Galen in early modern English medicine: case-studies in history, pharmacology and surgery 1618-1794

Submitted by Lisa Charlotte Jarman, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Medical History, September 2013.

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Abstract

This thesis examines the influence of Galen (b. 129 AD) on medicine in England between 1618 and 1794, approaching the study of his authority and the use of his work through three case-studies: histories of medicine, pharmacology, and surgery. The histories of medicine illustrate the variety of ways in which Galen is referred to, both as a historical figure, and as an ongoing contemporary influence. His importance in terms of accessing the knowledge of the ancients, and as a fixed point in time around which to discuss the history of medicine, and to situate other practitioners over a broad time period, underlines the significance of his role within medicine. Similarly, the pharmacological texts examined provide a more tangible sense of the influence of Galen, and their varied, but formulaic structures enable specific remedies to be traced over time and their corresponding associations and details compared between different editions. Identifying the role of Galen within surgical treatises also allows for a more theoretical aspect of surgery to be explored, providing a different perspective on an area more frequently portrayed as a manual art. The use of Galenic texts within each case-study, in particular the histories of medicine, demonstrates a significant and nuanced engagement with the content of his works, reiterating the importance of his contribution, and showing the value ascribed to the simplicity offered by past approaches. It is evident that a shift had occurred from the acceptance of ancient authority based on convention, to evaluating the simplicity and utility of information on an individual basis. The value ascribed to utility in the assessment of medical knowledge is evident throughout these texts, which also demonstrate the importance of the experience and observations of the practitioner in facilitating the ongoing and significant use of the influence of Galen.
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Appendix A  Galen as source – summary of Galenic works referenced

This table shows the titles (in Latin and English) of all the different Galenic works that are mentioned within the early modern texts studied, and also shows in which of the other Appendix documents they are discussed.

Appendix B  Galen as source – table of references and citations

_Galenic texts with English translation_

These tables of citations and references show where Galen is utilised as a source, and link each individual reference to the specific Galenic text. They are arranged in order of the number of times each text is mentioned in the early modern works, and then by the order in which they appear in Kühn.

Appendix C  Galen as source – table of references and citations

_Galenic texts without English translation_

These tables of citations and references show where Galen is utilised as a source, relating to texts not currently available in English, which limits the possibility of verifying the reference. They are arranged in order of the number of times each text is mentioned in the early modern works, and then by the order in which they appear in Kühn.

Appendix D  Galen as source – summary table of references and citations shown in Appendices B and C

These tables summarise the content of Appendices B and C, showing the Galenic texts referenced, alongside the authors mentioning them and brief additional information, including the specific books and chapters where this is provided.

Appendix E  The table entitled ‘A CHRONOLOGICAL CHART OF MEDICAL AND SURGICAL AUTHORS’ within William Black’s _An historical sketch of medicine and surgery_ (1782).

This provides a great deal of information regarding the broad narrative of the history of medicine, and shows the relative dates of activity and general area of medicine of notable practitioners from 400 BC to 1800 AD.
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Notes on translation

All Greek translations within the text were kindly provided by John Wilkins unless otherwise attributed, who also assisted my translations from Latin to English, checking and suggesting improvements.
Introduction

Galen was born in 129 AD ‘in Pergamum on the Ionian seaboard of Asia Minor’, and ‘died sometime in the second decade of the third century, probably in Rome.’¹ He wrote a vast number of texts on a variety of topics, including medicine, logic, philosophy, philology and literary criticism.² His work was already important within antiquity, and it found its way to early modern Europe via a path through the Arabic and Islamic world, being translated from Greek into both Syriac and Arabic. Galen was subsequently one of the first ‘classical authors to be translated into Latin, originally from the Arabic, and then later directly from Greek manuscripts.’³ From the perspective of early modern medicine, Galen was a codifying and systematising influence that extended to all areas of medicine – theory, knowledge, education and practice. It is also important that ‘much of our information on early medicine depends on Galen’s interpretation and sifting of the evidence’,⁴ and as such his role extends beyond the provision of medical information, to providing a model for approach, discussion, and practice.

This thesis approaches the study of the influence and use of Galen in early modern English medicine through three case-studies: histories of medicine, pharmacology, and surgery, between 1618 and 1794. It looks at the role of fundamental themes, such as the relationship between theory and experience; the relative emphasis on simplicity, complexity, and utility; and identifying the set of values by which practitioners during this period were judging Galen. This work also aims to show the different ways in which Galen was utilised, and the extent to which allusions to his ideas and works were reflective of a genuine engagement with Galenic material.

Between the underlying assumptions within the historiography described below, and the areas that have received particular focus, there is a notable gap to be

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² Ibid.
³ Ibid., p. xv.
addressed regarding the position of Galen in English medicine between the mid-seventeenth century and the end of the eighteenth century. The decision within this thesis to address histories of medicine, pharmacology, and surgery, rather than to include physic is based upon several key points. The more significant attention that has been dedicated to medical theory within physic ensures that there is perhaps less room for this type of study in that area. Furthermore, addressing an additional area of medicine would have been beyond the scope of this thesis, entailing significant engagement with numerous sources and contexts. There is, however, capacity to extend the work towards physic in the future, to identify if the findings of this thesis are consistently reflected within physic during this period. Furthermore, there has been a tendency to reduce Galen primarily to his influence on physic, and as such this thesis aims to highlight these themes from a slightly oblique angle, rather than to pursue the areas which often draw more attention within this context. It is also useful to examine areas in which Galen’s reputation was less significantly tied to the nature of medical systems, accessing attitudes less distorted by the central controversies of this theme, and providing a different perspective on the role of a frequently studied figure.

**Historiography**

In order to examine the various aspects of Galen’s contribution to medicine during the early modern period, as well as to address perceptions of Galen and the availability of his work, this thesis necessarily interacts with many different historical fields. The importance of Galen to the history of medicine in the broadest sense means that the work traverses many areas within the history of medicine, as well as sectors referring more generally to the history of intellectual pursuit, the nature of knowledge, and the writing of history in the past. In order to gain a comprehensive perspective on Galen in the early modern period, it was also important to examine works relating to classical antiquity, concentrating on Galen within his own lifetime, and subsequently.

Galen and the ‘Galenism’ that developed following his lifetime are dealt with in varying ways throughout different historical works, and historians’ approaches to Galen are determined by the nature of the work itself. For example, studies of Galen in his own lifetime are necessarily more concerned with details of his
background and influences than works examining the Renaissance re-capturing of Galen, or more general histories of medicine. Consequently, varying degrees of generalisation become evident as the historiography of Galen moves towards the seventeenth and eighteenth centuries.

Owsei Temkin’s work *Galenism: rise and decline of a medical philosophy* in many ways defines the study of Galen during this period.\(^5\) It describes Galenism as ‘an intellectual phenomenon, as a philosophy in the sense of principles, beliefs, and facts, more or less cogently connected to form a set and ascribed to Galen.’\(^6\) Much of the text concentrates upon Galen’s lifetime, and relatively little space is devoted to the early modern period, although it does provide an insight into the origin of attitudes and ideas prevalent later. During his discussion of the decline of Galenism, Temkin provides different views on the nature of the change, showing both that ‘the first major assault did not arise over specific points of anatomy or medicinal action, it attempted an overthrow of the whole, and it was fully equipped with a new theory, a new practice, and new social demands’, and that the decline was ‘not a sudden event but a process in which very dramatic episodes interchanged with inconspicuous, through not less important, developments’, highlighting that there was no one particular cause.\(^7\)

Of specific relevance to this thesis is the suggestion that ‘Galenic pharmacology was to resist destruction longer than other branches of Galenic medical science’\(^8\), an area that is further explored in Chapter 2; and this thesis also engages with the idea that there was a ‘shift from living, to historical, interest’ in Galen by the end of the eighteenth century.\(^9\)

In terms of work relating to Galen in his own time, Vivian Nutton’s assessment that: ‘The study of ancient medicine over the last thirty years has developed to an extent unparalleled since the sixteenth century’\(^10\) is significant as it shows the level of interest that has become evident in recent years, stimulating a proliferation of editions of Galen’s work. This has served to highlight the

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6 Ibid., p. xi.
7 Ibid., pp. 124-125; pp. 135-136.
8 Ibid., p. 112.
9 Ibid., p. 185.
importance of Galen in ancient medicine, especially with regard to his role in the ‘synthesis and systemization of medicine’ which was to ‘achieve canonical status already in antiquity’.\textsuperscript{11} This illustrates the common emphasis that is placed on the centrality of Galen to medical theory both during, and immediately following, his lifetime. However, Nutton has also highlighted that this perspective shows the pervasive nature of Galen’s influence in that ‘to regard ancient medicine solely, or even largely, as a system of thought […] is to follow Galen’s preference for a sound theoretical understanding of the principles behind medicine over practical details.’\textsuperscript{12} This shows the significant effect that Galen had upon subsequent perceptions, particularly due to the persuasive and dominant tone of his writings.

The relatively recent increased attention directed towards Galen gives the impression that authors have sought to redress the balance in terms of Galen’s prominence relative to the other ‘giants’ of Greek antiquity: ‘Galen is nowadays by far the least well known, even among the generally educated, who will usually know at least the names of others as well as that of Hippocrates, Galen’s acknowledged master in matters medical.’\textsuperscript{13} Much work has also been done which situates Galen more broadly within the culture, knowledge, and intellectual landscape of his lifetime, as well as looking at the influence of preceding factors, including his relationship to Hippocrates.\textsuperscript{14} The idea that ‘Galen both does and does not fit within his contemporary intellectual and literary culture – he is, in different ways, both typical and atypical of his thought-world’\textsuperscript{15} is important, as although this thesis does not contribute to this area of historiography, it nonetheless impacts upon the ‘Galenism’ that made its way to the early modern period.

In addition to the numerous texts which examine Galen within his own time, it is almost inevitable that any work addressing the history of medicine more

\textsuperscript{14} See, for example C. Gill, T. Whitmarsh, and J. Wilkins (eds), \textit{Galen and the world of knowledge} (Cambridge, 2009) and R.J. Hankinson (ed.), \textit{The Cambridge companion to Galen} (Cambridge, 2008), especially R. Flemming’s chapter ‘Commentary’, pp. 323-354.
\textsuperscript{15} C. Gill, T. Whitmarsh, and J. Wilkins (eds), \textit{Galen and the world of knowledge} (Cambridge, 2009), p. 8.
generally will also refer to Galen, although the scope and depth of references are determined by the nature of the work itself. Survey works such as The Western medical tradition, which begins in 800 BC, place Galen within the context of what came before him, whilst also providing a sense of his place alongside other Greek writers. This work in particular brings the study to 1800, and as such it also interacts with the role of Galen and Galenic theory in medicine until this point. However, the majority of historians confine their assessments of Galen to the end of the seventeenth century, perpetuating a notion of decline primarily lasting until this point.

In many ways Andrew Wear’s chapter within The Western medical tradition exemplifies the way in which Galen was viewed in the early modern period. For example, the fullest discussion of Galenic medicine is under a section entitled ‘Learned medicine’, which concurs with a general trend placing Galenic medicine within a learned, literate context during this period. Furthermore, Wear highlights a sense of a move towards ‘reducing Galenic medicine to method and hence to greater certainty’ during this period, something that is echoed in works examining Galen in the ancient world. This similarity of perspective can also be seen in the idea that ‘on the face of it, to talk of a revival of Galenic medicine in the sixteenth century makes no sense, for long before this time it had formed the basis of learned medicine’. This argues that the longevity of Galenic medicine indicates that a ‘rediscovery’ during the sixteenth century is not necessarily an accurate description, and illustrates the debate evident within the historiography regarding the ‘revival’ of Galenic medicine. As Mary Lindemann has suggested, Galenism during the early modern period was a concept that was ‘elaborated in the middle ages and modified by Arabic writings’, which reiterates this suggestion of a process of selection and development over time. The role of the organisation and selection of the material of the Galenic corpus, particularly within the seventeenth century is further discussed by Wear, who emphasises that ‘the great effort of the learned

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18 Ibid.
19 Ibid., p. 256.
20 Ibid., p. 251.
physicians lay in trying to get rid of uncertainty in the application of Galen’s medicine to the myriad differences that existed among patients. Wear also links this approach to the way in which Galen was presented at this time, for example, through the use of tables. In many respects Galen and Galenic medicine provide a background within the historiography of this period, and serve as a basis from which to embark upon analysis of other topics. This can particularly be seen in texts such as Margaret Pelling’s Medical conflicts in early modern London, and Sandra Cavallo’s Artisans of the body in early modern Italy. Both of these works explore their topics against the backdrop of Galenic medicine, underlining the importance of humoral pathology, and of Galen as an authority. It is important to note here that whilst Galenic medicine is frequently shown to be fundamental to medicine during this period, there are few examples where a comprehensive definition of ‘Galenic’ is provided. This is particularly evident in Noga Arikha’s work Passions and tempers: a history of the humours, which provides significant background information regarding the origins of a theory of four humours. Whilst the implication here is that this formed the basis of Galenism during the early modern period, a definition of Galenism itself at this time is not provided. The fact that this is not addressed, even within a work dedicated entirely to the humours, underlines the challenges presented by attempting to determine the form that Galenism took during the early modern period, a clear indication of the work remaining to be done in this area. Similarly, Lindemann emphasises the difference between the writings and teachings of Galen, and the ‘hardy intellectual construct’ that was Galenism, without providing detail regarding the tangible effect of early modern Galenism.

Throughout the historiography, there is however, an implied underlying sense of what constituted Galenism, as well as the use of opposing views on healthcare and the body to illustrate what Galenism was not. There has been a degree of

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23 Ibid.
24 M. Pelling, Medical conflicts in early modern London: patronage, physicians, and irregular practitioners, 1550-1640 (Oxford, 2003); S. Cavallo, Artisans of the body in early modern Italy: identities, families and masculinities (Manchester, 2007).
debate regarding challenges to Galenic medicine during this period and their relative impacts on medicine more broadly, and on Galenic theory. This can be seen in Lindemann’s assessment that: ‘some historians find that Galenism was “in tatters” by the 1600s (and especially by the end of that century); others see a Galenism modified by the iatrochemists (and later iatromechanists) that still retained a certain vitality and a certain ability to adapt, at least until the 1680s.’ This effectively summarises the differing perceptions of the decline of Galenism and the range of periods that this is variously attributed to. This also reiterates the general lack of attention that has been directed towards this issue in the eighteenth century, particularly given the tone here which suggests that the 1680s were the last point at which this was confirmable.

The variety of perspectives regarding the decline of Galen can be seen in Lester King’s assessment that it was during the seventeenth century that ‘Galenic teaching came under concerted attack’, and this phrase also implies a deliberate and systematic erosion of Galenism. Contrastingly, it is suggested in the preface to The Cambridge companion to Galen that ‘the first cracks in the façade of his [Galen’s] pre-eminence date from 1543 and the publication of Vesalius’ de Fabrica.’ Whilst the preface also highlights areas of Galenic medicine that continued beyond this date, later in the book, Vivian Nutton underlines that ‘by 1600 Galenic anatomy in its pure, pre-Vesalianian form, was confined to the fringes of academia.’ This chapter, entitled ‘The fortunes of Galen’ illustrates the minimal focus that is dedicated to the role of Galen within the late seventeenth and the eighteenth centuries. Here, Nutton does suggest that ‘Not only did his ideas constitute the basis of formal medicine in Europe at least until the seventeenth century, and arguably until the nineteenth’; however, towards the end of the chapter, he moves from discussing William Harvey (1578-1657), to addressing the reasons that K.G. Kühn (1754-1840) ‘between 1821 and 1833 […] brought out his edition of Galen in twenty-two

31 Ibid., p. 355.
stubby volumes, almost 20,000 pages in length’, thus demonstrating the notable gap which this thesis addresses.\textsuperscript{32}

Although many historians point towards the decline of Galenism as being due to ‘a slow deflation rather than a sudden implosion’\textsuperscript{33} the degree of the decline is also an area of debate. For example, Pelling’s \textit{Medical conflicts in early modern London} found that: ‘although the London College did its best to reinvent the Galenic corpus as a substitute’, this was ‘a strategy which failed in the course of the seventeenth century.’\textsuperscript{34} Pelling also alludes to a desire amongst patients to seek alternatives to Galenic remedies due to ‘an impatience with the protracted business of a cure by Galenic means, including diet and regimen.’\textsuperscript{35} This suggests a proliferation of alternatives to Galenic remedies, and therefore also to Galenic theories, especially in a ‘highly competitive environment like early modern London.’\textsuperscript{36}

In contrast to this however, Wear underlines that: ‘if concepts of disease were changing, this was less so with therapeutics.’\textsuperscript{37} Here, the idea that Galenic therapeutics continued after a decline in the theoretical aspects of Galenic medicine illustrates the complex nature of Galenism during this period. Furthermore, the wide range of factors that are shown to contribute to a decline in Galenism are also presented in different ways, and given different emphasis. Whilst many historians point to the rise of chemical medicine, Charles Webster underlines the importance of the increasing availability and variety of plants and chemicals, such that an ‘interest in new medicines [...] greatly increased in the seventeenth century’ showing variation in perceptions of these factors.\textsuperscript{38} Similarly, Owsei Temkin underlines that: ‘the gradual rise of the barber-surgeons [...] and of the apothecaries [...] brought medical man to the fore who

\textsuperscript{32} V. Nutton, ‘The fortunes of Galen’, in R.J. Hankinson (ed.), \textit{The Cambridge companion to Galen} (Cambridge, 2008), pp. 355-390, p. 378-379; see also S. Mattern, \textit{The Prince of medicine: Galen in the Roman Empire} (Oxford, 2013), which similarly briefly covers the period up until the end of the sixteenth century, highlighting key themes of the transmission of Galen to this period, and also the significance of his influence on anatomy.

\textsuperscript{33} M. Lindemann, \textit{Medicine and society in early modern Europe} (Cambridge, 1999), p. 70.


\textsuperscript{35} Ibid., p. 265.

\textsuperscript{36} Ibid., p. 263.


had no vested interest in Galen39 which places a slightly different emphasis on the more generally presented idea that learned society was beginning to challenge the theoretical aspects of Galenism in the wake of the work of individuals such as Vesalius and William Harvey.

The increasing focus on social context within the history of medicine, has led to a move away from emphasis on the theoretical basis of healthcare during this period. As Galen is often looked at specifically with regard to literate, learned medicine, there is a sense that Galenism has become an underlying theme, upon which other narratives are written. The vast range of ideas and factors that could be considered in relation to Galen and Galenic medicine during the early modern period has encouraged a necessarily selective presentation of material within the historiography, which has been led by the nature and aims of each work. Similarly, little attention has been dedicated to uncovering the extent to which the Galenism that survived to the early modern period was derived from original Galenic ideas and texts, and how far it represented the influences of its period. What is evident is a sense that there was a process of selection over time which changed the Galenic corpus, and that the aspects retained reflected different times, places, authors, and intended readers.

Much of the historiography of early modern Galenic medicine concentrates upon the sixteenth century, and it is often emphasised that the rediscovery and better distribution of Galenic works stimulated interest and drove the revival of his theories during this period. This focus upon the sixteenth century is also reinforced by the fact that Richard Durling’s article ‘A chronological census of Renaissance editions and translations of Galen,’ which provides much of the statistical analysis on the availability of Galen at this time, only examines the period between 1473 and 1600.40 The influence of this can be seen in Vivian Nutton’s work, which talks about availability from 1500 until 1560, citing Durling in the endnotes.41

In addition to the works that show Galen within the context of medical history more broadly, each of the case-studies within this thesis also has its own varied historiography, and areas of contention. The writing of history within the early modern period has been studied from varying perspectives, often focusing upon the particular authors producing these works, or the different approaches taken to the study of medical history at different times. Nancy Siraisi particularly addresses this in *History, medicine, and the traditions of Renaissance learning*, which looks at the relationship between medicine and its theoretical past, and how history was written during this period.\(^{42}\) It places Galenic medicine within the wider context of changing literary and medical approaches during the Renaissance, and thus also provides scope for examining these themes during the end of the seventeenth, and the eighteenth centuries, especially since Siraisi suggests that ‘The life long commentary on and exposition of ancient medical texts as useful guides to current medical practice was gradually coming to an end’.\(^{43}\) In this work, Siraisi also examines the role of the ancients, especially ‘The figure of Hippocrates’, in determining the way in which medical histories were written during this period, a theme which is similarly explored within this thesis but with an emphasis on Galen.\(^{44}\) Elsewhere, Siraisi discusses Galen’s use of case histories alongside the suggestion that he provided a model for the work of Girolamo Cardano in mid-sixteenth-century Italy.\(^{45}\) Siraisi’s conclusions here show a striking similarity to those of this thesis, especially given the different geographical and temporal focus, suggesting a degree of continuity in the use and evaluation of ancient material which extends to England, and the seventeenth and eighteenth centuries.\(^{46}\)


\(^{43}\) Ibid., p. 261.

\(^{44}\) Ibid., see in particular pp. 79-102.


\(^{46}\) Ibid., see in particular pp. 601-602, which demonstrates that: ‘His medical narratives show all the inconsistencies and contradictions characteristic not only of the man but more generally of Renaissance reworkings of ancient scientific authorities and traditional epistemologies.’ Similarly, in terms of the drawbacks that Cardano identifies regarding the practice of medicine and the external factors affecting this, as well as recording a suitable narrative: ‘none of this was in fact sufficient to cause him to abandon the traditional ways in which physicians described their experiences in treating patients. Instead, he added new methodologies – mostly derived from ancient sources – to traditional ones. The capacity for innovation of even such a profoundly idiosyncratic and non-conformist individual as Cardano was bounded on the one hand by ancient texts and on the other by his professional needs.’
 Much of the historiography focusing upon pharmacology during the early modern period can be divided into several broad areas. These consist of remedies and the changing market for their consumption; the role of the apothecary and provision of medicines; Renaissance herbal history; and works which examine key figures and the pharmacological texts they produced. The significant work produced by Patrick Wallis has shown ‘evidence for a radical expansion in medical consumption in the seventeenth century’, and the role of international imports and patterns of medical retail.\(^{47}\) Wallis also cites Ian Mortimer as showing that ‘the ongoing popularity of Galenic simples provides little evidence of a change in the content of medicine that might be responsible for shifts in consumption.’\(^{48}\) Similarly, Wallis himself suggests: ‘The kinds of medical drugs imported also changed over this period. However, the changes were mainly an expansion in the pharmacopoeia, rather than a displacement of older medicines by new drugs’, and that ‘therapeutic range was marked more by continuity than change’, points which both corroborate the findings of this thesis.\(^{49}\)

There is also a body of work which addresses Galen’s pharmacological contribution during, and immediately following his lifetime, exemplified by studies such as Laurence Totelin’s on ‘Galen’s authorial strategies in the pharmacological books’ and the chapter dedicated to ‘Drugs and Pharmacology’ by Sabine Vogt within *The Cambridge companion to Galen*.\(^{50}\) It is also important to note that discussions regarding ancient pharmacology often focus upon the impact of Dioscorides, whose work *Materia medica* was ‘organised into a coherent handbook of pharmacy and pharmacology which retained its usefulness for over 1800 years.’\(^{51}\) Given that Dioscorides was active in 60 AD, this shows the longevity of his influence, which is reflected in works such as

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\(^{49}\) Ibid.


Charles Singer’s study of ‘The herbal in antiquity and its transmission to later ages’ and Brent Elliott’s ‘The world of the Renaissance herbal’, which emphasises Dioscorides’ as the only work of this type to have survived complete from antiquity.\textsuperscript{52}

Whilst the theoretical aspects of surgery have tended to receive less attention than the more material aspects, there is nonetheless one particular article that illustrates the significance of the link between Galen and surgery. This work, by Mary Erler, shows that:

The first printed edition of Galen in English appears as part of a compilation titled *The Questyongry of Cyrurygens*, in 1542 (STC 12468). Though it has not previously been suggested that the volume was conceived by its publishers as a surgical student’s textbook, both its preface and its adherence to its French source demonstrate this intention. (Its source, also a surgical apprentice’s text, similarly represents the first printing of Galen in French.)\textsuperscript{53}

This shows the importance of the relationship between Galen and early modern surgery, but the piece does not extend this argument beyond the end of the sixteenth century. This is also reflected in the use of Durling to show statistical information about the popularity of printed editions of Galen up to 1600: ‘These thirty-four years in the middle of the sixteenth-century thus simultaneously see the widest popular dissemination of Galen’s writing, and the production of the work which was to succeed it.’\textsuperscript{54} Although this may well be accurate, it nonetheless privileges this period by the information available within Durling’s

\textsuperscript{52} For Dioscorides, see L.I. Conrad, M. Neve, V. Nutton et al., *The Western medical tradition: 800 BC to AD 1800* (Cambridge, 1995), p. 8, 57, which also shows that ‘Galen incorporated large sections of the works of Dioscorides and others, organising them according to the disease site and, in another tract, the type of remedy employed.’ (p. 57); C. Singer, ‘The herbal in antiquity and its transmission to later ages’, *The Journal of Hellenic Studies*, Volume 47, Part 1 (1927), pp. 1-52; B. Elliott, ‘The world of the Renaissance herbal’, *Renaissance Studies*, Volume 25, Number 1 (February 2011), pp. 24-41.


\textsuperscript{54} Ibid., p. 168.
article, and does not provide a comparison to the later period to confirm that this is the case.\textsuperscript{55}

The historiography of surgery has also tended to focus upon the more material aspects of the field. For example, many works discuss the technical side of becoming a surgeon, such as the length of time that individuals would have been apprenticed to another practitioner, and the differences in practices that surgeons undertook in relation to physicians.\textsuperscript{56} As a consequence, less has been written about the theoretical basis for surgical knowledge or the intellectual perspective of the surgical practitioner in England at this time. The history of surgery during this period has also been studied through various, more specific approaches, using, for example, the experiences of a particular individual to reach wider conclusions on the subject. This can be seen through studies such as Lucinda Beier’s work on London surgeon Joseph Binns; or Elizabeth Lane Furdell’s \textit{The royal doctors, 1485-1714: medical personnel at the Tudor and Stuart courts}, which emphasises doctors, but also makes mention of royal surgeons alongside many other types of practitioner attending the royal household.\textsuperscript{57} The emphasis on particular areas can also be seen within Sandra Cavallo’s work \textit{Artisans of the body in early modern Italy}, which discusses surgeons and other practitioners of the body within key areas specific to each type of ‘artisan’.\textsuperscript{58} This epitomises a move towards examinations of the history of the body, and perceptions of the human form, often approached through examinations of visual culture, such as in Roy Porter’s \textit{Bodies politic}, or by looking at the body within a wider social context, as can be seen in \textit{The body in parts: fantasies of corporeality in early modern Europe}.\textsuperscript{59}

\begin{itemize}
\item \textsuperscript{56} See, for example L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 292-295.
\item \textsuperscript{58} S. Cavallo, \textit{Artisans of the body in early modern Italy: identities, families and masculinities} (Manchester, 2007).
\item \textsuperscript{59} R. Porter, \textit{Bodies politic: disease, death and doctors in Britain, 1650-1900} (London, 2001); D. Hillman and C. Mazzio (eds), \textit{The body in parts: fantasies of corporeality in early modern Europe} (London, 1997).
\end{itemize}
Sources
In order to comprehensively address the themes described above, this thesis concentrated upon printed sources from within three key areas of medicine: history, pharmacology, and surgery. The first group, histories of medicine, were initially intended to provide an insight into perceptions of Galen from outside medicine; however, all those consulted are written by medical men, and thus present a different perspective from within medicine, and a distinctive approach to the construction and intent of the work. These texts allow for the assessment of Galen within the historical framework of medicine, as well as his placement as part of medical knowledge more broadly. The limitations of these sources lie in their backward facing approach, which can be problematic in determining the genuine ongoing use of Galen in contemporary medicine. Similarly, these texts are also utilised to further the ideas of the author within areas external to medicine, including engaging with the religious debates of the time, or demonstrating specific perceptions of other parts of the world. As such, these works have several layers within the narrative, often not relating to the questions at hand.

The second group of sources, pharmacological texts, show the perception of Galen from the perspective of particular remedies and approaches to the treatment of affliction. The pharmacopoeia is a genre of text introduced primarily to control the quality of drugs. The word is derived from the Greek ‘pharmakon’, a drug, and ‘poiia’, making. The ‘guide for the apothecaries of Florence was published in 1498 and is generally regarded as the first official pharmacopoeia in Europe in the modern sense’ and subsequently other cities followed in producing formularies. In England a pharmacopoeia was first considered in 1585, however it was not until 1618 that the Pharmacopoeia Londinensis was published. This book was compiled by the Royal College of Physicians, and as an ‘official’ pharmacopoeia appeared in Latin for some time before being translated into English.

61 Ibid. Here, pharmacopoeias in the ‘modern sense’ refers to those relating to a ‘specific political unit.’
62 Ibid.
63 The College of Physicians did not become known as ‘Royal’ until over a century after it received its royal charter in 1518; however, it will be referred to throughout as ‘The Royal College of Physicians’, or the ‘Royal College’, for consistency, as the majority of the period
The varying pharmacological texts utilised in this thesis provide a more tangible sense of the influence of Galen, and their varied, but formulaic structures enable specific substances to be traced over time, and their corresponding associations and details compared between different editions. The use of both ‘official’ and popular works allowed for a range of views to be explored in parallel, and in particular, the popular texts provided a perspective not accessed elsewhere within the thesis. These sources are limited by the relatively small amount of information that they present in addition to the pharmacological recipes, particularly within the earlier Latin editions. This facilitates a clear image of the ingredients, and uses of each remedy, but prevents a more detailed view of the perceptions and ideas underlying the formulae.

Surgical treatises represent the third key type of source utilised within this thesis, and their clear structure and regular configuration allows a great deal of information to be determined from their content. The value of these works to this project lies in the practical aspects of their information, which contribute a different type of theory to overall assessments of the role of Galen. These texts also create a connection between the other two types of source in that they provide information about Galen which relates both to remedies, and to the historical origins of aspects such as definitions or practices. However, a particular drawback concerning surgical treatises is their representation of an ideal of surgery in terms of its methodology and treatments, and they therefore do not necessarily provide an indication regarding the extent that these ideals were realised in practice. This privileges recourse to Galen under ideal circumstances, but does not allow a sense of the way in which this translated to practice, or more routine references to Galen as an authority.

The majority of the sources employed within this thesis were written by notable, learned practitioners, which, although nuanced, does essentially provide a very specific type of approach to medicine. As the intention of the project was to address the particular theoretical and knowledge-based aspects of medicine, these sources provide comprehensive and varied views from within this covered by this thesis falls after it started being consistently referred to as ‘Royal’. See ‘History of the RCP’, http://www.rcplondon.ac.uk/about/history.
tradition. The internal referencing between different sources and authors also underlines the importance of these figures within the medical sphere, ensuring that the perspectives examined are both representative of this particular area, and can be used to make broader points within each theme. Taking into account the limitations of each genre, the varied nature of these texts ensures that the information they contain regarding the use and influence of Galen can be corroborated from several perspectives, and conclusions are particularly reinforced by confirmation from such a diverse range of sources.

**Chapter outline**

Chapter 1 addresses the role of Galen within histories of medicine published between 1699 and 1782. It begins by looking at the importance of Galen in preserving older knowledge, providing a way in which to access the knowledge of the ancients. Here, the importance of Galen in terms of the presentation of, and access to, Hippocrates becomes apparent, and whilst Galen provides much of the information about Hippocrates that was utilised during this period, there is also a sense of comparison between the two figures. This chapter also shows the use of Galen as a marker of time, situating other practitioners and defining time periods within the history of medicine. The use of Galen as a source of information is the most prevalent way in which his influence is evident within these texts, and the numerous citations and references to his works are examined within this chapter to determine the extent of the engagement with his work. Galen is one of the most significant practitioners described within this material, and many of these texts dedicate a specific section to addressing his life and work. Information about Galen, and his knowledge and perspective is presented both as a historical background, and as an ongoing contemporary influence, which similarly links to the part of the chapter addressing the tangible effect that Galen had upon medicine at this time. The final section of Chapter 1 further develops this theme, exploring the use of Galen, and the influence of his contribution on the current state of medicine.

Chapter 2 highlights similar themes to those established within the first chapter, but utilises various Latin and English editions of the *Pharmacopoeia* from 1618-1791 to study the changing perception of Galen from a different perspective. Here, references to Galen within the ‘official’ editions of the *Pharmacopoeia* are
examined, followed by the occurrences within the more popular editions. This allows for a comparison between the two types of texts, which is subsequently continued through the study of the specific remedies associated with Galen, and the use of his works as a source of information. The objective here was to determine whether there was a comprehensive rejection of Galenic influence over time, a process which appears to have been less significant, and more complex than may immediately be assumed.

Chapter 3 looks at the role of Galen within early modern surgery, and the way in which his influence is evident within learned surgical treatises from 1676-1794. His authority as part of the broader medical framework is also illustrated, providing a sense of the more theoretical aspects of the field, previously more frequently portrayed as a manual art. This chapter also addresses the broader influence of ancient knowledge within early modern surgery, and the way in which this was incorporated into surgical approaches. The value ascribed to creating a balance between modern advancement and adherence to tradition is clearly evident here, and approaches to the reconciliation of ancient and modern knowledge are shown to be a particularly notable aspect of these texts. This chapter also demonstrates the importance of understanding the ‘errors’ of the past, and placing them within the context of their time, whilst also accounting for the significant changes that had occurred.
Chapter 1
Galen and histories of medicine

The history of history writing has received significant attention from historians, and although the focus of this chapter is medical history, the development of history writing in a general sense, and its format during the early modern period is a notably interrelated area. Volume 3 (1400-1800) of *The Oxford history of historical writing* comprehensively addresses the writing of history in different geographical contexts throughout the world, highlighting the parallels that can be drawn; the differences produced by different areas; and the continuities that can be identified with modern history writing. Similarly, Don Bates’ edited collection *Knowledge and the scholarly medical traditions* concentrates on ‘scholarly ways of knowing’ in a volume that also covers a broad geographical range. Bates highlights that these ‘ways of knowing’ ‘constitute organized, rhetorical and institutional expressions of cultural values with respect to knowing. They do not give us a full account of how people actually behave, relative to the business of knowing.’ There is also an emphasis within the text on Galen and Galenic medicine, and the themes of this thesis particularly interact with the assertion that: ‘apart from Galen’s reverential treatment of Hippocrates, the Hippocratic and Galenic texts do not, by themselves, cultivate the idea that their contents are the revelations of transcendent authorities.’

Closely related to history writing is the reading of history during the early modern period. This focus is exemplified by Daniel Woolf’s work *Reading history in early modern England*, which looks at types of historical writing; ‘the contexts and purposes of history reading’; the disappearance of the chronicle as a genre; and the ways in which books were circulated and marketed. Although this thesis emphasises the content of medical and historical texts more significantly than their readership, this is nonetheless a significant theme which

66 Ibid., p. 20.
67 Ibid., p. 12.
has scope for development elsewhere. The presentation of material within the
types of works examined often shows an ideal of theory or practice, and thus
there is potential for a notable disparity between intention and reception or
ultimate practical deployment. Similarly, the interpretation of texts by readers is
likely to have been influenced by a similar process of selection according to
experience and utility that is evident in the way the authors featured in this
thesis chose material from Galen, and other authorities, to present within their
works.

The history of medical history has been significantly addressed but is
approached in varying ways according to the context of the piece. Medical
historiography appears in different degrees of detail as part of a standard
introduction to historical research based on primary material, as a tool to set the
research into the context of work previously produced in the field. Although not
all pieces include a significant separate part addressing this area, it is unlikely
that no other historical studies would be referenced throughout, and therefore
medical historiography is a common feature of medical histories. In addition to
this approach, there are also many examples of studies which focus primarily
on medical historiography, drawing together works which examine similar
topics; provide a sense of the 'state of the field' and the direction in which it
should develop; or showing the historical process by which the historiography
has reached a given point. Both broad types of historiography also present
theoretical and methodological concerns, and outline the key themes that
characterise debates within the specific area targeted.

'State of the field' historiography with an evaluative approach can be seen
throughout different phases in medical history, and despite the common
intention, illustrate a diversity of methods and perspectives in drawing material
together. For example, Roy Porter's article 'The patient's view: doing medical
history from below', which, in the context of the emerging emphasis on the
social aspects of medical history, was a call to alleviate the imbalance caused
by an overemphasis on the role of the physician in history, instead taking into
account the importance of the patient in medical encounters and
developments. This type of evaluative piece can also be seen through Roger Cooter’s paper arguing that despite its apparent success, the social history of medicine had ‘lost its capacity seriously to engage’ and needed to take into account the ‘contemporary bio-centric world’. The response published by Jonathan Toms outlines the shortcomings of Cooter’s argument, whilst demonstrating the contested nature of approaches to medical history, particularly with regard to social perspectives. The ‘approach analysis’ piece is also significant in demonstrating the various ways in which medical history has been carried out over time. Jon Arrizabalaga’s article addressing the medical causes of death in preindustrial Europe outlines the history of the way in which this was understood between the fourteenth and early seventeenth centuries, whilst also showing the effect that these understandings had, and should have, on the historiography. Arrizabalaga expands on these themes as part of a particular issue of *Asclepio*, looking at the history of the disease. His article outlines the ways in which the concept of disease has been approached over time, as well as exploring the effect, or discussion, of particular diseases such as *sudor Anglicus*, or the sweating sickness, and the complexities of retrospective diagnosis.

Andrew Cunningham similarly examines the difficulties associated with analysing disease in the past, suggesting that historians of medicine often discuss past diseases as though identification by modern standards is both possible and acceptable. Cunningham disputes these points, underlining that: ‘once we understand the sources of our unjustified assumption about the

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71 J. Toms, ‘So what? A reply to Roger Cooter’s ‘After death/after-life’: the social history of medicine in Post-Postmodernity’, *Social History of Medicine*, Volume 22, Number 3 (December 2009), pp. 609-615.
72 J. Arrizabalaga, ‘Medical causes of death in preindustrial Europe: some historiographical considerations’, *Journal of the History of Medicine and Allied Sciences*, Volume 54, Number 2 (April 1999), pp. 241-260; see also L. Jordanova, ‘The social construction of medical knowledge’, *Social History of Medicine*, Volume 8, Number 3 (1995), pp. 361-381, which similarly analyses the contribution that social constructionist approaches could make to the social history of medicine.
validity of retrospective diagnosis, we can stop trying to do it.'\textsuperscript{75} Disease identity in the past is a key part of this paper, and the suggestion that ‘you die of what your doctor says you die of’ is a recurring theme used to show the complexity of attempts to understand and explain disease in the past, especially given that concepts of disease, as well as diseases themselves, can be seen as changing over time. More recently, Jonathan Andrews has written about the historiography of medicine since the beginning of the twenty-first century.\textsuperscript{76} This piece shows the influence of several of the pieces mentioned above, providing context for the approaches taken following their publication.\textsuperscript{77} Andrews also highlights that: ‘we are now much better informed about the socio-professional milieu not only of doctors, surgeons, apothecaries and surgeon-apothecaries but also of midwives/female healers, druggists, ‘quacks’ and other irregular practitioners.’\textsuperscript{78} Additionally, the importance of this thesis in addressing parts of both the seventeenth and eighteenth centuries is demonstrated by the suggestion that: ‘the eighteenth century remains under-represented’.\textsuperscript{79}

Alongside this type of ‘approach analysis’, similar themes are also addressed as part of studies which show the origin and evolution of the history of medicine over time, often ending at the point of publication. For example, Genevieve Miller suggests that: ‘historical writings in both medicine and science began in classical antiquity’, and continues this narrative by outlining various individuals producing historical accounts from this time until the development of the study of medical history within American and European libraries and universities during the early twentieth century.\textsuperscript{80} Miller also mentions Galen, both as a particular author discussing the work of his predecessors, and as a source utilised by later practitioners; however, she places the ‘first genuine works of medical history’ during the seventeenth century, beginning with Daniel Le

\textsuperscript{77} Ibid., p. 503.
\textsuperscript{78} Ibid., p. 506.
\textsuperscript{79} Ibid., p. 510.
John Burnham’s account is briefer regarding the earliest examples of medical history, emphasising instead the role of physicians in the production of histories of their craft, and the subsequent contributions by professional historians. Charles Webster also provides a particularly successful analysis of the historiography of medicine, which succinctly outlines ‘the major standard histories of medicine’ and the various ways in which these histories are presented. This piece illustrates the contribution of Conrad Gesner during the middle of the sixteenth century, highlighting that he ‘produced an impressive Bibliotheca universalis (1545) containing biographical notes, as well as a detailed bibliography concerning medical writers from the ancients onwards.’ In agreement with other historians, Webster identifies Daniel Le Clerc’s Histoire (1696) as ‘the first attempt at a history of medicine in the modern sense’ and also briefly mentions John Freind as providing the sequel to Le Clerc’s text. The remainder of this chapter continues the narrative of notable historical contributions, providing comparison and a sense of the thematic changes taking place over time.

In parallel with other areas of history, there has been a focus upon the role of the individual in the production of early modern histories of medicine, and this perspective is often used to draw broader conclusions from the work or practices of the individual. For example, several of the authors discussed within this chapter are also examined specifically as part of articles which link them to their histories of medicine. An article by an unattributed author appears in the Journal of the American Medical Association in 1968, dedicated to Daniel Le Clerc. This work briefly provides details about Le Clerc’s background, before showing several lengthy quotes from the introductory sections of the text (by

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84 Ibid., p. 30-31.

85 Ibid., pp. 29-43, p. 31.

both Le Clerc, and the text’s English translators) in order to illuminate the author’s intention in producing it, as well as the reasons it was translated from the French. Although this article relies upon the uncritical presentation of Le Clerc’s own material, it is nonetheless one of the few sources in English which provides information about Daniel Le Clerc.

In contrast to this, R.J.J. Martin provides a more detailed discussion of John Freind and his work, The History of Physick. This outlines Freind’s background, education, and his approach to both medicine and the society in which he lived. Martin shows the importance of this study by suggesting: ‘the reasons why John Freind, a wealthy and very active physician and politician, should have undertaken the researching and writing of a learned (and lengthy) history of medicine are not at all obvious’. Similarly, Max Neuburger’s article ‘Francis Clifton and William Black: eighteenth century critical historians of medicine’ approaches this area by using two individuals to demonstrate the analysis of medicine provided by these authors, within the context of the eighteenth century as a particularly important period of ‘skeptical and critical or “enlightening” tendency’.

Alongside historical works addressing authors also studied within this chapter, there are pieces which discuss early modern historians of medicine not addressed below, such as Janet Doe’s study of Jean Astruc. This places the French author into the context of his time, suggesting that he was: ‘in many ways a characteristic exponent of his era, rather than a figure standing out from it’. Doe also highlights Astruc’s interest in broad medical learning, indicating that: ‘he read all the ancient and modern authors, carefully analyzing their works, picking out from each one his special contributions to knowledge, weighing each against the other to estimate their authority’. This is reminiscent of the way in which the medical authors addressed within this thesis used and

88 Ibid., p. 399.
91 Ibid., p. 186.
incorporated Galen's ideas and texts into their own work, and emphasises that this approach was evident throughout Europe at this time.

Medical histories from the early modern period are periodically utilised as sources of information, both to show the narrative of events or individuals, and to demonstrate broader points regarding the theme of a particular work. For example, Helen King briefly discusses several of the histories of medicine used within this thesis, alongside other texts, as part of a chapter entitled 'Medical history and obstetric practice in William Smellie'. This outlines the context in which Daniel Le Clerc and John Freind were writing, and the various contemporary debates surrounding the content of each text. However, the complexity of the interrelationship between these texts is demonstrated by the incorrect attribution of An answer to what Dr. Freind has written in his History of physick to Daniel Le Clerc. This was originally written by his brother, Jean Le Clerc, published in French in the Bibliotheque ancienne & moderne in 1727, and again in English under this title in 1728. Following the section in which King mentions these texts, the emphasis is on the role of Hippocrates, rather than Galen, and the chapter continues as a discussion of Hippocrates and his expertise regarding midwifery.

The importance of Daniel Le Clerc’s Histoire de la Médecine in particular can be seen through the inclusion of a passage from this text within a modern English translation of Galen’s De Sanitate Tuenda (On the Preservation of Health). The section outlines the ‘Life of Galen’ to provide context to the subsequent translation, and is attributed through a footnote, which says: ‘translated by Sidney Licht, M.D., from Daniel Le Clerc’s Historie de la Medecine, Amsterdam,

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93 Ibid., see in particular p. 85-88.
94 For the attribution to Daniel Le Clerc, see H. King, Midwifery, obstetrics and the rise of gynaecology: the uses of a sixteenth-century compendium (Aldershot, 2007), p. 87, n. 124. For evidence regarding Jean Le Clerc’s authorship, see J. Le Clerc, Bibliotheque ancienne et moderne, pour servir de suite aux bibliothèques universelle et choisie. Par Jean Le Clerc. Tome XXVII. Pour L’Anneé MDCCXXVII. Premiere Partie (A La Haye, MDCCXXVII [1727]); J. Le Clerc, An answer to what Dr. Freind has written in his History of physick (London, 1728); and the section of this chapter addressing the backgrounds of the texts and authors used throughout.
1723. This underlines both the perceived quality of the information contained within Le Clerc’s discussion, as well as the ongoing significance of his history.

The history of medical history has significant coverage from an ancient perspective, and there are many examples of works which address ancient historiography and the authors producing this type of material. Wesley Smith’s ‘Notes on ancient medical historiography’ illustrates the different contexts and challenges presented by ancient medicine in comparison to the early modern period, suggested by the idea that: ‘what the ancients left is meager and of varying quality. People in antiquity who approached the history of medicine often did so by indirection, for example, in idealization of the past, in polemic, or in self-justification.’ Despite Smith’s ancient focus, he also refers to Daniel Le Clerc’s *Histoire*, albeit from a different perspective to other historians of early modern medicine, highlighting that: ‘when Daniel Le Clerc initiated modern writing on the history of ancient medicine in 1696, the most balanced and disinterested history available for use as the skeleton for his history was the introduction to Celsus’s *De Medicina*, written in Rome in the early first century A.D. He filled out Celsus’s account largely with information from Galen.’ Smith also highlights an interesting parallel to early modern histories through a discussion of Celsus and his use of the ancients as an unspecified authority from the past as part of a discussion of phlebotomy (bloodletting): ‘the ancients thought that the young and the old could not bear it and that it would cause abortion in pregnant women.’ Smith questions this statement to underline the uncoordinated nature of Celsus’s history: ‘who, one asks, are the “ancients” whose views have been corrected, and who did the correcting and when?’

Following details regarding the different approaches to the presentation of medical history by various ancient authors, Smith turns to ‘the information of Galen’. This primarily outlines Galen’s portrayal of Hippocrates and his work, and it is important to note here that: ‘Galen’s history was not without effect. Later medical men repeat what he says.’

98 Ibid.
99 Ibid., p. 78.
100 Ibid., p. 109.
Vivian Nutton reiterates this authority, suggesting that: ‘the influence of Galen on the subsequent interpretation of the history of ancient medicine has been substantial.’\textsuperscript{101} This article highlights that the study of Galen and Galenic texts has significantly developed in recent years, due to increased availability of editions and translations of his works. The aim of this study, however, is ‘to explore some of the consequences of removing, in a similar fashion, [to the removal of Hippocrates] Galen from the history of medicine.’\textsuperscript{102} Nutton further explains this point by showing that: ‘the Galenic question is not, as was once suggested, the credibility of Galen, although that still remains a difficulty, but how one can penetrate behind his priorities and prejudices to recover the history of medicine before his time.’\textsuperscript{103} The significance of the effect of Galen’s presentation of material can also be seen through the suggestion that: ‘the theory of the four humors, as interpreted by Galen, exercised an enormous influence on subsequent medicine, and it is only right that historians should wish to trace its antecedents. But to write the history of medicine as if to imply that it achieved this dominance almost from its first articulation, and certainly from the composition of \textit{On the Nature of Man}, is to adopt a Galenic perspective that cannot be justified in our present state of knowledge.’\textsuperscript{104} This theme is also apparent within the early modern histories studied in this chapter of the thesis, and demonstrates the powerful nature of Galen’s portrayal of himself and the information that he chose to include within his works.

The variability of the influence of ancient authors in medicine and medical history can be seen through Debby Banham’s article regarding attribution and authority in Old English medical texts.\textsuperscript{105} This piece argues that: ‘although English vernacular medicine of the late ninth to twelfth centuries draws heavily upon the classical and sub-classical tradition, classical authorities are almost never cited. In fact citations of any kind are very rare [...]. Only in the twelfth century are Galen and Hippocrates mentioned for the first time. This suggests a

\textsuperscript{102} Ibid., p. 112.
\textsuperscript{103} Ibid.
\textsuperscript{104} Ibid., p. 119.
rather self-sufficient medical community in England, with limited historical awareness or contact with wider developments, at least until new Latin medical texts came in from the continent in the eleventh century.\textsuperscript{106} Here, it is important to note that although this thesis draws on ancient medicine and early modern interpretation, there is a significant time span separating these periods, and that there can be no assumption of consistency in the intervening years. The changing acceptance of different medical traditions and influences can also be seen in Andrew Wear’s work on the reception of classical Arabic medicine by English medical writers.\textsuperscript{107} This shows that: ‘in the seventeenth century the impact of Arabic medicine in West European medicine, so large in the middle ages and into the renaissance, dried up. [...] The sense of distance between Arabic medicine and English early modern medicine is very apparent.’\textsuperscript{108} Wear also makes an important point here regarding the content of this chapter of the thesis, suggesting, in contrast to the overall theme of the rest of his piece, that John Freind ‘could write as a historian, able to see overall patterns; but he was also a physician interested in the content of Arabic medicine.’\textsuperscript{109} However, Wear attributes Freind’s interest in Arabic medicine to the idea that he: ‘held radically different theoretical views from the Arabs’, and could therefore analyse their approach from a separate perspective.\textsuperscript{110}

The link between ancient medicine and the early modern period is primarily made through translations and editions of various texts, and references to these within later works. There is a significant body of work which addresses these conduits to the past, not least the many translations of Galen’s work that have been produced, and are used throughout this thesis. These texts often also include short histories to provide context to the subsequent translation, outlining the background and perspective of the relevant author.\textsuperscript{111} In terms of the availability of Galenic texts, Richard Durling’s article ‘A chronological census of


\textsuperscript{108} Ibid., p. 267.

\textsuperscript{109} Ibid., p. 275.

\textsuperscript{110} Ibid., p. 276.

\textsuperscript{111} See, for example Galen, M.T. May (ed. and trans.), \textit{Galen On the usefulness of the parts of the body, De usu partium}, Volume I (Ithaca, New York, 1968); Galen, P.N. Singer (ed. and trans.), \textit{Galen: Selected works} (Oxford, 1997); Galen, M. Grant (ed. and trans.), \textit{Galen on food and diet} (London, 2000).
Renaissance editions and translations of Galen’ is one of the most frequently cited by historians seeking evidence regarding the use and diffusion of Galen during this period.\textsuperscript{112} Whilst this article is undoubtedly important, it does, however, create a particular emphasis on the period between 1473 and 1600, which is reflected within a notable section of the historiography, and contributes to the focus within this thesis on the seventeenth and eighteenth centuries. Alain Touwaide similarly briefly addresses the production of Greek medical texts in the Renaissance, and demonstrates the importance of a range of circumstances that contributed to the significant number of texts that were produced.\textsuperscript{113} More specifically, Stefania Fortuna examines ‘the Latin editions of Galen’s \textit{Opera omnia} (1490-1625) and their prefaces’, showing the process by which texts were translated, and from which languages and sources, as well as the important information contained within the prefaces.\textsuperscript{114}

Although all of the approaches and traditions outlined above provide valuable context for the themes of this thesis, there are in addition several studies and authors which are more directly relevant to the specific content and findings of this chapter. Ludmilla Jordanova addresses \textit{The sense of a past in eighteenth-century medicine}, and shows that history ‘written by practitioners of the field whose past was being recounted’, ‘was less commercial than it was ideological, but in its own way writing the history of medicine in the eighteenth century was a ‘heritage industry’. While the principal projected audience for such writings was other practitioners and those with cognate interests, this does not mean that they were narrow, crudely aggrandising, or unresearched.\textsuperscript{115} This focus on the intention and audience of these texts balances the ‘internal impulses that led medical practitioners to be interested in their past, and the more general concerns of their contemporaries with historical change, its implications for the


\textsuperscript{115} L. Jordanova, \textit{The sense of a past in eighteenth-century medicine}, The Stenton Lecture 1997 (Reading, 1999), p. 3.
present, and the broad lessons to be drawn from reflections upon the past. In parallel with the findings of this thesis, Jordanova argues that medicine ‘generally was suffused with a historical consciousness’, highlighting that this was evident in several different forms and types of material. It is also apparent that the content of histories of medicine from this period reflected contemporary intellectual and political concerns, and it is underlined that: ‘the sense of a medical past, alive, usable, relevant, was not just carried by individuals, it was a collective phenomenon.’ Although this piece mentions several of the authors discussed below and their contributions to the history of medicine, Jordanova also suggests that: ‘there is relatively little work on the history of the history of medicine, and eighteenth-century writings have been especially neglected’, which underlines the contribution of this thesis. Similarly, the conclusions drawn from this material, and the other chapters within this thesis also particularly support the notion that: ‘what was innovative was complemented by what was of proven value; it was not just that the idea of the past was a cultural resource for eighteenth-century practitioners, but that the past itself was a clinical resource for them.’

Chiara Crisciani similarly addresses the idea of novelty in medicine and the way in which this was incorporated into existing ideas, focusing on the thirteenth to the fifteenth centuries. Although this is much earlier than the period discussed within this thesis, the themes are nonetheless similar, and it approaches several of the key issues from a different angle. For example, the idea that the aim of this piece was, in part, to show how ‘novelties appear in physicians’ and surgeons’ representations of their discipline and its development, and to point out the criteria used to incorporate the “new” into the framework of already existing notions.’ This highlights the perception of new information as opposed to the preservation of older material; however, this remains a key feature of the complexities of the perpetuation or rejection of

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117 Ibid., p. 6.
118 Ibid., p. 4 and p. 15.
119 Ibid., p. 4, n. 2.
120 Ibid., p. 16.
122 Ibid., p. 119.
particular medical theories and practices that are reflected throughout this thesis. Following a discussion of ‘concepts of tradition and progress in medical commentaries’, Crisciani turns to the idea of ‘progress in compendia of practical medicine’. Here, it is suggested that: ‘the ways in which these texts on practical medicine are built seem explicitly cumulative’, a sense that is particularly evident throughout this thesis, elements of which are present within each chapter. Similarly, Crisciani’s conclusions also resonate with the much later time period studied within this thesis: ‘scholastic medicine was characterized by a concept of increment, but one that was not progressive in the sense of continual accumulation; by the indefinite integration of new material, but within a closed doctrinal and disciplinary framework; and by a lively dynamism that paradoxically did not involve radical changes.’

Finally, it is important to highlight Nancy Siraisi’s work, which examines various aspects of the history of medicine during the Renaissance, and whilst Siraisi covers the period to the early seventeenth century, overlapping only slightly with the period addressed within this thesis, it is nonetheless possible to draw significant parallels. The article ‘Anatomizing the past: physicians and history in Renaissance culture’ explores ‘the role of historical interests in learned medical culture and the participation of physicians in the broader historical culture of the period.’ Siraisi also specifically discusses the importance of Galen within this tradition, suggesting that: ‘the writings of Galen, the dominant authority in medicine throughout the sixteenth century, both contained history and provided a model for historical writing in several senses.’ The model provided by Galen is also a theme recurrent throughout this thesis, and underlines that Siraisi’s findings in this respect continue into the later seventeenth century and beyond. This piece also emphasises the role of prefaces in providing historical outlines prior to a medical text, which included the evaluation of previous practitioners and knowledge; and analyses the specific work of Girolamo Cardano. Cardano is also the subject of a previous article by Siraisi which provides more

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124 Ibid., p. 138.
126 Ibid., p. 9.
127 Ibid., p. 10 and p. 21-24.
detail regarding his background, approach and the content of his works. As mentioned in the overall introduction to this thesis, Siraisi’s more recent book, History, medicine and the traditions of Renaissance learning, examines the relationship between history, medicine, and its theoretical past, showing the various ways in which these ideas were recorded. It places Galenic medicine into a wider context of changing literary and medical approaches during the Renaissance, and emphasises the availability of various editions of ancient works in the level of attention that they received during this period. In addition to the study of Galen and other ancient authorities, this work underlines the role of ‘Renaissance Galenism’, which is characterised not just as an interest in ‘the whole range of Galen’s output’, but ‘more generally, the notion that the renovation of contemporary medicine required the full understanding and actual application of all aspects of ancient medical teaching. In a similar way to the findings of this thesis, Siraisi also emphasises the contemporary importance placed upon the combination of classical leaning alongside technical knowledge, and the book shows that, during the sixteenth century, waves of interest in particular ancient texts affected both awareness and consideration of particular aspects of medicine and healthcare, whilst also encouraging specific developments. A further aspect of this text that finds parallels within this thesis is evidence of inconsistency in the relationship between ancient authorities and Renaissance medical learning, a factor which is also apparent during the late-seventeenth and eighteenth centuries.

Galen and histories of medicine
This chapter examines the perception of Galen evident within histories of medicine published in England during the eighteenth century. It is limited to the eighteenth century, rather than addressing the seventeenth in parallel as it is broadly accepted that Daniel Le Clerc’s Histoire de la Médecine, ‘first published in 1696’ was ‘the first example of a kind of history-writing about medicine that is recognisable to us.’ The criteria for this recognisable history have been

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129 N. Siraisi, History, medicine and the traditions of Renaissance learning (Michigan, 2007)
130 Ibid., p. 44.
131 Ibid., p. 177.
132 Ibid., p. 44 and p. 160.
described as: ‘based on something akin to research; that they developed a narrative thread and did not primarily list individuals or works; and that they attempted to account for the shape of the medical past – explaining trends was among their goals.’\textsuperscript{134} The texts examined within this chapter exhibit all of these criteria, and thus fall within the tradition begun with Daniel Le Clerc.

Daniel Le Clerc’s text was translated from French into English by James Drake (1667-1707) and Andrew Baden (1666-1699). Drake was a ‘political and medical writer’ from Cambridge, whilst Baden was born in Wiltshire and ‘proceeded MA at Cambridge in 1697.’\textsuperscript{135} This edition was published in 1699, and framed many of the subsequent discussions regarding the history of medicine, and the way in which it was presented. This can particularly be seen through John Freind’s text, in two volumes: \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century} (1725). Freind frames his work as a response, and extension, to Le Clerc, but saying of the \textit{‘Three Parts already published’}: ‘he brought down the History to the end of Galen’s time: and having search’d into his Works, and into those of all the Writers, who preceded him, for above 600 years, he put together his Memoirs not only with indefatigable industry, but with exquisite skill.’\textsuperscript{136} Freind (1675-1728) was a physician, skilled in Latin, and following a period spent translating and editing several Greek orations, ‘Medicine and natural philosophy soon superseded literature for Freind, although in his medical works, written mostly in Latin, he sustained his reputation as a Latin stylist.’\textsuperscript{137} Freind’s outlook in constructing his history is illustrated by the idea that he:

supported the ancients in the ‘battle of the books’ of the 1690s. Yet his wholehearted defence of Newtonianism indicated that, in natural philosophy, he was a modern. He attempted to reconcile these

\begin{flushleft}
\textsuperscript{134} L. Jordanova, \textit{The sense of a past in eighteenth-century medicine} (Reading, 1999), p. 6.  
\end{flushleft}
apparently conflicting positions in his 1717 edition of books 1 and 3 of the *Epidemics* of Hippocrates.\textsuperscript{138}

This reflects many of the aspects of his outlook within *The history of physick*, and the idea that ‘he argued that modern, Newtonian theory and practice had confirmed many of the observations of Hippocrates. Truth, explained Freind, was eternal and God-given, and God gave the privilege of understanding it only to certain individuals in each generation.’\textsuperscript{139} is in parallel with many of the observations that he provides regarding Galen’s contribution to medicine. *The history of physick* was particularly popular, and many of the references to Galen within this text corroborate and exemplify the broader themes of the work:

Freind argued that medical practice had indeed progressed over the centuries, but medical theory had seen little progress until his own time. He characterised the physician as the possessor of a God-given talent, and the parallel between this characterization and the divinely ordained monarch of the Jacobites was not coincidental.\textsuperscript{140}

Freind’s text, which is relatively critical of Daniel Le Clerc’s work is in turn analysed by Clifton Wintringham in *Observations on Dr. Freind’s History of physick; Shewing, some False representations Of Ancient and Modern physicians*, published in 1726. The title of this work immediately suggests the tone of the content, and it contains both assessments of Freind’s text, as well as suggestions regarding how his research and interpretation could be improved. Wintringham was baptised in 1689, and ‘was admitted an extra-licentiate of the Royal College of Physicians’ on 3 July 1711.\textsuperscript{141} However, ‘no record of his having obtained an MD has been found in British or European universities’, although ‘He wrote extensively on medical topics’.\textsuperscript{142}

\begin{footnotes}
\item[139] Ibid.
\item[140] Ibid.
\end{footnotes}
The prevalence of texts commenting upon other texts can further be seen through the publication of Jean Le Clerc’s An answer to what Dr. Freind has written in his History of physic, concerning several mistakes, which he pretends to have found in a short work of Dr. Le Clerc (1728), and John Baillie’s A letter to Dr. ------ in answer to a tract in the Bibliotheque ancienne & moderne, Relating to some Passages in Dr. Freind’s History of Physick (1727), which responds to Le Clerc’s work. Jean Le Clerc (1657-1736) was a theologian and philosopher from Geneva, and Daniel Le Clerc’s brother; and John Baillie (d. 1743) was a physician and writer, ‘employed as a doctor at St George’s Hospital in London and in the English army. Here, Le Clerc’s text is published after Baillie’s response, although the original, which appeared in the Bibliotheque ancienne & moderne, was published in 1727. The English translation also has the addition of a preface by William Cockburn, which underlines that Jean Le Clerc was Daniel’s brother, and outlines the context for this piece. Within John Baillie’s work, Jean Le Clerc is referred to as ‘the Annotator’ which can be verified by examination of a paragraph in French included in Baillie, described as by ‘the Annotator’ which also appears in Jean Le Clerc’s Answer text.

Following this period of comparison and discussion, three later texts are also examined within this chapter, and show a more comprehensive move towards addressing the improvement of physic in the future, alongside discussing the medicine of the past. Firstly, Francis Clifton (d. 1736) was a physician who ‘entered Leiden University on 23 May 1724, and graduated as doctor of medicine there in September of the same year.’ His work, The state of

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143 The full title of Jean Le Clerc’s text illustrates the connection to Baillie’s: J. Le Clerc, An answer to what Dr. Freind has written in his History of physic, concerning several mistakes, which he pretends to have found in a short work of Dr. Le Clerc, intituled, An essay of a plan, &c. Translated from the eighth article of Bibliotheque ancienne, & moderne, vol.27. Part 2. by Mr Le Clerc. To which is added, a preface, by W. Cockburn, M.D. (London, 1728).
146 J. Le Clerc, Bibliotheque ancienne et moderne, pour servir de suite aux bibliothèques universelle et choisie. Par Jean Le Clerc. Tome XXVII. Pour L’Année MDCCXXVII. Premiere Partie (A La Haye, MDCCXXXVII [1727]).
147 J. Baillie, A letter to Dr. ------ in answer to a tract in the Bibliotheque ancienne & moderne, Relating to some Passages in Dr. Freind’s History of Physick (London, 1727), p. 6; J. Le Clerc, An answer to what Dr. Freind has written in his History of physic (London, 1728), p. 3.
physick, ancient and modern, briefly consider'd: with a plan for the improvement of it (1732) reflects many of Freind’s ideas, particularly through the way in which ‘he maintained that Hippocrates had anticipated Newton in his idea of the system of gravitation.'149 Clifton describes the influences on this work by suggesting that:

Hippocrates, Celsus, Pliny, Cælius Aurelianus, and Galen among the Ancients; and Le Clerc and Freind, among the Moderns, are the principal authors I have consulted: and, to say the truth, whoever reads the Histoire of Le Clerc, and the continuation of it by Freind, may, if he please, save himself the trouble of reading much of the historical part of this book.150

This also illustrates the similarity of tone to Freind’s work, and implies that Clifton viewed the parts of his text that addressed the medical future as more notable than those that addressed the medical past.

This emphasis on the improvement of physic is also evident within John Barker’s text An essay on the agreement betwixt ancient and modern physicians (1747). Barker (1708-1749), a physician who became a ‘member of the Royal College of Physicians’ in 1746, was ‘fiercely opposed to the practice of venesection – the repeated bleeding of the patient’, and consequently became involved in a dispute with another physician over its use in the treatment of fever cases.151 The title of his work particularly underlines the comparative nature of the content, as well as showing the role of Galen as a key figure within this ongoing debate.

Finally, William Black’s work An historical sketch of medicine and surgery, from their origin to the present time; and of the principal authors, discoveries, improvements, imperfections and errors (1782) provides a great deal of

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150 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), unnumbered page, fourth of ‘The Preface.’
information regarding the broad narrative of the history of medicine, and the inclusion of a table entitled ‘A CHRONOLOGICAL CHART OF MEDICAL AND SURGICAL AUTHORS’ is a particularly interesting source of information showing the relative dates of activity and general area of medicine of a notable number of practitioners from 400 BC to 1800 AD. He explains the structure of the chart by suggesting that: ‘The Numbers or Years at the top distinguish the chronology or century of the Author’s publication: his birth and death I have not attempted to explore.’ Black (1749/50–1829) was a ‘physician and writer on medicine’, who ‘studied medicine, first at Edinburgh, then from 1771 at the University of Leiden, gaining his MD there in 1772 with a dissertation on fevers’. Although Black ‘did not rise to eminence as a physician, [...] he was one of the first writers in England to apply statistics, previously employed in politics and commerce, to medicine.’ Of the texts mentioned above, Black’s provides the most detail regarding the more tangible aspects of medicine, including specific chronological detail, bibliographic information, and the most comprehensive coverage of time.

Black indicates the purpose of his ‘Chronological chart’ by saying under a section towards the end of his work providing a ‘Postscript’, that:

My first intention was to have published a separate Chart, and upon a larger scale. Some friends, however, whose judgement I respect, are of opinion, that even in its present crude state, it may be acceptable to the readers of the preceding compendium, I offer it to their perusal with all its imperfections, and with great diffidence. It may, perhaps, assist some readers in groping their way through a mist of ancient and modern writers.

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152 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
153 Ibid., p. 310.
156 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXXII [1782]), p. 310. This section of the text also provides additional information regarding the construction of the ‘Chronological chart’ and the conventions used. For example: ‘The Chart, as to the Chronology, commences 400 years only before Christ. It was
This illustrates the perception that navigating the landscape of ancient and modern medical writers was problematic, and indicates Black’s intention in providing a guide to the overall narrative and the essential information which constituted the framework of the history of medicine. It also serves to anticipate criticism of the table and its accompanying text, suggesting that whilst it is a useful start within this process, it nonetheless could be improved through additional work.

The relationship between these texts, and the way in which they are produced is also addressed by the other authors mentioned. For example, John Freind speaks in a similar tone to Black within his section ‘To the Reader’, suggesting that:

*If this short HISTORY of PHYSICK can be of any Use or Entertainment to those who are versed in the Ancients, or can excite others to be better acquainted with them, I shall think my labour very well employ’d: or if it should not, I shall not at all be dissatisfied with having amused myself in this Way.*

This again shows a reserved description of the content of the work, similarly insulating the author from external criticism. It also emphasises the role of the ancients within this work.

Clifton Wintringham demonstrates the link between his text and Freind’s within the first page of his *Observations on Dr. Freind’s History of physic*, which says:

*Doctor Freind’s principal Scheme in writing his History of Physic, was, to represent himself first, and, after him, Doctor Mead, as the only Physicians at this Time, in London especially: As for History, that is made*

impossible in such confined limits to have strayed further back to the fabulous ages of Medicine, or even to Esculapius […] So far as respects the immediate Medical and Surgical Authors down to 1500, the Chart is, I believe, tolerable full and accurate. The Punctum, or Period (.) at the end of several ancient authors names, during the first six centuries, is meant to signify that their works are lost.’ (p. 311-312).

subservient to the mention’d Design; and, indeed, that Part of the Performance is very imperfect and superficial, he seeming equally to contrive how to corrupt the History of Physick, and to abuse Men by a corrupted History.\textsuperscript{158}

This particularly underlines the critical nature of Wintringham’s text, questioning Freind’s intention in producing it, and indicating that this was not for the broader benefit of the field.

At the end of his text, John Barker provides a comprehensive summary of the intention of these types of text in terms of the improvement of physic, based upon a solid foundation of historical awareness. This can particularly be seen through the idea that:

For the Office of a Physician is like that of a Builder, who undertakes to repair a decayed Pile; he must add what is wanting, and subtract what is superfluous, support the Fabrick, where it is weak, open obstructed Drains, &c. but he must take Care, at the same Time, to keep the Plan of the Original Architect constantly in View, lest while he is endeavouring to repair, he should, in reality, subvert the Fabrick. This is a Method which they will find, indeed, to be more laborious than that of framing Hypotheses, (however ingenious they may be) to found their Practice on; or than that of ringing the Changes with a Sett of Remedies, as Empiricks have always done; but yet not so laborious as to deter any one from the Undertaking; for HIPPOCRATES has shewn the Way, and it is much easier to follow the beaten Road, than it is to strike out new Paths in Science.\textsuperscript{159}

In many ways, this exemplifies the way in which Galen is perceived throughout these texts, and the final passage of the text reiterates this point, saying:

For, to conclude with the Words of the divine old Coan, “Medicine is an Art, which has existed from ancient Times, and by which may useful

\textsuperscript{159} J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 289.
Things have been discovered, as many more will be in Time to come, by such as are qualified for the Task, and acquainted with the Discoveries which have been already made: But if any one shall neglect and despise these Discoveries, and pretend to make Improvements in the Art, by pursuing another Road, he will deceive himself and others; for it is impossible to be done.\footnote{160}

This underlines the importance of ancient knowledge, and this chapter shows the various ways in which Galen is utilised within this framework, as both a particular authority and as a member of a broader group of ancient practitioners influencing medical knowledge, theory, practice and history. Galen is shown to be significant with regard to the preservation of older knowledge, providing a source for information often not available elsewhere. He is also used as a marker of time: as a fixed point from which to compare and relate ideas, developments and theories over time. Additionally, his work is utilised as a source for information, both in terms of highly specific citations of particular Galenic texts, as well as through more general allusion to his works and the ideas contained within them. The histories of medicine examined also convey a significant quantity of information regarding Galen’s own lifetime, and the context of his background and its effect upon the work he produced. This information takes varied forms: from biography and character; to his relationship to Hippocrates; his medical system and approach; and assessments, both positive and negative, of his achievements and the texts he produced. These texts also illustrate Galen’s perspective and knowledge, and present this throughout within a broad range of discussions, showing their importance as a source of information about Galen’s approach. They similarly address the effect that Galen had over time, providing a sense of the impact he had upon different periods ranging from during and after his lifetime, to contemporary attitudes shown in the texts of the eighteenth century. This extends to show the present use of Galen, and his role within the current state of medicine, also underlining the role of ancient medicine in the future improvement of physic.

\footnote{160 J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 290.}
Galen as preserving older knowledge

The role of Galen as a particular source of information can be seen throughout these types of texts and several different aspects are emphasised by the authors. For example, the idea that his works were a source of information not otherwise available indicates the importance of his role in providing the underlying detail of earlier practitioners and authors whose own accounts were no longer accessible. In addition to preserving older knowledge, Galen is also portrayed as building upon the theories of the past, and contributing to the information that he conveyed regarding his predecessors. This is particularly evident with regard to Hippocrates, and Galen is shown to be a significant source through which to access information about the theories and practices associated with the Hippocratic corpus.\textsuperscript{161} Modern accounts of this process also reiterate the importance of Galen, by suggesting that:

\begin{quote}
[...] much of our information on early medicine depends on Galen’s interpretation and sifting of the evidence. His view of the historical Hippocrates was scarcely questioned until the twentieth century, even though some ancient followers of Hippocrates held very different opinions of what their teacher had written.\textsuperscript{162}
\end{quote}

This illustrates the extent to which Galen influenced perceptions of Hippocrates, and shows the longevity of his ideas in this area. Although Galen provides much of the information relating to Hippocrates that was utilised during the early modern period, there is also a sense of comparison between the two. This can be seen throughout the histories of medicine examined, and illustrates the complexity of the relationship between the two practitioners. Whilst Galen is seen as a key source of information relating to Hippocrates, his broader role in portraying the landscape of ancient medicine is particularly important, and his texts provide access to information regarding a significant number of ancient medical practitioners.

\textsuperscript{161} Examples showing the use of specific parts of Galen’s Hippocratic commentaries can be seen below, and within Appendix C.
Throughout William Black’s *An historical sketch of medicine and surgery* (1782), there are several examples which show Galen as a source of information regarding past practitioners, and also in some instances, as the only way in which to access this information, otherwise lost. This can particularly be seen as part of a discussion regarding ‘two celebrated Anatomists’ Erasistratus and Herophilus. Both are listed under ‘Anatomy and physiology’ and ‘Practice of medicine, therapeuticks, pathology’ within Black’s ‘Chronological chart’ and shown as active during the third century BC.\(^{163}\) This is reinforced and clarified by modern accounts of both practitioners, which suggest they were working in 280BC.\(^{164}\) As part of the section ‘Chap. III. Of Greek Writers: Medicine and Surgery in Greece, and at Alexandria, in Egypt’, Black suggests that: ‘ERASISTRATUS’S Anatomy of the Brain and Nerves far surpasses in correctness that of his predecessors: his description of the Ventricles in this organ is preserved by Galen.’\(^{165}\) This underlines the importance of Erasistratus as an anatomist improving upon the work of his predecessors, and also illustrates the role of Galen in preserving this information and ensuring that it remained accessible. The fundamental and long-standing position of Galen within this process can be seen through the idea that: ‘Modern scholarship on Erasistratus and Asclepiades has had first to pierce the fog of Galenic prejudice. Yet without his information any reconstruction would be immensely the poorer.’\(^{166}\) This shows that, alongside Asclepiades (active in 95 BC), much of the information known about Erasistratus is derived from Galen, and that this had a significant and lasting effect upon perceptions of these practitioners.\(^{167}\)

Black’s reading of Galen in this instance is also reinforced by modern assessments of his perception of Erasistratus:

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\(^{163}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E.

\(^{164}\) L.I. Conrad, M. Neve, V. Nutton et al., *The Western medical tradition: 800 BC to AD 1800* (Cambridge, 1995), p. 8; see also p. 33: ‘The step from Aristotelian animal to human dissection is credited to Herophilus of Chalcedon (c. 330-260 BC) and his contemporary Erasistratus of Ceos (c. 330-255 BC).’ This reiterates Black’s description of Erasistratus’ area of expertise. Black also mentions Herophilus as Erasistratus’ ‘rival in anatomy’: W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), p. 44.

\(^{165}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), p. 43.


Galen was ambivalent about him, to say the least. While he quoted with approval Erasistratus' injunctions to practise anatomy constantly, and dwelt at length upon his remarkable investigations of the anatomy of the heart and brain, he was scathing about other aspects of his medicine.\textsuperscript{168}

Although this implies that Galen provided both positive and negative assessments of his predecessors' work, it nonetheless shows the importance of his role in the continuation of their ideas. This is reiterated by Black's comment that: 'The works of these two Authors [Erasistratus and Herophilus] are now lost, but numerous fragments of their practical precepts are preserved in Cælius Aurelianus and in Galen,' which indicates that without the information available in the work of successors, this practical knowledge would have been lost.\textsuperscript{169}

The preservation of Erasistratus' work though Galen is described, and put into a wider context, by Daniel Le Clerc, who suggests that:

> We have lost the writings which Diocles, Praxagoras, Philotimus, Erasistratus, Herophilus, Asclepiades, Theon, Diotimus, and several others compos'd upon that subject; but by the fragments that are still remaining in Galen, or other Authors that have cited them, we may easily know in what esteem Gymnastick was among the Antients.\textsuperscript{170}

Whilst this passage addresses a different aspect of medicine, it does illustrate that Galen, in particular, was viewed as a reliable source of information regarding 'the Antients.' It also implies that it was possible to 'easily know' the views of practitioners active prior to Galen's lifetime through his works and those of other authors using these types of citations.

The importance of the information provided by Galen can further be seen within William Black's work, which indicates that: 'His comments upon the Authors and

\textsuperscript{169} W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 44.
\textsuperscript{170} D. Le Clerc, The history of physick, or, An account of the rise and progress of the art (London, 1699), p. 142.
Medical practice of antiquity, makes us feel less regret for the destruction of the originals.'¹⁷¹ This illustrates that Galen was seen as a significant and acceptable source for this type of information, and the idea that he addressed ‘the Authors and Medical practice of antiquity’ also begins to show the comprehensive and wide ranging nature of his works. Similarly, the suggestion that the content of his texts was able to partly alleviate the problems associated with the ‘destruction of the originals’ underlines the perceived quality and utility of the information he provided. This reiterates the significance of Galen as a specific source through which to access the theories and knowledge of his predecessors, and shows the extent to which his work influenced the aspects of medical knowledge and practice that were transmitted to later periods.

Galen as marker of time

In addition to being a specific source of information, Galen is also utilised as a way in which to situate other practitioners and their work, and provides a fixed point around which to address medical theories and practices over time. This is particularly evident within the titles of two of the histories examined: John Freind’s The history of physick; from the time of Galen, to the beginning of the sixteenth century, and John Barker’s An essay on the agreement betwixt ancient and modern physicians: or a comparison between the practice of Hippocrates, Galen, Sydenham, and Boerhaave, in acute diseases. Although each shows a different emphasis, both titles illustrate the presence of Galen as a significant figure in demonstrating the content of the text and the periods covered. These authors, alongside the others mentioned throughout, use Galen in a variety of different ways to construct the historical narrative of their works. For example, Galen is used to date specific practitioners; to show relative chronologies, including those significantly after his own lifetime; to define periods; and as a way to frame historiographical discussion.

Galen is used to situate a wide variety of practitioners over an extremely broad period of time, and there is often a sense that he provided a commonly understood point from which to refer to other individuals. This can particularly be seen within Frances Clifton’s The state of physick, ancient and modern,

¹⁷¹ W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 102.
which contains an entry regarding Heraclides of Tarentum, who Clifton describes in a marginal note as: ‘the most famous of all the Empiricks.’ 172 Within the text, it says that Heraclides:

is suppos’d to have liv’d about the close of the thirty-eighth Century, and was more famous than any of his successors; Sextus Empiricus being the only one of note before Galen’s time, and Marcellus (who liv’d at Rome under Theodosius) after it; unless we except the ornament of our own country, Thomas Sydenham, who ‘tis plain was an Empirick in the main, though we don’t find among his works the express tenets that they held. 173

Although the ‘close of the thirty-eighth Century’ does not immediately provide a clear date of activity, Vivian Nutton mentions a tract by Heraclides of Tarentum written ‘around 70 BC’, whilst he is listed as active in 80 BC in the ‘Chronological table’ provided within *The Western medical tradition* (2004). 174 William Black places him slightly earlier, showing Heraclides in his ‘Chronological chart’ under ‘Practice of medicine, therapeuticks, pathology’ sometime between 200 BC and 100 BC. 175 Nonetheless, this passage illustrates the importance of Galen, not only as a point in time, but also as a practitioner ‘of note.’

The role of Galen as a marker of time can similarly be seen within William Black’s discussion regarding Aretæus, which says that ‘Authors are at a loss to fix the precise time when Aretæus wrote, whether shortly before or after Galen.’ 176 Black places Aretæus within his ‘Chronological chart’ under ‘Practice of medicine, therapeuticks, pathology’ as ‘Aretæus Capp’ and shows the name between the years 100 and 200, which reinforces the suggestion that he was

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173 Ibid., p. 38. According to the seventeenth-century theory that the world began in 4004 BC, the thirty-eighth century places Heraclides as active at the end of the third century BC, however, Clifton does not appear to use this numbering system elsewhere.
175 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E
176 Ibid., p. 63.
active at a similar time to Galen. The difficulty in determining a precise date of activity is reinforced by modern accounts, which suggest that:

When and where Aretaeus wrote is unclear. The older view, based on the absence of his name from the pages of Galen, was that the two authors were roughly contemporary, both active in the second half of the second century. Galen’s silence was thus explained on the grounds either of ignorance or of a reluctance to acknowledge contemporaries or near-contemporaries from whom he had taken much of his material.

It is significant that although Black may not have known that Galen does not refer to Aretæus, he nonetheless utilises him as a fixed point around which to speculate upon Aretæus’ dates.

The idea that evidence within the Galenic corpus to confirm the period of activity of a particular practitioner was not necessary in order to use Galen as an indicator of time is evident within Clifton’s text, which contains a passage saying: ‘As to this last Author, viz. Cælius Aurelianus, he was an African of Sicca, a town in Numidia, and is thought to have liv’d about Galen’s time, or rather later, though they don’t mention one another.’ Here, the implication is that whilst Galen is important to show the broad dates of Cælius Aurelianus’ activity, the idea that ‘they don’t mention one another’ was seen as an aside, rather than a requirement to verify the information. The association between Cælius Aurelianus and Galen is broadly confirmed by William Black, who places him under ‘Practice of medicine, therapeuticks, pathology’ in his ‘Chronological chart’, between the years 100 and 200 AD. However, more modern sources suggest a much later date, which nonetheless still conforms to Clifton’s suggestion that Cælius Aurelianus ‘liv’d about Galen’s time, or rather later.’ For

177 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. Here, the word ‘Capp’ refers to ‘Cappadocia’, i.e. ‘Aretæus of Cappadocia’; see also Appendix E.
178 V. Nutton, Ancient medicine (London, 2004), p. 205. This also suggests further debate surrounding the dates of Aretæus, indicating around 50AD, and the 140s or 150s as additional possibilities. See also L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995), p. 9 and 44.
179 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 53.
180 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. Shown as ‘C. Aurelianus’; see also Appendix E.
example, Nutton refers to him as active ‘c. 420’ and suggests that: ‘A Latin medical culture that was still flourishing in North Africa in 450, with writers such as Caelius Aurelianus and Cassius Felix, had come near to collapse as the civic institutions that had supported it weakened and crumbled away.’\textsuperscript{181}

The significance of Galen within this type of discussion, and in dating specific practitioners can also be seen within John Freind’s work *The history of physick*, which contains a passage relating to Palladius:

*Palladius, call’d Sophist or iatrosophist, was bred, as he himself seems to hint, at Alexandria. I place him first among the more modern Greeks, but cannot agree with a late learned author who computes, that he flourished about the year one hundred and twenty-six*. St. Albinus gheses better at the age of Palladius, in ranking him after Galen, \textit{i.e.} after the year two hundred: tho’ Albinus is guilty of a great over sight in this matter, for he says [...] that he thinks it is \textit{probable} this author liv’d after Galen, since Galen does not mention him: whereas he might have been satisfy’d from his own translation, that it is \textit{certain}: for there Palladius quotes Galen. Indeed he not only mentions Galen here, but in his other works very often: and it may be prov’d, that he lived not only after Galen, but after Ætius and Alexander too, whose words, as we shall see, he makes use of.\textsuperscript{182}

This shows the importance ascribed within these texts to determining the period of activity of particular practitioners. It also illustrates that Galen was used both as a source for this type of information, and as a fixed point in time through which to relate the position of other practitioners. Although there is evidence of debate surrounding the date of Palladius’ activity, Lawrence Conrad reiterates Freind’s suggestion that he was active after Galen, Ætius and Alexander, by placing him within the late sixth century.\textsuperscript{183} Additionally, Freind underlines the


\textsuperscript{182} J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (London, 1725), p. 244-245. ‘*’ symbol within quote indicates a citation with a footnote that does not clearly show the source of the information.

role of a variety of texts, including citations of Galen, in determining the chronology of particular authors.

The idea of the relative chronology of practitioners, and the use of Galen as a marker within this narrative, can again be seen within Freind’s text, as part of a discussion regarding Avenzoar (1090-1162):

Avenzoar, tho’ his age cannot be precisely determin’d, seems to have lived later; and we are sure, he liv’d before Averrhoes, who more than once gives him a very high and deserv’d encomium: calling him Admirable ʷ, Glorious ʷ, the Treasure ʷ of all knowledge, and the most Supreme ʷ in Physick ʷ from the time of Galen ʷ to his own.¹⁸⁴

Whilst Freind is unable to provide a precise age for Avenzoar, he utilises other information to approximate the relative dates of activity, and also underlines his position in relation to Galen, both as a practitioner and as a chronological marker. This particular passage is also discussed by Clifton Wintringham within his Observations on Dr. Freind’s History of physick, published in 1726. Here, he explores the paragraph within the context of the work more broadly:

We are assured that Averrhoes thought Avenzoar a Glorious, and an Admirable Person, and that he was the Treasure of all Knowledge, as well as the Supreme in Physick from Galen’s Time down to his own. Freind thinks these Characters so much his due, that we can do no less than to take his Word for what he has now declared, or, at least, is supposed to have declared; yet, if we may believe Freind a little further,

¹⁸⁴ J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume II (London, 1725), p. 74. The superscript letters within this quote refer to footnotes providing only page numbers.
In mirroring the language used within Freind’s text, Wintringham indicates a specific knowledge of its contents, which also reinforces his subsequent criticism of the comments. Wintringham illustrates a contradiction in Freind’s argument for the use of Averrhoes’ testimony in determining the role played by Avenzoar in the chronology he is presenting. He implies that information provided by Averrhoes, a physician-philosopher also known as Ibn Rushd who died in 1198, was flawed and that Freind had also suggested this within his own work. The ‘*’ symbol within Wintringham’s account directs the reader to ‘Page 120’ of Freind’s work, which says of Averrhoes: ‘tho’ I agree, that it is probable, he was no very great Practicioner.’ Whilst this illustrates a sense of inconsistency within Freind’s work, it is significant that Galen remains as a way in which to situate the two other practitioners from a much later period.

Throughout these types of text, there are also various discussions regarding the way in which other historians of medicine have constructed their works, and the role of Galen as a marker to situate both other practitioners and their historiographical analysis. For example, John Baillie, in the text which is described as Relating to some Passages in Dr. Freind’s History of Physick, suggests that:

What the Annotator says of Paracelsus, that he was a famous Imposter, and therefore ought to have particular notice taken of him, argues no more, than that a man in compiling a compleat history shou’d not entirely pass him by, but will never be an excuse, why a writer only of hints, should spend nigh half his book upon that author, and allow but three pages to four of the most remarkable Greek Physicians since the time of Galen; surely the Annotator will not say, this is to write accurately.

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187 J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume II (London, 1725), p. 120.
188 J. Baillie, A letter to Dr. ------ in answer to a tract in the Bibliotheque ancienne & moderne, Relating to some Passages in Dr. Freind’s History of Physick (London, 1727), p. 23-24.
Here, ‘the Annotator’ refers to Jean Le Clerc, the author of *An answer to what Dr. Freind has written in his History of physick* (1728), and it is evident that Baillie believed that the ‘most remarkable Greek Physicians’ (including, by implication, Galen) should have a significant proportion of any ‘compleat history’ devoted to them. This idea can similarly be seen within Dr. Freind’s *History*, in relation to a different period and geographical location:

This short narrative of the introduction of learning among the *Arabians*, is no more, than what was necessary to give us some general insight into the state of Physick in those days. And tho’ from what I have before remark’d, that the Physical Writers of this nation were *chiefly* copiers of the *Greeks*, it may seem to some an unnecessary inquiry, yet the design I propos’d, in putting together a connected History of Physick from the time of *Galen*, would be very dis-jointed and imperfect, unless an account of them likewise were given in its proper place.189

This underlines the perceived importance of completeness in constructing this type of history, and reinforces the role of Galen in providing a marker from which to begin, indicating that a ‘connected History of Physick’ began with Galen, and extended to the present time.

There also a sense that Freind saw his work as part of a broader narrative, which can be seen in his suggestion that:

Neither shall I say any thing of the *Latin Writers*, who lived after the time of *Galen*, since Mr. *le Clerc* in the *first* edition of his History, has given a full and distinct account of them all: except of Marcellus the *Empirick*, who most impudently pillaged and transcribed *Scribonius Largus*, and did little in this work which he has left, besides adding a few trifling receipts or rather *legends* of his own.190

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190 Ibid., Volume I, p. 294-295.
The implication, therefore, is that Daniel Le Clerc had sufficiently addressed the most important figures within this particular section of the chronology, and Freind needed only to resolve a minor omission in the narrative bounded by Galen. Freind also provides further historiographical comment regarding ‘Mr. Le Clerc’s History of Physick’, indicating that:

in the Three Parts already published [...] he brought down the History to the end of Galen’s time: and having search’d into his Works, and into those of all the Writers, who preceded him, for above 600 years, he put together his Memoirs not only with indefatigable industry, but with exquisite skill.¹⁹¹

This comment reiterates the idea that a more general narrative was perceived to exist, and that Freind was therefore able to remark favourably upon another historian’s work. Additionally, the role of Galen as a marker of time can again be seen within this paragraph, illustrating that the project of constructing a ‘complete’ History pivoted around Galen as a fixed point in time.

Providing notes regarding other, similar, works of History is a theme that is continued by Jean Le Clerc in his text entitled An answer to what Dr. Freind has written in his History of physick. Here, he directly addresses the passage mentioned above within his introductory section, suggesting that: ‘Doctor Freind having begun his History of Physick where Doctor Le Clerc ends, thought himself obliged to take some notice of the later; of which he speaks very favourably.’¹⁹² This is followed by a quote, containing the passage above, and is accompanied by a citation allowing the reader to confirm the information provided. This demonstrates a specific knowledge of the work referenced, and reinforces the idea of the development of a broader historical medical narrative.

Nonetheless, the sense of contributing to a broader chronology does not preclude the possibility of conflict or contrasting opinions. Within the lengthy ‘Preface’ to Jean Le Clerc’s An answer to what Dr. Freind has written in his

History of physick (1728), written by W. Cockburn, M.D., there is an account of the nature of a specific disagreement, which begins with an introduction to the context: ‘Dr. Freind being thus to expose Physicians, under the pretext of a History, he sets up, in the next place, for a superior Capacity for that Work; that as he himself is the greatest Physician, so he must likewise appear to be the best Writer of Physick History.’

This is followed by a passage providing additional detail:

On this account the learned Dr. le Clerc falls under the Displeasure of Dr. Freind. Le Clerc had writ the History of Physick, beginning with Hippocrates, and ending with Galen so accurately, that Dr. Freind tells us, we find amply and clearly represented all the Philosophy, the Theory, and Practice of ancient Physicians; so that there is scarce a Nation, a Distemper, a Medicine, or even the Name of an Author, to be met with amongst them, of which he has not given a full and exact account. This Accuracy has been universally confessed; but is now the occasion of all the Scandal from the History of Physick: for Freind must have still a superior Character for an Historian, […]

Here, it is implied that the underlying reason for disagreement is Freind’s desire to portray himself as ‘the greatest Physician’, which evidently also encompassed being seen as ‘the best Writer of Physick History.’ This also illustrates the importance ascribed to writing history alongside practicing medicine, and to the author to identifying their position within the overarching narrative of medicine over time and in relation to other practitioners, such as Galen.

The position of Galen within the broader medical narrative is emphasised throughout these texts, and his role as a way in which to divide the chronology and situate other practitioners is particularly significant. The use of his name within the titles of several of these histories underlines the idea that this was a recognisable method of describing the content of a text, and shows the importance of Galen as a figure for defining periods, and the medical

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194 Ibid., p. v.
developments that occurred within them. The variety of different ways in which Galen is utilised as a marker of time underlines his importance as both a source of information, and as a fixed point around which to address medical ideas over a broad time period. This aspect also links to the sense of an existing narrative, contributed to by each historian, and Galen remains a fundamental aspect of the construction of this framework.

**Galen as source: Galenic texts, citations and references**

The most frequent way in which Galen is referred to within these types of history of medicine is as a source of information or ideas. This takes the form of both citations referring to specific Galenic texts, used to illustrate a variety of different points, and more general references showing the broader influence of Galen’s work on a particular area. The content of the Galenic corpus is utilised throughout these texts, and the way in which it is referred to suggests that these books were physically accessible for consultation, and that the ideas they contained were understood and seen as relevant. The specific references to Galenic works often take the form of the provision of a book and chapter number within a footnote and this demonstrates the level of engagement with the texts, and adds a sense of accountability to their use. Similarly, the more general references are often used to provide comments regarding the place of Galen’s work within a broader time period, as well as conveying a sense of the process by which their content had reached the present.

*References to specific Galenic texts*

A significant number of Galenic texts are referred to by name within the histories of medicine examined, and often a footnote is provided which shows the relevant book or chapter of the work. The citations illustrate the different ways in which these authors engage with the Galenic corpus, and demonstrate the extensive variety of the texts that are discussed. Appendix A illustrates the titles (in Latin and English) of all the different Galenic works that are mentioned within the early modern texts studied, and also shows in which of the other Appendix documents they are discussed. Appendices B and C are tables of citations and references which show Galen as a source, and link each individual reference to the specific Galenic text. Both are arranged in order of the number of times each is mentioned in the early modern works, and then by the order in
which they appear in Kühn. Here, Appendix B addresses references to texts which also have an English translation. This allowed each citation to be checked against the original text, indicating the extent to which the early modern text adheres to the information and language of the Galenic work. Appendix C provides the citations that are given for texts not currently available in English, which limits the possibility of verifying the reference; however, Appendix B provides a large enough sample to draw significant conclusions from the comparison. Finally, Appendix D summarises the content of Appendices B and C, showing the Galenic texts referenced, alongside the authors mentioning them and brief additional information, including the specific books and chapters of each Galenic text where this is provided. This Appendix is also arranged by the works most frequently mentioned, and then by their presentation in Kühn; and particularly demonstrates which authors refer to which texts, and how frequently.

The Galenic work most frequently referred to within the histories of medicine examined is De Methodo Medendi (On the Therapeutic Method).\textsuperscript{195} It was written during the latter half of the second century AD, and has been described as Galen’s ‘therapeutic masterpiece.’\textsuperscript{196} The majority of the fourteen books within De Methodo Medendi are mentioned, and often a specific chapter within a book is also provided, allowing the reader to further pursue the information.\textsuperscript{197}

The specific use of information from De Methodo Medendi can be seen within Francis Clifton’s work The state of physick, as part of a chapter entitled ‘Of the State of Physick among the Romans’ where Clifton includes a reference to Book 1.\textsuperscript{198} This particular citation is used to provide evidence of a story from Galen, and a marginal note indicates that the paragraph addresses ‘The conduct of Thessalus’: ‘His impudence to the Faculty was so great (as Galen tells the Story) that he would often say his predecessors knew nothing as to

\textsuperscript{195} See C.G. Kühn (ed.), Galeni Opera Omnia (20 Volumes, in 22 books), Volume X (Leipzig, 1821-1833). Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: MM. See also Appendix B.


\textsuperscript{197} Only Books 4, 7, 10, and 14 are not mentioned specifically.

\textsuperscript{198} See Appendix B, row 1.
the preservation of health, or the cure of diseases; [...] Here, the superscript ‘b’ refers to a footnote, which says: 'b Book 1. of his *methodus medendi*.' This reinforces the information within the text, and implies that Clifton had detailed knowledge of this Galenic text, in order to be able to utilise it as a source for his own work.

Clifton’s use of the Galenic text can be reinforced by reference to a modern English translation of *On the Therapeutic Method*. Here, this critical discussion of Thessalus contains the comment:

Nor does he stop committing outrages in all the other works, like, I suggest, through those [writings] he sent to Nero when he starts right away with these very words:

I have established a new sect and, as all doctors who came before passed on nothing useful regarding either the preservation of health or the relief of disease, it is the only true sect.

As he proceeds in the letter, he says that Hippocrates had created a tradition that was harmful. [...] such a man feels no shame when he awards himself the crown. Accordingly, I think it falls to me to say something to him regarding his insolence toward the ancients, although it is certainly not my custom to refute harshly those who are foolish.

This extract from Book 1, chapter 2 demonstrates that Clifton’s version of Galen’s story is accurate, and also illustrates the tone of this particular section of *On the Therapeutic Method*.

The reference to ‘the Faculty’ within Clifton’s text is interesting as it reflects a contemporary concern with a central medical authority, not present in Rome.

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200 Ibid., p. 50.
within Galen’s lifetime. This preoccupation can also be seen within the section that Clifton dedicates to Galen’s background and work, under the marginal note ‘His conduct to physicians.’ Here, Clifton suggests that:

As his education and genius had set him above the level of his brethren, he was sometimes too free with them, and too full of himself; looking with contempt upon what they did, and comparing himself to Trajan in point of usefulness. This behaviour naturally created him the ill-will of the Faculty, who in return plagu’d him as much as they cou’d.202

The footnote relating to this passage says: “a See the book of his methodus med. c. 8.” which refers the reader to a specific place within De Methodo Medendi.203 The comparison to Trajan can be found within the Galenic text, which makes the point that ‘The famous Trajan was, of course, the man who repaired all the roads in Italy’ alongside the suggestion that: ‘I came to this book, as I said a little earlier, not because the method itself was entirely undiscovered, but because it was lacking in some respects, since I found that none of my predecessors had completed the method.’204 However, the idea that this ‘behaviour naturally created him the ill-will of the Faculty’ is less clearly based within the original Galenic work, especially as no overarching Faculty sat above the competing sects within Rome at this time; although the allusion to contemporary opposition is likely to be relatively accurate.

The similarity of language between the allusions to Galen within these types of texts, and the Galenic texts themselves can particularly be seen within a section of John Barker’s text, which says: ‘------ “for Nature,” to use GALEN’s Words, “being relieved by this Means, and part of the Burthen which oppressed her being carried off, she will the more easily get the better of what remains. […]’205 His indication of the use of Galen’s words implies a direct quotation from the text, and the footnote directs the reader to ‘+ Method. Medend. l. 11. c. 15.’206

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202 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 84.
203 Ibid.; see also Appendix B, row 7.
206 Ibid.
Here, the relevant passage of Book 11, chapter 15 says: ‘For Nature, which
governs our bodies, is relieved when it has cast off a burden that is, as it were,
weighing it down, and will prevail over what remains with ease’\footnote{207} which closely
mirrors the sense of Barker’s quote. This illustrates a direct engagement with
\textit{De Methodo Medendi}, and shows the importance of Galenic texts as a source
of information about Galen and his perspective.

In contrast to the broad range of authors that cite \textit{De Methodo Medendi}, only
John Barker makes reference to \textit{In Hippocratis Aphorismi (On Hippocrates’
‘Aphorisms’)}\footnote{208}. As the title indicates, this text is a commentary upon
Hippocrates’ \textit{Aphorisms}, and was written ‘in seven volumes’\footnote{209}. It was amongst
the first group of Galen’s commentaries on Hippocrates, chosen due to the
decision to begin ‘with the “most genuine and useful of Hippocrates’ books”’\footnote{210}. Galen himself, in \textit{On my own books}, shows the character of this work, and his
intention in producing it:

\begin{quote}
Word-by-word commentaries had already been written by many of my
predecessors, and I knew their work pretty well; [...] If, then, I
remembered some particularly gross error on the part of one of them,
such that anyone who followed it would suffer a severe setback in his
medical practice, I would indicate this; otherwise, I would confine myself
to my own interpretation, without reference to the conflicting
interpretations of others. The \textit{Commentary on the ‘Aphorisms’} was
composed in this way, [...]\footnote{211}
\end{quote}

The nuanced discussion relating to specific Galenic texts such as this is
particularly highlighted through the provision of several references in support of
a particular point. This can be seen within the short section that Barker
dedicates to addressing Galen’s life and work, which says: ‘Again, if we inquire

\footnote{207} Galen, I. Johnston and G.H.R. Horsley (ed. and trans.), \textit{Galen: Method of Medicine, Books
\footnote{208} See C.G. Kühn (ed.), \textit{Galeni Opera Omnia}, Volume XVIIB-XVIIA. Abbreviation in R.J.
Hankinson (ed.), \textit{The Cambridge companion to Galen: Hipp.Aph}. See also Appendix C.
\footnote{209} Galen, ‘My Own Books’, in Galen, P.N. Singer, (ed. and trans.), \textit{Galen: Selected works,
translated with an introduction and notes by P. N. Singer} (Oxford, 1997), pp. 3-22, p. 16.
\footnote{211} Galen, ‘My Own Books’, in Galen, P.N. Singer (ed. and trans.), \textit{Galen: Selected works,
by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the Hippocratic Plan; and that his Intention was only to promote the Concoction of the mobific Matter, by keeping the Fever to the proper Standard *. The footnote relating to this sentence indicates that the information can be found in the following locations: ‘* Comment. 1. in Aphorism. 8, 9. De Ptissana Liber. De Arte Curativa ad GLAUCONEM. C. 10. 13.’ This shows references to two texts in addition to In Hippocratis Aphorismi: De Ptisana and Ad Glauconem de Methodo Medendi. Although the inclusion of several citations is not necessary to demonstrate one point, Barker uses these three texts to reiterate his knowledge of the Galenic corpus, and to show different aspects of the information he conveys.

A further reference to In Hippocratis Aphorismi within John Barker’s text illustrates the type of information that was utilised from Galen’s work. Following a discussion regarding Hippocrates’ ‘Rule for using Evacuations of all kinds’, there is an associated footnote, which says: ‘§ Agreeable to this is what GALEN says: “A Physician should observe the Tendency of Nature; and, if it is salutary, should assist her Motions; but if it is otherwise, he should restrain those Motions, and direct them another Way.” […]’ This underlines Galen’s approach to medicine, and the importance of observation to his methods. It also reiterates the relationship between Galen and Hippocrates, and the way in which Hippocrates influenced Galen’s outlook, especially through the reference to Comment 1 on Aphorism 21 that is included at the end of this footnote.

Following In Hippocratis Aphorismi, one of the next most frequently cited texts by Galen within the histories of medicine examined is De Locis Affectis (On the Affected Parts). This is one of his later works, written after he had retired to Pergamon at the age of 60. The six books composing this treatise were

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213 Ibid.; see also Appendix C, row 1.
214 The other texts mentioned here are also discussed below; see also Appendix B, row 25 and Appendix C, row 18 respectively.
216 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume VIII. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Loc.Aff. See also Appendix B.
composed after 192 AD.' Part of the rationale for the use of this text as a source of information within a history of medicine can be seen through the idea that it shows: ‘Galen the self-publicist, Galen the polemicist, Galen the vivid raconteur of his own successes; this is after all the text with the famous diagnostic anecdote (Kühn, 8. 361-66; pp. 376-78 here) that has led at least one contemporary scholar to liken the physician to Sherlock Holmes in the gloriously theatrical presentation of his own infallibility.’

This reference from Kühn, not specifically mentioned in these texts, is from Book 5, chapter 8, which shows a ‘Description of liver disease of a Sicilian physician.’

John Freind is the only author of those explored that specifically cites De Locis Affectis, and he does so in several different ways periodically throughout his work The history of physick. De Locis Affectis addresses ‘specific diagnostic problems, such as crises, pulses, prognosis, various symptoms, the role of the temperaments, and other causes of disease’, and of these, Freind uses it with regard to symptoms, the pulse, and prognosis. His allusion to the pulse can be seen through a reference which is linked to De Locis Affectis through a footnote: ‘c Loc. affect. 4. 11.’

The accompanying passage says:

217 Galen, R.E. Siegel (ed. and trans.), Galen On the affected parts: translation from the Greek text with explanatory notes (London, 1976), p. 1. The Siegel edition of De Locis Affectis has been superseded by a more recent Spanish translation: Galen, S.A. Aparicio (ed. and trans.), Sobre la localización de las enfermedades (De locis affectis). Introduction by Luis García Ballester; translation and notes by Salud Andrés Aparicio (Madrid, 1997). However, the necessity of an English translation, and the nature of use of the Siegel text ensures that it is sufficient for the present purposes. The importance of this text is alluded to in a review of the Spanish translation by Peter Singer, as is the relationship to the English edition: P.N. Singer, ‘Review of: Galen, S.A. Aparicio (ed. and trans.), Sobre la localización de las enfermedades (De locis affectis). Introduction by Luis García Ballester; translation and notes by Salud Andrés Aparicio (Madrid, 1997)’, Bulletin of the History of Medicine, Volume 73, Number 3 (1999), pp. 483-484: ‘A modern scholarly translation of the De locis affectis is to be welcomed: the previous version by Rudolph E. Siegel (Galen on the Affected Parts, 1976) is less than entirely reliable, and this is a work of central importance, both for the picture it gives of Galen toward the end of his career and for its great influence at certain key moments in later Galenism.’ (p. 483).


221 Ibid., p. 1.

But to pass by this idle jargon, and to enter into a more rational Pathology of *Palpitation*; what *Actuarius* says of the unequal Pulse in the case of *plenitude*, we find often by experience is very true. And this inequality of the Pulse is often a fore-runner of not only a *Palpitation*, but of a *Syncope* and sudden death, and indicates some obstruction about the Heart; as *Galen* c prognosticated in the case of *Antipater* the *Physician*, who died soon after in this manner.  

The phrase ‘this inequality of the Pulse is often a fore-runner of not only a *Palpitation* […]’ illustrates the ongoing relevance of this information from Galen, and the use of his work as a source of current information. The text is also used to show evidence of the validity of the information, and therefore its value in the present, as well as to underline that this point had been established in a much earlier time.

Alongside *De Locis Affectis*, there are two other Galenic texts mentioned with similar frequency: *De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus* (SMT), and *In Hippocratis Epidemiarum Libri*, discussed here in the order that they appear in Kühn. *De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus* (On the Powers [and Mixtures] of Simple Drugs) is one of Galen’s most prominent pharmacological texts. The content of this work, written in eleven books, is divided into two key sections: ‘The first five books of SMT outline Galen’s theory of the four humours as applied to pharmacology, and the sub-divisions according to the intensity and the distinction between basic and derivative qualities. Books VI-XI provide a catalogue of drugs and their healing properties […].’ This text is referred to by four different authors (see Appendices C and D), and of these, both Francis Clifton and John Freind utilise the work in differing ways. Clifton mentions: *De simplic. medicam. facult. l. 11. N° 24. de cancris ustis.* within a footnote.

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relating to a section which says of Galen: ‘[…] if he is not persuaded he knows a thing himself, he never attempts to convince another.’

This illustrates Galen’s broader philosophy in terms of approaching medical knowledge, although the remainder of this passage also alludes to a sense of inconsistency in the application of this particular philosophy. Whilst Clifton employs this text to allow Galen to show his own perspective, Freind uses it to link Galen’s views to contemporary medicine. He says:

Galen \(^g\) gives us the History of two or three cures as extraordinary in an Elephantiasis, from the same Medicine. And our own experience informs us, what surprising things may be done by such a method of Diet, in many cases, particularly in diseases of the Skin, and an Atrophy.

Here, the superscript ‘\(^g\)’ refers to a footnote, which indicates that the story from Galen can be found in SMT, Book 11: ‘\(^g\) Simpl. Med. 11.’

This emphasises the role of experience alongside theory, and shows that a surprising idea from Galen can be reinforced by the experience of more modern practitioners. It also reiterates the broader influence of Galen’s contribution, as it mirrors his approach to medicine founded upon the combination of knowledge and experience.

In Hippocratis Epidemiarum Libri (On Hippocrates’ ‘Epidemics’) is Galen’s commentary upon the Hippocratic Epidemics. The part of the Epidemics which is mentioned in the early modern texts is described as ‘genuinely Hippocratic (such as those by such a close and loyal associate as Polybus)’, in contrast to those genuinely by Hippocrates, or those that do not fall into either of these categories. Although In Hippocratis Epidemiarum Libri is cited several times, the majority of these are by John Barker, referring to the same section: Book 6, comment 5. Galen himself suggests within On my own books that Book

\(^{227}\) F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 86.


\(^{229}\) Ibid.


\(^{231}\) R.J. Hankinson (ed.), The Cambridge companion to Galen (Cambridge, 2008), p. 342. This also suggests that: ‘Books Two and Six had yet to reach that [publication] stage by the time of Hippocrates’ death, but were revised and put into circulation by his son Thessalus’ (p. 342).
6 was comprised of eight ‘volumes of commentary’ and also provides an explanation for the character of the text:

After I had composed the above works, I heard someone praising a false interpretation of one of the Aphorisms. From that point on, whenever I gave one of these works to anybody, it was composed with an eye to general publication, not just to the attainments of that individual. In this category are: the commentaries on Books II, III, and VI of the Epidemics; [...]232

The references that John Barker provides all refer to similar themes, addressing the character or features of the Art of physick, and the relationship of the Art to Nature. This is exemplified through a passage which says: ‘Thus GALEN tells us, that it is the Business of one and the same Art to form a Thing, and to preserve and repair it after it is formed. As therefore Nature formed the Body at first, it is her Office to restore it again to Health, when it becomes diseased.’233 This demonstrates an aspect of Galen’s view of the role of the physician in approaching the restoration of health, and also begins to explain his intention underlines the basis for his broader outlook. The footnote relating to this point illustrates the source of the information, and also alludes to an alternative title for In Hippocratis Epidemiarum Libri: ‘+ GAL. in Lib. vi. HiP. de Morbis Vulgar. Com. V.’234 Here, the phrase ‘HiP. de Morbis Vulgar’ is an abbreviation of In Hippocratis de morbis vulgaribus, which refers to a Latin edition of Galen’s commentary on Epidemics that also usually includes commentaries on Hippocrates’ Humours and The nature of man.235

The use of Galen as a source of information, and reference to specific texts to reiterate a variety of points can further be seen in De Usu Partium, Ad

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234 Ibid.
235 See, for example Galen, G.B. Rasario, Galeni In Hippocratis librum de humoribus, commentarii tres: ejusdem Reliquum sexti commentarii in sextum de vulgaribus morbis: itemque septimus, et octavus: nuper in lucem editi, ac latinitate donati: Jo. Baptista Rasario interprete (Venetis, 1562). The title of this work refers to Galen’s commentaries on Hippocrates’ Humours (in three volumes), and the ‘rest’ of the commentaries on Epidemics VI, i.e. volumes six, seven and eight of this commentary.
Glauconem de Methodo Medendi, De Curandi Ratione per Venae Sectionem, and De Compositione Medicamentorum secundum Locos. These works are referred to by several different authors in varying degrees of detail, although less frequently than those mentioned above. Galen began writing De Usu Partium (On the Usefulness of the Parts of the Body)\(^{236}\) ‘during the first stay in Rome’ and says within On my own books, says: ‘To this period too belongs the composition, at the behest of Boethus, of six books of The opinions of Hippocrates and Plato and the first one of The usefulness of the parts of the body. [...] I completed both these works after a considerable passage of time.\(^{237}\)

In terms of content, De Usu Partium is described as one of the works ‘in which physiological questions occupy a central place’ although, as opposed to the approach of On the Doctrines of Hippocrates and Plato and On the Natural Faculties, here physiology is treated ‘as something already understood.’\(^{238}\) The book is founded upon the idea that ‘all parts of the body are instruments (organa) for various types of activity, arranged hierarchically, but for all that in a cooperative manner’, and that, as is indicated by the title, ‘each part has a ‘use’ or a ‘usefulness’ which is the best possible.’\(^{239}\)

De Usu Partium is referred to by both Francis Clifton, who utilises it most frequently, primarily to contextualise Galen’s influences and work (see Appendix B), whilst Jean Le Clerc mentions it within the preface of An answer to what Dr. Freind has written in his History of physick (1728) to make a more specific point. Here, he comments upon the quality of Dr. Freind’s research when producing The history of physick by suggesting:

> Oribasius, says the Doctor [Dr. Freind], gives us the first account of the salivary Glans, which is either omitted by Galen, or is lost together with some of Galen’s Works. But it seems Galen was not worthy Dr. Freind’s reading; for if he had, he might there have found *Oribasius’s* account in

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\(^{236}\) See C.G. Kühn (ed.), Galeni Opera Omnia, Volume III-Iv. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: UP. See also Appendix B.


\(^{239}\) Ibid., p. 267.
so many Words. *Oribasius* did well to copy *Galen* in his accurate Description; but *Freind* has nothing to value himself on his Reading.\(^{240}\)

The implication is that Freind had not shown Galen’s awareness of the salivary glands in his text, but had attributed the first account of them to Oribasius. By providing a reference here within a footnote that refers to two places in Galen that mention this part of the body, Le Clerc illustrates the problematic nature of Freind’s omission.\(^{241}\) It suggests that had Freind’s research been more comprehensive, he would have found that this information was available in Galen, and therefore, from Le Clerc’s perspective, it should have been taken into account. This also demonstrates a sense of the importance of the correct context in describing the medical knowledge of the past, and the role of a coherent timeline within the structure of a history of medicine at this time, underlining the connection between medical development in the past and the present.

*Ad Glauconem de Methodo Medendi* (*Therapeutics to Glaucon*) is a text focusing on the therapeutic aspects of medicine which was written by Galen at the request of the philosopher Glaucon.\(^{242}\) The work is ‘Galen’s own synopsis of therapeutics [...]’, a treatise which was written in the early 170s and which has the advantage of being short and reasonably systematic.\(^{243}\) The characterisation of this text as short and systematic is also reflected in early modern perceptions, which can be seen through John Freind’s suggestion that:

> Stephen the Athenian or *Alexandrian*, called sometimes the one, and sometimes the other from the place either of his birth or his residence, wrote a commentary upon *Galen’s* first book to *Glauco*: a book writ with

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\(^{240}\) J. Le Clerc, *An answer to what Dr. Freind has written in his History of physick* (London, 1728), p. xviii; see also Appendix B, row 19.  
\(^{241}\) The footnote relating to this passage says: ‘*Book XI. of the use of the Parts; and in the Book of the Voice and Breath.*’ J. Le Clerc, *An answer to what Dr. Freind has written in his History of physick* (London, 1728), p. xviii.  
\(^{242}\) See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume XI. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: MMG*. See also Appendix C.  
so much perspicuity, that it does not seem to want any comment to make it more intelligible.\textsuperscript{244}

This suggests that the work was already sufficiently clear, and as such that a commentary was perhaps unnecessary, and shows that Freind was able to understand the content without the need for additional explanation. In addition to several references to \textit{Ad Glaucenem de Methodo Medendi} by John Freind, John Barker also mentions this work, in one instance alongside several other texts to reinforce a point regarding Galen’s approach to regulating the diet of the sick.\textsuperscript{245} The construction of \textit{Ad Glaucenem de Methodo Medendi} and Galen’s intention in writing the text can be seen through the idea that:

Glaucen has requested that Galen provide “an outline of a general method of treatments” […] and this is what Galen sets out to do. […] Right from the start, Galen realizes that there is a tension between the theory of therapeutics, which aims at universal knowledge, and the practice of therapy which is concerned with particulars.\textsuperscript{246}

This particularly illustrates the ongoing relationship between theory and practice, and shows that Galen was aware of the challenges associated with reconciling medical knowledge and practice, a balance which is continually relevant within the early modern histories of medicine.

\textit{De Curandi Ratione per Venae Sectionem} (\textit{On Treatment by Bloodletting}) is also within this group of texts which are specifically mentioned several times throughout the histories of medicine examined.\textsuperscript{247} The book itself ‘is a late work, in which Galen sums up his views on bloodletting at the request of colleagues who wanted something more manageable than his great work \textit{On Therapeutic
The context for the construction of this text, the nature of the content, and the importance of bloodletting has been described through the idea that:

In Galen’s work, venesection is very prominent: he often recommends it in his own treatment of various diseases, and he devoted four separate works to the topic. The primary reason for the latter was that venesection had strongly been condemned as a useless and indeed quite dangerous method by the Hellenistic doctor Erasistratus, with whom Galen takes issue on a large number of points, possibly because the legacy of Erasistratus still exercised great influence in the second century CE. [...] This no doubt explains the polemical tone of Galen’s writings on venesection, of which *On Treatment by Bloodletting* (*Cur.Rat.Ven.Sec.*) is probably the most systematic.

Bloodletting is correspondingly often mentioned within early modern medical texts, illustrating the influence of Galen on this ongoing practice. This can similarly be seen through the inclusion by Barker of a passage illustrating advice from Galen regarding the use of bloodletting: ‘For Galen frequently cautions Physicians against Bleeding in very hot or very cold Weather +, [...]’

John Freind similarly alludes to bloodletting within *The history of physick*, and discusses the origins of arteriotomy, the practice of bloodletting from an artery, as opposed to a vein. He suggests that Galen, ‘as far as I can comprehend his meaning in his treatise of curing diseases by opening a blood vessel, seems to be the first who ventur’d upon it, and made the experiment upon himself.’ The footnote relating to this passage refers the reader to ‘Curat. per V.S. 13.’ however the relevant information is found within chapter 23:

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252 Ibid.
I shall now tell you how I got the inspiration to have recourse to arteriotomy. [...] I went for the artery in the space between the index finger and thumb of the right hand, [...] Forthwith a long-standing pain was relieved which had oppressed chiefly the part where the liver meets the diaphragm. This happened to me in my youth.\textsuperscript{253}

Nonetheless, this illustrates the relationship between theory and practice in a particularly significant sense as it shows Galen experimenting on himself with this method of bloodletting. The similarity here between the story and the language used to describe it in Freind, and the way in which it is presented in Galen is striking, and underlines genuine engagement with the Galenic text and its content.\textsuperscript{254}

The final text within this group is: \textit{De Compositione Medicamentorum secundum Locos} (\textit{On the Composition of Drugs According to Places}).\textsuperscript{255} This work is often referred to alongside \textit{De Compositione Medicamentorum per Genera} (\textit{On the Composition of Drugs according to Kind}),\textsuperscript{256} and they are described as ‘two large complementary works’, which were ‘written between AD 180 and 193, and in all probability simultaneously.’\textsuperscript{257} These texts convey a significant amount of information regarding pharmacology and compound medicines, and in terms of content:

Their introductory chapters partly repeat, and partly extend, the theory of humours, mixtures, degrees and intensities; but the bulk of the works consists of a more or less annotated compilation of the recipes both used and approved by Galen himself, but also transmitted from elder doctors.\textsuperscript{258}

\begin{footnotes}
\item[254] See Appendix B, row 21, which shows the similarity of the language in Freind and Galen throughout the presentation of this story as a whole.
\item[258] Ibid.
\end{footnotes}
In particular, the books of *De Compositione Medicamentorum secundum Locos* are arranged in order of head to foot, and therefore by referring to different parts of the text, the early modern authors also refer to ailments of different parts of the body. Francis Clifton refers to Book 5 (especially chapter 3), describing the ‘face and teeth’; Clifton Wintringham cites Book 8, which addresses ‘stomach and liver’; and John Barker mentions Book 10, chapter 2, which is likely to relate to ‘sciatica’.\(^{259}\) The references utilised by each author illustrate a broad knowledge of the text, and the specific nature of the majority of the citations reiterates the idea that they were significantly engaging with the content of the Galenic work. In addition to referring to particular books and chapters in order to demonstrate information from Galen, these authors also assess the content of the work, and place it within a more contemporary context. For example, the citation of *De Compositione Medicamentorum secundum Locos* by John Barker, mentioned above, says: ‘When GALEN, therefore, advises *Bleeding* and *Purging* in an *Arthritis* *, we must conclude that he is speaking of the *Inflammatory Rheumatism*, which is attended with a *Fever*, not of the *Chronical Rheumatism* or, as it is sometimes called, the *Gout* +.\(^{260}\) In suggesting that Galen’s point here must be referring to ‘the *Inflammatory Rheumatism*’, Barker shapes the Galenic material to fit modern perceptions of this particular ailment. It is unclear to the reader whether this is in fact what Galen ‘is speaking of’, however, in this instance, it is the comparable nature of Galen’s view and the early modern perception that is key, and allows the ancient perspective to remain relevant.

In addition to text which are mentioned by a number of authors, there are two Galenic works only referred to by John Barker: *De Ptisana* and *De Praenotione ad Epigenem*, both of which are composed of a single volume. *De Ptisana* (On *Barley Soup*) is a short treatise addressing the use of this particular remedy and


the effect of different circumstances on its deployment. Galen’s own account at the beginning of the work illustrates the intention behind its composition:

Not long ago I found some physicians using the juice of pearl barley on one of their patients, although they neither specified in what cases it helps or hinders those who are convalescent, nor did they determine the manner and amount of the dose, or the correct time for administering the soup. Instead, so it seemed to me, they considered the use of barley soup to be suitable whenever they wished, which made me think that it would be useful to set out more clearly for the layperson everything Hippocrates wrote concerning its use: that is an explanation of the method of boiling; its power and effect; the correct time, amount and manner of the dose; the range of benefits it confers on those who are ill when properly administered, and conversely the troubles it causes when administered incorrectly; and in addition to all this the sort of people to whom it is, or is not, right to give.

This also underlines the role of Hippocrates in the works produced by Galen, a point which is reiterated by one of the passages mentioned by John Barker. Here, he says: ‘Again, if we inquire by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the Hippocratic Plan’. This section is linked to three Galenic texts, including De Ptisana, which shows the extent of the adherence to Hippocrates, as well as the importance of Galen as a source for this information.

The second work only cited by Barker is De Praenotione ad Epigenem (On Prognosis). This work was ‘probably published in 178’ and addresses a variety of topics regarding diagnosis and prognosis; ‘semi-autobiographical’

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261 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume VI. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Ptas. See also Appendix B.
263 J. Barker, An essay on the agreement betwixt ancient and modern physicians (London, 1747), p. 158. The other texts mentioned in this passage (In Hippocratis Aphorismi and Ad Glaucnem de Methodo Medendi) are discussed above; see also Appendix B, row 25 (De Ptisana); Appendix C, row 1 (In Hippocratis Aphorismi); and Appendix C, row 18 (Ad Glaucnem de Methodo Medendi).
264 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume XIV. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Praen. See also Appendix B.
elements; case histories relating the outcome of various treatments; and experiences with particular patients.\textsuperscript{265} One of Barker’s references demonstrates several of these aspects, and addresses a particular story in which Galen ‘foretold that there would be an Hæmorrhage at the Nose on the fifth Day of the Disease.’\textsuperscript{266} This is recounted almost identically from \textit{De Praenotione ad Epigenem}, as Barker asserts prior to beginning the account: ‘The Story is an uncommon one, for which Reason I think I cannot conclude this Chapter better than by relating it; which I shall do, as nearly as I can, in his own Words.’\textsuperscript{267} Here, Barker adheres closely to the text, and there is a sense of significance in showing the relatively lengthy story in full. Barker also adds a comment towards the end of the narrative, which says: ‘And thus Art triumphed over Ignorance.’\textsuperscript{268} This insertion both illustrates Galen’s skill in forecasting the outcome of this particular illness, and underlines the ongoing importance (and status) of these skills.

In a similar way to John Barker and \textit{De Ptisana} and \textit{De Praenotione ad Epigenem}, Francis Clifton is the only author examined that mentions \textit{De Sectis ad eos qui Introducuntur} (\textit{On Sects for Beginners}).\textsuperscript{269} This text, in one volume, ‘sets out the differences in types between different sects (I say ‘in type’, because there are more specific differences which the initiate may learn later on in his studies).’\textsuperscript{270} Galen also suggests that \textit{De Sectis ad eos qui Introducuntur} ‘should be the first book to be read by students of the art of medicine.’\textsuperscript{271} The introductory nature of the text, as well as the way in which it was constructed by Galen, can be seen through the idea that:

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[...]
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\textsuperscript{266} J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 65; see also Appendix B, row 30.
\textsuperscript{267} Ibid.
\textsuperscript{268} Ibid., p. 68.
\textsuperscript{269} See C.G. Kühn (ed.), \textit{Galeni Opera Omnia}, Volume I. Abbreviation in R.J. Hankinson (ed.), \textit{The Cambridge companion to Galen: Sect.Int. / SI}. See also Appendix B.
\textsuperscript{271} Ibid., p. 4.
medical sects had already been anticipated, in a sense, by Celsus, Galen’s account – of the Methodists especially – betrays the influence of his own evaluations. He does not offer as neutral a version of their views as possible and then allow the students to make up their own minds on the subject. Rather, his analysis is influenced at every stage by his own ideas about the correct method.²⁷²

This shows that the content of the text was specifically intended to demonstrate Galen’s view of the different sects, and his suggestion that it should be the first book to be read by students underlines the importance ascribed to this as a foundation for medical learning. When referring to this work, Clifton particularly highlights it as a source of information regarding the sects, and as an introductory medical text:

Whereas what is common in diseases, and what is particular in certain cases, is as much the object of a Physician’s consideration, one as well as the other, as the knowledge of the kind or species, to which any disease belongs; as Galen has shewn very clearly, [...].²⁷³

This particularly indicates the importance of a strong theoretical basis for medicine, taking into consideration both common and more specific information regarding disease and treatment. It also illustrates the contemporary role of this foundation in addition to presenting Galen’s perspective on the topic.

_De Anatomicis Administrationibus_ (On Anatomical Procedures) is mentioned with similar frequency to _De Sectis ad eos qui Introducuntur_, although only in a general sense, with no specific book or chapter references.²⁷⁴ Galen himself suggests that ‘Anatomical procedures contains all the anatomical information’, and explains the reasoning for the production of the text as part of a discussion regarding a particular anatomical discovery: ‘Once I had persuaded both myself and others to whom I made the demonstration that I had discovered the truth of

²⁷³ F. Clifton, _The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it_ (London, 1732), p. 49; see also Appendix B.
this too – along with a range of other matters which had been either misrepresented or simply ignored by previous anatomists – I then committed to paper the Anatomical procedures. Both John Freind and Francis Clifton allude to De Anatomicis Administrationibus, referring to the text in terms of its use and survival over time, as well as to show what the content reveals about Galen’s anatomical proficiency.

In addition to the Galenic works that are mentioned several times by various authors, there are also a group that are mentioned only once in the texts examined. These will be discussed in the order that they appear in Kühn, which also coincides relatively closely with the different authors referring to them. Firstly, John Barker mentions three texts only once. The first of these, *Quod Optimus Medicus sit quoque Philosophus* (The Best Doctor is also a Philosopher), is described by Galen as a ‘very short work which also belongs in this category as relevant to Hippocrates, in which I demonstrate that *The best doctor is also in every way a philosopher*.’ The reference to the work that Barker includes, also illustrates an area of commonality between the ancients and moderns: ‘We find that some amongst the Ancients affected to despise this Doctrine as much as the Moderns do [...]’. This shows a degree of continuity over time, and a sense that parallels could be drawn between early modern and ancient perceptions.

The second text that only Barker refers to is *De Temperamentis* (On Mixtures). This text addresses many areas, including Books I and II, which explore the idea that the balance of the elementary qualities of the body is ‘peculiar’ (*oikeia*) not only to different species of animals but also to individual people’, hence ‘there is always an element of specificity or even individual variation; and there are differences and variations according to age or gender,

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276 See Appendix B, rows 33-34.
280 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume I. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Temp.* See also Appendix B.
climate and mode of life, which constitute and affect a person’s health.’

This work also discusses the theory of pharmacology, and within this section ‘divides its attention between drugs and foodstuffs’. Barker also refers once to De Naturalibus Facultatibus (On the Natural Faculties), Galen’s work which primarily addresses physiology. This text is based upon the idea that the physical faculties ‘are directly implanted into the parts of the body, and are not under the control of the ruling part of the soul’.

Francis Clifton also provides a single citation of both De Placitis Hippocratis et Platonis, and De Sanitate Tuenda. The first of these, De Placitis Hippocratis et Platonis (On the Doctrines of Hippocrates and Plato) was written during Galen’s ‘first stay in Rome’, composed ‘at the behest of Boethus’, and was ‘completed by AD 176.’ It contains many of the ‘general organizing principles of Galen’s physiology’ and also addresses the philosophical aspects of Galen’s perception of the soul. There is also an interesting parallel between De Placitis Hippocratis et Platonis (PHP) and the early modern approach to the medical ideas of the past. This is based in the idea that: ‘behind the theory of PHP there lies the not inconsiderable backdrop of the great medical and philosophical authorities of the past, thus exhibiting in this book a perfectly general characteristic of all the author’s work.’ The other work referenced by Clifton is De Sanitate Tuenda (On the Preservation of Health). This text, also known as Galen’s Hygiene, focuses on ‘scientific hygiene’, or ‘applied physiology.’ In this work, Galen ‘defines health as the state of right balance between elementary qualities such as hot, cold, dry and wet, within the homoeomerous parts of the body.’ The intention in addressing hygiene was to ‘maintain the

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282 Ibid., p. 310.
283 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume II. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Nat.Fac. See also Appendix B.
287 Ibid., p. 189.
288 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume VI. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: San.Tu. See also Appendix B.
normal equilibrium of humors and qualities by prescribing the correct kind and amount of food, drink, sleep, wakefulness, sex activity, exercise, massage and similar matters’ whilst the physician ‘must keep in mind that individuals are different.’

John Freind also makes the only reference to two texts, discussing De Praesagitione ex Pulsibus and De Crisibus, both of which fall into Galen’s own category of his works on prognosis. Of these, De Praesagitione ex Pulsibus (Prognosis by Pulses) contains ‘very detailed information, including highly elaborate taxonomies of pulses of different types.’ The pulse was Galen’s ‘chief diagnostic tool, and as such is repeatedly invoked as the basis of his successful predictions’, showing the importance of this text to Galen, alongside the others he devoted to the pulse. This is reflected in modern perceptions of Galen’s work on the pulse, which suggest that: ‘Galen did indeed consider his development of pulse doctrine his greatest contribution to diagnostic medicine [...]. But even in this field he does not claim complete originality.’ This also underlines the compilatory nature of Galen’s work, a feature that is significantly reflected in the early modern texts examined. The second text mentioned only by Freind is De Crisibus (On Crises). The role of this text within the Galenic corpus is suggested by the idea, conveyed from Galen’s own perspective:

As he explains to Commodus’ tutor Peitholaus, all one needs to know about diagnosis and prognosis is contained in three treatises he had recently written, On the Differences of Fevers (Diff.Feb.), On Crises (Cris.) and On Critical Days (Di.Dec.), which demonstrate that almost all the basic information was already to be found in the works of Hippocrates.

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293 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume IX. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Praes.Puls. See also Appendix C.
294 C. Gill, T. Whitmarsh, and J. Wilkins (eds), Galen and the world of knowledge (Cambridge, 2009), p. 120.
295 Ibid.
297 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume IX. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Cris. See also Appendix C.
This also alludes to the importance of Hippocrates within the works produced by Galen, and illustrates the way in which Galen perceived his relationship to the medical knowledge of the past.

Finally, two further Galenic texts are mentioned in only one instance: *In Hippocratis de Salubri Victus Ratione* by John Barker; and *De Ordine Librorum Propriorum* by Francis Clifton. *In Hippocratis de Salubri Victus Ratione* (*On Hippocrates’ ‘Regimen in Health’*), is Galen’s commentary upon Hippocrates’ *Regimen in Health*, a text usually found alongside Hippocrates’ *On the Nature of Man*.\(^{299}\) It has been suggested that these ‘two works now transmitted separately […] have been combined, with various unfortunate additions, mainly in between them but also spreading a bit further. Galen is absolutely committed to the authenticity of the main section of *On the Nature of Man*, […]’ but:

> He is reluctant even to consent to the common suggestion that the work was by Polybus (by now viewed as Hippocrates’ pupil and successor, entirely faithful, so Galen claims, to his master’s doctrines) rather than the great Hippocrates himself. He is, on the other hand, content with the ascription of the good, majority, parts of *On Healthful Regimen* (those portions that are ‘well-expressed and in accordance with Hippocratic techné’) to Polybus.\(^{300}\)

The role of *In Hippocratis de Salubri Victus Ratione* within Barker’s text is to reinforce a point regarding Galen and ‘with what Intention he bled in acute Distempers’.\(^{301}\) It is shown here alongside references to *De Methodo Medendi* and *In Hippocratis Aphorismi*, which reinforces the importance of Hippocrates within this particular aspect of medicine, as well as allowing for several examples to reiterate Barker’s point.\(^{302}\)

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\(^{302}\) See Appendix B, row 10 (*De Methodo Medendi*) and Appendix C, row 3 (*In Hippocratis Aphorismi*).
De Ordine Librorum Propriorum (On the Order of my Own Books),\textsuperscript{303} is one of ‘two short texts from Galen’s own hand that deal with his output’, indicating the ‘order in which an aspirant doctor should read them’.\textsuperscript{304} This work was also known as Galen’s ‘Epistle to Eugenianus’ as can be seen within the footnote that Clifton provides to direct the reader to the text: ‘\textsuperscript{305} See his Epistle to Eugenianus, about the order to be observ’d in reading his books.’\textsuperscript{305} Clifton utilises Galen in this instance as a source of biographical information, addressing the way in which he ‘turn’d his thoughts to Physick, when he was about seventeen’.\textsuperscript{306}

In addition to the numerous genuine Galenic texts discussed above, two works identified as spurious are also specifically mentioned within the histories of medicine examined. These are: Definitiones Medicae (Medical Definitions)\textsuperscript{307} and Introductio seu Medicus (Introduction).\textsuperscript{308} Both works appear as part of the Kühn edition of Galen, indicating that they had been attributed to Galen, although his authorship has since been drawn into question.\textsuperscript{309} Francis Clifton refers once to Introductio seu Medicus, whilst John Barker uses two footnotes to attribute information within the text to Definitiones Medicae. All of these references use the word ‘Galen’ alongside the abbreviated title of the relevant text, implying that they were either unaware of the questionable authorship, or that this was not perceived as important to the use of the work. During a discussion addressing changes in medical approach over time, Clifton suggests that:

Though indeed it must be confessed, that before Pythagoras’s time […] there was a strange inclination in Physicians to Enthusiasm; and what they would not be at the pains to cure by dint of Observation and

\textsuperscript{303} See C.G. Kühn (ed.), Galeni Opera Omnia, Volume XIX. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Ord.Lib.Prop. See also Appendix B.
\textsuperscript{305} F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 81; see also Appendix B, row 40.
\textsuperscript{306} Ibid.
\textsuperscript{307} See C.G. Kühn (ed.), Galeni Opera Omnia, Volume XIX. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: [Def.Med.]. See also Appendix C.
\textsuperscript{308} See C.G. Kühn (ed.), Galeni Opera Omnia, Volume XIV. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: [Int.]. See also Appendix C.
\textsuperscript{309} R.J. Hankinson in R.J. Hankinson (ed.), The Cambridge companion to Galen (Cambridge, 2008) identifies these texts as spurious within his Appendices: 1 ‘A guide to the editions and abbreviations of the Galenic corpus’; and 2 ‘English titles and modern translations’. 
Experience, they were very ready to attempt by Charms and Amulets. These were common in the days of Æsculapius, who, as Celsus and Galen tell us, was the first that rescued Physick from the hands of the vulgar, and, rejecting the idle part, adhered to the solid.\textsuperscript{310}

This passage alludes to \textit{Introductio seu Medicus} through the information in the footnote, and shows the rejection of the ‘idle part’ of medicine in the form of ‘Charms and Amulets’ and the adherence to ‘the solid’ aspects, linked to ‘Observation and Experience’. The emphasis on ‘Observation and Experience’ as a solid, fundamental basis for medicine is reiterated throughout Galen’s works (perhaps helping to perpetuate the use of \textit{Introductio seu Medicus} as a Galenic text), as well as within the early modern texts influenced by his medical framework. The introductory nature of both \textit{Introductio seu Medicus} and \textit{Definitiones Medicae} also perhaps reinforces their utility, suggesting that the provision of valuable but accessible medical information outweighed any questions regarding the origin or authenticity of the work.

The role of Galen as a source of information is evident throughout the histories of medicine studied, and citations and references relating to Galenic texts are utilised in a variety of ways, according to the context of the discussion. A striking range of texts are mentioned by these authors, who take information from Galen’s anatomy, pharmacology and prognostic works, as well as looking to many other types, on topics as narrow as barley soup, and as broad as therapeutics.\textsuperscript{311} The use of a variety of texts also reflects the diverse nature of the topics addressed within these histories of medicine, and it is significant that Galenic works are chosen according to the need of the author, rather than by following the use, or copying from, another practitioner. This suggests that the physicians addressed knew the content of the Galenic corpus quite comprehensively, and were therefore able to select the information relevant to their piece from across the genres included in Galen. The specific nature of the references shown, often including both the book and chapter number, provides a sense of accountability with respect to the information provided within the early modern text. As has been shown in Appendix B, the provision of precise

\textsuperscript{310} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 3-4; see also Appendix C, row 31.

\textsuperscript{311} See Appendix D.
citations, or Galenic quotations within the text, correspond almost without exception to the Galenic text in question. The similarity of language in these instances underlines a direct engagement with the Galenic text, as does the nuanced nature of many of the discussions and explanations regarding their content. The occasional references to Galenic texts now acknowledged as spurious further demonstrates the idea that information was chosen based upon the utility of content, rather than necessarily due to their origin. This reiterates the importance of Galen as a particular source of information as his works were likely to have been chosen due to their inherent value, and contemporary relevance, as well as the ubiquity of their use. The way in which these texts are employed also reflects many of the other themes relating to the use of Galen within early modern medicine. This can particularly be seen through the use of citations relating to the importance of experience and observation; utility of information; the significant relationship between theory and practice; and the influence of older authorities, particularly Hippocrates.

**General references to Galen as source, or to Galenic works**

Alongside citations showing information taken from specific books or chapters within the works of Galen, there are also examples of less precise references to Galen as a source, or to the content of his texts in a broader sense. This can particularly be seen with regard to pharmacy, and the suggestion that certain remedies may be found in Galen. For example, William Black suggests that: ‘Bituminous, nitrous, and sulphureous mineral waters were prescribed in baths, and to be occasionally drank, as may be seen in Pliny and Galen.’\(^{312}\) This can similarly be seen within Jean Le Clerc’s work *An answer to what Dr. Freind has written in his History of physick*, which says:

To this may be added, that Physick had undergone very great Alterations in the space of four or five hundred years, that interven’d between the time of *Hippocrates* and that of *Celsus*; and that if the first Physicians used but very simple Medicines, the same cannot be said of those who came after. On the contrary, it seems that the latter Physicians strove who should contrive the most compounded Medicines. *Mithridate*, one of

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\(^{312}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), p. 84.
the first, and at the same time one of the most famous Antidotes, is an Instance of what I say. Celsus gives a Description of it, wherein are thirty six Druggs; which is, perhaps, much more than is needful. But this number was not yet thought sufficient: for in Damocrates's Mithridate, there are, if I mistake not, fifty. This Composition is recorded by Galen, and is the same with that now in use.\textsuperscript{313}

This provides a particularly broad overview, and indicates that a significant change had occurred whereby medicines had become more complex over time, evolving from ‘but very simple Medicines’ to compounds containing ‘much more than is needful.’ Here, Le Clerc shows that the iteration of the remedy Mithridate that was currently in use could also be found in Galen’s works, and that the significant number of ingredients had perpetuated from this period. This suggestion also reinforces a link between the information available in Galen and the medical knowledge and practice of Le Clerc’s time, and implies a degree of continuity since this period.

The role of the information available within the Galenic corpus can also be seen in John Baillie’s text, which argues:

But what this Annotator urges besides for his opinion is very extraordinary; he wou’d have us think that these antidotes, where musk is the base, and where aromaticks are the chief ingredients, are a certain proof they were taken from the Arabians. The aromatics he mentions, are cloves, ginger, pepper, pearl, amber, coral, and leaf-gold. But he is ignorant, that every one of these medicines, except leaf-gold, were in use amongst the Greeks, and are often mention’d by Galen, and the writers who succeeded him.\textsuperscript{314}

Here, the superscript ‘r’ refers to a footnote, which says: ‘r Art. 9. p. 431’, citing the relevant page within the original French work by Le Clerc which Baillie is

\textsuperscript{313} J. Le Clerc, An answer to what Dr. Freind has written in his History of physick (London, 1728), p. 63-64.

\textsuperscript{314} J. Baillie, A letter to Dr. ______ in answer to a tract in the Bibliothque ancienne & moderne, Relating to some Passages in Dr. Freind’s History of Physick (London, 1727), p. 56-57.
commenting upon, therefore also showing that ‘Annotator’ is Jean Le Clerc.\textsuperscript{315} Baillie illustrates that Le Clerc was incorrect to suggest that the use of these ingredients demonstrated that the remedies derived from ‘the Arabians’, and he utilises Galen as a specific example to reiterate his point, as well as to imply that Le Clerc had not taken this additional evidence into account. The idea that ‘leaf-gold’ was not in use by the Greeks, is supported by John Freind, who says, as Le Clerc suggests, that ‘the Arabians first brought in the use of Leaf-gold and silver’.\textsuperscript{316}

The debate surrounding the use of particular ingredients and the way in which they were mixed together at various times is further evident within Freind’s \textit{The history of physick}, which contains a passage that says:

> He [Guy Patin] goes on inveighing against them [the Arabians] for being \textsuperscript{a} Inventors of compound Pharmacy: but if he wou’d have look’d into the Greeks with that view, he wou’d find, I believe, as many, and consisting of as many ingredients, in Galen, and those who wrote after him. Nay, so far were the Arabians from being the Authors or the only favourers of Compound Medicines, that one of them has so great a regard for Simples, that he prefers them in all distempers, and remarks, that too much sollicitude in their composition \textsuperscript{b} is nothing, but labour and vanity.\textsuperscript{317}

This reiterates the point made by Baillie that methods and ingredients attributed by various authors to ‘the Arabians’ had also been known to the Greeks. Freind also specifically uses Galen to illustrate a point at which remedies ‘consisting of as many ingredients’ were in use, and as such to show that compound pharmacy was not necessarily an invention of Arabic medicine.

\textsuperscript{316} J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume II (London, 1725), p. 206.
\textsuperscript{317} Ibid., p. 207-208.
Baillie returns to this theme subsequently within *A letter to Dr.* —*- in answer to a tract in the Bibliothèque ancienne & moderne*, and similarly addresses the origin of compound medicines. He suggests that:

The *Enneapharmacos* was in great repute, and no doubt of great antiquity. We read of an antidote of *Philip of Macedon*, call’d *Ambrosia*, of twenty ingredients. [...] And *Galen* gives us the form of a *Collyrium*, used by *Diocles*, the *Disciple* and *Successor of Hippocrates*. And what if the like instances, and even a great variety of them, are to be met with in *Hippocrates* himself. For *k* tho’ the *writer*, in order to prove the simplicity of the *ancients* in this matter, asserts, that this great *Physician* has no *compound* medicines, which consist of above *three* or *four*, or at most above *five* ingredients: yet, upon reading his works, this account will appear a very false one.318

This passage is used to show the antiquity of using many ingredients within a particular remedy, and to underline the number of ingredients that could be employed. It also questions the suggestion, ultimately derived from Daniel Le Clerc’s *Histoire de la médecine*, that Hippocrates did not use compound medicines.319 As has also been seen above, Galen is provided as a specific source of information regarding the types of medicines that were in use both during his lifetime, and prior to this, indicating that he was viewed as a significant authority regarding both contemporary medicine and history.

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318 J. Baillie, *A letter to Dr.* —*- in answer to a tract in the Bibliothèque ancienne & moderne*, *Relating to some Passages in Dr. Freind’s History of Physick* (London, 1727), p. 64-65. The footnote relating to this passage refers the reader to: ‘*k* p. 438’.

319 Here, ‘the writer’ could refer either to Daniel or Jean Le Clerc. This is unclear within the passage, as Baillie’s work is an answer to Jean Le Clerc’s critique of John Freind’s *The history of physick*, which partly takes the form of a discussion of Daniel Le Clerc’s brief attempt to continue the history of medicine almost to the present day, hence Baillie can ultimately be seen as addressing Daniel Le Clerc’s work in this instance. The citation provided by the footnote is likely to be for: J. Le Clerc, *Bibliothèque ancienne et moderne, pour servir de suite aux bibliothèques universelle et choisie. Par Jean Le Clerc. Tome XXVII. Pour L’Année MDCCXXVII. Première Partie* (A La Haye, MDCCXXVII [1727]), p. 438. However, it is also possible to locate this argument within Daniel Le Clerc’s work. In the edition of *Histoire de la médecine* translated into English in 1699 (D. Le Clerc, *The history of physick, or, An account of the rise and progress of the art* (London, 1699)), the relevant passage says: ‘Another thing which is worth our Observation is, that the compound Medicines of *Hippocrates* were but very few, and consisted of very few Simples, four or five at most.’ (p. 311). See also, the equivalent passage in an edition in the original French: D. Le Clerc, *Histoire de la médecine* (Amsterdam, 1723), p. 216.
The role of Galen as a source relating to the more contemporary aspects of medicine is particularly evident within John Freind’s work, which, as part of a section addressing the use of ligatures in ‘tying up the arteries in Amputations’,\(^{320}\) says:

The invention of this method was owing to Parey \(^{0}\), who, as he says himself, had never either seen or heard of its being practiced before, but had taken the hint of it from a passage in Galen concerning Wounds, and made the experiment of it with such success, that he thinks it came into his head by Inspiration. And no doubt, without inspiration, if we would revolve often in our thoughts what the ancient Physicians have written upon any particular subject, new hints would occur to us not only in relation to that very case, but what may be applied, as in this instance from Parey, to some other.\(^{321}\)

This suggests that a discussion in Galen had provided the inspiration for Ambroise Paré’s invention, which reiterates the use of Galenic texts as a source of information. It is also important to note that Freind describes the broader value ascribed to the works of the ancients, and implies that reinterpreting the information within a modern context could provide useful insight and diverse benefits, perhaps quite different from their original intention.

The variety of information that was derived from Galen is further evident within Freind’s text, as part of a section discussing the use of oils under various circumstances, as recommended by different authors, including Galen. Here he suggests that: ‘Galen expressly says, that oyls stop the pores; and accordingly advises Unction after Bathing, for this reason, that they should not perspire too much.’\(^{322}\) The use of the phrase ‘expressly says’ underlines that Galen had been used as a specific source for this information, and that his perspective contributed to a broader understanding of medical advice over time. Similarly, Francis Clifton shows the significance of the information available in Galen, through a passage under the marginal note: ‘Herophilus the first, who dealt with


\(^{321}\) Ibid., p. 238-239.

\(^{322}\) Ibid., p. 62.
much in Physick’, which says: ‘He was the first too, who wrote with exactness upon the doctrine of the Pulse, (notwithstanding […] but as his works are all lost, we can only know from Galen, what his opinion was.’\^{323} This underlines the importance of Galen as a source of information, otherwise lost, and also implies the value that was placed upon reading Galen, and utilising the content of his works as a notable part of the history of medicine.

The way in which medical practice evolved over time is also a common theme within these texts, as is the use of Galen to provide a picture of the state of certain aspects of medicine, either during, or before his lifetime. This can particularly be seen within The history of physick, where Freind says:

> By the way we may observe, that this was a different manner of Scarifying, from that performed by the help of Cupping. The Arabian Physicians seem to have a notion only of the latter practice\^{h}: but from this place, as well as from some passages of Galen, it is plain, that the Ancients made deep incisions into the skin by the knife; and therefore thought, by the large quantity of blood they could draw off, that this method was equivalent to opening a vein.\^{324}

This illustrates that Arabic physicians were solely aware of cupping as a method of therapeutic bleeding, however, information from Galen and elsewhere shows that the ancients ‘made deep incisions into the skin by the knife.’ This difference in practice demonstrates contrasting approaches to this method over time, whilst the role of Galen in providing or confirming the fundamental detail remains evident.

Alongside the information that early modern authors utilise and describe from Galenic texts, they also highlight various pieces of information that were not available in Galen. For example, regarding Ælius and the particular surgical procedures that he discusses, Freind suggests: ‘There is in him indeed a great deal upon this head, which is neither in Celsus, nor Galen: and the manual

\^{323} F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 27.

\^{324} J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume I (London, 1725), p. 17.
processes he describes in these cases, are at least double in number to what may be found in them. This is reiterated later in the text, where Freind says:

As to Surgery particularly, I think I may without any derogation to the more ancient Writers affirm, that whoever carefully looks into Ætius and Paulus, will be convinc’d, that a great many improvements have been made in that branch of Physick, which are not recited in Galen, or any where else.

Here, the implication is that the additional information provided within the work of Ætius and Paulus constitutes an improvement in surgery, and the idea that it is not present in Galen or Celsus underlines the development that had occurred over time.

This theme is also reiterated by Freind as part of a discussion of Alexander, which says: ‘He employs a whole book in treating of the Gout, of which Galen says little or nothing: which may incline us to think, it was a more prevailing distemper in this time.’ This is significant as it demonstrates the role of Galen in charting change over time in terms of the particular medical concerns that were prevalent during different periods. Freind implies that the omission in Galen was not simply a mistake, but that it shows a tangible difference in the experiences of health and medicine – in this instance the incidence of gout.

The significance of omission in Galen is further reiterated by a particular debate between Jean Le Clerc and John Baillie, which discusses why certain information may have been left out by different authors. Le Clerc, in his critique of Freind, suggests that:

If the Antidote here in Question, was truly Hippocrates's, should it be possible that Celsus, who, as Dr. Freind says, constantly copied after him; should it be possible, I say, that he should have omitted this Composition, and have failed putting it to so many more, which he has given a description of in his Books? Could it be possible that Galen, who,

326 Ibid., p. 301.
327 Ibid., p. 87.
also, had an excessive Esteem for *Hippocrates*, should have failed to have done him the honour of mentioning this famous Antidote, if what Actuarius says were true? Sure no body will ever think so. Pray, where was the Receipt of this Medicine hid for four or five hundred Years, elapsed between *Hippocrates* and *Celsus*, or six or seven hundred, if we come down to *Galen*?\(^{328}\)

This passage questions Actuarius’ declaration that a particular antidote had been formulated by Hippocrates, by implying that had this been the case, the recipe would have appeared throughout the texts of subsequent medical authors, including Galen. However, John Baillie presents a contrasting view in the same year, which asks:

Do these authors transcribe all the receipts which are to be found in *Hippocrates*, or is it impossible that they might not have so high an esteem for this *antidote*, as Actuarius we find had? But how came it to be hid for so many *centuries*, so that even no author mentions it? I would gladly know, where our Annotator has got this fact. Might not several of those authors, which are now lost to us, have inserted it into their works? Aetius gives us an account of a great many compositions of the *ancients*? Is it to be supposed, that he invented them, because we find no mention of them in *Galen* or any where else? or did he put this or the other name to them, with an intention to raise the value of the medicine? The silence then of other authors, in this case, surely is very far from being any conclusive argument.\(^{329}\)

Here, Baillie suggests that it was possible to attribute the omission of this antidote from later texts to a lack of interest in the remedy, or a view that it was no longer useful. He additionally makes the point that this particular antidote could have been addressed by an author whose work had been lost. It is important to note that Baillie also argues that omission of a concept or remedy in Galen was not necessarily synonymous with its non-existence, nor that the

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\(^{328}\) J. Le Clerc, *An answer to what Dr. Freind has written in his History of physick* (London, 1728), p. 60.

\(^{329}\) J. Baillie, *A letter to Dr. ----- in answer to a tract in the Bibliothèque ancienne & moderne, Relating to some Passages in Dr. Freind's History of Physick* (London, 1727), p. 61-62.
author who did include it was also its inventor. The implication, therefore, is that whilst Galen was a useful indicator of medical knowledge over time, he was not infallible or sufficient as a sole source of information.

The role of Galenic works as a source for later collectors or compilers of medical information is also emphasised throughout these texts, and this can particularly be seen through the idea that:

Oribasius indeed in two large Books [...] has described all the parts then known of the humane body, and assigned the proper office to each of them: but he has added little to what Galen has discoursed in his Anatomical Works; and upon the account of this Treatise, rather than of any other of his Writings, he deserves the name given him of Simia Galeni.330

This is also reiterated later in Freind’s text, by the suggestion that ‘Oribasius has not a syllable upon his head, but what is to be found in Galen.’331 These passages indicate that whilst Oribasius put together a comprehensive account of the human body, his original contribution in this area was minimal.

Freind similarly discusses the lack of originality within these types of work, as part of the second volume of his text The history of physick, and also shows that in one instance, Averrhoes highlighted this aspect of his own work: ‘For in Anatomy, he professes he gives us nothing new: and indeed he here entirely copies after Galen: and as to the Practical part of this Work, there is scarce any thing in it, but what is borrow’d’332 This is reiterated by Francis Clifton, who also suggests that: ‘His Anatomy is intirely Galen’s; his practice has very little new in it, nor does he seem to have had much share of it.’333 This indicates that in addition to the significance of Galen as a source for this work, Averrhoes also had little practical experience to reinforce or develop his theoretical knowledge.

331 Ibid., p. 32.
332 Ibid., Volume II, p. 117.
333 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 104.
The derivative nature of many of these later medical works is also further highlighted by Clifton, who, regarding Avicenna, says: ‘His works, which were very famous till the restauration of learning, were call’d by him his Canon, and taken almost entire from Galen, Rhazes, and Haly Abbas, and yet inferior to Abbas’s.’ This illustrates that although information had been taken from older authorities and presented in a collated form, there had not necessarily been a corresponding development in the quality of the content. This indirectly demonstrates the perception that in many instances, Galen’s work was superior to that which followed.

In contrast to the way in which Galen is presented as the sole, or particularly significant, source for these types of compilatory medical texts, there are also examples whereby the content of ancient authors was criticised in the presentation of compiled medical information. This can be seen in Freind, who suggests, as part of a section addressing Paulus:

‘Tis very plain from this treatise, that he performed operations in Surgery himself: he describes the different methods, which were made use of by the ancients, by his own contemporaries, and by himself. He relates the good or bad success in several of them: and writing upon this subject, he is so far from being a mere copier, that he sometimes dissents from Galen, and seems to prefer a more modern experience to his. So in the chapter about an Aneurysm, after having quoted what Galen says upon this article, he interposes his own opinion concerning the method of cure.

Here, Freind highlights that in addition to copying information from a variety of sources, Paulus also ‘sometimes dissents from Galen.’ It is interesting to note that whilst Freind shows Paulus as utilising material from the ancients, contemporary authors, and his own experience, he specifically mentions Galen as an example that shows how far Paulus was from ‘being a mere copier’, implying that this was both significant and perhaps unusual.

334 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p.103.
335 J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume I (London, 1725), p. 160-161. The footnote within this passage refers to Paulus’ work.
Francis Clifton similarly addresses the role of dissent in the use of ancient ideas, and within *The state of physick, ancient and modern*, he says:

> The oldest as well as the fullest and best account we have of the ancient Arabick Physick, and the writers of that nation, is left us by Haly Abbas, who about the year 980 wrote his *Almaleci* or royal work, which he design’d as a compleat system of physick; undertaking by it to supply the defects of others, and specifying where Hippocrates, Galen, Oribasius, and Paulus had fail’d. By him we learn, that the original works of Mesue are lost; and that the works which we now have under the name of Serapion, are genuine, and may be reckon’d as the first book of physick in Arabick, Mesue’s being very probably wrote in Syriack.\(^{336}\)

This illustrates that Haly Abbas’ ‘compleat system of physick’ also provided a significant account of ‘the ancient Arabick Physic’, which demonstrates the importance of the past in constructing a history of medicine within this tradition. The passage additionally underlines that Haly Abbas particularly highlighted the ‘defects of others’ and that Galen was scrutinised in this way alongside other significant medical authorities. Clifton also presents a brief narrative of the other information to be found in Haly Abbas, which reinforces the content of the work by emphasising the information ‘By him we learn’.

In addition to very specific citations of Galenic works, used to reiterate particular points, there are many examples of more general references to these texts, often in relation to broader aspects of medicine or its history. Despite being less precise, these references nonetheless show the importance of Galen as a source of information, and also illustrate the different ways in which his work was utilised. This is particularly evident with regard to pharmacology, as Galen is shown to provide information regarding specific remedies, as well as a fixed record of the types of medicines that were in use both during and prior to his lifetime. It is also important to note the broader value ascribed to the works of the ancients, particularly in terms of providing a basis from which to progress,

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inspiring later practitioners to develop and improve upon the ideas they contain. More specifically, Galen is highlighted as a source of information contributing to a broader understanding of medical advice over time. Within the context of the evolution of medical practice as an underlying theme within these works, Galen is used to provide an image of the state of certain aspects of medicine as they are shown in his texts. The significance of Galen in charting change over time can also be seen through discussions regarding particular aspects that were omitted from his works. This is shown to reflect tangible differences in the experiences of health and medicine over time, but also to highlight developments, and ideas unknown to Galen. The role of Galenic works as a source for later compilers of medical information is also emphasised throughout the histories of medicine examined, and there is often a sense that little had been added to the works during this process. However, despite the derivative nature of many of these texts, there is also evidence of instances of deviation from ancient ideas, and the content of ancient works. This is also occasionally reflected in other discussions addressing Galen as a particular source of information, suggesting that whilst he remained a useful indicator of medical knowledge, he was perhaps not sufficient as a single source of information. Nonetheless, his role as a source for information otherwise lost is also significant and is highlighted by the early modern authors as they address these topics. This demonstrates a further use of his works, and it is clear that the information available within the Galenic corpus was frequently utilised within this, and a variety of other contexts.

Information about Galen

In addition to using Galen in a variety of different ways, including as a particular source for information; as a marker of time across an extremely broad period; and as a way to access the theories and knowledge of his predecessors, these types of histories are also used to provide information about Galen. They show the context of his life and work, and underline the effect of his background and environment on his contribution to medicine. The type of information about Galen that is conveyed ranges from more specific, biographical information, to ideas about his character, and the relationship between Galen and Hippocrates. The texts also address his medical system, and approach to medical
knowledge, and provide assessments of his achievements alongside more negative perceptions and comments.

Several of the texts examined include a specific section dedicated to conveying information about Galen’s life, work, and medical knowledge. For example, the extract from the contents page of Francis Clifton’s text *The state of physick, ancient and modern* (Figure 1) shows part of the outline of this section, and the first five sub-headings that are included. Other authors similarly devote a particular chapter to Galen: William Black includes a significant part relating to Galen, and John Barker devotes about five pages to discussing him. The notable length of these sections in relation to the works as a whole illustrates the importance of Galen within the overall narrative that the texts create, and the prominence of these discussions shows the centrality of Galen as a key figure in the history of medicine. These texts also refer to Galen within a range of contexts throughout the work as well as addressing him within a dedicated section, and this is similarly reflected within the texts that do not specifically separate a part to discuss Galen.

**Figure 1**

**Biography**

William Black begins his section dedicated to Galen by providing both detailed and specific information relating to his life and contribution to medicine. The

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F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), unnumbered page, within ‘The Contents’ under ‘Sect. II.’

Section copied from the contents page of Francis Clifton’s text: F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), unnumbered page, within ‘The Contents’ under ‘Sect. II.’
varied of the points included can be seen through the initial sentences of this part of Black’s text:

Galen, P.C. 160, the last Author of distinction who practised Medicine at Rome, is a man, upon whose character and writings I must dwell for some time. He reigned during a great number of centuries over Physic, as an inspired Prophet, or a Pope gives laws in Religion. Galen was universally appealed to, as a monarch and an oracle: he was supposed to have brought every part of Medicine to perfection, and his system credited as infallible.  

By suggesting that he ‘must dwell for some time’ upon Galen’s character and writings, Black illustrates the importance ascribed to Galen, both as a medical authority, and as a significant figure within the history of medicine. This passage also underlines the broad nature of Galen’s influence, and the length of time that his ideas dominated medicine.

Francis Clifton provides a similar overview of Galen’s life and background, and begins his section ‘Of Galen’ (indicated by a marginal note) by saying: ‘Galen was born in Adrian’s time A.D. 131, and was about four or five years old, when that Emperor dy’d. He was of Pergamus in Asia minor, the son of Nico, an honest, rich, and learned man, who spar’d no cost for his son’s education.’

This introduction to Galen’s life includes more detailed information regarding his background than Black’s text, and places his lifetime within the context of broader contemporary events. Here, the disparity between the dates given by Clifton and Black is perhaps due to the use of different sources, or to a focus on different points in Galen’s lifetime: Clifton provides ‘A.D. 131,’ as a date of birth, whilst Black states ‘P.C. 160.’ Modern scholarship indicates that ‘Galen was born in September AD 129, in Pergamum on the Ionian seaboard of Asia Minor’ which broadly corroborates Clifton’s account, although it is interesting to note

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339 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), p. 86.


341 Here, ‘P.C.’ is likely to refer to something similar to ‘floruit’, i.e. the date he flourished, or date of activity, as it is too far removed from Galen’s date of birth to suggest this is what Black is referring to.
that uncertainty remains regarding the date of Galen’s death: ‘He died sometime in the second decade of the third century, probably in Rome.’

Immediately following his introduction to Galen’s background, Clifton describes the way in which he ‘turn’d his thoughts to Physick’ and outlines the ensuing development of his career:

After he had gone thro’ all the learning of the schools, he turn’d his thoughts to Physick, when he was about seventeen, and, as he himself says, by vertue of a dream; and at nineteen he studied a little while under a disciple of Atheneus; and after that, under several masters, all men of eminence, as appears by his own account up and down his works: besides, he travell’d much, and made a long stay at Alexandria, where all the Sciences then flourish’d; and at the age of twenty eight return’d to Pergamus. His health, which had been very bad till then, grew better after that (the manner of it he tells you himself) and remain’d firm and good to the last, tho’ he liv’d to be a very old man.

This passage illustrates the basis for the authority of Galen, particularly through the suggestion that his masters were ‘all men of eminence,’ reiterating the quality of his training, a factor which is also reinforced by the allusion to his long stay at Alexandria, and additional extensive travel. It is important to note that these details are conspicuously taken from Galen’s own writings, and Clifton demonstrates his knowledge of these texts by highlighting the various sources of the information. This also illustrates the persuasive nature of Galen’s writing style, and shows Clifton perpetuating the image that Galen constructed of himself and presented through his work.

In contrast to the more positive aspects of Galen’s background that Clifton initially emphasises, he subsequently indicates that there was a degree of contemporary opposition to his work:

343 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 81. The superscript letters within this passage refer to footnotes which provide citations for the relevant places in Galen; see also Appendix B, row 40 (footnote ‘a’) and Appendix B, row 22 (footnote ‘b’).
He did not appear at Rome till he was thirty two, and then met with great opposition from the Faculty, for pretending to know what they did not or wou’d not know: a pretension, that always did and always will raise a man enemies, how well grounded soever it may happen to be. However he had the good fortune to please many of the principal men [...] by his dissections and prædictions, and other parts of his profession; and yet was forc’d to leave the place four or five years after; the clamour of the Physicians was so strong against him. But he had not been long in his own country, before he was sent for by Marcus Aurelius and Lucius Verus, and after that never left Rome; at least not for good and all.\textsuperscript{344}

This passage suggests that the opposition Galen encountered was primarily due to the way in which he approached the ‘Faculty,’ and emphasised his own knowledge and perspective over conforming to current attitudes. It is interesting to note that this allusion to the ‘Faculty’ reflects contemporary concerns more significantly than the environment of Galen’s own time, as there was no specific, central ‘Faculty’ governing medicine during this period in Rome. Although in the passage Clifton acknowledges that this approach ‘always did and always will raise a man enemies,’ by adding the comment ‘how well grounded soever it may happen to be’ he implies that the ideas being presented by Galen were fundamentally valuable.\textsuperscript{345} This indicates that here, it was Galen’s manner and personality that hindered the acceptance of his theories, not the quality of the information provided. In contrast to this, Clifton also highlights various positive aspects of Galen’s time in Rome: his ‘good fortune’ and subsequent summons by Emperors Marcus Aurelius and Lucius Verus. The way in which Clifton presents this contrast in his story of Galen’s background is as an interesting twist in the overall narrative, providing a challenge from which to recover towards the end of the tale. It also underlines that Galen’s reputation was built upon many different factors, and that his authority was perhaps strengthened by the difficulties encountered.

Although Clifton dedicates a specific section of his work to Galen, he also addresses his life, background and reputation throughout the text as a whole.

\textsuperscript{344} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 81-82.

\textsuperscript{345} Ibid.
This can particularly be seen within a chapter entitled ‘Of the state of Physick from the Restauration of Learning in 1453, to the present times’ where Clifton says of Hippocrates:

A great genius will always show it self. If any man cou’d dispute it with him, ’twas Galen, a man of vast learning. But he is so far from pretending to it, that he every where speaks of him in terms of the highest respect; and particularly in his surprising work de usu partium b, where he has these remarkable words; “again we shall begin with the words of Hippocrates, as with the words of a God.” Which is something the more wonderful, because, next to Hippocrates, he himself was certainly the greatest Physician; and civilities of this kind are, we know, very rare among men of the first rank.346

Here, Clifton presents Galen as ‘a man of vast learning,’ ‘the greatest Physician’ after Hippocrates, and as a man of ‘the first rank.’ These descriptions show the importance of Galen as a figure within the history of medicine, and underline the reasons for his influence as a fundamental authority, second only to Hippocrates. By including a reference to Galen’s work De usu partium (On the usefulness of the parts of the body) and a quotation from the text, Clifton illustrates that he was taking information directly from Galen, reinforcing his own knowledge and understanding of the past. In addition, this provides evidence of the way in which Galen presented his relationship to Hippocrates, highlighting Hippocrates as the superior author and medical authority. The use of Galen to show this information illustrates that Clifton’s view of the past was, to an extent, informed by Galen’s presentation of himself and others. This also begins to account for the significance of Galen in conveying information regarding Hippocrates, and why ideas relating to Hippocrates were often linked to, or derived from, Galen’s perspective.

The relationship between Galen and Hippocrates, and the way in which this is presented during the early modern period, can also be seen through a

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346 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 138-139. The superscript ‘b’ within this passage refers to a footnote which provides a citation for the relevant place in Galen; see also Appendix B, row 17.
comparison between the quotes that Clifton includes in his text. As part of a
discussion regarding the perception of physicians and their art, he says:

No wonder then, that the first Physicians were *deify’d*, or that those who
have excell’d in it since, have always been highly esteem’d *. Where
there is an intrinsick excellence in any Art, (as these certainly is in
*Physick*) the professors of it, who understand it well, cannot fail of being
much esteem’d.*

Here, the superscript ‘a’ refers to a footnote (see *Figure 2*), which shows a
statement taken from Hippocrates, in Greek alongside the English translation:
‘A philosophical Physician is Godlike.’* This mirrors the quotation shown
above, in which Galen says: ‘again we shall begin with the words of
*Hippocrates*, as with the words of a God.’ The similarity of language, and the
allusion by Galen to Hippocrates’ statement, illustrates the significance of the
relationship between the two ancient authors, as well as Clifton’s role in
perpetuating these ideas.

*Ἰστής φιλοσόφος, ἐσθένος. A philosophical Physician is Godlike, says Hipp. L. de dec. bab.*

*Figure 2* *349*

**Character**

In addition to showing biographical information about Galen, these types of
texts also allude to his character and approach to medical knowledge. These
accounts are often consistent with modern assessments that: ‘Galen saw
himself, no doubt in self-aggrandizing terms, as a man on a heroic mission to
rescue medicine, and science in general, from their degenerate decrepitude.’*

This can be seen, for example, in William Black’s work, which indicates that:

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348 Ibid., p. 138.
Galen boasted publickly in his writings, of his superior knowledge in Medicine, and in many instances assumed a magisterial authority, and illiberal superciliousness. “I have, (says he, in a fulsome strain of personal adulation,) done as much to Medicine, as Trajan did to the Roman Empire, in making bridges and roads throughout Italy. It is I alone that have pointed out the true method of treating diseases: it must be confessed, that Hippocrates has already chalked out the same road, but as the first discoverer he has not gone so far as we could wish; his writings are defective in order, in the necessary distinctions; his knowledge in some subjects is not sufficiently extensive; he is often obscure after the manner of the ancients, in order to be concise; he opened the road, another must render it passable.”

Here, whilst Black acknowledges Galen’s ‘superior knowledge in Medicine’, he also allows Galen to illustrate the boastful and ‘magisterial’ nature of his writings by including a quote which shows the extent of his ‘personal adulation.’ Although the source of this quote is not specifically shown, Black uses it as evidence of Galen’s character and way of presenting himself. This is reiterated through the suggestion (from Galen) that Hippocrates had begun to set out a path of medical knowledge, but this had been insufficient or incomplete, and as such Galen had been able to improve upon the ideas of the past and amend existing knowledge, rendering the road ‘passable.’

A similar idea is presented by Francis Clifton within his work The state of physick, ancient and modern, which, as part of the section he dedicates to Galen, says:

As his education and genius had set him above the level of his brethren, he was sometimes too free with them, and too full of himself; looking with contempt upon what they did, and comparing himself to Trajan in point of usefulness. This behaviour naturally created him the ill-will of the Faculty, who in return plagu’d him as much as they cou’d.

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351 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 88.
352 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 84.
This assessment highlights Galen’s ‘education and genius’, but is more critical than Black’s account, implying that Galen’s attitude was directly responsible for the negative reception that he experienced from those around him. The use of the phrase ‘comparing himself to Trajan in point of usefulness’ indicates that Clifton was referring to the same passage quoted above by Black, although here Clifton provides a footnote showing the source of the information: “a See the book of his methodus med. c. 8.” This illustrates an underlying similarity in the construction of Black and Clifton’s histories, as both authors viewed this point as relevant to depicting Galen’s life, work and personality. The comparison to the Emperor Trajan was perhaps particularly indicative of a person that was sometimes ‘too full of himself’ and including this argument demonstrates both the relationship between these histories of medicine, as well as a broader understanding of Galen’s character.

Alongside this type of information relating to Galen’s own portrayal of his personality, Clifton also addresses Galen’s character in relation to more specific and practical aspects of his work. This can particularly be seen in a discussion regarding his proficiency in anatomy, which says:

But this must always be understood of brutal more than humane Anatomy; Vesalius having demonstrated, that he describes the parts from Apes, or some other creatures, and not always from men. Be this as it will, he has certainly shewn himself a man of vast application and ingenuity, and worthy of all the honour that has been paid him since.”

Here, Clifton underlines that Galen was often working from animal anatomy, and implies that he should not therefore be judged by the standards of those using human dissection to build their anatomical knowledge. It suggests that within this context, Galen had ‘shewn himself a man of vast application and ingenuity’, and as such was ‘worthy of all the honour that has been paid him since.’ This assessment contrasts the negative aspects of Galen’s character

353 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 84. As shown, the superscript ‘a’ within this passage refers to a footnote which provides a citation for the relevant place in Galen; see also Appendix B, row 7.

354 Ibid., p. 88.
that Clifton had previously presented, and contributes to a more complex depiction of Galen’s background and contribution to medicine.

The complexity of the way in which Galen is represented within these texts is also illustrated within William Black’s *An historical sketch of medicine and surgery*, which particularly underlines both the skilful and problematic nature of Galen’s approach:

Unfortunately for Galen, materials were not in his days, collected to build any permanent system: but when deficient in facts and experiment, he possessed a warm Asiatic imagination, and abundant invention to fill up the chasm with conjectures. He did not trouble himself to philosophize in that close wary tract, pursued by our modern Locke, from established facts; many of his fine spun theories, rest like the fairy castles upon a baseless fabric of air. Had he lived in modern times, it is probable, that with the talents of a rhetorician, of an easy florid writer, and a man of general erudition, all which he is allowed to have possessed, his system would have rivalled either of the two modern compilers Boerhaave or Hoffman.355

Although this passage is, in many ways, particularly negative regarding Galen’s nature and methodology, it also implies a sense of admiration and reverence for the way in which he had achieved such longevity for his ideas and theories. The idea that ‘he possessed a warm Asiatic imagination, and abundant invention to fill up the chasm with conjectures’ appears to both criticise the substitution of ‘facts and experiment’ for ‘invention’, whilst also admiring his ability to do so. Similarly, the suggestion that ‘many of his fine spun theories, rest like the fairy castles upon a baseless fabric of air’ is both a negative assessment of the lack of foundation for many of his ideas, and also a poetic tribute to the quality, grandeur, and authority of the ‘fine spun theories’ that he created.

In contrast to the criticism of Galen’s approach, Black also indicates the extent of his talent for expressing his ideas by suggesting that in the present day, his

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355 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 102.
system would rival the best compilers of medical information. This illustrates the perceived strength of Galen’s writing and oratory style, and the significance of these factors in ensuring that his theories were accepted. The passage also implies that, in this instance, Black was assessing Galen’s contribution by modern standards, and perhaps suggests that this type of ‘abundant invention’ had become less acceptable over time. By showing the contemporary strength of Galen’s character alongside the questionable foundation of many of his ideas, Black demonstrates the complexity of the way in which Galen was represented in these types of texts, and shows the broad, and often contradictory, nature of the information that was provided.

**Relationship to Hippocrates**

Throughout discussions about Galen and his contribution to medicine, these types of authors also particularly emphasise the link between Galen and Hippocrates. This is evident within John Barker’s text *An essay on the agreement betwixt ancient and modern physicians*, and here, ‘CHAP. III’ begins with the suggestion that:

> Our Notions in Physick change with our Philosophy, (says an ingenious Writer) and at last we return to our old ones again. The Truth of this Observation has been shewn, by the short History which I have given of the Practice of Physick in ancient Times, and may be farther confirmed by a View of the Revolutions which latter Ages have produced. For, after all the Deviations which have been made from the Hippocratic Plan, by Asclepiades, Themison, Soranus, and others, succeeding Physicians were glad to return to it again; and Galen himself, notwithstanding he carried the Theory of Physick farther than any one had done before, by explaining the Causes of Diseases from the Principles of the Aristotelian Philosophy, yet, in his Practice, he closely followed Nature, and Hippocrates.\(^{356}\)

This places Galen’s use of Hippocrates into a broader context, indicating that the return to past ideas was a necessary consequence following the ‘Deviations

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which have been made from the *Hippocratic* Plan,’ and that Galen was particularly significant in facilitating this change. It also underlines the perceived importance of Galen to the development of the ‘*Theory of Physick,*’ and shows that his work was fundamentally influenced by both nature and Hippocrates.

The role of Hippocrates in the development of Galen’s approach to medicine can further be seen within the short section at the end of ‘CHAP. II’ that Barker specifically dedicates to discussing Galen:

> This great Restorer of the *Hippocratic* Medicine then, tho’, in his Theory, he ran into some Speculations concerning the Causes of Diseases, which were perhaps a little too refined, yet, in his Practice, he always took Nature, and *Hippocrates,* Nature’s best Interpreter, for his Guide. His curative Indications in Fevers were the same as those which *Hippocrates* pursued, *viz.* to assist *Nature* when her Efforts were too weak, and to restrain her Motions when they were too violent, or irregular.\(^{357}\)

This illustrates the way in which Galen used Hippocrates as a fundamental ‘Guide’ to practice, and shows the similarity of intention between Hippocrates and Galen in terms of working in parallel with nature. This passage also begins to imply that whilst Galen followed Hippocrates in many of the practical aspects of medicine, in some instances his speculations regarding medical theory were unnecessarily complex or over-refined.

The importance of Hippocrates with regard to Galen’s practical approach to medicine is also reiterated as part of a section of Francis Clifton’s text, described in the margin as addressing ‘*His practice.*’ This indicates that:

> In his *practice* he was much influenc’d by two maxims: the one was, “that a disease ought to be got the better of by that which is contrary to it;” the other, “that *nature* ought to be preserv’d by something a-kin to her self:” and both these were taken from *Hippocrates,* the Physicians of all the

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Ancients that he stuck the closest to, except where the discoveries in *physick* or *pharmacy* (and especially *pharmacy*) seem’d to have taught ‘em a nearer way. But in these deviations it too often happen’d, that he went out of the way for the worse.\(^{358}\)

By showing these points within quotation marks, Clifton implies that the information was taken directly from Galen, and although no specific reference is provided, it nonetheless underlines his desire to present an understanding of Galen’s perspective. The quotations illustrate two of the key areas that Clifton perceived as dominating Galen’s approach to healthcare: countering disease by the use of an opposite, and preserving nature by utilising something of a similar character. The idea that both aspects ultimately derived from Hippocrates reiterates Barker’s suggestion of the importance of Hippocrates as an authority, and the influence of his ideas on Galen’s medical practice. It is also important to note Clifton’s suggestion that Galen deviated from Hippocrates in specific areas that had been developed beyond past ideas, and that in some instances these changes were detrimental to medical theory more broadly, as is reflected in Barker.

In addition to discussing Hippocrates’ influence on Galen’s general approach to medicine, Barker also demonstrates an example of a more specific way in which Hippocrates affected his perspective. As part of a section examining the role of Galen over time, and his objective of assisting nature in addressing fevers, Barker says:

This is exactly the *Hippocratic* Doctrine on this Subject, and from hence it is plain, that GALEN look’d upon Bleeding in Fevers to be only a *palliative* Remedy, and never depended upon that alone.

Again, if we inquire by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the *Hippocratic* Plan; [...]. Lastly, If we ask with what View he made use of Evacuations in Fevers, such as

\(^{358}\) F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 84-85.
Purging, Sweating, &c. the Answer is, that he trod in HIPPOCRATES’S Steps in this, as he did in all other Respects.359

This illustrates Galen’s adherence to Hippocrates’ approach in this instance, and shows that with regard to fever, Galen’s use of bleeding, diet, and evacuations closely followed Hippocrates’s method.

Although Francis Clifton broadly concurs with Barker’s perception of the influence of Hippocrates, as part of the section he dedicates to Galen, Clifton also shows a particular example of the differences between their respective practices. This is presented alongside a discussion regarding Galen’s use of therapeutic bleeding, and the marginal note: ‘A material difference between the practice of Hippocrates and Galen’:

As to bleeding he practis’d it oftner than Hippocrates, and is the first upon record, who mentions the quantity to be taken away. ‘Tis remarkable too, that he bled at all times, by night as well as day, but no children under fourteen, and very seldom old men. And where bleeding and purging were both necessary, he always began with bleeding, but never us’d Leeches; a manner first introduced by Themison, or at least the Methodists. Bathing and friction were in great esteem with him, and so were opiates and anodynes, especially in the cure of fluxes and pains. In a word, his practice agreed in the main with that of Hippocrates, but yet with this difference; the one’s was founded chiefly upon experience and observation, the other’s upon reasoning: so that Hippocrates has occasion’d very little dispute among physicians, while Galen had laid a foundation for eternal dispute.360

Here, the difference that Clifton highlights centres upon the approach taken by each practitioner: Hippocrates’ methods as based upon experience and observation; and Galen focusing more significantly on reasoning as a foundation for theoretical ideas. Clifton also links these different ways of

approaching medicine to the reception of each author, underlining that Hippocrates created minimal disagreement in response to his ideas, whilst Galen provided a system that was open to ongoing challenge.

**Medical system and approach**

Throughout the sections that Francis Clifton and William Black dedicate to describing Galen’s life and contribution to medicine, comments regarding his influences, approach, and overall medical system feature prominently. This can particularly be seen within Black’s text, which places Galen’s system within the context of the different medical sects active in Rome during his lifetime. Following a list of notable sects, and a discussion of the lack of a consensus between them, Black says: ‘Galen’s system gained the ascendant over all the others: he declared himself no party in Medicine; on the contrary he appears to have held all the rival sects in great contempt: [...]’\(^{361}\) This illustrates the way in which Galen positioned his medical system in parallel to the other sects, and shows how his perspective was differentiated from rival approaches to medicine.

This passage in Black reflects a similar section within Francis Clifton’s *The state of physick, ancient and modern*, which addresses this theme under the marginal note ‘*All the sects subsisting in his time*’ Again, following a list of the various sects, Clifton says:

However, *Galen* declar’d himself of no party, and yet swallow’d ‘em all up afterwards. His favourite view from the first was the establishment of the *Hippocratisck* doctrine. He study’d *Hippocrates*, perhaps, the most of any man living, and founded his way of thinking on what he had met with in those writings, especially with regard to the *power of nature*, the *doctrine of attraction*, the *signs of diseases*, the *circumstances of a crisis*, &c. but in some of these he was apt to carry his speculations too far, and multiply other things beyond their bearing; his *temperaments*, for instance, and his *pulses*: upon which he wou’d reason very freely, but not

\(^{361}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 87.
always very justly, for want of knowing some things better, that nothing but the Anatomy and Philosophy of the moderns cou’d discover.\textsuperscript{362}

Here, Clifton also shows the aspects of Galen’s work that were particularly influenced by Hippocrates, indicating that these ideas formed the basis of his own medical system. Additionally, Clifton highlights, as he does elsewhere in the text, that Galen could ‘carry his speculations too far, and multiply other things beyond their bearing.’\textsuperscript{363} As is also implied in John Barker’s work, Clifton suggests that in some instances Galen unnecessarily complicated the theories he adopted, and developed them beyond their useful limits.\textsuperscript{364}

Clifton also reiterates this argument in a broader sense, indicating that conjecture alone was insufficient to improve certain aspects of medicine, especially in terms of the treatment of patients. He says within the section dedicated to Galen, that:

\begin{quote}
The knowledge of the parts, which had been much improv’d since the time of Hippocrates, as it had taught ‘em many things relating to diseases, that it was impossible to come at by conjecture only, so it generally led ‘em into disputes and reasonings, that were of very little use to the Patient. Nor were these confin’d to diseases only. The Materia Medica was to be consider’d in a new light, and the operation of every \textit{simple}, and indeed of every \textit{compound}, to be accounted for, in an entertaining, ingenious manner. Galen, who knew as much of Anatomy and Philosophy as any of his Predecessors or cotemporaries, was far from backward upon this occasion, even tho’ he met with so little encouragement from Hippocrates, and the wiser part of the Ancients; but regarding these things as matters of consequence, thought he cou’d never do enough to represent ‘em all in the strongest and clearest light; […]\textsuperscript{365}
\end{quote}

\textsuperscript{362} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 83-84.
\textsuperscript{363} Ibid., p. 83; see also p. 84-85.
\textsuperscript{364} For Barker’s comments, see J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 155-156.
\textsuperscript{365} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 85.
This places Galen’s contribution within the context of the way in which medical knowledge had developed over time, and underlines his particular achievement in anatomy and physiology. It also shows the importance that Galen attributed to the study of anatomy and physiology, as well as suggesting the amount of work he saw as remaining in this area.

This can similarly be seen within William Black’s *An historical sketch of medicine and surgery*, which reinforces the importance of Galen’s contribution following, and improving upon, Hippocrates and the work of the ancients:

All these defects in Hippocrates, Galen undertook to repair, and to supply new materials. The former is his model in many instances, and upon whose works he has written a variety of elaborate commentaries. Galen plumes himself upon being the first who established a just and rational method of treating and teaching Medical subjects. He compares a Physician to an Architect, who should know all the parts, even to the most minute, that compose a house: the Physician must likewise learn the actions and particular functions of each part, composing the human body: this is enforcing the study of Anatomy and Physiology.\(^{366}\)

Here, Black reinforces the centrality of anatomy and physiology as part of Galen’s approach to medicine, and illustrates that whilst his work was based on the past, a significant change had also occurred between earlier medical systems and his own.

**Assessments and achievements**

The role of anatomy within Galen’s medical system, and the way in which this was viewed during the early modern period, is further evident within Clifton’s work, as part of a section entitled in the margin: ‘Galen **remarkable for Anatomy**.’\(^{367}\) The accompanying text suggests that:

\(^{366}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), p. 88-89.

\(^{367}\) F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 87.
In *Anatomy* he certainly excell’d all that ever went before him, and dissected *men* as well as *brutes*; but had much fewer opportunities of humane dissections than the other. *Apes* were his chief subjects, and these he recommends to his pupils to begin with; that, when an opportunity should offer of a *humane* body, they may more readily know how to improve it for the best. Children, that had been expos’d by the barbarity of their parents, or a man basely murder’d in the fields, were in a manner all the humane subjects that they could now and then lay hold of.\(^{368}\)

This demonstrates the various ways in which Galen was able to carry out dissection, and shows his perception of its use in medical education, whilst also underlining his particular achievement in this area. The passage appears within the section that Clifton utilises to address information about Galen, which additionally illustrates this process as a notable part of the narrative surrounding Galen’s overall contribution to medicine.

The positive assessment that Clifton offers within this part of the text is also reflected in other areas of his discussions regarding Galen, and earlier in the work, he says:

> He was certainly the greatest scholar, as well as the best Physician then living, as appears by his works, which are very learned and numerous; and have been more numerous; there having been once above *five-hundred* books in *physick* only, and about half as many more in *other Sciences*, all of his own writing. In Physick he certainly did wonders, and was the great restorer of the *Hippocratick System* in opposition to the *Methodists*, who till that time had kept their ground remarkably.\(^{369}\)

The content of the paragraph is further highlighted through the use of a marginal note, which says: ‘*The greatest scholar of the age.*’\(^{370}\) This reiterates Galen’s achievements, particularly within the context of his own time, and

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\(^{368}\) F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 87-88.

\(^{369}\) Ibid., p. 82.

\(^{370}\) Ibid.
shows the scale and broad range of his contribution. It also provides an indication of the number of works that had been lost over time, as well as showing the extent to which Galen changed approaches to medicine by restoring the Hippocratic system in opposition to the competing sects of the period.

The idea that Galen primarily restored medicine to a Hippocratic model is also reiterated by John Barker, who begins the short section that he specifically uses to address Galen’s life and contribution to medicine by suggesting that:

After Physick had continued in this fluctuating State, for a few Years, People began to turn their Eyes back to HIPPOCRATES, and the Hippocratic Method. This Method was in part revived by CELSUS, who has been stiled, for that very Reason, the Latin HIPPOCRATES; but it was fully restored, about a Century afterwards, by GALEN. This Author, though very little Notice is now taken of him, seems to have been born for the Advancement of Medicine in general, and for the Restoration of the Hippocratic Practice, in particular. It is well known what Reputation his Works continued to be in, wherever the Art was known, for upwards of thirteen hundred Years, i.e. till about two hundred Years ago: But if we inquire into the Reason of it, we shall find that it was not on account of his Philosophical Opinions, so much as his close Adherence to the Hippocratic Method, that he continued so long to enjoy this Honour. I shall close this Chapter with an Account of his general Design, by which it will appear that his Practice was strictly conformable to that of HIPPOCRATES.371

This places Galen’s work within the context of medical knowledge at this time, and implies that Hippocratic medicine had already begun to be revived, and Galen subsequently completed this process. It is also important to note that Barker alludes to the decline of Galenic influence by saying that ‘very little Notice is now taken of him.’ He places this decline as occurring ‘about two hundred Years ago,’ which, in relation to the publication of his text (1747),

designates it as during the mid-sixteenth century. Although this illustrates a specific decline, Barker also highlights the significance of Galen’s works, as well as the longevity of his authority. He does, however, attribute this to Galen’s adherence to Hippocrates, as opposed to his own medical reasoning, which contrasts the emphasis on Galen’s achievements shown previously in the same passage. This contrast can particularly be seen through the idea that Galen ‘seems to have been born for the Advancement of Medicine in general, and for the Restoration of the Hippocratic Practice, in particular’ which prioritises the role of Hippocratic medicine, but also highlights Galen’s broader contribution to medicine.

In addition to the information that is presented as part of a section dedicated to Galen, there are also examples of histories of medicine that provide information about Galen throughout the text, but do not designate a specific area as discussing his life and work. This can be seen within John Freind’s *The history of physick*, which addresses Galen’s achievements and contribution to medicine in various passages, and also in varying contexts. For example, following a discussion regarding Galen’s ‘famous Epistle to Cecilianus,’ Freind says:

> You will not imagine, by any thing I have said, that I have the less opinion of Galen, who I am sensible was a very knowing Man, and an excellent Physician, no ways without doubt inferior to Oribasius; but here I am speaking only in the *historical* way, and relate facts as they appear upon the records we have left of the Ancients.  

This follows a point regarding particular actions and remedies discussed by Oribasius, and highlights that in this case Galen ‘lays down no methodological course of curing.’ Although here Freind emphasises the positive aspects of Oribasius’ approach, and contrasts this with the lack of information in Galen, he

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372 It is difficult to take this assertion at face value, as decline was certainly less prominent two-hundred years prior to the publication of Barker’s text (1747, therefore about 1547), and as such his assessment retains less credibility here. In fact the period highlighted was not long after the publication of the Aldine edition of Galen, ‘a (nearly) complete Galen in Greek’ in 1525-1526, which ‘reintroduced works of Galen that had been unknown or neglected for centuries.’: V. Nutton, ‘The fortunes of Galen’, in R.J. Hankinson (ed.), *The Cambridge companion to Galen* (Cambridge, 2008), pp. 355-390, p. 370 and p. 372 respectively.


374 Ibid., p. 25.
also suggests that this type of more critical assessment does not alter his view of Galen’s broader positive contribution. In acknowledging that Galen was ‘an excellent Physician’ and reiterating his place in relation to Oribasius, Freind illustrates the way in which Galen’s work was assessed alongside subsequent ideas in order to build a narrative of medical knowledge over time. This is also shown through the idea that in this instance Freind is ‘speaking only in the historical way,’ which suggests that this, in addition to the sources used, had a significant effect upon the information communicated, and the way in which it was presented.

The development of a historical narrative of medicine over time can similarly be seen subsequently within Freind’s text, where he says:

Nay the very Sophists, who before, and after Adrian’s reign, swarm’d not only at Rome, but along the Asiatick coast, and employ’d their whole study in imitating the elegance, at least the diction of the old Greek Writers, have not out-done Galen, and some of his successors, if we consider them in regard to their style only. Galen himself was not only the best Physician, but the best Scholar and Critick of his time.\(^\text{375}\)

This implies that later authors were unable to reach the quality of Galen’s output, and reinforces the positive assessment of Galen that Freind offers elsewhere in the text. The idea that ‘Galen himself was not only the best Physician, but the best Scholar and Critick of his time’ also underlines the broad nature of Galen’s contribution, which is further demonstrated by the inclusion of the phrase: ‘So great an honour have these authors done to their profession, by being versed in other Arts and Sciences, as well as their own.’\(^\text{376}\) This shows that a wide-range of knowledge was seen as improving the central aims of a medical author’s work, and reiterates the positive image that Freind creates here of Galen and his work.


\(^{376}\) Ibid., p. 221.
Negative perceptions and comments

Although the sections that these authors dedicate to Galen are relatively positive, outlining his life, work and contribution to medicine, they also include more critical observations, and show that in some instances aspects can be perceived as both positive and negative. This can particularly be seen in comments relating to the voluminous nature of Galen’s work, and the problems associated with utilising it effectively:

I HAVE found it no easy task to contract into miniature, the immense mass of Galen’s writings, system and improvements in medicine. To have done it with sufficient justice to the author would require, instead of one small chapter, or rather a few pages only, several large volumes.\(^{377}\)

Whist Black does not overtly criticise the ‘immense mass’ of Galen’s work, he places this within the context of the problematic nature of presenting it effectively, and of summarising the content for more modern readers. This underlines the value placed upon Galen’s contribution, particularly as Black is reluctant to compromise the quality of the information provided in his own text. In providing an explanation regarding the reason for presenting Galen’s ideas in this way, he also justifies his choice, and implies that contrasting opinions were widespread.

Black returns to this theme within the section that he dedicates to Galen, indicating that: ‘In resemblance of his favourite Aristotle, there is a superfluous round of definitions and divisions, and human patience is often exhausted in the jargon of terms, refinement and logick.’\(^{378}\) In contrast to the previous passage which places the voluminous nature of Galen’s work into the context of his achievements, here, Black underlines a more negative aspect of the considerable detail included within the Galenic corpus. The idea that ‘human patience is often exhausted’ illustrates the extent to which Black viewed much of this detail as unnecessary, and it also implies that Galen’s medical system had been excessively refined, and become over-complicated as a result of this process. This reiterates the perceived difficulty in separating the superfluous

\(^{377}\) W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 100.

\(^{378}\) Ibid., p. 103.
from the valuable in terms of the ideas contained within Galen’s work, and demonstrates the need to summarise and simplify the information available.

The idea that particular areas of Galen’s work could be both positively and negatively perceived is also shown within Francis Clifton’s work, under a section devoted to ‘His practice’ This suggests that:

[...] and yet after an infinite deal of labour in this way, and particularly in reasoning upon the virtues of Medicines, and explaining ’em all by the four cardinal qualities, and their several combinations, tho’ he has shewn us indeed the fineness of his genius, he has at the same time left this part of physic in a much worse state than he found it. And yet he declares elsewhere (viz. where he is finding fault with his master Pelops, for attempting to give a reason for every thing ⁹) that, if he is not persuaded he knows a thing himself, he never attempts to convince another: so natural is it for a man, for even the best of men, to see the failings of another, and to overlook the same failings in himself.⁷³⁷

Here, Clifton places the ‘fineness of his genius’ alongside the idea that Galen had ‘left this part of physic in a much worse state than he found it,’ which illustrates the complex nature of perceptions of Galen’s contribution to medicine. Clifton implies that in some instances Galen’s efforts were unnecessary, as the information produced was ultimately not useful; however, he also shows Galen’s confidence in the quality of his own work by underlining that ideas would not have been presented unless he was ‘persuaded he knows a thing himself.’⁷³⁸

The complexity of the way in which Galen is presented within these texts is reiterated as this section of Clifton’s work progresses. Subsequent marginal notes show divisions including ‘Galen remarkable for Anatomy’, a relatively short part, which is followed by: ‘The great injury he did Physick, and what.’ Under this heading, Clifton further develops the idea that Galen had a

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⁷³⁷ F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 85-86. The superscript ‘a’ within this passage refers to a footnote: "De simplic. medicam. facult. l. 11. N° 24. de cancris ustis.’; see also Appendix C, row 11.
⁷³⁸ Ibid., p. 86.
detrimental effect upon certain areas of medicine, and begins this discussion by saying: ‘But yet there is one thing, that I can’t but take notice of, and that is, the great injury he did Physick in the main, by reasoning so subtilly upon several parts of it, from his elements, cardinal qualities, and the like: an injury, in a man of his sense, hardly ever to be forgiven.’ This is reminiscent of the idea evident elsewhere in this section that Galen could occasionally ‘carry his speculations too far, and multiply other things beyond their bearing.’ Both sentiments are critical of the way in which Galen approached the theory of medicine, and suggest that ideas could be over-developed in instances where they were not grounded in practical experience. The passage continues in this manner, and the section that Clifton dedicates to Galen ends with the continuation of the sub-heading ‘The great injury he did Physick, and what’, and the reiteration the problematic nature of Galen’s contribution:

I must needs say, it has often appear’d to me very wonderful, that a man, who understood Hippocrates so well, and had so great a regard for his observations preferable to all other, should ever have been instrumental to establish another doctrine so contrary to the former, and so liable to disputation. No body could ever have a higher opinion of Hippocrates, than Galen had; no body could be more sensible to the usefulness of observation than he; and yet no body has done more to alienate the mind from that noble and important part, to the speculative and uncertain. How much better would it have been, upon all accounts, to have only press’d the study of the best Authors, making them as plain and as agreeable as possible, than, by a new way of thinking, to draw us off from what we ought always to have in view? but alas! to our great misfortune, Galen thought otherwise; (perhaps out of despair of ever coming up to Hippocrates in his own way) and the generality of Physicians since, finding it easier to satisfy themselves from Galen’s principles, and to recommend themselves to the publick by his way of writing, than Hippocrates’s method of observing, have, in a manner, universally given in to that pernicious scheme; so that for many Ages little or nothing was done for the advancement of physick; the remaining Greek Physicians

381 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 88-89.
382 Ibid., p. 83; see also p. 84-85.
(except Trallian) and almost all the Arabian Physicians, treading in the same tract that he had mark’d out.383

This illustrates the perception that in many ways it was Galen’s relationship to Hippocrates and the way in which he presented and developed his ideas that was detrimental to medical knowledge. The suggestion that ‘no body could be more sensible to the usefulness of observation than he [Galen]; and yet no body has done more to alienate the mind from that noble and important part, to the speculative and uncertain’ implies that Galen had moved away from the observational approach advocated by Hippocrates, in favour of a more speculative method, and Clifton particularly criticises this change. He also indicates that it would have been preferable had Galen simply provided the information of the ‘best Authors’, as opposed to forging a ‘new way of thinking’, and that he perhaps did so in order to compensate for failing to reach Hippocrates’ standard. However, in showing the perceived damage inflicted upon medical theory, Clifton also underlines the extent and longevity of Galen’s influence, and the significance of its effect upon later physicians, who trod ‘in the same tract that he had mark’d out.’

In contrast to Clifton’s critical attitude in this instance to the way in which Galen presented his theories, John Barker underlines the problems that were introduced to these theories following Galen’s lifetime. This can be seen through the idea that:

The Corruptions which had crept into the Galenic Medicine, by Means of the Arabians, and the latter Galenists, had occasioned an Inquiry into the State of Physick, and some Attempts to reform it, a little before this Period. And even the Authority of GALEN himself had by some been called into Question. The first who ventured publickly to find Fault with him was VESALIUS. This Author however confined his Censures chiefly to GALEN’S Anatomical Treatises. But the Itch of Reformation now began to spread; and he was soon followed by ARGENTARIUS, in Italy, GOMETIUS PEREIRA, in Spain, and FERNELIUS, in France. But none of these Writers

383 F. Clifton, The state of physick, ancient and modern, briefly consider’d; with a plan for the improvement of it (London, 1732), p. 89-90.
went much farther than to correct the supposed Mistakes of the Galenic Theory, the Practice being left, for the most part, as it stood before.\textsuperscript{384}

Here, Barker suggests that Galenic medicine had been subsequently corrupted, which implies that the fundamental information associated with Galen remained of value, but that later developments had caused ‘the Authority of GALEN himself’ to be ‘called into Question.’ This passage also describes the process by which Galenic authority changed over time, and highlights that the decline of Galen’s influence began with Vesalius, and at this time rested principally within criticism of theoretical points, as opposed to challenging the practical aspects of medicine.

The broad range of information that is conveyed about Galen within these texts illustrates the importance ascribed to his place within the history of medicine. It also shows a sense of the significance attributed to placing current medical ideas within the context of the past, and the role of Galen and his background within this framework. The way in which Galen’s knowledge and theories are contextualised by the inclusion of specific biographical details, as well as information regarding his character, methods and way of presenting himself, underlines the basis for his authority and suggests a sense of justification in terms of the longevity and extent of his influence. Similarly, the inclusion of information relating both to Galen’s own, predominantly positive, presentation of himself, and to the often contradictory early modern perceptions of his character, illustrates the complex nature of the way in which he was represented in these types of texts. The role of the relationship between Galen and Hippocrates is also shown to be particularly significant, and this link is frequently evident in parallel with discussions regarding Galen’s work. The influence of Hippocrates upon Galen’s approach to medicine is evident both in terms of Galen’s role in transmitting Hippocrates’ work, as well as through comparisons between the two practitioners. In many ways, Galen’s authority is reiterated through allusion to this relationship, and through reference to the eminent men surrounding him in Rome. The emphasis on Galen’s medical system and approach is also particularly important, as it is shown both within

\textsuperscript{384} J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 163-164 (Note: p. 164 is incorrectly numbered 264 in the text).
the context of his own time, and as an ongoing influence on contemporary medicine. In highlighting his achievements within particular areas of medicine, these authors reiterate that Galen’s contribution was central as a foundation for both medical theory and practice, whilst also illustrating the cumulative nature of medical development. In contrast to the positive assessments of Galenic influence, there are also examples of criticism, especially with regard to the voluminous nature of Galen’s works. However, this is linked to the problematic nature of utilising and sharing the information contained, and as such demonstrates a continuing sense of the inherent value of the texts, and the utility of their content. The information about Galen that is conveyed within these histories of medicine is particularly complex, but nonetheless illustrates the fundamental way in which he was viewed as part of past and contemporary medical knowledge. Additionally, criticism lay primarily within theoretical points, rather than in challenging many of the practical aspects of Galenic medicine, and the themes addressed are intended as factual or descriptive details to explain his perspective.

**Galen’s knowledge and perspective**

Although not primarily intended to teach practical medical knowledge, these types of history nonetheless include information regarding Galen’s perspective on particular medical themes, as well as his knowledge of the body, and theoretical medicine. His perception of various ideas is placed within the context of his own time, but is also shown to influence later developments, as well as a variety of areas that had remained relatively unchanged. The importance of theoretical knowledge and an understanding of the structure and function of the human body is demonstrated as particularly significant to Galen, and this is also reflected within early modern perceptions. Similarly, these types of histories also emphasise the role of the more practical aspects of medicine, as well as the influence that Galen had upon particular medical procedures. In addition to conveying Galen’s own perception of medical theory and practice, the ideas and theories of the past are also subject to ongoing assessment, and are placed within the context of broader developments and changes over time.

The role of theoretical knowledge within William Black’s *An historical sketch of medicine and surgery* is particularly evident as part of the section which
explores Galen’s life and contribution to medicine. Black places particular emphasis on conveying how Galen viewed certain aspects of medicine, his overall approach, and on the development of these over his lifetime, suggesting that:

He compares a Physician to an Architect, who should know all the parts, even to the most minute, that compose a house: the Physician must likewise learn the actions and particular functions of each part, composing the human body: this is enforcing the study of Anatomy and Physiology.\textsuperscript{385}

In addition to this type of broad overview, Black also describes in detail Galen’s theories of the body, and the way in which he understood disease, prognostics, treatments, and preventative medicine. For example, he says that Galen:

scrupulously examined the effects and abuse of what are perhaps improperly termed the Non-naturals, and which, when well regulated, tend materially to preserve health: such are the air we breathe, food and drink, motion and rest, sleep and watching, retentions and excretions of the body, and passions of the mind.\textsuperscript{386}

This illustrates the role of theoretical knowledge in the section that Black dedicates to Galen, and he reinforces this by suggesting that: ‘There are in this author an infinite number of important prognostic observations, and commentaries on those of Hippocrates.’\textsuperscript{387} Here, he underlines the importance of the content of Galen’s works, and shows the significance of Galen as a source of information regarding Hippocrates. This can similarly be seen in a further discussion of Galen’s theoretical perspective, which also aligns his perspective with Hippocrates:

A disease, according to Galen’s definition, implied an inability to perform the functions of the body, as in health. His classification of diseases is

\textsuperscript{385} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCCLXXXII [1782]), p. 88-89.
\textsuperscript{386} Ibid., p. 90.
\textsuperscript{387} Ibid., p. 94.
analogous to that of Hippocrates; he parcelled them into epidemic, endemic, sporadic, short, long, benign, malign, and many other divisions unnecessary to be recapitulated.\textsuperscript{388}

Although this definition of a disease illustrates the importance of both the broader basis for Galen’s ideas, and the more complex divisions they contained, there is also a sense that Black saw these divisions as either too numerous, and as such not necessary to repeat; or as well-known information that did not need reiteration. Nonetheless, Black does provide additional examples of Galen’s view on the importance of theoretical knowledge, indicating that: ‘A KNOWLEDGE of the different functions of the body, says Galen, serves to discover the diseased organ: thus a difficulty of digestion is an indication that the stomach is affected […]’\textsuperscript{389} This is followed by further points, showing the way in which knowledge of the body related to the discovery of the area of an affliction.

However, there is also evidence that the role of theoretical knowledge within Galen’s perception of medicine had a detrimental aspect. This can particularly be seen in the idea that:

Many of the minute distinctions respecting the pulse, existed in Galen’s brain only; at least many of the causes, and of the prognostics built upon them are extremely suspicious. Galen even confesses the impossibility of distinguishing all these different pulses, by saying, it would require the life of one man to learn them perfectly.\textsuperscript{390}

Here, the implication is that a proportion of the theoretical framework associated with Galen was viewed as no longer relevant during the early modern period, and that the level of detail it contained was unnecessary. Furthermore, this passage also questions the extent to which this information was relevant during Galen’s own lifetime, characterising portions as existing ‘in Galen’s brain only’

\textsuperscript{388} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCLXXXII [1782]), p. 90.
\textsuperscript{389} Ibid., p. 91.
\textsuperscript{390} Ibid., p. 95.
and as ‘extremely suspicious.’ Similarly, the voluminous nature of the distinctions mentioned is shown to be problematic, reiterated by the suggestion that Galen understood the difficulty in learning and deploying the information effectively.

This point is further reinforced within Black’s section dedicated to Galen, which both explains and assesses his overall contribution to medicine:

Like Aristotle, he seems to have been better fitted to digest the observations of others into systems, than to build upon his own collection: but experiments and medical discoveries are made by slow degrees, and Galen had too much vanity, even in the most intricate questions, to appear ignorant. His theory of the four elements, as applied to the human body, and to the virtues of medicines, is a curious web of philosophical fiction, a monster of the fancy, and to support it, he heaps up mountains of casuistry and conjecture. His writings are too verbose and prolix, and his practical observations are obscured by clouds of sophistry.

Galen’s style of writing, personality, and approach to the presentation of his ideas are shown to hinder the understanding of the theories available within his work, whilst making it appear more voluminous and complex than was necessary to convey the content.

Despite Black’s negative stance in this instance, he includes this passage as part of a relatively significant section focusing on Galen’s life, career and knowledge, and nonetheless acknowledges the fundamental nature of his contribution. Similarly, the idea that he ‘seems to have been better fitted to digest the observations of others into systems, than to build upon his own collection’ suggests that Galen was perceived as playing an important role in

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391 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), p. 95.
392 Ibid., p. 102.
codifying information, and creating a coherent medical system from the theories and knowledge that were available to him.  

In addition to showing perceptions of Galen’s theoretical knowledge, these types of histories also illustrate attitudes towards the practical aspects derived from Galen and his works. This can particularly be seen in William Black’s argument that:

Galen is abundantly prolix on the various exercises, and in regulating the gradations to which they should be extended. By means of clean linen, and riding on horseback, we may safely in our variable watery climate, dispense with a great part of the ancient gymnastic toils and systematic discipline: not that cold bathing, used in moderation, is without its advantages in washing away impurities from the skin, and in sultry weather invigorating the languid constitution. How far the gymnastic medicine may be beneficially prescribed in the cure of diseases must be a future consideration.

The suggestion is that Galen’s work regarding exercises and their practical application was significant, but written in an overly lengthy style which perhaps provided more information that was seen as necessary. However, the idea that although measures could be taken to ‘dispense with a great part of the ancient gymnastic toils’ there was a sense that they remained valuable, and were perceived as worth considering as part of ongoing approaches to the treatment of disease.

The influence of Galen’s perspective on the practical aspects of healthcare is also evident in Black’s description of his approach to bloodletting: ‘He bled rather oftner than Hippocrates, but never children under fourteen years of age: the quantity drawn, was proportioned to the disease and strength, and never exceeded eighteen ounces, nor was less than eight. Errors, he said, had better

393 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 102.
394 Ibid., p. 113.
be committed on the safe side. \(^{395}\) This is particularly significant as it illustrates specific theoretical points influencing practice, and the importance of individual circumstances in determining treatments. It also shows a fundamental aspect of Galen’s overall approach, indicating that errors ‘had better be committed on the safe side,’ which is likely to have been included alongside this information to further explain the theory discussed, as well as serving to advise the contemporary reader.

The link between Galen’s approach to bloodletting and contemporary attitudes to this method of treatment is also explored by John Barker within his text *An essay on the agreement betwixt ancient and modern physicians* (1747). Following a brief discussion regarding the role of heat and cold in the use of bloodletting, Barker suggests that:

> From what has been said, we may account for the Difference between the Practice of HIPPOCRATES and that of our Physicians, with respect to Bleeding; as we may also for GALEN’s deviating from the Practice of his Master in this Point. For HIPPOCRATES was very cautious about Bleeding, and GALEN very fond of it, and yet both of them proceeded upon the same Plan, as I shall hereafter shew: But as GALEN practised in the temperate Clime of Italy, he had much greater Reason for using this Evacuation freely than HIPPOCRATES, whose Practice was mostly limited to the warm Clime of Greece. And the same way of Reasoning holds good with regard to us. \(^{396}\)

Here, Barker highlights that in this instance Galen deviated from the example set by Hippocrates, but he also provides an explanation for this difference in approach. Similarly, Barker also underlines the link between ancient knowledge and present practice, showing the role of ancient authority and the way in which it was perceived to relate to the present. This illustrates the importance of Galen within this particular narrative, indicating his position as part of a path from

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\(^{395}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXII [1782]), p. 97.

Hippocrates to the date of Barker’s text with regard to changes in the approach to, and execution of, bloodletting.

In addition to presenting aspects of Galen’s theoretical and practical knowledge, these types of texts also offer a sense of the assessment of medical knowledge and development over time. It is interesting to note that Galen also provided this type of discussion within his own work, as William Black suggests: ‘Notwithstanding many defects and inaccuracies, Galen allows that Dioscorides wrote better upon the Materia Medica than any who preceded him.’ This implies that Galen can be seen as a commentator on past writings, and also that these assessments were viewed as valuable within an early modern history of medicine. In terms of the assessment of Galen as a contributor to medical knowledge, Black provides a specific example, indicating that with regard to surgery, broadly defined: ‘On this science and art amongst the ancient surviving writers, Hippocrates, Celsus, Galen, P. Ægineta and Albucasis, alone possess any intrinsic excellence.’ This places Galen alongside a variety of other notable surgical authorities from the past, and underlines that of those whose writings survive, this group provided fundamentally valuable knowledge.

Whilst this passage shows a particularly positive view of the contribution provided by these specific ancient authors, there is also evidence that other perspectives were included. As part of a discussion regarding the idea that ‘Surgery derives intrinsic information from Paulus Egineta, (P.C. 640;)’ and the way in which he ‘directs how [...] to tie up punctured arteries in the operation for the Aneurism,’ Black suggests that: ‘Galen, Paulus, and all the ancients, speak of one species only of aneurism, and define it to be “a Tumour arising from arterial blood, extravasated from a ruptured artery.” The aneurism from a dilation of the artery is a discovery of the moderns.’ This underlines that a change had occurred over time, and whilst the ancients are not criticised for their limited knowledge in this instance, it shows that there was a perception of development in this particular area of medical knowledge.

397 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 84.
398 Ibid., p. 285.
Alongside more positive observations of medical knowledge in the past which emphasise ancient approaches within the context of their own time, there are also examples which highlight differences in knowledge and criticise older perspectives. This can be seen in William Black’s work within a section addressing ‘Anatomy and Physiology,’ which says:

C. ASELIUS (1626) had discovered the lacteal vessels running through the mesentery: Galen took them for white arteries: Aselius imagined that they terminated in the liver. Pecquet, soon after, discovered the receptacle of the chyle and course of the thoracic duct to its termination in a blood vessel near the heart: from this last discovery, the ancient and common erroneous notions of the chyle, or prepared nutriment, being first carried into the liver for concoction into blood, were subverted.400

This narrative is echoed by modern perspectives, which reiterate the roles of the characters discussed in Black’s account, and also address the broader implications of these developments:

new anatomical structures unknown to Galen were being discovered and they were given physiological interpretations antithetical to Galenic physiology. In 1622, Gaspere Aselli (1581-1625) saw the lacteal vessels. Their significance became apparent when Jean Pecquet (1622-74) described in 1651 the thoracic duct (the major vessel of the lymphatic system) and its connection with the venous system. Aselli had believed that the lacteals transmitted chyle to the liver to be made into blood, Pecquet’s discovery that the chyle flowed into the vena cava and thence to the heart, put together with the Harveian circulation, was taken to have completely destroyed the food-chyle-blood system centred around a blood-making liver that was fundamental to Galenic physiology.401

400 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 173.
Given the significance attributed to this series of discoveries, both in Black’s account and more modern interpretations, it is interesting to note the way in which Black conveys the information. His passage suggests that he understood the significance of these changes and their effect on medical thinking, but the tone of his writing is relatively casual, undermining the importance of the underlying points. This was perhaps due to the length of time that had passed between Galen’s work, the subsequent discoveries that changed perceptions of his theories, and the publication of Black’s text. It is likely that this version of events had become an accepted narrative, which acknowledged that a change had occurred, but did not completely discredit Galen as a source of knowledge, especially within the context of his own time.

In contrast to this, Black also presents examples of the flawed nature of some areas of Galen’s knowledge, and within a section exploring ‘Chymistry and Physicks’ he suggests that:

BRITAIN, near the end of the 17th century, produced one man, whose discoveries alone would have immortalized any nation. Under the penetrating genius of the great Sir Isaac Newton, philosophy seems to be almost exhausted. He demonstrated the theory and laws of light, of seven primordial rays or colours, and of vision. Galen’s physiology of vision was grossly erroneous.\(^{402}\)

Whilst this highlights the extent to which Galen was perceived as incorrect in terms of his physiology of vision, it nonetheless underlines his overall importance in a broad range of areas. No other practitioners or authors are mentioned within this brief passage regarding Sir Isaac Newton, and Galen is chosen to illustrate the significance of the change that had occurred over time, placing him as an important part of the overall narrative.

In addition to providing analysis of the medical knowledge of the past, these types of text also show a broader sense of change over time. This is particularly evident within the section of William Black’s work *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 193-194.
From the days of Hippocrates to those of Galen, the list of remedies, more especially of compound prescriptions, was enormously accumulated: in other respects, his practice is founded upon that of Hippocrates, whose doctrine of the critical days he defends. Galen wrote diffusively on the Materia Medica and composition of drugs. Many of his prescriptions, recipes, and antidotes, collected from various Authors, are made up of a rabble of discordant ingredients, and are now expunged from our modern Pharmacopæias.403

This illustrates that whilst Galen built his medical philosophy on Hippocrates’, Black suggests that he also contributed a significant number of his own treatments to a list that was ‘enormously accumulated.’404 Furthermore, Black also shows that change continued, and many of the remedies that had been utilised in the past were no longer viewed as relevant to contemporary practice, and as such had been ‘expunged from our modern Pharmacopæias.’405

In assessing the medical knowledge of the past, and identifying changes over time, these types of text present varying perspectives and emphasise different aspects of the areas they describe. This can particularly be seen with regard to perceptions of the circulation of the blood, and the way in which this theory developed. For example, John Freind, in his work The history of physick (1725), includes the testimony of the Oxford editor of Nemesius, who ‘contends, that the circulation of the blood, an invention which the last century so much brag’d of, was known to Nemesius, and described in very plain and significant terms.’406 Freind describes Nemesius as one ‘whom we may reckon one of the ancients,

403 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 96.
404 Ibid.
405 Ibid.
tho’ not properly a Writer in Physick, *Nemesius*, Bishop of *Emissa*, who wrote a treatise concerning the *Nature of Man*, near the end of the *fourth Century*: 407

This corresponds with modern accounts of Nemesius, which place him as flourishing in 390, and draws into question William Black’s placement of him within his ‘Chronological chart’ under ‘Anatomy and physiology’ as active sometime between 500 and 600 AD. 408 Nonetheless, Freind is critical of Nemesius’ early modern editor, and, following a quote likely to be from the translation, suggests that:

Upon this single slender proof does he attribute this great discovery of the *circulation* to *Nemesius*; and those who have insisted, that it was known both to *Hippocrates* and *Galen*, have full as good arguments on their side. I will only say this, that from this very description, and from what the same author says of the *Liver* in the same chapter, that it ministers nourishment to the body by the veins, one may demonstrably infer, that *Nemesius* had no Idea of the manner, in which the circulation of the blood is perform’d. 409

Here, Freind illustrates that Hippocrates and Galen were as likely to have known about the circulatory system as Nemesius, but as Nemesius ‘had no Idea’ about the process, by implication Hippocrates and Galen had a similarly limited perception of the theory. This idea is reiterated within William Black’s text, which mentions the circulation of the blood within his section dedicated to Galen. This ensures that the entry is necessarily focussed upon Galen’s own knowledge of the process, rather than the development of the theory more broadly, but it nonetheless highlights that aspects of medical knowledge were differently presented according to the intent of the author:

Galen knew of that obvious motion perceptible in the heart, its systole and diastole, and that the arteries and veins contained red blood, and he

seems not to have been ignorant of the lesser circulation through the lungs, and of the communication between the auricles, and the ventricles of the heart, in a fetus before birth; but the general rotatory circulation through the body, continued many centuries after a profound secret. Galen imagined, that from the lungs the heart was supplied with the subtile and pure part of the air, which contributed to cool the blood, […]\textsuperscript{410}

Black details the extent of Galen’s understanding of this process, but suggests that ‘the general rotatory circulation through the body’ was unknown until a later period, which was perhaps also beyond Nemesius’ lifetime. If the ‘many centuries’ after Galen that Black suggests that the circulatory system remained ‘a profound secret’ move the narrative of this discovery beyond Nemesius’ lifetime, the accounts by Freind and Black, although different, contribute to a similar overall narrative of the development of the theory.

The role of changing views over time and the way in which this is presented within this type of history of medicine can be seen through the idea that:

Contradictions in prescriptions and practice are not alone glaring between ancient and modern physicians, and between distant countries, and universities, but in the same city, and even in the same disease, the sons of Esculapius on many occasions differ widely. To use a common and proverbial phrase, Hippocrates often says, Yes, and Galen flatly says, No.\textsuperscript{411}

This passage appears as part of the introduction to a section within An historical sketch of medicine and surgery called ‘Writers on the Practice of Medicine, Therapeuticks and Pathology,’ and it underlines that variation in perspective was identified both between broad categories such as ‘ancient’ and ‘modern,’ but also between significantly narrower ranges of time and place. It is important to note that in this instance the contradiction between Galen’s ‘No’ and Hippocrates’ ‘Yes’ does not appear to compromise the authority of either figure,

\textsuperscript{410} W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 99-100.
\textsuperscript{411} Ibid., p. 227.
but implies that an understanding and acceptance of contradictions contributed to an overall narrative of the history of medicine.

The influence of Hippocrates and Galen over time, and the way in which this was linked to the history of medicine is evident within the second volume of John Freind's work *The history of physick*, which moves on from discussing 'the state of Physick among the Greeks' to address 'the Arabians.' Here, he indicates that:

> Even the Physicians, we may observe, in all the *Theory* of diseases, embrac'd the maxims and opinions of *Hippocrates* and *Galen*, and propagated the same to posterity, not indeed always in their true genuine simplicity, but often very much adulterated with their idle fictions, and intermixed with some subtil and unnecessary speculations of their own.

This reiterates the significance of Galen’s role (alongside Hippocrates) within medicine, both as a specific authority, and as a fundamental part of the historical narrative across a broad spectrum of time and location. It is particularly important to note that Freind underlines the ‘true genuine simplicity’ that Galenic theory represented, and that subsequent additions over time from this tradition were unnecessary, and detracted from the simple value of the knowledge of the past.

The role of Galen as an influence on both theoretical and practical medical knowledge, and the assessment of these over time can be seen throughout these types of texts. It is evident that Galen’s perspective was viewed as relevant over an extremely broad period of time, and these authors frequently allude to the importance of his knowledge and its position within a broader narrative of the history of medicine. As part of his section addressing Galen’s life and work, William Black provides a summary of Galen’s overall contribution to medicine:

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413 Ibid., p. 28.
We observe that Galen has attempted to describe the structure of the human body, and to explain its functions; to investigate the causes of diseases, their manner of operation; the names, composition and virtues of drugs; and lastly, the science of diagnostics and prognostics, and of remedies. Under these different branches are included anatomy, physiology, pathology, materia medica, and the practice of physick. No part of medicine, as it is now at least taught in the schools, was left untouched by him, medical chymistry and Natural philosophy excepted, which for ages after continued to be unknown. His anatomy and physiology, though deformed by many errors, prevented a great deal of labour to the moderns, and put them forward in this science. He re-established the study of Hippocrates, and pointed out the clew, to arrive at medical knowledge, not, I confess, always by example and experiment, but to study it with more advantage than formerly, and to extend its limits. Galen, it is true, often lost his way, and was bewildered in subtleties; but even his errors stirred up a curiosity for investigation, when learning and philosophy were revived in Europe.\(^{414}\)

This underlines the fundamental nature of Galen’s role in medical knowledge, both immediately following his lifetime, and in the centuries leading to the publication of Black’s text in 1782. Although Black suggests that aspects of Galen’s work were ‘deformed by many errors,’ he nonetheless highlights the variety of areas that were influenced by his contribution, as well as the longevity of this effect. This reiterates the importance ascribed to Galen as an authority, but also illustrates the value attributed to placing current approaches to medicine and the body within the context of past knowledge, and indicating the place of key figures and developments within a broader narrative of the history of medicine.

The role of theoretical knowledge, and the emphasis on the way in which Galen viewed certain aspects of medicine is particularly prominent within these types of texts. Galen’s perception of the role of a detailed knowledge of the body in order to successfully diagnose and treat a patient is evident throughout, and the

importance of the codifying role played by Galen in the past is shown to remain significant. In contrast to this, information is also included which alludes to an unnecessary level of detail within the Galenic corpus, much of which was seen as no longer relevant during the early modern period. Nonetheless there is also a sense that within the context of the theories and knowledge that were available to him, Galen remained a notable authority, and a significant influence on later periods. Alongside discussions relating to Galen’s theoretical knowledge, attitudes towards the practical aspects of Galen’s work are also highlighted. In many ways Galen’s importance is presented as part of a broader practical narrative, linking the work of Hippocrates to the practices of contemporary practitioners. In some instances practices are shown to be particularly similar; however, in other cases the changes occurring over time are more significantly emphasised. The importance of Galen within this broader narrative is highlighted throughout, and although instances of deviation from ancient knowledge are also mentioned, there is a sense that this was acceptable within the context of the time, and was a necessary and useful part of the development of medicine. As such these ideas remained particularly useful, and were perpetuated on this basis.

Perceptions of the effect of Galen over time
Alongside the presentation of Galen’s perspective of medical knowledge and practice, these texts also provide information regarding the way in which his ideas more tangibly affected medicine over time. Although the effect of Galen is evident throughout, the way this is presented within these histories of medicine can be split into several relatively distinct periods. Firstly, ancient medicine immediately following Galen’s own lifetime. This illustrates the effect of Galen across a broad time period, and whilst it is the most removed from the publication date of these works, it nonetheless constitutes a significant proportion of their content. Secondly, the role of Galen within Arabic medicine is also emphasised, and although the perception shown is particularly negative, the effect of Galen upon the work produced within this tradition is notable. Fewer details are provided regarding Galen and the way in which he affected medieval medicine, however, his position within medical knowledge and education during this period remains evident. As the narratives move towards the present, these texts continue to show Galen as both a specific influence,
and as a broader underlying authority. New theories and ideas in the Renaissance and early modern period are shown to be inspired by ancient perspectives, but also challenge them where appropriate. In addition to the differences that are evident between these specific periods, there are also themes that are common throughout. For example, the effect of Galen on individual authors, his placement relative to other notable figures over time, and an ongoing sense of underlying continuity are central to presentations of Galen’s role.

*Ancient medicine after Galen*

Although ancient medicine constitutes a time period remote from the publication of these texts, a significant proportion of their contents is dedicated to ideas and individuals from a broad spectrum of dates. A variety of perceptions of the role of Galen within this narrative can be seen through the authors that he is linked to, for example, as a leader in science and medicine alongside Plato and Aristotle:

> We are for some time to take our leave of mighty Rome, to return back into Greece, which had long continued an humble appendage of Roman sovereignty. [...] In the three last centuries a few additions and improvements were made by some distinguished Greeks, in medicine and surgery: with these exceptions, literature and the arts hastened to decay, throughout the wide dominions of Rome. [...] Plato, Aristotle and Galen, were now the leaders in science and medicine: Alexandria was the fashionable school for study, [...].

This illustrates William Black’s construction of an account of this period that places Galen as a significant figure in conjunction with other prominent authorities. The importance of Galen alongside other notable ancient figures, such as Hippocrates, can similarly be seen within the Contents page of Francis Clifton’s work *The state of physick, ancient and modern* (1732). Here, there is an entry for ‘Hippocrates *the Prince of Physicians, and Galen next to him*’ which

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415 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), p. 104.
provides the page reference ‘138.’ This underlines that Galen was perceived as standing next to Hippocrates in terms of importance to medicine, and that these types of key figures were utilised as structural markers and finding aids in the composition of this text.

The specific contribution that Galen was perceived to have made to pharmacology, and his place within the context of this developing over time, can be seen as part of a lengthy and diverse discussion regarding remedies and medicines in John Freind’s text. Here, he suggests that:

The composition of medicines was still much improved in the time of Andromachus, and brought to more perfection in Galen’s, and even after that, as we may learn from Ætius, great additions were made to this part of Pharmacy: yet notwithstanding the ingredients were numerous, they were not altogether inconsistent.

Andromachus, ‘active in Rome in the 70s and 80s AD’ was ‘a Cretan who became personal doctor to Nero’ and was therefore a significant figure within ancient medicine. In linking Galen to this tradition, Freind illustrates that he was active in this area during a time where positive changes were occurring, and the idea that this was ‘brought to more perfection’ in Galen’s time underlines the importance of his contribution, and implies that he was viewed as notable within this tradition.

Following this period, and Galen’s own lifetime, several individuals are presented within these early modern texts as a specific group of authors.

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416 F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), unnumbered page, within ‘The Contents’ under ‘Sect. IV.’
418 L.M.V. Totelin, ‘And to end on a poetic note: Galen’s authorial strategies in the pharmacological books’, *Studies in History and Philosophy of Science*, Volume 43 (2012), pp. 307-315, p. 308; V. Nutton, *Ancient medicine* (London, 2004), p. 177. Nutton refers here to Andromachus the Elder, and comments that ‘Andromachus’ verses were later turned into prose by his son, another Andromachus, probably an imperial physician later in the first century.’ (p. 178). The ‘verses that were later turned into prose’ refer to the format of a recipe written by Andromachus: ‘He was famous for his universal antidote, *Galene*, which replaced the Mithridatium of Mithridates in popular esteem. It now contained more ingredients, sixty-four as opposed to forty-one, with a higher proportion of opiates and minerals, and with the original lizard flesh replaced by that of a viper. Andromachus wrote his recipe in the form of a poem in eighty-seven couplets.’ (p. 177).
discussing and collating the medical knowledge of their recent past. This is reflected in modern accounts, which highlight a similar set of practitioners:

The century following the death of Galen (c. AD 200/216) is a blank spot in the history of medicine. [...] When light returns, around AD 350, it is almost on a different world. [...] Although such works are known earlier, what is found in the works of Oribasius of Pergamum (c. 325-400), Aëtius of Amida (fl. AD 530 in Constantinople) and Paul of Aegina (fl. in Alexandria c. 630) is different from Celsus, Pliny and Galen’s *Method of Medicine*. The later authors assembled extracts from earlier writers, often verbatim, into a coherent mosaic of opinions, ideas, and remedies. Their compilations can be big or small; Oribasius produced one for his patron, the Emperor Julian, in 70 books, of which over 30 survive [...].

This perspective from 1995 mirrors the view presented by Francis Clifton in 1732, whose text *The state of physick, ancient and modern* similarly implies that there was an inconsequential period following Galen. This is shown by a marginal note which says: ‘Greek physicians after Galen’ denoting a new section addressing this topic, the earliest author under which flourished in the early fourth century. The relevant passage indicates the collective way in which these authors were discussed, and also underlines their approach to the study of medicine:

As to the Greek Physicians, the more famous are Oribasius, Aëtius, Alexander and Paulus; all of them collectors (in a great measure) from the writings of other Physicians, and from Galen in particular; from whom they have given almost every thing that is valuable in Anatomy, Physick and Surgery, (as they then stood) besides some remarks of their own, by no means useless. What these remarks are, and how far they may be trusted to, has been elegantly shewn by a late famous Physician of our own country, Dr. John Freind; so that to descend to particulars is

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needless. Some things however it may not be amiss to take notice of from him.\textsuperscript{421}

This illustrates the extent to which the individuals listed were influenced by Galen, and the effect that his work had upon what was transmitted during this period. Clifton also refers here to John Freind’s work, and directs the reader to it through a footnote: “\textsuperscript{a} See his history of \textit{Physick}.”\textsuperscript{422} This begins to suggest the relationship between authors of different histories of medicine, and that they were often contributing to an underlying framework of history, providing their own information whilst propagating the ideas of others.

The ‘things’ Clifton believed ‘it may not be amiss to take notice of’ from Freind include additional information regarding many of the individuals mentioned in the introduction to this particular section regarding ‘Greek physicians after Galen’. For example, he says:

\begin{quote}
\textit{Oribasius} was born at \textit{Pergamus} (the place of Galen’s nativity) […], and prov’d the greatest scholar and physician of his time. His attachment to his towns-man was such, especially in the \textit{Anatomical} part, that he was sometimes call’d \textit{Simia Galeni}; a circumstance that lets us at once into the manner of his writings, which were very large at first, but are now in a much smaller compass.\textsuperscript{423}
\end{quote}

This reiterates the influence of Galen on the work produced by these practitioners, and also shows that this link was perceived as significant. In this section of the text, Clifton continues to discuss the group of post-Galenic Greek authors, addressing them separately and in relation to each other: ‘\textit{Ætius} was of \textit{Amida} in \textit{Mesopotamia}, and brought up at \textit{Alexandria}. […] He is clearer and

\textsuperscript{421} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 90-91. The ‘Alexander’ mentioned here is Alexander of Tralles (active 570), see L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 9, 55, 100.

\textsuperscript{422} F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 91.

\textsuperscript{423} Ibid., p. 91.
fuller than Oribasius, but inferior to Paulus (in the opinion of Fab. ab Aquapendente).  

The parallels drawn between Oribasius, Aëtius of Amida, and Paul of Aegina can also be seen within William Black’s work, which suggests that:

The Greek Writers whom I am about to mention, copied largely from Galen: their anatomy and theory of medicine, was entirely Galenical, and in most instances, their practice. Oribasius’s (P.C. 360) great work, called the Abridgement of Medicine, is almost throughout a compilation.  

This emphasises the compilatory nature of Oribasius’ work and reinforces the effect of Galen upon what was written during this period. Black similarly continues his text by discussing: ‘ÆTIUS, P.C. 500, the compiler of a large volume, treats of more diseases than Oribasius; the symptoms and method of cure are also marked at greater length,’ and ‘Paulus Egineta, (P.C. 640).’

The reliance upon Galen as a source for medical knowledge is shown to continue, and Clifton also suggests that there was a further period where little development occurred, and medical focus remained with the past:

As to the other Greek physicians of a lower rank, and a later date, the chasm that there is of 500 years in the Greek history, viz. from 560. to the reign of Isaac Comnenus in 1060. has left us very few of any note, but Palladius the Sophist, who was brought up at Alexandria, and wrote a commentary upon Hippocrates; and Theophilus, who wrote ex professo upon Urine, and is the first author of the kind now extant. He has handled

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426 Ibid., p. 105, 107.
his subject very ingeniously, but was much beholden to Hippocrates and Galen.⁴²⁷

Here, the work of the two practitioners mentioned is fundamentally linked to the authority of Hippocrates and Galen, both as sources of information, and as figures to be analysed from their own differing perspectives. It also indicates the continuing influence exerted by both Hippocrates and Galen, as Palladius was a teacher active in the late sixth century, whilst William Black places ‘Theophilus Prot’ in his ‘Chronological chart’ under ‘Anatomy and physiology’ between 900 and 1000, showing the broad period during which, according to Clifton, few notable medical authors were active.⁴²⁸

It is interesting to note that the perception held by these practitioners of the extent of the influence exerted by Hippocrates and Galen was not necessarily positive. This can be seen through the idea that for Palladius: “Hippocrates sowed the seed, Galen reaped the harvest”, [...] with the implication that only unprofitable stubble remained.”⁴²⁹ Similarly, modern scholarship has also questioned the consequences of the continuing effect of Galen as an authority, and of those that compiled his work into more succinct volumes:

[...] much was lost in this process of redaction. As these encyclopaedias developed, they became more and more brusque. Alternatives became irrelevant luxuries, and the word of Galen came to dominate over all others. The long citations in Oribasius were often amalgamated, and the names of the different authors omitted or lumped together under that of

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⁴²⁷ F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 96.
⁴²⁸ L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995), p. 100 (Theophilus is also briefly mentioned on p. 142); W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), unnumbered page, following p. vi. Black also lists a ‘Theophilus’ under ‘Practice of medicine, therapeuticks, pathology’ between 600 and 700; however, the connection to urine suggests that the Theophilus mentioned here is Theophilus Protospatharius listed under ‘Anatomy and physiology’ between 900 and 1000. However, these may ultimately represent the same person, as shown by Owsei Temkin: ‘Theophilus Protospatharius who is usually placed in the seventh century. There is no absolute certainty about this date, nor about the identities of all the medical authors of the time who bore the name Theophilus.’ He also mentions him as a writer of books on urine: O. Temkin, ‘Byzantine Medicine: tradition and empiricism’, Dumbarton Oaks Papers, Volume 16 (1962), pp. 95, 97-115, p. 110. See also Appendix E.
Galen, to form a coherent and succinct account of a particular topic. Galen’s hesitations and qualifications (and even self-contradictions) were edited out, and the practical and empirical side of his work was replaced by the dogmatic. Galen was becoming Galenism.\textsuperscript{430}

This illustrates a broader process that was occurring over time, and begins to explore the longer-term effect that Galen had upon the history of medicine.

\textit{Arabic medicine and the effect of Galen}

The perception of Arabic medicine that is presented within these types of histories is often relatively negative, and the effect of Galen, and the ancient world more broadly, is shown to be significant. This is evident within Francis Clifton’s work, as part of a section entitled ‘Of the State of Physick among the Arabians, &c. to the Restauration of Learning’, which declares: ‘And here it is to be noted once for all, that whatever the Arabians translated or imitated, was rather made worse by them’\textsuperscript{a}.\textsuperscript{431} The superscript ‘a’ within this passage refers to a footnote present at the end of the page, containing the instruction: ‘\textsuperscript{a} See Freind’s History, Vol. II. p 20.’\textsuperscript{432} Following this citation to John Freind’s \textit{The history of physick} (1725) directs the reader to a section indicating Freind’s perspective regarding ‘Arabian learning’:

\begin{quote}
I believe one may venture to affirm, that the Arabian learning, however magnified by their own nation and by some Europæan moderns, was entirely deriv’d and borrow’d from the Greeks: and this race of men was so far from making great improvements in any science, that whatever they translated or imitated was rather made worse.\textsuperscript{433}
\end{quote}

This suggests that Freind saw little value in the contribution made by the ‘Arabians’, and that whilst their ideas were grounded in Greek medical knowledge, their translations and changes were viewed as detrimental to the improvements of the past. The resemblance between these passages from

\begin{footnotes}
\item[431] F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 100.
\item[432] Ibid., p. 100.
\end{footnotes}
Clifton and Freind in terms of the language used illustrates that Clifton was effectively quoting from Freind’s text, and attributed this information to him to reinforce his own argument. This also underlines the relationship that existed between these types of text, and the similar narrative that they often describe.

The similarity of these accounts can be seen through the way in which both discussions imply a relatively negative perception of Arabic medicine, and Clifton also reiterates Freind’s view of the importance of the influence of ‘the Greeks’: ‘As to their Physicians, they follow’d Hippocrates and Galen in all the Theory of diseases, and now and then put in an idle fiction of their own; but have added very little to signify, notwithstanding all their pretensions and appearances.’\(^{434}\) This shows the significance of Galen, alongside Hippocrates, as a source of information for ‘all the Theory of diseases.’ It also underlines the view that additions made by Arabic physicians were insignificant and although occasionally presented as more important, ultimately contributed little to medical knowledge. This is reiterated by William Black, who as part of ‘Chap. V. The Destruction of the Western Roman Empire, by the Goths and Vandals, in the sixth Century: Of Mahomet, and the irruption of the Arabians: their Effects on Medicine and Literature: Of Arabian Writers on Medicine and Surgery: The Origin of the Small-Pox and Measles.’, says:

In describing the essential signs of diseases, the Arabians were negligent and incorrect: then follow a formulæ of prescriptions, and compound medicines. Their Theory and Practise of Physic, was entirely borrowed from the Greeks, and blended with a heap of superstitious nostrums: they made no additions to Anatomy, but took all from Galen.\(^{435}\)

Here, it is evident that the negative perception of Arabic medicine also continued much later into the eighteenth century, and that Black was perpetuating the viewpoint expressed by both Clifton and Freind several decades earlier. The assessment that Black offers of ‘the Arabians’ is very similar, but also particularly critical, suggesting that in some areas they were

\(^{434}\) F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 100.

\(^{435}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 125.
‘negligent and incorrect’ and that the few additions that were made fell below the considerable standard of their Greek predecessors. The significance of the specific influence of Galen can also be seen within this passage, which indicates that the anatomical knowledge utilised during this period was entirely Galenic, and that the effect of Galen was therefore particularly important to this group of physicians.

In addition to more general comments relating to Arabic medicine, there are also assessments of specific individual authors and practitioners. For example Rhazes (d. 925), is discussed by John Freind as an author that is ‘extoll’d to a most immoderate degree by the Arabick Historians, and represented as one deeply skill’d in all sorts of Sciences, in Philosophy, Astronomy, and Musick, as well as Physick.’\footnote{J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume II (London, 1725), p. 44-45.} Whilst to an extent this reiterates more modern accounts which suggest that Rhazes was ‘one of the greatest Muslim physicians and philosophers;’\footnote{L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 112. This also illustrates the alternative names for Rhazes: ‘Razi (known in the Latin West as Rhazes, d. 925)’.} it is aligned more significantly with the broadly negative attitude towards Arabic contributions to medicine that was evident at this time. Nonetheless, Freind also suggests that ‘The Historians tell us, that he was a man of indefatigable application, and was continually reading and writing, and was reckon’d by them the Galen of the Arabians.’\footnote{J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume II (London, 1725), p. 45.} This implies that although contemporary perceptions of Arabic medicine were relatively unfavourable, Freind recognised the value that was attributed to Rhazes during his own time, and underlines his importance through an association with Galen. This illustrates the use of Galen as an indicator of diligent learning and application that was able to be deployed as a description for other medical authors, underlining the continuing influence of Galen as both a source of medical knowledge, and a less tangible medical authority. It is also important to note that Freind here emphasises the role of historians in providing the information that he utilises in his own text, which places him within a broader framework of historians and historical narrative being built over a considerable time period.
Francis Clifton also suggests the perceived importance of Rhazes as ‘the chief, and one of the oldest of the Arabian Authors’ and highlights positive contemporary perceptions of him through the use of the phrase ‘their Galen’:

In short he was so famous among the Arabians, as to be call’d by ‘em their Galen; and yet his Compendium of physick, that was made out of his large work (the Continent) and was much esteem’d for some hundred years, comes far short of the Greek Authors, tho’ it is taken in a great measure from them.439

This illustrates the use of Galen as a description to indicate particular characteristics that were also attributed to Rhazes, and shows the influence of Galen on significant Arabian medical works. It also reiterates the idea that the ‘Arabian Authors’ were viewed in a less positive way than their Greek predecessors, and that they came ‘far short’ of the Greek authors that provided much of the theoretical material for their own texts. The influence of Greek authors also extended to practical information, and the relationship between Rhazes and Galen in this respect can be seen in William Black’s work, which suggests that: ‘If the feverish heat and symptoms in the Small-pox raged with violence, Rhazes directed copious blood-letting not only before the eruption, but even after, if the fever had not abated. In imitation of Galen, young persons under fourteen years of age were cupped only.’440 This shows the practical influence of Galen on specific areas of medicine, and also underlines the link between Galen and subsequent Arabian authors.

The link between Galen and specific Arabic authors can also be seen through the way in which he is shown to have influenced Avenzoar (Ibn Zuhr, c. 1191-1161), and his medically-trained father:

It is a very remarkable story he tells of himself, in a particular case, where he was at a loss how to proceed; and ask’d the opinion of several other Physicians to no purpose: at last he took a journey to the town,

440 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXXII [1782]), p. 123.
where his father lived, and desired his advice. The old man would give
him no direct answer, but shew’d him a place in Galen, and bid him read
that: if he could find out the cure of the distemper by it, it was very well; if
he cou’d not, he bid him never think of making any proficiency in Physick.
The advice succeeded, so that the patient was cur’d, to the satisfaction
both of the father and the son.\textsuperscript{441}

Here, John Freind describes a story which underlines the influence of Galen,
and the extent to which his works were viewed as both relevant and useful. The
suggestion is that practical and theoretical answers were available within the
Galenic corpus, and that a proficient physician would be able to find them. It is
also interesting to note that Freind emphasises that this was Avenzoar’s own
description of his approach to medicine, and that it highlights the importance of
Galen, linking Avenzoar’s method and practice to the authority of a particular
figure from the past.

The effect of Galen as a tangible and significant influence on Avenzoar is
reiterated by Freind immediately following the story on the previous page:

\begin{quote}
And indeed throughout [sic] all this work, he professes himself so much
of the \textit{Dogmatical} or \textit{Rational} sect, which was directly opposite to the
\textit{Empirical}, that he has a great deal of reasoning about the causes and
symptoms of distempers: and as in his Theory he chiefly, if not only,
follows \textit{Galen}, so he quotes him upon all occasions, oftener than the rest
of the \textit{Arabians} do.

\textsc{Notwithstanding} he is so \textit{Galenical}, there are several particulars
in him, which seldom occur in other authors; and there are some cases,
which he relates from his own experience, which are worth perusing.\textsuperscript{442}
\end{quote}

\textsuperscript{441} J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth
century}, Volume II (London, 1725), p. 78. The superscript ‘k’ within this passage refers to a
footnote which provides a page reference: ‘k 69.’ For additional detail regarding Avenzoar, see
Malignancy of the Colon (with an English translation from the Arabic and notes on its Hebrew
431-440.

\textsuperscript{442} J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth
This illustrates the importance of the role played by Galen in the construction of Avenzoar’s medical theories, especially given the idea that ‘in his Theory he chiefly, if not only, follows Galen.’ In underlining that Avenzoar refers to Galen more frequently than other Arabian authors, Freind indicates that he was particularly influenced by Galen, and that this was evident in all aspects of his approach to medicine. The suggestion that Avenzoar was more significantly influenced by Galen than his contemporaries also shows the frequency with which he referred to him. This is particularly notable due to the emphasis Freind and similar authors place upon the reliance of Arabic physicians more broadly on the authority of Galen and other classical authors. In addition to highlighting the derivative nature of Avenzoar’s work, Freind also contrasts this by suggesting that ‘there are several particulars in him, which seldom occur in other authors’ and that aspects described from his own experience ‘are worth perusing.’ This indicates that alongside the information Avenzoar was able to acquire from Galen, value was also attributed to particular features of his own experience, and the information gathered through practice. It is interesting to note here that the relationship between theoretical knowledge that is reinforced by practice also reflects Galen’s own approach to medicine.

In addition to showing the effect of Galen on individual Arabian authors, such as Rhazes and Avenzoar, these types of history also highlight the relationship between different authorities, mentioning them alongside Galen. For example, William Black comments that ‘AVICENNA’S “Canon Medicinæ,” is compiled principally from Galen, Rhazes, and Halyabas.’ This sentence describes the particular influences that affected the composition of Avicenna’s text, which, in some respects, contrasts with modern perceptions of its construction: ‘In medicine his great work was his Al-Qanun fi l-tibb (‘Canon of Medicine’), which abandoned the theoretical/practical division of Razi and Majusi in favour of a more rigorous approach.’ Nonetheless, moving away from a particular approach in favour of another can also imply a significant influence, and the sentence from Black illustrates the different authorities that were important in the compilation of the ‘Canon Medicinæ.’ In presenting Galen (129-c. 200 / 216)

443 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), p. 126.
alongside Rhazes (Razi, d. 925) and Haly Abbas (Majusi, d. c. 999) as the principal influences on Avicenna (Ibn Sina, d. 1037) during the construction of the ‘Canon Medicinæ’ Black shows the broad time period from which information could be drawn, and the effect of Galen much later than his lifetime, but within a region relatively close to his own. The relationship between Galen and the subsequent Arabic authors that were influenced by his work demonstrates a sense of continuity in medicine during this time, and illustrates the continuing importance of Galen as a relevant and useful source alongside other authors, many of whom also utilised Galen. It also underlines the way in which the authors of these types of history of medicine present practitioners as contributing to an accumulating framework of medical theory and practice, which provide a context for the medicine of their own time.

All of the Arabic authors mentioned above are shown as part of William Black’s tabulated section: ‘A CHRONOLOGICAL CHART OF MEDICAL AND SURGICAL AUTHORS’ within the column bounded by 900 and 1000, indicating that they were active.

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L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995): For Galen, see p. 3, 61; for Rhazes (Razi), see p. 89, 112-113; for Haly Abbas (Majusi), see p. 89, 113-114; for Avicenna (Ibn Sina), see p. 89, 114-115. The geographical locations mentioned in this passage are as follows: Galen was from Pergamum (now Bergama, Turkey) (p. 61); Rhazes was from Rayy (in northern Persia) (p. 112); Haly Abbas was from Ahwaz (southern Persia) (p. 113); and Avicenna was also from Persia (p. 114).

Section copied and adapted from William Black’s ‘Chronological chart’: W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
between these years. This shows a period which, according to Black, was dominated by Arabic practitioners, all significantly influenced by Galen. The extracted section of this table (Figure 3) illustrates the authors that Black selected as prominent within each aspect of medicine during this period. Here, Rhazes (Razi, d. 925) appears under both ‘Practice of medicine, therapeuticks, pathology’ and ‘Obstetricks’; similarly, Haly Abbas (Majusi, d. c. 999) is shown as contributing to ‘Practice of medicine, therapeuticks, pathology’ and ‘Historiographers’. The role of these authors in addressing several areas of medicine is also demonstrated by Avicenna (Ibn Sina, d. 1037), who is shown under ‘Chymistry’, ‘Mat. Medica and Pharmacy’, ‘Practice of medicine, therapeuticks, pathology’ and ‘Obstetricks’; whilst Avenzoar (Ibn Zuhr, c. 1091-1161) is listed only within ‘Practice of medicine, therapeuticks, pathology’, although this in itself remains a broad category.

In addition to the Arabic authors mentioned in Black’s ‘Chronological chart’, there are three other names shown within this time period, as can be seen in Figure 3. ‘Theophilus Prot’ appears under ‘Anatomy and physiology’; and Nonus and Simon Sethi are shown within ‘Practice of medicine, therapeuticks, pathology’. All three are Byzantine physicians, but Black does not dedicate a section of his text to this particular tradition, indicating that although they were seen as a valuable addition to the ‘Chronological chart’, they were perhaps less significant than the other practitioners within this time period, who are mentioned more comprehensively. John Freind, however, does address the three names listed by Black, and implies that there was a degree of variation in their descriptions: ‘Indeed there are several tracts under the name of Theophilus, who goes by many and different titles, latrosophista, Protospatharius, and Monachus; the two last of which seem very contradictory to one another.’ Similarly, Freind suggests that although some place Theophilus ‘in Heraclius’s reign’:

447 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
448 Ibid. See also Appendix E.
449 Ibid. See also Appendix E.
the authority and the reasoning equally seem ill supported; and I think what has been said of this very treatise just before, is sufficient to refute such an opinion. I should rather be inclined to believe, from some barbarous words, which he intermixes in his Writings, that he liv’d after that time.\textsuperscript{451}

This broadly corroborates the time period that Black attributes to Theophilus within his ‘Chronological chart’, and Freind provides additional detail regarding the reason that Black may have located him there as a notable figure: ‘He is the first Author now extant, who has treated professedly of Urines: […]’.\textsuperscript{452}

Freind’s text also reiterates Black’s placement of Nonus under ‘Practice of medicine, therapeuticks, pathology’ and suggests that: ‘Of these [authors writing in Greek] Nonus seems to be in order next; who compos’d a sort of a Physick-manual, in which is contain’d some short account of most distempers and their cure.’\textsuperscript{453} This demonstrates the broad nature of Nonus’ work, and whilst it shows a level of knowledge regarding his contribution to medicine, Freind also indicates that uncertainty surrounded the specific dates of his activity. This is evident in the idea that the ‘Constantin Porphyrogenitus’ whom the work was inscribed to could either have been: ‘the seventh Emperor of that name, the son of Leo, and died in nine hundred fifty nine’, or: ‘the son of Constanti Ducas, who died in 1067.’\textsuperscript{454} Nonetheless, Freind highlights that whilst determining an exact period was problematic, ultimately ‘To which of these Constantins Nonus inscrib’d his Work, is not very material: […]’. This epitome is little else than a transcript from Ætius, Alexander, and Paulus.’\textsuperscript{455} In addition to illustrating

\textsuperscript{451} J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume I (London, 1725), p. 248. Freind also provides an indication regarding the time period of Heraclius, and the limited nature of what was known from that time: ‘Tho’ indeed this is the less to be wondered at, considering that from the time of Agathias, that is from five hundred and sixty to the reign of Isaac Commenus in one thousand and sixty, there is a chasm of five hundred years in the Græcian history; so that we know very little of all that interval, except what some slender account of the reigns of a few Emperors, chiefly Mauritius and Heraclius, furnishes us with.’ (p. 243-244).


\textsuperscript{454} Ibid., p. 253-254.

\textsuperscript{455} Ibid., p. 254.
Freind’s disregard of specific detail in this instance, this also implies a notable link between Nonus and Galen. The suggestion that Nonus’ work was ‘little else than a transcript from Ætius, Alexander, and Paulus’ implies that it was also significantly influenced by Galen. These authors, active during the sixth and early seventh centuries, were collectors and compilers of information from other physicians, particularly Galen, and Nonus was therefore indirectly reproducing parts of Galen’s work through Ætius, Alexander and Paulus.\footnote{Francis Clifton also mentions the link between these three authors (Ætius, Alexander and Paulus) and Galen: F. Clifton, \textit{The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it} (London, 1732), p. 90-91.}

The final author that Black mentions within the 900-1000 time period is Simon Sethi, who is shown under ‘Practice of medicine, therapeuticks, pathology’. John Freind also corroborates this placement, through a discussion regarding Simeon of Antioch, also known as Simeon Seth:

\begin{quote}
And yet, tho’ Psellus was such a compiler as has been mention’d, Simeon of Antioch, writing upon the same subject, but, indeed, in a very impure style, copy’d mostly from him: which is the more extraordinary, since the book he transcribed from, was then fresh in every one’s memory: for Simeon must have been his contemporary, tho’ no doubt younger, because he dedicated this treatise to Michael Ducas call’d Parapinaceus, who resign’d the Empire in 1078, the very year in which Psellus, as we are informed, died.\footnote{J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume I (London, 1725), p. 258-259.}
\end{quote}

Freind also temporally links Simeon to Nonus, the other Byzantine listed under ‘Practice of medicine, therapeuticks, pathology’, by adding that ‘Michael Psellus liv’d not long after Nonus’.\footnote{Ibid., p. 257.} This is reiterated by Owsei Temkin, who, as part of an article discussing Byzantine medicine, indicates that Simeon Seth was ‘the contemporary of Psellus and physician of Michael Ducas.’\footnote{O. Temkin, ‘Byzantine Medicine: tradition and empiricism’, \textit{Dumbarton Oaks Papers}, Volume 16 (1962), pp. 95, 97-115, p. 108.} Within this piece Temkin also addresses Simeon and his relationship to Galen:
Simeon Seth, who accuses Galen of prolixity, feels obliged to refute passages of his works by demonstrative methods [...]. He obviously does not think highly of the followers of Galen to whom he addresses himself. “Perhaps,” he says in conclusion, “by contradicting your words, I shall convert some of your followers, not to a different opinion but so as to prove that no man is infallible. [...]”\textsuperscript{460}

He follows this outline of Simeon’s approach to Galen with an explanation for the particularly negative tone of Simeon’s assessment of Galen’s work:

One cannot help asking who the “followers” of Galen were at a time when all physicians were Galenists. Simeon Seth obviously has a particular group in mind “by whom you would not be more pleased than I am,” he tells Galen. They are the people who consider Galen “as something divine.” [...] But before rushing to the conclusion that we are dealing with a chapter in religious history, we must at least envisage another possibility. Simeon Seth was the greatest Orientalist of Byzantine medicine. A dietetic text which selected the best, not only from the Greek materia medica but also from Persian, Arabic, and Indian sources, is ascribed to him. To this eclectic, an enthusiastic limitation to Galen may have looked like one-sidedness, which he detested: [...].\textsuperscript{461}

This illustrates that whilst Simeon was critical of Galen and his followers, this challenge took place within a broader context which saw Galen as a fundamental medical authority.

Although Byzantine medicine is represented within this section of William Black’s ‘Chronological chart’, the period is nonetheless shown to be dominated by Arabic authors. In many instances, assessments of their broad contribution to medicine are particularly negative within these types of histories of medicine, although there are also examples of valuable information or ideas attributed to specific practitioners. The importance of this period in terms of the material that

\textsuperscript{461} Ibid., p. 108-109.
was produced and the impact of the preservation of older ideas can be seen in the suggestion that:

The impact of the translation movement was enormous, most obviously for the hundreds of ancient texts which it saved for posterity in Arabic. But beyond the factor of quantity was that of selection – as the favoured author was Galen, it was his work which set the standard for Arabic medicine in centuries to come.\footnote{462 L. Conrad, ‘The Arab-Islamic medical tradition’, in L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), pp. 93-138, p. 108.}

The significance of Galen as a tangible and relevant figure is illustrated both here, and throughout early modern assessments of Arabic medicine. The role of Galen as an authority is evident both during this period, and as a consequence of what was produced and perpetuated, demonstrating the cumulative nature of medical theory, and the way in which it was presented.

\textit{Medieval medicine and the effect of Galen}

The period between the twelfth and fifteenth centuries represents a time whereby ‘medicine’s distinctive ideas and most important written sources of authoritative teaching did not originate in medieval western Europe but were drawn from Greek antiquity and the world of Islam.’\footnote{463 N. Siraisi, \textit{Medieval and early Renaissance medicine: an introduction to knowledge and practice} (London, 1990), p. 1.} This illustrates the cumulative nature of medicine over time, and also begins to suggest the ongoing importance of Galen as theoretical influence. However, Galen’s dominance both as a source of information and as a conduit for the knowledge of others is not reflected as significantly within the histories of medicine examined. There are relatively few examples which specifically show the effect of Galen on medieval medicine, and although this link was extremely important, the way in which it is discussed within these works seems not to reflect this. More broadly, there is a notable increase in the number of authors listed within William Black’s ‘Chronological chart’ from 1100, particularly under ‘Practice of medicine, therapeuticks, pathology’, although only two names appear between 1000 and 1100 in all areas of medicine.\footnote{464 W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E.} This suggests that medical
knowledge, theory and practice remained active, and based within the earlier Greek tradition, as described by Nancy Siraisi:

The reception of the books that began to arrive in the eleventh and twelfth centuries did not demand any drastic revolution in medical ideas or techniques. Both the medical works available in Latin in the early Middle Ages and those newly translated into that language belonged in broad terms to the same Greek medical tradition. However, the new material was so much more copious, complex, and intellectually sophisticated than most of the works available earlier that its full absorption was a slow process extending over several generations.\textsuperscript{465}

William Black also discusses this process in 1782, indicating that: ‘In the interval, from the 11th to near the middle of the 15th century, physic, arts, and literature, began to revive, though by very slow gradations.’\textsuperscript{466} This underlines that whilst change was occurring, medical knowledge remained significantly linked to the past, and the influence of Galen, and other notable figures from the ancient world, continued to be particularly important.

The role of Galen as an overarching figure in medical theory during this period can be seen through the prominence of his work in the training of physicians at several European medical schools. At Salerno in southern Italy, a flourishing medical centre since the around ‘mid-900s’, medical theory was an increasingly important part of education, and ‘In the course of the twelfth century, the medicine of Salerno appears to have become more theoretical and more oriented toward formal, academic medical education.’\textsuperscript{467} The position of Galen within this education is described by William Black, who suggests that:

\textsuperscript{466} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCLXXXII [1782]), p. 131.
\textsuperscript{467} N. Siraisi, \textit{Medieval and early Renaissance medicine: an introduction to knowledge and practice} (London, 1990), p. 13. See also p. 57-58, which provides additional information and indicates that: ‘Between the late eleventh and the early thirteen centuries, Salerno, long famous as a center of medical expertise and medical practice, developed into an extremely influential center of medical education where important characteristics of academic medical teaching took shape.’ (p. 57).
The statutes of the Schola Salernitana, and those of the medical schools at Naples, seem to have been prior to those of Paris. -- By them, the Physician must have studied seven years, and, after being examined on Galen and Avicenna, he was invested with the ring and cap. The Surgeon was qualified after one year's study of Anatomy.\textsuperscript{468}

This indicates that the final stage of study comprised an examination on Galen and Avicenna, which highlights Black's perception of the authority of Galen during this period. The centrality of the role of Galen within medical education at Salerno can also be seen in John Freind's earlier text, which says that:

The \textit{Statutes} of the College of Salernum are very old, and very proper; and because they are perhaps the first example of this kind, and may probably have set the pattern to all others of the same nature, I will take the liberty to give a sketch of them in a few words. [...] The examination is very strict, either in Galen's \textit{Therapeuticks}, or the first of the first of Avicenna, or in the \textit{Aphorisms}.\textsuperscript{469}

Here, Freind reiterates the idea shown in Black that Galen was central to the examination process, and includes Hippocrates' \textit{Aphorisms} as an additional ancient text that was involved in the examination. Both authors underline the importance ascribed to Galen as a significant part of medical training, and imply that knowledge of Galenic texts was a necessary aspect of medical training.

In addition to showing the effect of Galen on medical education during this period, John Freind also begins to suggest the broader influence that was

\textsuperscript{468} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCCLXXII [1782]), p.134.

\textsuperscript{469} J. Freind, \textit{The history of physick; from the time of Galen, to the beginning of the sixteenth century}, Volume II (London, 1725), p. 229-230. See also N. Siraisi, \textit{Medieval and early Renaissance medicine: an introduction to knowledge and practice} (London, 1990), p. 58, which broadly reiterates Freind's interpretation: 'In addition to writing various guides to medical practice, twelfth- and early thirteenth-century Salernitan authors brought together a collection (subsequently known as the \textit{articella}) of short treatises conveying the rudiments of Hippocratic and Galenic medicine to serve as a basic curriculum, and they established the practice of teaching by commentary on these texts. The collection as first compiled in the twelfth century (later other texts were added) consisted of two Hippocratic treatises, the \textit{Aphorisms} and the \textit{Prognostics}; a brief Galenic treatise known under various titles (\textit{Ars medica}, \textit{Ars parva}, \textit{Tegni}, or \textit{Microtechne}); an Arabic introduction to Galenic medicine known to the Latins as the \textit{Isagoge} of Johannitus; and short tracts on the main diagnostic tools of the medieval physician, namely pulse and urine.'
evident at this time. For example, regarding ‘Guido de Cauliaco’, a French surgeon (c. 1300-68),\textsuperscript{470} Freind suggests: ‘He gives us the case, where he took out a part of the brain, and cur’d the patient: one of the first instances of the kind perhaps in Surgery \textsuperscript{b}: for in Galen and others, mention is only made of the brains being wounded, not of any part of it coming out.’\textsuperscript{471} It is interesting to note that Freind compares Guy de Chauliac’s work to the knowledge available at the time of Galen, indicating that Galen was viewed as a standard from which to check progress, notwithstanding the considerable time that had passed between his lifetime and the mid-fourteenth century. Similarly, this also illustrates the idea that whilst the ongoing influence of Galen was significant, it was both acceptable, and valuable, to show changes and developments not known to ancient medicine.

The role of context, and the different information available at varying times, is also highlighted by Freind through a passage relating to Roger Bacon (c. 1214-94).\textsuperscript{472} Here, he comments:

I remark’d likewise, that in his description of the structure of the Eye, he refers to Avicenna often, but to Galen never: which makes it, I think, more probable, that these Anatomical works, at least of this latter writer, were not yet translated into Latin. For Galen has given so minute and exact a description of this organ, that Bacon cou’d not have fail’d to quote him, had he known this treatise.\textsuperscript{473}

This implies that the work of Galen was conspicuous in its absence from Bacon’s text, and that there was an expectation of its use under these circumstances. Freind explains the absence by suggesting that the relevant part

\textsuperscript{471} J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume II (London, 1725), p. 321. The superscript ‘b’ within this passage refers to a footnote: ‘b 3, 11.’ See also N. Siraisi, Medieval and early Renaissance medicine: an introduction to knowledge and practice (London, 1990), p. 80, which indicates that this statement from Guy de Chauliac is likely to be found within ‘one of the principal works on surgery written in the fourteenth century, Guy de Chauliac’s Inventarium, commonly known as the Great Surgery (1363).’
\textsuperscript{473} J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume II (London, 1725), p. 237.
of Galen was not yet available in Latin, indicating that the quality of the information in Galen was such that there could be no other explanation for not referring to it. This reiterates the ongoing influence of Galen as a theoretical authority, and shows the effect that he was perceived to have had on the underlying framework of medicine. Although within the histories of medicine examined there are relatively few examples of the specific effect of Galen on medicine at this time, there is a broad sense within the passages cited of the cumulative nature of medical theory, and of the role of Galen within this framework.

Renaissance and early modern medicine: the effect of Galen

In a similar way to the medieval period, the narrative presented by the authors of these types of histories of medicine of Galen and his effect on the Renaissance and early modern period shows both specific influence, as well as a broader underlying authority. This can particularly be seen within William Black’s work as part of a section addressing, amongst other areas, ‘A general sketch of the progress of Medicine and Surgery, and of the most distinguished Writers, and important discoveries from the beginning of the sixteenth century to the present time, including an interval nearly of three hundred years.’ Here, Black describes the role of Thomas Linacre, whose translation of Galen’s Method of Healing appeared in 1519, in the development of medicine in Britain:

Linacre was the first founder of two medical chairs at Oxford and Cambridge, where annual lectures were ordained to be read on Hippocrates and Galen. From this era, Medicine, in Britain, begins to assume regularity in the form of its studies, and to be placed upon a more respectable footing: but it was not until two centuries later that an anatomical theatre was erected at Oxford.

This suggests that the advent of specific lectures based on the work of Hippocrates and Galen was linked to medicine reaching ‘a more respectable

475 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 164.
footing’ in Britain, and that the authority of both figures contributed to an improvement in academic medicine at this time.

The role of Galenic authority is also further discussed by Black within the same chapter, as part of a section which addresses ‘Anatomy and Physiology’ between the sixteenth century and the time of publication (1782). Although these references discuss several of the significant challenges to the authority of Galenic anatomy during the sixteenth and seventeenth centuries, they nonetheless underline the importance of connecting Galen to the path that anatomy had taken until that date. For example, Black describes changes to perceptions of anatomy over time, indicating that: ‘It is, however, from the epoch of A. Vesalius, (1539) a Physician of Brussels, in Flanders, and cotemporary with Charles the Vth, that we must date the origin of modern discoveries in Anatomy.’

He subsequently provides additional detail regarding Vesalius’ contribution and its reception:

The fame of this modern Herophilus early procured him an invitation from Italy, to fill the public anatomical chair. There Vesalius’s acute criticisms and detection of Galen’s errors, raised him many enemies amongst the implicit bigots to that ancient oracle, whom they had been taught to revere as infallible. Vesalius’s chart of the human structure, his description and plates of the bones, muscles, and blood-vessels, leave all the ancient treatises on this subject at a great distance.

This underlines that in the past, Galen had been presented as a figure to ‘revere as infallible’ but that Vesalius’ work had vastly improved upon previous perceptions of anatomy. Throughout this passage, Black uses images of the past to contextualise his point, and to link the medical theory of the present to the process by which it had reached the eighteenth century. In presenting ancient knowledge as correct within its own time, and comparing Vesalius to an

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476 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXII [1782]), p. 168. For Vesalius, see L.I. Conrad, M. Neve, V. Nutton et al., *The Western medical tradition: 800 BC to AD 1800* (Cambridge, 1995), p. 208; see also p. 273: ‘Andreas Vesalius (1514-64) […]. Born in Brussels, he was the son of a pharmacist to the Emperor Charles V.’

ancient anatomist (Herophilus), Black illustrates the importance of the past, whilst also highlighting the positive nature of developments over time.\textsuperscript{478} The significance of time passing since the initial publication of Vesalius’ work is also apparent, as it allows Black to show the contrast between initial assessments, and the subsequent recognition of the importance of this information.

Immediately following his discussion of Vesalius, Black turns to the anatomical achievements of Fallopius, working in northern Italy during the mid-sixteenth century.\textsuperscript{479} Here, he suggests that:

\begin{quote}
G. FALLOPIUS (1555) a pupil of Vesalius, is generally, but erroneously, called the first discoverer of those two tubes depending from the womb, and named after him, the Fallopian tubes. The original merit, however, is due to Herophilus. [...] The revival of this discovery gave a new turn to the systems of generation broached by Hippocrates, Aristotle and Galen.\textsuperscript{480}
\end{quote}

This reiterates the continuing influence of Herophilus within early modern anatomy, and also illustrates the role of the past in contributing to the discoveries, and re-discoveries, of this period. In linking the revival of an ancient idea to the reinterpretation of the ‘systems of generation’ previously described by Hippocrates, Aristotle and Galen, Black highlights that the ideas of the ancients were viewed as stimulating, and contributing towards, ongoing developments and changes in the perception of anatomical features.

Following brief discussions of other notable anatomists from the period, Black turns to William Harvey and his work on the circulatory system:

\begin{footnotesize}
\textsuperscript{478} For Herophilus (also mentioned above), see L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 8; see also p. 33: ‘The step from Aristotelian animal to human dissection is credited to Herophilus of Chalcedon (c. 330-260 BC) and his contemporary Erasistratus of Ceos (c. 330-255 BC).’
\textsuperscript{479} For Fallopius, see L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 280: ‘Gabriele Fallopia (1523-63), one of Vesalius’s successors in Padua.’
\textsuperscript{480} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCLXXXII [1782]), p. 169.
\end{footnotesize}
W. Harvey (1628) in Britain rendered his name immortal by another signal discovery, the circulation of the blood, which engaged numbers of pens in its defence and opposition: amongst his opponents we find the names of some eminent Anatomists, who actuated by envy wished to rob him of the merit of this discovery. Harvey established, by incontrovertible experiments, the circulation of the blood through the body, in the space of twenty hours. The lesser circulation through the lungs had been mentioned by Galen, and by two of the moderns, Servetus and Cæsalpinus, an Italian botanist; it remained for Harvey to put the finishing hand to this glorious discovery, and to extricate this most essential part of the human physiology from obscurity.\(^{481}\)

Here, he illustrates the opposition that could arise in response to deviation from ancient knowledge, but also shows the way in which new theories could contradict the theories of the past. Black also sets out the broader importance of the theory of circulation and its establishment ‘by incontrovertible experiments,’ and places it within the context of the past by connecting the new discovery with aspects known to Galen. The use of the phrase ‘it remained for Harvey to put the finishing hand to this glorious discovery’ reinforces the idea that medical theory was viewed as a cumulative process, and that the past provided a basis from which to develop.\(^{482}\) Similarly, the end of this passage suggests that Harvey had understood existing knowledge in a way that the ancients had been unable to, and thus was able to extend it beyond what would previously have been possible. This implies that additional information gathered over time had

\(^{481}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 172. Black lists ‘A. Cæsalpinus’ within his ‘Chronological chart’ under ‘Botany’ between 1500 and 1600 (unnumbered page, following p. vi). For Servetus, see L.I. Conrad, M. Neve, V. Nutton et al., *The Western medical tradition: 800 BC to AD 1800* (Cambridge, 1995), p. 329: ‘Michael Servetus (b. 1511), anatomist, astrologer, theologian, and a heretic who contrived to offend both Catholics and Protestants and was burnt at the stake in Calvin’s Geneva, also had the idea of the pulmonary transit.’ For additional detail on Harvey’s life and work, see p. 330-335; see also p. 279: ‘William Harvey (1578-1657)’ and p. 325, which describes him as: ‘William Harvey, a product of the Paduan school of anatomy.’ See also Appendix E.

\(^{482}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 172. Black also mentions the idea of the rediscovery of previous knowledge in relation to Richard Mead (1673-1754), showing that Mead ‘wrote on the influence of the sun and moon upon human bodies, in certain diseases. This, however, was not new: Galen, and Fracastorius had laid great stress upon the powers of the moon, planets, and stars.’ (p. 241-242).
allowed more modern anatomists to comprehend the value and importance of earlier ideas, and their utility once further developed.

The broader, tangible effect of Galen is exemplified by a passage from the introductory section of John Barker’s work *An essay on the agreement betwixt ancient and modern physicians*:

Amongst the Objections which we frequently hear made to the Art of Physick; the greatest, and indeed the only material one, is the Disagreement which sometimes happens amongst Physicians in the Practice of their Art. For when People hear of these Dissentions, they hastily conclude that Physicians either have no certain Method, or *Rule of Practice* to pursue, or else that they are not agreed in the Application of this *Rule* in particular Instances. [...] In answer to this it might be sufficient to say, with HIPPOCRATES, that this very Disagreement amongst Physicians is a Proof of the Reality of the Art. For if there was no such thing as an Art of Medicine, no System of Precepts, or *Rule of Practice* for the Artist to be directed by, there would not be good and bad Physicians as there now are, but all of them would be alike ignorant and unskilful, and the Cure of the Sick would depend upon Chance alone. [...] But to give a fuller Answer to this Objection, I shall attempt to shew, 1st, That there is, in Reality, an invariable Rule, or Method for Physicians to direct their Practice by, or, in other Words, that *Physick* is a *real Art*; and, 2dly, That the most eminent Physicians, in all Ages, have agreed in their Manner of interpreting and applying this Rule, at least, in the most important Branch of Medicine, *to wit*, the Management of acute Diseases. And this, I think, will fully vindicate the Art of Physick from Reproach: For, if this can be proved, as I think it may, by the Example of the best Physicians, such as HIPPOCRATES, GALEN, SYDENHAM, and BOERHAAVE, this great Objection to the Art will vanish, as it will then evidently appear, that the Disagreement among Physicians does not arise from any Imperfection in the Art itself, but from their Ignorance of
that Art, or some worse Cause; and it would be highly unreasonable to blame the Art for the Fault of the Artist who professes it.\footnote{J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 3-4, 5, 6.}

This is presented in response to the idea that disagreement between physicians illustrates a lack of a central ‘Art’ of physic, and as such that medicine could be criticised for having ‘no certain Method’. Here, Barker shows that the fundamental basis for the Art of physic was an underlying system of practice, which guided the physician in the treatment of patients, as opposed to reliance upon chance. Galen is centrally placed within this model as a key example of ‘the best Physicians’ and by implication this suggests that his work contributed to the foundations of the Art of physic. This also demonstrates the parallel influence attributed to both ancient and modern practitioners, and Hippocrates and Galen are shown alongside Sydenham and Boerhaave. Similarly, the idea that ‘the Disagreement among Physicians does not arise from any Imperfection in the Art itself’ reinforces the sense that there was a perfect underlying basis for medicine that all authors and practitioners were working towards, which was accumulating over time. This allows for the contribution of Galen in some areas to remain completely relevant, whilst other aspects could be perceived as a work in progress, in some instances begun by Galen.

In many ways, the effect of Galen is epitomised by the concluding passages provided by John Freind towards the end of his first volume of \textit{The history of physick}:

Thus have I endeavoured to give you a short History, as well as I cou’d ground it upon any good Authorities, of the few Greek Physicians from the time of Galen: and I have pointed out some things relating to the improvement of Physick, which occur in their books. There has been indeed a prevailing opinion, that scarce any thing was done among the ancients towards advancing this Art, but what is comprized in the voluminous Works of that great Man. What gave the first rise to such a notion, probably might be this: because it appear’d at first sight, that those who succeeded Galen, did transcribe a great deal from him, many
were inclined to think, without giving themselves the trouble of examining and comparing their Writings, that they did nothing else by transcribe.\textsuperscript{484}

This illustrates the perception that following Galen, a significant proportion of what was produced utilised or transcribed his work, without significant analysis or addition. However, Freind is critical of the editors of these works, suggesting that ‘what has been left us by way of Comment, being employ’d chiefly in Grammatical or Critical Remarks, without any view of explaining what relates either to the History or the Practice of Physick, in the time of each respective Writer’.\textsuperscript{485} This implies that more had perhaps been achieved following Galen’s lifetime than was previously shown, and although Freind endeavours to highlight the achievements of others, he nonetheless presents Galen as a fundamental starting point, and a particularly important authority.

In terms of the effect of Galen more broadly within these texts, his influence is emphasised more significantly within the sections of the works which address ancient medicine following Galen’s lifetime. There is a notable decline in the tangible uses of Galen towards the present, which can, to an extent, be accounted for by the smaller proportions of the texts that are devoted to modern medicine, in relation to earlier periods. However, it does also illustrate a sense that Galen had become less important as a tangible influence on medical practice, whilst becoming increasingly significant as a figure from the past providing the basis of medicine and its history. The effect of Galen on ancient medicine following his lifetime is particularly significant, and many of the authors utilising his work are described in a collective way, following the model of medicine set out by Galen. During discussions of this period, the relationship between Galen and Hippocrates is particularly highlighted, and Galen is shown to stand alongside Hippocrates as a key figure influencing medicine. Both practitioners provide a structural element to the history of medicine, and comparison of their differing perspectives is also addressed throughout. The role of Galen as a source of information is particularly significant in presentations of his effect on both ancient and Arabic medicine, and although there are allusions to an inconsequential period following Galen, he is


\textsuperscript{485} Ibid., p. 296.
nonetheless perceived as central to the medical work that was carried out during this time. The perception of Arabic medicine that is shown within these texts is particularly negative, and is likely to reflect contemporary attitudes towards the tradition during this period.

Although relatively little specific information is conveyed within these texts regarding the effect of Galen during the medieval period, he is shown to be a particularly significant underlying influence on medical knowledge. This can be seen in his use as an important source of information; as a conduit for the knowledge of the past; as an authority within medical education; and as a basis from which to develop medical theory and practice. These types of effect are also reflected within the Renaissance and early modern periods, and there is a sense that utilising ancient authority as a basis for medicine could place it upon a more reliable foundation. The reverence of the past is central to ideas during this period; however this was balanced by an awareness that it was also valuable to move away from this in some instances, developing medicine with the benefit of new perspectives on older ideas, and to use additional information gathered over time to reinforce the quality of medical knowledge. The accumulation of medical ideas over time is a recurring theme throughout these texts, and the tangible role of Galen and the ancients can be seen by the way in which they stimulated, inspired and contributed to a broader framework of medicine.

**Present use of Galen**

Although the nature of histories of medicine necessarily creates a focus on past theory and practice, there is nonetheless also evidence of more contemporary comment regarding medicine and the present use of Galen. For example, William Black includes several references to the current influence of Galen within his text *An historical sketch of medicine and surgery*. As part of the section dedicated to describing Galen’s life and contribution to medicine, Black explains that: ‘Numbers of the present anatomical terms are copied from Galen.’ This underlines a specific and continuing aspect of Galenic influence, which is also reflected within the idea that: ‘Physicians did little more than copy,

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486 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), p. 100.
or write dull commentaries upon some parts of his voluminous works, many of
which are now lost; but at present Galen’s writings amount to six volumes in
folio.\textsuperscript{487} Although he does not provide a time-scale for this comment, it implies
that the voluminous nature of Galen’s work was perhaps detrimental to a more
significant survival rate; however, it does show that a noteworthy number of
Galenic works remained in existence.

The role of Galen within contemporary medical knowledge can also be seen
through the way in which Black addresses his broader place within the history of
medicine. Here, he discusses Galen’s contribution as a basis for modern
medicine, and indicates that even his errors provided opportunities for debate
and further investigation. Within the context of this argument, Black says that:

\begin{quote}
As a proof of those sentiments, which to some may appear ill-founded,
medicine is now taught at most universities upon the outlines and vast
range of the Galenic plan. Galen must be allowed to have furnished the
most compleat original drawing, though deformed and incorrect in all its
parts.\textsuperscript{488}
\end{quote}

This illustrates that whilst many aspects of Galen’s work had been shown to be
incorrect, Black nonetheless saw significant value in the underlying framework
that Galen provided. His allusion to ‘the most compleat original drawing’
suggests that Galen was seen as a fundamental basis from which to progress,
and therefore was an important continuing influence within medical education.

There are also examples of more specific ways in which Galen was utilised
during this period, and as part of a broader discussion regarding the attribution
of remedies to their original authors, and the perpetuation of particular recipes
through these associations, John Baillie says:

\begin{quote}
For, at this rate of arguing, one might say, the composition which we now
have of \textit{Mithridate} is not genuin, because \textit{Celsus} does not describe it.
Could \textit{Celsus}, who liv’d so near the time when it made so great a noise,
\end{quote}

\textsuperscript{487} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time}
(London, MDCCCLXXXII [1782]), p. 87.
\textsuperscript{488} Ibid., p. 101.
have omitted the description of it? for what he describes under that name is quite another medicine. We now make use of the receipt of it, which we have in Galen and Scribonius Largus. But where is the great difference between this method of arguing and our author’s? c he cannot conceive, how either Celsus or Galen would ever have miss’d inserting this antidote into their works, if it was truly Hippocrates’s.  

Here, Baillie uses this example to make a broader point relating to the texts he is analysing, however, it illustrates the pervading role of Galen as a medical influence. The use of the phrase ‘We now make use of the receipt of it, which we have in Galen and Scribonius Largus’ also underlines the idea that a current recipe during this period was ultimately derived from Galen, and as such that his work remained of contemporary relevance.

These examples illustrate the specific and ongoing nature of Galenic influence during this period, and also underline that his works remained in existence and continued to be utilised in various contexts. Similarly, recipes found within his texts also remained prominent, and there is a sense of the importance of placing these within the context of the past. It is important to note that whilst highlighting that these remedies continued to be used, these authors also reiterate the fundamental link to Galen by the relatively minor nature of the changes that had occurred since this time, or the significance of the foundation that this knowledge provided.

State of medicine

Although these types of text contain a relatively significant amount of information regarding the present state of medicine, these comments are often more general, and refer less frequently to specific authors or practitioners. However, when assessing the current state of medicine, these authors occasionally mention Galen and his broader influence, in a wide variety of ways. For example, as part of a section entitled ‘A general review and comparison of

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489 J. Baillie, A letter to Dr. UUUUU in answer to a tract in the Bibliotheca ancienne & moderne, Relating to some Passages in Dr. Freind’s History of Physick (London, 1727), p. 61. The superscript ‘c’ within this passage refers to a footnote: ‘c p. 436.’ directing the reader to a specific page within the text under discussion.

490 For Scribonius Largus, see L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995), p. 8, which shows he was active in 48 AD.
the ancients and moderns; and some general concluding reflections,’ William Black remarks that:

To attain all the knowledge of antiquity, through a revolution of fifteen hundred years, in every branch of medicine and surgery, we have only to consult Hippocrates, Aristotle, Theophrastus, Cælius Aurelianus, Areteus, Celsus, Dioscorides, Pliny, Galen, Ætius, Alexander Trallianus, P. Ægineta, Rhazes, Avicenna, and Albucasis. Even of this small library, a perusal of a great part of their works might, at this day, be dispensed with by students and physicians, except as objects of curiosity. Their anatomy and physiology was as defective and imperfect as their geography and skill in navigation.491

This suggests that whilst many of the ideas associated with these individuals were no longer seen as immediately relevant, they nonetheless constituted a significant contribution to medicine over time. The list of authors to consult also provides a suggestion of the underlying framework that these histories of medicine present, and indicates the importance of Galen alongside other prominent medical figures within this context.

There is also evidence of a more positive assessment of Galen and the ancients more broadly, and the way in which this relates to present practice. Francis Clifton discusses the role of ancient methods within a section entitled ‘A Plan for the Improvement of Physick’ which contains a passage, denoted by a marginal note, addressing ‘Prædictions very rare and imperfect at thi[s] time’.492 This suggests that the ‘changes and event of Fevers, Pleurisies’ were difficult to predict,

And yet this is very possible to be done, where the Physician had made proper remarks all along; as appears from what has been done already by Hippocrates, Galen, and some others. I don’t say, that the critical days of the Ancients are always critical days with us; tho’ I am persuaded at

491 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 302.
the same time, that there is a great deal more in ‘em than the generality of Physicians imagine: [...]493

Here, the implication is that present practice could perhaps be improved through reference to the way in which Hippocrates and Galen ‘made proper remarks all along’ in order to monitor the progression of a fever. This passage similarly highlights that although the ‘critical days’ may have been perceived differently by the ancients, and perhaps not correspond with modern categories, they remained useful and contained fundamentally valuable information.

The value of the past alongside problematic aspects of the present state of medicine is reiterated by William Black, who comments within a section ‘Of the Theory of Medicine,’ that:

The moderns have drowned medicine in a sea of theory, and have out-done Plato, Aristotle, Galen, and all the subtle doctors of antiquity. They babble incessantly about hostile acids, alkalies, sulphur, […] &c. These are a few of the principal ingredients infused into modern medical writings; they are the sublimated and visionary reveries of the chymical and mechanical sects.494

This contrasts the subtlety of antiquity, with the suggestion that the moderns had unnecessarily expanded medical theory to the detriment of medicine itself. It also depicts other approaches to medicine at this time, in the form of ‘the chymical and mechanical sects,’ as ‘reveries’, obscuring a simpler and more valuable theory of medicine. Although Galen is often criticised during the early modern period for the voluminous nature of his writings, and the difficulty associated with understanding their contents as a result, Black contrastingly suggests that the moderns had either magnified this problem, or created their own. This implies that the moderns had complicated medical theory to the extent that fundamentally useful information had been lost within the ‘incessant

494 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), p. 298-299.
babble’ of their writings, and that the simplicity of the past was inherently valuable, providing a more useable framework.

The relative achievement of medicine within different periods is also discussed by John Barker, who links the state of medicine in the past with the way in which the future of the art could develop:

I will not presume to make a Comparison between the State of Physick in those dark Ages of the World, and in this enlighten’d one; but as it is too evident that the Credit of the Art is rather declining than the contrary, and that EMPIRICISM is daily gaining Ground, it is justly to be feared that, in future Times, Physick may once again be brought so low, as to be esteemed the most base and contemptible, instead of the most excellent of all Arts, and come to be exercised, as GALEN complains it was formerly, by illiterate Quacks, and People bred up to Trades, and manual Employments, instead of Men of an ingenuous and a liberal Education.495

The ‘dark Ages of the World’ that Barker mentions here refers to information taken from Hippocrates, and the time addressed is therefore significantly removed from his own, explaining his reluctance to ‘presume to make a Comparison.’ Nonetheless, he does draw a comparison between Galen’s perception of specific aspects of the medical sphere, and the possibility that similar individuals of illiterate or manual status could also negatively affect the future of medicine. This suggests that an inherent similarity existed within medicine over time, and the parallel drawn between two distinct earlier periods, and the idea that ‘it is justly to be feared that, in future Times, Physick may once again be brought so low’ shows the perceived relationship between the past, and present or future practice.

In separating his own ‘enlighten’d’ period from ‘those dark Ages of the World,’ Barker suggests a difference intended to prevent the repetition of past mistakes. However, this also implies that the framework of medicine in the past was viewed as significant in the present, and as a factor that should be taken into

account as medicine progressed. The title of Barker’s text (*An essay on the agreement betwixt ancient and modern physicians*) also underlines his emphasis of the link between past and present, and explains his inclination to highlight or locate areas of agreement and similarity.

The parallels that Barker draws between the past and present state of medicine are also reflected within a subsequent section of the text, ‘CHAP. III’ Here, he suggests that:

> The Innovations which were made in Physick, for many Ages after Galen’s Time, were few; but those which the two last Centuries have produced are various: notwithstanding which, those who are universally allowed to be the best practical Writers amongst the Moderns, have sufficiently shewn, by embracing the *Hippocratick* Doctrine themselves, that *They* thought it impossible to lay down a better Plan, or to establish the Practice of Physick upon a more solid, and rational Foundation. This I shall shew presently, by the Example of Sydenham and Boerhaave; but, first of all, I shall just take Notice of the Attempts of some of the most noted Reformers of latter Times, to introduce new Modes in Physick; for by seeing the *Hypotheses* of some of them, and the Unsuccessfulness of the Attempts of all, we shall be convinced how impossible it is to establish Physick upon any other *Basis* then that which Hippocrates built upon, *viz.* the *Observation of Nature*; and consequently shall see how little Regard ought to be paid to such as now do, or shall hereafter deviate from his Plan.\(^{496}\)

This passage illustrates the importance ascribed to past models of practice, and underlines the role that Hippocrates’ doctrines continued to play as a foundation for medicine. This basis is shown to be particularly important in providing a framework for present and future developments, and although Barker acknowledges that changes have occurred over time, he nonetheless emphasises the importance of this ‘solid, and rational Foundation.’ In commenting on the state of medicine in the past, Barker also reiterates similar

perceptions of Galen as a maker of time, providing a point around which to present his argument. The suggestion that innovations ‘for many Ages after Galen’s Time, were few’ presents Galen as an indicator of significant innovation, contrasting the subsequent ages that provided little development. He also discusses the idea of various innovations occurring within the ‘two last Centuries’ which, although important, are not separated from the context provided by the past.

The present state of medicine, and the context of the past, is also addressed throughout William Black’s *An historical sketch of medicine and surgery*. Here, the role of the past in leading to present ideas illustrates medicine as continually evolving and changing according to both historical and contemporary factors. This can be particularly seen through a passage within ‘Writers on the Practice of Medicine, Therapeuticks and Pathology’, commenting on the relative position of competing medical theories:

> Chymical theory and remedies then became the reigning taste in physick. This propensity in Germany, and the discovery of the circulation of England, contributed to weaken the reverence for the Galenic Theory and Practice, and for the Italian School. Until this period, most of the German, French, and British physicians had been educated in Italy.

This refers to the various approaches that were taken during the sixteenth and seventeenth centuries, and Black explains prior to this paragraph that: ‘Medicine, in the 16th, and much more in the 17th century, was divided into two sects or factions: the Galenists and Chymists.’ Although this illustrates a perception of the decline of Galenic theory and practice over time, it also shows the extent to which it dominated medicine across Europe, particularly though the assertion that, until then, many physicians were educated in Italy, which Black specifically links to Galen and Galenic theory.

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498 Ibid., p. 234.
The idea of a weakened reverence for Galenic theory during this period is also reiterated towards the end of this section, as part of a discussion addressing writers on pathology:

I have long considered the systems of pathology, and even that of my old learned Dutch master, Gaubius, as imperfect, both in the general outline and composition. They are in general too refined for the active business of medicine; and are not yet, as I conceive, sufficiently disentangled from the reveries of the Galenists, Chymists, and Mechanicks. 499

This illustrates the idea that the development of medicine over time was a complex and ongoing process, especially in terms of pathology, which Black describes as too reliant upon the ‘reveries’ of the past. He also shows Galenic theory as one approach alongside others that were influential at this time, suggesting that modern pathology was not yet ‘sufficiently disentangled’ from any of these significant authorities. The role of Gaubius in this process is also highlighted, and Black begins to explain his view regarding the perpetuation of Gaubius’ system of pathology: ‘It may possibly be attributed to either ignorance or negligence, that the pathological system of Gaubius, a text book in many universities, is slurred over without any comment.’ 500 This phrase indicates the importance of Gaubius’ work during this period, and also illustrates an aspect of the way in which Black perceived the continuation of these ideas. The section also more broadly underlines the role of the past as inextricably linked to the medical theories of the present, and whilst in this instance Black questions the validity of this relationship as hindering progress, it nonetheless demonstrates the importance of the past in continuing assessments of the state of medicine.

Black also addresses the process by which medical theory had changed over time, and evolved into the framework evident in the present, as part of a section entitled ‘Of the Theory of Medicine.’ Here, he explains that:

499 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 279. Black places H.D. Gaubius between 1700 and 1800 under ‘Practice of medicine, therapeuticks, pathology’ and ‘Mat. Medica and Pharmacy.’ within his ‘Chronological chart’: see unnumbered page, following p. vi and Appendix E.

500 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCLXXXII [1782]), p. 279.
Hippocrates and the Greek sages had recourse to the depravity or redundance of the four supposed primary elements or humours, blood, phlegm, yellow and black bile. With the methodic and dogmatic sects at Rome, little atoms blocking up the pores, or stricture and laxity of the extreme vessels, and muscular fibres, continued the triumphant systems during two centuries, until Galen knocked this nonsense on the head, and once more restored the four humours to their former rank and activity. But it was only substituting error for error: all are equally false. Galen’s theory, however, was idolized by the succeeding Romans, Greeks, and Arabians, and throughout the ages of gothic and ecclesiastic barbarity, and for a considerable time after the revival of literature in Europe. Such was the jargon which ignorance and credulity revered for ages, and called by the name of theory and philosophy.\(^{501}\)

This presents the ancient history of medicine and the way in which this particular theory developed over time, but also uses modern perspectives to compare to the state of medicine in the past. This broader assessment underlines the perception of medicine as an accumulation of past ideas and theories, contributing to an overall structure that was significantly linked to previous influences. The passage also illustrates that progress was not necessarily described as a linear process, and the description of the way Galen ‘restored the four humours to their former rank and activity’ shows that returning to past ideas could be an important part of overall development.

In showing the way in which Galen improved upon the past, Black also implies a parallel to the actions of the moderns in continuing this approach to medical theory. Contextualising the present in this way illustrates the significance of the path that medicine had followed to reach the current iteration, and underlines Black’s view that the broader state of medicine was much improved in his own time, in comparison to the medicine of the past. Highlighting the errors of the past by suggesting that although ‘Galen knocked this nonsense on the head,’ he was still ‘only substituting error for error’ indicates that Black saw value in demonstrating the achievements of the moderns in moving past these ideas,

\(^{501}\) W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), p. 297-298.
whilst also acknowledging the important role of the past in the broader development of medicine.

The present state of medicine is discussed periodically throughout these types of text, and the context of the past is shown to be particularly significant. The importance of Galen, alongside other ancient practitioners, in providing a fundamental framework for medicine and a basis from which to develop is frequently evident, as is the idea of knowledge accumulating over time. There is evidence that although the ideas of the ancients were no longer viewed as comprehensively useful, they were perceived as contributing valuable information, and a reliable foundation from which to progress. Similarly, the subtlety of antiquity is emphasised as a positive aspect of the knowledge of the past, and contrasts discussions in some instances regarding the moderns’ unnecessarily complex ideas. Within this context, the suggestion of a weakened reverence for Galenic theory can also be seen as part of a broader inclination to adhere to ideas based upon utility, and as such that criticism was directed towards Galen in the same way that it was also directed towards contemporary ideas, and those in between. This also underlines the idea that an inherent similarity existed within medicine over time, and that comparable themes and challenges arose in all periods. In assessing the present state of medicine, placing developments within the context of the past was seen as particularly important, and in this way medicine was viewed as perpetually changing in response to both the past and the present. As such, a return to past ideas could form a significant part of this continuing process, and therefore the role of Galen, and the ancients more broadly, remained an important aspect of this overall development.

The histories of medicine examined provide a perspective of Galen that differs from that which is found within more practical medical treatises. The less instructive nature of their tone and the underlying narrative that is constructed contribute to a broad image of the use of Galen within a variety of different contexts, and to provide a range of information to the reader. In most instances, these works aim to convey the history of the author’s art, and this ensures that the content reflects the concerns and perceptions of those within learned
medicine. It is a tradition based upon ancient authority, intending to show a strong basis for subsequent developments, and to improve the learned and respectable image of medicine in the present. Consequently, contemporary concerns frequently influence the construction of the narrative, and can be seen through the language, topics and key figures employed by each author.

The importance of Galen can be seen throughout these histories of medicine, and the broad nature of the ways in which he is utilised illustrates the value and significance ascribed to his influence. It has been shown that Galen was particularly important in the preservation of older knowledge, and in some instances Galenic texts were the only way in which the knowledge of his predecessors could be accessed. Similarly, there is also evidence of the significant, and ongoing, impact that Galen's perception had upon the type of information that was transmitted. The use of his works ensured that the aspects of medical knowledge contained within were perpetuated, alongside his own perspective. It addition to providing, and building upon, the knowledge of the past, Galen is also used as a marker of time. This chapter has demonstrated the frequency with which Galen is utilised as a fixed point around which to discuss medical information over a vast time period, and as a way to situate other practitioners and their work. This shows the significance of Galen in terms of both the construction of the historical narrative of these works, as well as in providing a way to frame historiographical discussion, and define time periods.

Within the histories of medicine studied, the most frequent way in which Galen is referred to is as a source of information. This takes the form of general allusions to his work and the influence that the Galenic corpus had upon various aspects of medicine, as well as the provision of specific citations which directly reference a particular text, and often also show the book and chapter that contain the information. Comparison between the specific citations provided and modern English translations of the relevant Galenic texts has established that these authors were engaging directly with Galen, and there is a striking similarity of both language and intention in the use of these references. A wide range of Galenic works are discussed, across a broad selection of subject matter, and both substantial and shorter texts are utilised. This reflects the comprehensive nature of the histories, which do not focus on one particular
medical field, and necessarily address a broad range of topics as a result of examining various significant medical figures and themes over time.

Alongside information taken from Galen, these texts are also used to convey information about Galen. They illustrate biographical information, and show the effect of this context upon his contribution to medicine, as well as underlining the complex nature of the way in which he was perceived. Similarly, the information about Galen also demonstrates the significance of the relationship between his own work and that of Hippocrates, although this is also both reinforced and contrasted through discussions regarding his medical system and approach. This demonstrates the complex presentation of Galen within these texts, but nonetheless highlights the ongoing importance of his contribution to medicine, both in the past and within contemporary knowledge. The role of Galen’s knowledge and perspective, and his view of certain aspects of medicine is evident throughout these texts. He is shown as a significant codifying influence, and within this, the centrality of theoretical knowledge is particularly emphasised. However, information is also included which alludes to a challenging level of detail within the Galenic corpus, the voluminous nature of which is shown, at times, to compromise the value of the content. The tangible effect of Galen’s knowledge and perspective is also highlighted throughout these works, indicating the different ways in which his influence was utilised over time. Here, contemporary perception regarding the Arabic world is also reflected within the histories of medicine, particularly with regard to the way in which they compiled information from Galen, often with minimal original contribution. This chapter also addresses the present use of Galen, showing the ongoing and specific nature of Galenic influence, as well as the role of Galen within the current state of medicine.

The accumulation of medical ideas over time is a prominent theme throughout these texts, and although the ideas of the ancients were not accepted without question, they were perceived as contributing to a broader framework of medicine, and as a foundation from which to develop. The tangible role of Galen within this process has been demonstrated throughout this chapter, and his influence as a source of information, inspiration and underlying authority is particularly apparent. His role as the fundamental route to ancient knowledge is
central to the utility of his work, alongside the positive perception of his approach and the value of simplicity, observation and experiment. Many of the themes evident within the Galenic corpus remained important during the early modern period, and the continuation of similar debates reinforces the relevance of the information in Galen. The Galenic material discussed within these texts demonstrates a comprehensive and nuanced engagement with the content of his works, and underlines his continuing influence in the medical sphere.
Chapter 2

Galen and pharmacology

As outlined briefly within the overall introduction, there are several key areas into which the study of early modern pharmacological history can be divided. These consist of the history of Renaissance herbals; the development and introduction of chemical remedies; general histories, often portraying pharmacology as one branch of medical provision; the role of the apothecary; the influence of particular individuals and institutions; and remedies and the market for their consumption, most of which in some way interact with the content of this thesis. There is also an active and significant body of work which addresses the pharmacological aspects of Galen’s texts and practices, as well as the types of remedies and medical provision of this type that existed within his lifetime.

Brent Elliot defines a herbal as ‘a treatise on medicinal plants, traditionally intended for an audience of doctors and apothecaries’, and emphasises the role of the identification of plants in their function.\(^\text{502}\) These texts are closely linked to botany, and although in ‘The herbal in antiquity and its transmission to later ages’ Charles Singer describes them as ‘primarily a descriptive drug list or, as we now call it, a *pharmacopoeia*’,\(^\text{503}\) the indirect comparison to the pharmacological texts utilised within this chapter obscures significant differences in both form and purpose, especially when taking into account the images included by Elliot from John Gerard’s *Herbal*, published in 1597.\(^\text{504}\) As Elliot notes, these botanical images link the Renaissance herbal with the medieval tradition of plant illustrations,\(^\text{505}\) and as such, despite the important influence of Galen during this period, and the parallels that can be drawn between these texts and the pharmacological works discussed below, they form part of a somewhat different tradition.


\(^{505}\) Ibid., p. 27.
Although the plant identification aspect of herbals is less relevant to the content of this thesis, the significant connection between these types of texts and the ancient world does have resonance within this work. In addition to the importance of Dioscorides’ first century AD work *Materia medica* to later pharmacological studies, the connection between ancient and early modern remedies can be seen through Andrew Wear’s observation that: ‘the study of herbs became, like anatomy, part of the enterprise of giving a realistic and independent representation of what was being observed, whilst at the same time retrieving in a pure form the knowledge of the ancients.’  

With reference to the themes of this thesis, the history of the development and introduction of chemical remedies can be split into two key areas: the influence of Paracelsus (and his follower Johannes Baptista van Helmont) as a challenge to the dominance of Galenic medicine, and the gradual assimilation of chemical substances into common medicinal use. The first of these aspects is significant, and Paracelsus as a figure ‘gave shape and focus to the protests against establishment Galenism.’ As Andrew Wear highlights, ‘the magisterial work of Walter Pagel and Charles Webster, among others, [has] given the intellectual and reformist aspects of Paracelsianism the recognition they deserve’, and to this the work of Allen Debus can be added for illuminating the situation in England.

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506 A. Wear, *Knowledge and practice in English medicine, 1550-1680* (Cambridge, 2000), p. 67. For further information regarding Dioscorides’ *Materia medica*, see J. Scarborough and V. Nutton, ‘The Preface of Dioscorides’ *Materia Medica*: Introduction, Translation, and Commentary’, *Transactions and Studies of the College of Physicians of Philadelphia*, Volume 4, Number 3 (September 1982), pp. 187-227. This highlights that the text: ‘is one of the most influential of all medical writings [...]’. In it, one reads of a welter of plants, oils, minerals, insects, animal products, and wines, all organized into a coherent handbook of pharmacy and pharmacology which retained its usefulness for over 1800 years.’ (p. 187). The relationship between Galen and Dioscorides is illustrated by the idea that: ‘Most influential among those pharmacological works which have survived in their entirety is the *Materia Medica* of Dioscorides, whom Galen held in especially high esteem.’: S. Vogt, ‘Drugs and pharmacology’, in R.J. Hankinson (ed.), *The Cambridge companion to Galen* (Cambridge, 2008), pp. 304-322, p. 316; and similarly, through the suggestion that for the Greeks of medieval Byzantium: ‘Alternative views to those of the Galenists remained largely only in areas of medicine where Galen had said little – in gynaecology, with the Methodist Soranus, or in medical botany, with Dioscorides’: V. Nutton, *Ancient medicine* (London, 2004), p. 6.


Many historians have shown, however, that in terms of the decline of Galenic theory, the influence of Paracelsus was one of several challenges contributing to a broader context of deconstruction. For example, Mary Lindeman highlights the length of this process, indicating that: ‘the collapse of Galenism was a slow deflation rather than a sudden implosion’, and describes the factors attributed in a way that shows them as ‘waves’ of challenge to the centrality of Galenic medicine.\textsuperscript{509} In terms of Paracelsus’ role, Lindemann suggests that he ‘offered the basis for an ontological understanding of disease (i.e., each disease was a real entity with an independent existence)’, a significant change that differed fundamentally from the Galenic perception of disease as specific to the individual, and a result of humoral imbalance.\textsuperscript{510} This was also important with regard to remedies, as it meant that specific diseases should be treated with specific remedies. Vivian Nutton, as part of his contribution to The Cambridge companion to Galen also downplays the influence of Paracelsus, suggesting that the ‘chemical pharmacopoeia of the Paracelsians and, later, the mechanistic explanations of the iatrochemists, the advent of new drugs from America and the Indies, all combined to reduce Galenic influence still further.\textsuperscript{511} It is significant that this challenge to Galenism is situated towards the end of Nutton’s discussion of decline, and although chronologically this is where Paracelsus and the iatrochemists would be situated in his argument, they appear briefly as an addition rather than a key point.

\textsuperscript{509} M. Lindemann, \textit{Medicine and society in early modern Europe} (Cambridge, 1999), p. 70; see also C. Webster, \textit{The great instauration: science, medicine and reform, 1626-1660} (London, 1975), which similarly emphasises decline as a process over time, attributed to many factors.


Although there is debate regarding the extent to which Paracelsian and chemical remedies infiltrated the early modern medical landscape, the findings of this thesis indicate that from the perspective of the seventeenth and eighteenth centuries, the lasting impact of Paracelsianism was therapeutic, rather than theoretical. Particular chemical remedies can be highlighted as entering the pharmacological framework of this period, and mercury is a significant example which polarised views and generated contemporary debate. The volatile nature of the substance is highlighted by George Urdang, who describes the early modern perception of it as: ‘a frightening monster but, when tamed, a great panacea, a “natural theriac.”’ This piece is a good example of the way in which one substance has been used to draw broader conclusions regarding the use of chemical remedies, and the origins of the use of mercurous chloride, or calomel (the ‘tamed monster’ iteration of mercury), are outlined to show the context in which it was prepared and understood, particularly in contrast to the ‘destructive and corrosive’ iteration, mercury bichloride.

Although much of the discussion of these themes is framed as ‘chemical’ versus ‘Galenical’, there is evidence that a more complex environment has emerged over time, both historiographically and during the early modern period. Wear has argued that: ‘Galenic medicine, in transforming itself into a modernised learned medicine, claimed that it could assimilate the new chemistry without changing its foundations’, and the findings of this chapter particularly reflect this model.

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512 Andrew Wear has highlighted that the 1618 edition of the College of Physicians’ Pharmacopoeia Londinensis: ‘included sections on ‘salts, metals, minerals’, ‘chemical oils’, and ‘the more usual chemical preparations’; altogether 122 chemical remedies were set out in the enlarged second edition that appeared in the same year’, although ‘the remedies of the chemists were placed at the end of the book so that they could act as subsidiary servants and helps to the medicine of the ancients.’ See A. Wear, ‘Medicine in early modern Europe, 1500-1700’, in L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995), pp. 215-361, p. 320. Bruce Moran also discusses these themes, suggesting that: ‘There was nothing new in the sixteenth and seventeenth centuries in the idea of making medicaments from metals and minerals’, and that, therefore ‘What differed in the early modern period were the philosophical contexts’, based primarily in the intention of the preparation of a medicine. See B.T. Moran, ‘A survey of chemical medicine in the 17th century: spanning court, classroom, and cultures.’ Pharmacy in History, Volume 38, Number 3 (1996), pp. 121-133, p. 121-122.


515 A. Wear, Knowledge and practice in English medicine, 1550-1680 (Cambridge, 2000), p. 430.
In contrast to the specific approach demonstrated by works which concentrate upon chemical medicine or herbals, the history of pharmacology is also addressed in varying detail throughout more general histories of medicine. As has already been shown, Andrew Wear addresses various aspects of this theme as part of broader studies of the early modern period, as does Mary Lindemann.\textsuperscript{516} Similarly, these types of text also often include sections which discuss the role of apothecaries, both technically in terms of training, and in the medical care that they provided.

Additionally, there are examples of works specifically dedicated to apothecaries and their occupation, notably Juanita Burnby’s work which examines the responsibilities, training, and level of professionalisation of apothecaries; and more recently, Penelope Corfield addressing ‘the apothecaries’ role in the slow transition whereby reputable practitioners differentiated themselves from ‘quacks.’\textsuperscript{517} Louise Hill Curth also discusses apothecaries as part of her broader text \textit{From physick to pharmacology: five hundred years of British drug retailing}, which identifies the changing way in which medicines were distributed and consumed. In parallel to the history of surgery during this period, Curth highlights the role of the Royal College of Physicians in attempts to regulate the practices of apothecaries, and shows that whilst ‘apothecaries had been prescribing, compounding and administering medicines for centuries, the Company of Physicians attempted to stop such activities in the late seventeenth century. Their efforts to halt this competition resulted in what became known as the ‘Rose Case’, begun by a patient complaint to the Company of Physicians during the winter of 1669-70.\textsuperscript{518} This illustrates the legal aspect of medical practice that also arises within these types of texts, and as Curth underlines,
this challenge ultimately led to ‘apothecaries being given the legal right to practise medicine.’

The influence of the Royal College of Physicians in this instance demonstrates a further aspect that is often emphasised within pharmacological history: the role of institutions and their attempts at regulation. The development and maintenance of official pharmacopoeias across Europe has been studied by a variety of historians, and is often addressed briefly in general histories of medicine with regard to the type, availability and standardisation of remedies. More specifically, George Urdang outlines in detail the process by which the London Pharmacopoeia was developed, emphasising the role of the Royal College of Physicians and key figures within it in the form and content of the text. Similarly, William Brockbank explores the remedies contained within the Pharmacopoeia, showing the ancient origin of many of the preparations, and attempting to ascertain how widespread use was of the remedies listed. Brockbank’s otherwise useful article is, however, limited by his criticism of the ‘unscientific hotch potch’ that he encountered, and the ingredients whose inclusion he ridicules as ‘magic.’ Although he does rightly suggest the ‘scope for fraud’ present in connection with the more unusual (or mythical) ingredients, these condescending factors detract from the analysis of a developing pharmacological text which reflects a complex and contested, but broadly accepted, underlying medical framework. Whilst the focus of pieces relating to pharmacology in England is most often London, David Cowen has also shown the development of the Edinburgh Pharmacopoeia, arguing that it ‘presents a long, unbroken source for the study of the history of medicine and pharmacy, covering the very significant period when these were being subjected to the impact of the emerging chemical and biological sciences.’

520 See, for example A. Wear, Knowledge and practice in English medicine, 1550-1680 (Cambridge, 2000), p. 94.
523 Ibid., p. 2 and p. 3.
524 Ibid., pp. 1-14, p. 4.
In contrast to studies which emphasise the collective influence demonstrated by specific institutions, there are also pharmacological histories which approach the topic from the perspective of individuals, using them to make broader points regarding the context in which they were working. For example, Norman Howard-Jones’ article on John Quincy and his publications highlights his place as an apothecary writing on medical themes during a period in which the divisions between physicians and apothecaries are identified as ‘acute’. This piece also outlines biographical detail about Quincy, and shows the type of information regarding his perspective and approach to medicine that can be inferred from the content of his works. F.N.L. Poynter similarly outlines the background, education and practice that contributed to Nicholas Culpeper’s works on medicine. His apprenticeship as an apothecary is utilised to show that he is likely to have had ‘a more detailed understanding of the contemporary materia medica as prescribed and supplied to patients than could have been possessed by many physicians. The comparison between, and friction generated by, Culpeper’s relationship with the Royal College of Physicians (and learned medicine more broadly) is the focus of many other studies which discuss his work, although Poynter emphasises the more positive aspects of his translation of the Pharmacopoeia Londinensis: ‘It seems likely therefore that Culpeper was doing a service to his fellow apothecaries by providing them with an English version of the official guide. Both John Quincy and Nicholas Culpeper are utilised within this chapter, and their work represents two different perspectives regarding the pharmacopoeia and its content. The regulatory aspect of the Royal College of Physicians is also particularly relevant to this chapter, especially through the comparison that can

\[\text{pp. 340-351; see also D.M. Dunlop and T.C. Denston, “The history and development of the “British Pharmacopoeia”, British Medical Journal (22 November 1958), pp. 1250-1252, which briefly outlines the development of the Pharmacopoeia in England, Scotland and Ireland prior to their amalgamation into the British Pharmacopoeia.}\]

\[\text{N. Howard-Jones, “John Quincy, M.D. [d. 1722], apothecary and iatrophysical Writer”, Journal of the History of Medicine and Allied Sciences, Volume 6, Number 2 (Spring 1951), pp. 149-175, p. 149.}\]


\[\text{Ibid., pp. 152-167, p. 157.}\]

\[\text{Ibid., p. 159; see also A. Wear, “Medicine in early modern Europe, 1500-1700”, in L.I. Conrad, M. Neve, V. Nutton et al., The Western medical tradition: 800 BC to AD 1800 (Cambridge, 1995), pp. 215-361, p. 323-325.}\]
be made between different versions of the pharmacopoeia, and the remedies that are included or removed from each. The role of apothecaries is less relevant to this thesis, partly because it does not address the market for medicines and the way in which they reached consumers. As is evident below, this area has been significantly addressed by Patrick Wallis, and the connection to Galen traced within this chapter is primarily a theoretical influence, examining the specific and tangible connections to Galen that can be identified.

The historiography surrounding remedies and the way in which they were obtained and used is particularly broad, and there are several different aspects to be considered. The move towards looking at medicine from a social perspective, taking into account the experiences of patients and the popular perception of medicine has led to numerous studies which address ‘kitchen physic’ or medicines within the household.\textsuperscript{530} The role of therapeutics within the context of the home differs from the more theoretical approach taken by this thesis, and although the learned medicine portrayed by the materials utilised throughout this chapter would have diffused into society more broadly, the effect of this process and the popular perception and utilisation of remedies has been covered elsewhere.\textsuperscript{531}

Individual remedies, consisting of both single ingredients (simples) and compound substances have been addressed throughout the history of pharmacy.\textsuperscript{532} John Griffin’s article ‘Venetian treacle and the foundation of medicines regulation’ exemplifies this approach and is particularly important to this thesis as it discusses a remedy that was relevant to Galen in his own time, as well as to early modern medicine. Griffin suggests that: ‘Mithridatium and the related product Theriac were both regarded from the time of their original

\textsuperscript{530} For the importance of this change in perspective, see R. Porter, ‘The patient's view: doing medical history from below’, \textit{Theory and Society}, Volume 14, Number 2 (March 1985), pp. 175-198.
\textsuperscript{532} See also J. Evans, ‘Gentle Purges corrected with hot Spices, whether they work or not, do vehemently provoke Venery: menstrual provocation and procreation in early modern England’, \textit{Social History of Medicine}, Volume 25, Number 1 (February 2012), pp. 2-19, which outlines a particular group of remedies and their use.
formulations in the 2nd Century BC and the 1st Century AD respectively, until the mid 18th Century as universal panaceas.\textsuperscript{533} He outlines the origin and method of production of both substances, and highlights the importance of Galen in the transmission of information about the remedy. David Cowen similarly discusses a particular substance in his piece on ‘Squill in the 17th and 18th centuries’.\textsuperscript{534} This examines the numerous appearances and conspicuous absences of squill, or sea onion, within various Pharmacopoeias published in Europe, particularly focusing on English perceptions of its use and action.

Harold Cook’s article ‘Markets and cultures: medical specifics and the reconfiguration of the body in early modern Europe’ demonstrates an approach that utilises the story of a particular substance (Peruvian, or Jesuits’ bark) to, amongst other themes, show that a shift had occurred from a view of the body that was individualistic, to one that meant disease in one body could represent disease in any human body, as a more ‘universal object’. Cook suggests that: ‘one of the chief causes of that change was the growing vigour of the market for remedies that could be given to anyone, without discrimination according to temperament, gender, ethnicity, social status or other variables in the belief that they would cure quietly and effectively.’\textsuperscript{535}

The arguments relating to medical specifics also allude to the importance ascribed to ‘exotic’ remedies in the historiography of medicines during this period. The debate surrounding foreign drugs is effectively summarised by Andrew Wear in a short paper which outlines the various aspects that generated discussion during the early modern period: localism versus universalism in medicine; the idea that local substances could treat local diseases; the commercial facets of importing foreign substances; the assimilation of these substances into existing medical theories; and nationalistic concerns regarding whether exotic drugs would be effective on constitutionally-

\textsuperscript{534} D.L. Cowen, ‘Squill in the 17th and 18th centuries’, Bulletin of the New York Academy of Medicine, Volume 50, Number 1 (June 1974), pp. 714-722.
specific European bodies. These themes are also important in Patrick Wallis’ work, which finds that the ‘volume of imported medical drugs exploded in the seventeenth century, and continued growing more gradually over the eighteenth century. The variety of imported drugs changed more slowly.’ Wallis also underlines that: ‘foreign drugs were an important part of the therapeutic core of much commercial medicine, particularly in Galenic physic.’ His finding that: ‘the ongoing popularity of Galenic simples provides little evidence of a change in the content of medicine that might be responsible for shifts in consumption’ reinforces the conclusions of this thesis that Galenic ideas and remedies remained important throughout the early modern period.

In addition to the historiography that examines pharmacology during the early modern period, there is also a vast body of literature that addresses the pharmacology of the ancient world, as well as material specifically relating to Galen and his works. John Scarborough’s *Pharmacy and drug lore in antiquity* is a broad and wide ranging examination of the ‘how and why our Greek, Roman, and Byzantine forebears thought as they did about drugs and pharmaceuticals’, which also looks specifically at aspects of pharmacology within Galen’s works. Similarly, the work by Scarborough and Vivian Nutton on Dioscorides’ *Materia medica* is a comprehensive introduction to both the broader environment of ancient pharmacology, and to the relationship between

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537 P. Wallis, ‘Exotic drugs and English medicine: England’s drug trade, c. 1550-c. 1800’, *Social History of Medicine*, Volume 25, Number 1 (2011), pp. 20-46; see also M. Harrison, ‘Exotics and antiseptics’, in M. Harrison, *Medicine in an age of commerce and empire: Britain and its tropical colonies 1660-1830* (Oxford, 2010), pp. 1-19, which examines the remedies that were used to treat tropical diseases in place of (or alongside) bloodletting, in particular cinchona bark, also known as ‘Peruvian bark’, a substance often mentioned as a key example in the context of exotic drugs.


Dioscorides and Galen’s work much later. These aspects can particularly be seen through the suggestion of the ‘enormous number of details about Greek and Roman pharmacy in a century of rapid development and augmentation in substantive botany and drug lore’ provided by Dioscorides, as well as the idea that: ‘Galen, who praised Dioscorides highly, proudly wrote of his own botanical expeditions and of his journeys conducted for the acquisition of reliable supplies of mineral drugs.’ More specifically, Sabine Vogt’s chapter within The Cambridge companion to Galen effectively demonstrates Galen’s perception of the theory of pharmacology and the appropriate use of pharmacological substances, and the basis for these ideas. Vogt underlines that for Galen, ‘definitions of food and drugs run along the very same lines’, and that the properties of drugs should be matched to the individual patient’s ‘state of imbalance – taking into account the normal state of his individual mixture (krasis).’ This chapter also outlines the various texts which Galen used to address pharmacology, taking into account both simples and compound remedies, and shows the importance of particular antidotes in the form of theriac and mithridatium. Finally, there is also a broader tradition examining the content, language, meaning, and translation of Galenic texts, parts of which address his pharmacological works, although as is noted within this chapter, the key texts relating to this area are generally not available in modern translations.

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542 Ibid., p. 188 and p. 190.
544 Ibid., p. 306 and p. 309.
545 Ibid., p. 310-314. For an assessment of theriac (also known as Theriac Andromachus, Galene (not related to Galen, rather referring to the meaning of ‘Galene’ as ‘tranquility’), Venetian treacle, London Treacle, and occasionally simply Treacle during the early modern period) and mithridatium and their importance during the early modern period, see J.P. Griffin, ‘Venetian treacle and the foundation of medicines regulation’, British Journal of Clinical Pharmacology, Volume 58, Number 3 (2004), pp. 317–325.
547 The key works by Galen referring to pharmacological topics are: De Simplicium Medicamentorum [Temperamentis Ac Facultatibus (On the Powers [and Mixtures] of Simple Drugs), De Antidotis (On Antidotes), De Compositione Medicamentorum secundum Locos (On the Composition of Drugs According to Places), and De Compositione Medicamentorum per Genera (On the Composition of Drugs according to Kind). These are available in Carl Gottlob Kühn’s edition of Galen, which shows the Greek text alongside a Latin translation, see C.G. Kühn (ed.), Galeni Opera Omnia (20 Volumes, in 22 books) (Leipzig, 1821-1833), Volumes XI-
Galen and pharmacology

This chapter addresses the various ways in which Galen is utilised and referred to within a range of editions of the *Pharmacopoeia*, published in both English and Latin between 1618 and 1791. It begins by looking at general references to Galen within both ‘official’ and popular English translations of the *Pharmacopoeia*. These different perspectives allow the most significant themes to be drawn out of the texts, as the contrasting approaches strengthen conclusions regarding areas of corroboration, and highlight specific differences in the use of Galen. The chapter also uses the 1618 Latin edition of the *Pharmacopoeia* as a beginning point from which to assess the changing use of Galen within subsequent versions of the text. Here, the ‘Galenic’ substances identified in 1618 are notable in themselves; however, they also facilitate the examination of specific remedies and their association with Galen over time. Finally, the use of Galen as a source of information is also explored, identifying the Galenic works that are utilised throughout these texts, and demonstrating the way in which they are deployed within different editions of the *Pharmacopoeia*.

Galen and the ‘official’ *Pharmacopoeia*

The importance of the first, ‘official’ text of the *Pharmacopoeia*, published in 1618 can be seen through a *Proclamation* issued by King James I, instructing adherence to its content: ‘By the King. A Proclamation commanding all Apothecaries of this Realme, to follow the dispensatory lately compiled by the Colledge of Physitions of London.’

The standardising intent of the *Pharmacopoeia Londinensis* is evident in the continuing text of the *Proclamation*, which describes it as a book:

[...] prescribing and directing Apothecaries the generall formes, aswell of dispensing and compounding all sorts of Medicines and phisicall Receipts, as distilling of Oyles and Waters, and such like extractions,

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XII, XIV, XII-XIII, and XIII respectively. These texts are currently without modern translations, see ‘Appendix 2: English titles and modern translations’, in R.J. Hankinson (ed.), *The Cambridge companion to Galen* (Cambridge, 2008), pp. 399- 403, p. 401, 402, 401, and 402 respectively, which demonstrates the lack of modern editions.

548 James I, King of England, *By the King. A proclamation commanding all apothecaries of this realme, to follow the dispensatory lately compiled by the Colledge of Physitions of London* (London, 1618), unnumbered page, first of the two sheets.
together with the true Weights and Measures, whereby to make them which heretofore have bene variously and differently composed, and made according as mens seuerall fancies have led them, to the great danger of Our Subjects in their lives and health.\textsuperscript{549}

The problematic first printing of the \textit{Pharmacopoeia} in Latin led to a second printing (examined within this thesis), the reasons for which are addressed by George Urdang.\textsuperscript{550} Following this initial difficulty, many more Latin editions were issued, as well as a number of different English translations, discussed throughout this chapter. The proliferation of editions of the \textit{Pharmacopoeia} can be accounted for by a broad interest in the use and construction of remedies, exemplified by Andrew Wear’s suggestion that:

\begin{quote}
There is no doubt that recipes for compound remedies were much sought after. Theriac and mithridatium were the most famous of the ancient compound remedies, but there was by the early modern period a multitude of compound preparations, and one of the aims of the authorisation by European cities of official pharmacopoeias was to ensure that certain compound remedies were made according to standard sets of ingredients.\textsuperscript{551}
\end{quote}

This underlines the importance ascribed to these types of texts, and their inherent connection to the remedies of the past. Here, the 1618 edition formed the foundation of many of the Royal College’s aims, and provided a basis from which all subsequent versions derived their content. This section primarily addresses the ‘official’ English translations of the \textit{Pharmacopoeia} in order to examine the ways in which Galen is alluded to in a general sense, not evident within Latin editions, which tend to list only the ingredients and method of each recipe.

\textsuperscript{549} James I, King of England, \textit{By the King. A proclamation commanding} (London, 1618), unnumbered page, first of the two sheets.


\textsuperscript{551} A. Wear, \textit{Knowledge and practice in English medicine, 1550-1680} (Cambridge, 2000), p. 92.
General references to Galen in translations of the Pharmacopoeia

The concise nature of the information that is included within the various translations of the *Pharmacopoeia* by the Royal College of Physicians, necessarily means that there are relatively few references to broad medical theory and specific medical authorities. The model of these texts primarily takes the form of substances categorised according to type, for example ‘The Distilled and Compound Waters’ and listed by name, followed by a descriptive recipe.\(^{552}\) This is often accompanied by an additional comment by the author, provided within quotation marks underneath the recipe. These remarks supply further detail about the recipe, or the ingredients that are employed: “‘This differs chiefly from the former, by substituting Cardamom and Coriander Seeds in room of the Aniseeds, which makes it more cordial and grateful to the Stomach [...]’”.\(^{553}\) The practical character of the information that is conveyed within the *Pharmacopoeia* suggests that only functional points would have been included, without unnecessary embellishment. Therefore, references to specific authorities, particularly Galen, are significant as they illustrate instances where the inclusion of a name, or association of a substance with an authority, was deemed essential and contributed to the meaning of the entry.

It is important to note that whilst the frequency of references to Galen fluctuates over time, they are still present as late as the 1791 edition, which was translated by Thomas Healde, and revised by John Latham after his death.\(^{554}\) This ‘fifth edition’ of *The pharmacopoeia of the Royal College of Physicians* includes a comment which demonstrates the continuing centrality of Galen as an authority in this area. Under a section entitled ‘The Materia Medica’ an additional discussion is included regarding ‘The root of common male Fern’ (and the root of female fern), which says: ‘The root of both sorts has been recommended as anthelminthic, from the time of Galen, or earlier, to the present. Galen directs ʒiv of either *Pteris*, or *Thelypteris*) as a dose for the broad worms.’\(^{555}\)

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\(^{553}\) Ibid.


\(^{555}\) T. Healde and J. Latham, *The pharmacopoeia of the Royal College of Physicians* (London, 1791), p. 28. The ‘ʒ’ symbol within this passage represents a dram. A key showing this appears
Similarly, the ‘The fourth edition with additions’, solely by Healde also has this direction. Here, the words of the passage are identical, however, the ‘*Pteris*, or *Thelypteris*’ is completely enclosed within the brackets, rather than missing the first one as in the 1791 edition. The placement on the page is also different, and the text appears a page later in the 1790 edition. This suggests that in revising Healde’s fourth edition of the *Pharmacopoeia*, even though this section shows evidence of amendment, Latham chose to leave this particular reference to Galen within the text. Although in both texts an alternative dose and method of use follows the reference to Galen, this is not presented as more effective and it sits amongst other comments regarding the roots and their uses. Whilst this comment does not appear in John Quincy’s 1721 or 1727 editions, the substance (Fern root) is shown under a section entitled ‘A catalogue of *Officinal Simples*’ but this version provides little additional information about each substance, and is arranged to show both Latin and English names alongside the part of the plant that is used.

The changes and amendments that are made to the various editions of the *Pharmacopoeia* both by different authors, as well as within different versions by the same author, are significant in that they show a continual editing process that allows for fluctuations in the type of information and substances that were deemed relevant at a particular time. As a result, references to Galen change between different editions, but they are nonetheless present throughout almost all of the Royal College of Physicians *Pharmacopoeias*. These references take a variety of different forms, and are also often linked to ancient knowledge more broadly and the way in which it had travelled to the present.

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in an earlier edition though is revised to omit the symbol in both the 1790 and 1791 editions. See J. Quincy, *The dispensatory of the Royal College of Physicians in London* (London, 1721), unnumbered page, 2 prior to page 1.


557 Ibid.


This can particularly be seen within John Quincy’s work *The dispensatory of the Royal College of Physicians in London* under the entry for ‘Emplastrum Diachalciteos. Compound Plaister of Chalcitis’ which says: ‘This is a Composition as ancient as Galen, and is ascribed to him for its Author.’ This is significant as it indicates the importance of linking this substance to Galen, and underlining that he was its author. The inclusion of this comment is also particularly notable given that subsequently within the comments on this substance Quincy remarks: ‘This Plaister is seldom made, because commonly confounded with the following’, which is ‘Diachylon Simplex. Simple Diachylum.’ This observation also appears within Quincy’s 1727 ‘Second Edition’ of the text, underlining the continuing relevance of Galen as a source of this type of information, even in examples where the substance itself was utilised less often.

The importance of establishing authorship can be seen throughout the different versions of the *Pharmacopoeia* translations, and it is often shown alongside additional information which demonstrates the process by which a particular remedy had reached an edition of the text. This is evident under the passage relating to ‘Philonium Romanum. Roman Philonium’, which has identical references to Galen in both the 1721 and the 1727 edition of Quincy’s *The dispensatory*: ‘There are several other Compositions of this Denomination, taken by the Dispensatory Writers from Mesue, Galen, and others, but they all agree in the main.’ This emphasis on agreement over time is significant as it highlights both the continuity that is evident, as well as the continuing validity of a recipe appearing in the Galenic corpus. Alongside Galen in this passage, Mesue is also shown as a pharmacological authority. Mesue is mentioned in William Black’s ‘Chronological chart of medical and surgical authors’ from *An historical sketch of medicine and surgery* (1782), which illustrates medical and surgical authors that Black viewed as significant, and categorises them by century (from 400 BC to the date of publication) and by their area of concern.

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561 Ibid., p. 213.
562 Ibid.
564 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
Here, Mesue is placed under both ‘Chymistry’ and ‘Practice of medicine, therapeuticks, pathology’, although not ‘Mat. Medica and Pharmacy’, and is shown to be active during the ninth century.\(^{565}\)

The appearance of Galen and Mesue together as sources for pharmacological information is not unique to this reference, and this pairing is often used to mark points in time that a substance is utilised, or to highlight changes that have occurred at specific moments. Quincy also includes this type of reference within the entry for ‘Pulvis Diacalaminthes Simplex. \textit{Powder of Calamint Simple}’: ‘This is a very ancient Composition, and given very much alike by \textit{Mesue} and \textit{Galen}.\(^{566}\) Here, the continuity between Mesue and Galen is underlined, showing the importance of agreement between authorities and in determining the different sources from which remedies were drawn. Additionally, following the assertion that this particular recipe is very similar in both Mesue and Galen, the passage continues, underlining that: ‘though \textit{Zwelfer} gives the preference to that of the latter [Galen], and our College at first copied after it in their Dispensatory, though the preceding to this left out the Thyme, which is herein again restored.\(^{567}\) This shows a preference for the older form of the recipe and a desire to restore it to a previous state, whilst illustrating that others have made amendments over time. This can similarly be seen in Quincy’s text, under the recipe for ‘Trochisci de Scilla ad Theriacam. \textit{Troches of Squills for the Theriaca}’: ‘This Process is the same, very near, as directed in the \textit{Augustane}, and first \textit{London} Dispensatory: Its first Contrivance is ascribed to \textit{Galen}, who describes it \textit{de Antidotis}, and in the \textit{Theriaca ad Pisonem}, for which it was originally designated.\(^{568}\) This illustrates the perceived importance of tracing the original


\(^{566}\) J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721 and 1727), p. 79.


\(^{568}\) J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), p. 150. For additional information regarding ‘Squills’, or ‘Sea Onion’, see D.L. Cowen, ‘Squill in the
author of a recipe, and correctly attributing it. In this instance, the inclusion of the titles of specific Galenic works also provides both additional authority to the statement, and allows the reader to verify it, or learn more from the original source.

The significance of an association with ancient recipes and in tracing the history of a substance can be seen in Quincy’s address ‘To the Reader’, which says: ‘Some pains I have likewise taken in tracing many of the officinal Medicines back to their original Prescribers, that by comparing the Changes they have from time to time undergone, such Persons may better discern the Reasons for many Alterations now made.’ Although there are relatively few examples of an overt preference for an ancient version of a substance over a later iteration, there are occasional examples of the idea of returning to ancient ideas as a purer, or less distorted version of pharmacology. For example, under the recipe for ‘Trochisci de Vipera ad Theriacam. Troches of Vipers for the Theriaca’ the author comment states that: ‘There has been a great deal wrote by many others about the Choice of Vipers, and the several ways of making these Troches; but this Prescription comes nearest to that of Galen.’ This is significant as it shows an attempt to return to Galen’s recipe as closely as possible. It is also important to note that the passage also comments on the other versions of this substance: ‘The ancient Dispensatories very much abound with Forms of this Class […]. But the Practice of later Times hath greatly reduced this Class by the Expulsion of many tedious and incoherent Prescriptions.’ Here, it is evident that this particular recipe had been retained in preference to others and that in reducing the number of these types of substances that appeared in the Pharmacopoeia, it was the version closest to Galen that was retained.

A specific association with Galen can also be seen in a substance within the section ‘A catalogue of Officinal Simples’ where one entry is given as: ‘Berberis [Oxcantha Galeni] Barberry Bush, the Oxacantha of Galen; Berberis Dumetorum C. B. the Hedge Barberry of C. B.’, and ‘The Bark, Fruit, and Seed’

17th and 18th centuries’, Bulletin of the New York Academy of Medicine, Volume 50, Number 1 (June 1974), pp. 714-722.
569 J. Quincy, The dispensatory of the Royal College of Physicians in London (London, 1721), unnumbered page, third of ‘To the Reader.’
570 Ibid., p. 153.
571 Ibid., p. 154.
are listed as the useful parts. This is significant as it shows a particular plant associated with Galen, rather than a recipe, which is the form of the majority of other references. Throughout this section of the text, relatively few unique authorities are mentioned in connection with specific entries. Most, however mention ‘Caspar Bauhin’ (the ‘C. B.’ in the previous quote) and ‘John Bauhin’, who appears as ‘J. B.’, is also listed in many entries. In his ‘Chronological chart’ William Black shows ‘C. Bauhine’ and ‘J. Bauhine’ under sixteenth-century botany, and also under ‘Mat. Medica and Pharmacy’, indicating that the authorities mentioned within this section of the text are associated with both botany and pharmacology. This is supported by some of the other authorities that are present, for example: ‘Eruca, Rocket; latifolia alba sativa Dioscorides C. B. broad leav’d white Garden Rocket of Dioscorides according to C. B.’, which illustrates the presence of Dioscorides, as well as the continued references to ‘C.B.’. Similarly, there is also a reference to: ‘The Marsh-mallows of Dioscorides & Pliny, C. B.’ which shows how several authorities are shown to be associated with a particular entry, as well as the use of Caspar Bauhin to access other authorities. The entry referring to Galen above is the only one in this section which mentions him, and illustrates that for this particular substance (Berberis [Oxcantha Galeni]) the association with Galen was not only significant enough to retain, but also that his link to it was sufficiently important to show him as the only authority associated with this particular substance.

The brief, general references to Galen that are evident in these English translations of the Royal College of Physicians’ Pharmacopoeia are often used to show the origin of particular recipes, or to trace the history of a substance over time. This can be seen within John Quincy’s comments regarding ‘Species Hieræ Picræ. Spiieces of Hiera Picra’, which indicate that:

573 For examples giving the full names of Caspar Bauhin and John Bauhin, rather than simply initials, see J. Quincy, The dispensatory of the Royal College of Physicians in London (London, 1721), p. 281-282.
574 W. Black, An historical sketch of medicine and surgery, from their origin to the present time (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
The former Dispensatories used to call this *Species Simplex*, in Comparison to the length of the others: It had *Galen* for its Author, but hath been corrected by *Fernelius*. This present Addition of the College hath very justly altered all the foregoing, by rejecting the Mastick as neither answering the main Intention of the whole [...] and all the Ingredients much better proportioned to their respective Virtues than before.\(^{577}\)

This does not necessarily criticise Galen, but places his version of the remedy at the beginning of an evolutionary process, punctuated by Fernelius’ contribution during the early sixteenth century, and again altered within the present *Pharmacopoeia*.\(^{578}\)

There are also examples of substances with an association to Galen being completely removed from the *Pharmacopoeia*, but retaining a reference to him in order to show that this had occurred. As part of the recipe for ‘Emplastrum Tonsoris’, the additional comments say:

I cannot trace this further back than the last Editions of the College, nor guess at the reason for its particular Name. It is however so obscure both in Practice, and in the Shops, as being hardly ever called for or made. This Class of Compositions, hath likewise had its share of Improvement, by the present Emendation of the College Dispensatory, both in the Expulsion of some useless ones, and the Addition of what were not in before: Of the former sort are the *Emplastrum Album coctum Ulmense; Barbarum magnum* of Galen [...].\(^{579}\)

Here, the importance ascribed to tracing the history of a recipe and its origin is evident in the fact that the difficulty experienced in achieving this is explicitly


\(^{578}\) For Fernelius (Jean Fernel), see L.I. Conrad, M. Neve, V. Nutton et al., *The Western medical tradition: 800 BC to AD 1800* (Cambridge, 1995), p. 262-263, and ‘Practice of medicine, therapeuticks, pathology’ in W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXXII [1782]), unnumbered page, following p. vi. See also Appendix E.

presented within the text. Additionally, in highlighting that the 'Barbarum magnum of Galen' had been removed, Quincy retains a degree of the importance of this substance by mentioning it at all. Finally, it is important to note that it was not due to the association with Galen that this substance was expelled from the Pharmacopoeia; rather that it was part of a broader type of remedy that was increasingly obscure, and as such fewer examples remained, whilst those that did were ‘hardly ever called for or made.’

The way in which these translations of the Pharmacopoeia are constructed does not allow for significant embellishment of the recipes provided, and as such relatively little theoretical information is included. Within this context, references to specific authorities are particularly notable, and the inclusion of a name or association suggests the importance of this with regard to a remedy. The amendments that are evident within different editions of the text illustrate an ongoing development process that reflects the varying information and substances perceived as significant at a particular time. Similarly, the role of establishing the authorship or origin of a substance is evident throughout these texts, and Galen is shown as a significant contributor in this respect. In some instances, a preference for an older iteration of a remedy is evident, highlighting a sense of returning to a simpler form of pharmacology; and even where an association with Galen had been lost over time, valuable space is dedicated to showing that this relationship had existed in the past.

Galen and popular translations of the Pharmacopoeia

The more popular translations of the Pharmacopoeia represent a different perspective of the content of this text, and the aims of its distribution. However, it is important to note that despite Nicolas Culpeper’s reputation as an irregular practitioner, his writings ‘reflect faithfully the orthodox medicine of his own time, and his translations of the leading European medical writers of his age gave to English doctors for the first time a comprehensive body of medical literature in their own tongue which represented the best contemporary authorities.’

Culpeper’s conflict with the Royal College of Physicians is well documented,

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and it has been suggested that he ‘abused the College of Physicians beyond the limits of decorum but in a country politically divided they were on different sides, where each gave as good as it got.’\textsuperscript{582} Although ‘Most of the publications bearing Culpeper’s name as author or translator appeared after his death’, all but one of the texts studied within this chapter fall within his lifetime (1616-1654), and the 1702 edition adds additional detail but is comparable to the previous versions.\textsuperscript{583} His status as a ‘good classical scholar and always an avid student’ presents an interesting opportunity to explore the conjunction between a desire to ‘present the public with the “whole body of Physick” in the English tongue’, and an approach based upon classical learning.\textsuperscript{584}

A similarly experienced medical empiric, also in conflict with the Royal College of Physicians, William Salmon (1644–1713) ‘drew most of the information he incorporated into his writings from his extensive personal library. Indeed there is little evidence that he made any original contribution to medical knowledge.’\textsuperscript{585} He ‘entered the world of learning despite beginning as an assistant to a mountebank’, and alongside several other works, he ‘edited and translated at least portions of \textit{Pharmacopoeia Londinensis} (1678, 1682, 1685, 1691, 1696, 1707, 1716).’\textsuperscript{586} Two editions of this text are addressed within this chapter to reinforce the more popular approach exemplified by Culpeper, and the relationship between these texts and those of the Royal College is particularly illuminating regarding the broader influences on their content, especially given the tension that existed between them.

\textbf{General references to Galen in popular translations of the Pharmacopoeia}

There are many more specific references to Galen within the popular translations of the \textit{Pharmacopoeia} than there are in the translations linked to the Royal College of Physicians. Additionally, of the numerous mentions of Galen in the popular editions, a notable selection includes theory associated

\textsuperscript{583} Ibid., p. 160.
\textsuperscript{584} Ibid.
with Galen, which is not evident in the Royal College translations. The more overt reverence for Galen within the popular translations can be seen in an aside included within Nicholas Culpeper’s *Pharmacopoeia Londinensis* from 1702, which, under a discussion on the use of ‘Acetum Scillicum. 45. Or, Vinegar of Squills’ says:

[…] though a Man be never so *licentious in diet [* I would not have Galen’s Judgement tried in this particular, it is far safer to take it upon his word] he shall feel no harm […]. We should never have done if we should reckon up the particular benefits of this Medicine: Therefore we commend it as a wholesome Medicine for soundness of the body, preservation of health, and vigor of mind. Thus *Galen*. 587

Here, the implication is that it is unsafe to deviate from Galen in this instance, and the authority provided by his name is again highlighted by the further reference at the end of this entry.

The use of ‘Thus Galen’ is evident periodically throughout Culpeper’s editions of the *Pharmacopoeia*, but does not appear in either the ‘official’ editions examined, or in the versions by William Salmon that were studied. For example, in *A physicall directory* (1649), under the entry relating to ‘a Andromacus his Treacle’ Culpeper suggests that ‘it provokes the terms, brings forth both birth and afterbirth, helps pains in the joints, it helps not only the body but also the mind, as vain fears, melancholy &c. and is a good remedy in pestilential feavers Thus *Galen*. 588 This illustrates the importance of the association with Galen, and implies that Culpeper valued the inclusion of this reference in order to reinforce the authority of his own comments. The same passage, and allusion to Galen, also occurs within the 1702 edition of Culpeper’s *Pharmacopoeia Londinensis*, and although the pagination, and arrangement of the text is different, the wording is identical: ‘The virtues of it are: It […] helps pains in the joints, it helps not only the Body, but also the mind, as vain fear Melancholy, &c.


588 N. Culpeper, *A physicall directory or a translation of the London Dispensatory* (London, 1649), p. 113 and 184. (Note: these pages are consecutive, but the page numbers are not in this edition). The superscript ‘a’ within the title of this entry refers to a comment in the margin: ‘*a* This is that which commonly is called Venice-treacle.’
and is a good remedy in Pestilential Fevers: Thus Galen. Here, Culpeper reinstates the Latin title of the substance alongside the English name: ‘Theriaca Andromachi. 108. Or Venice Treacle’ and had also changed the capitalisation of various words. This suggests that although an editing process had occurred, the reference to Galen was retained, and therefore continued to have a role within the concise entry for this substance.

The importance of a connection to Galen with regard to this substance can again be seen in 1716, within the work of William Salmon. Here, Salmon includes the ‘College’ recipe for ‘25. Theriaca Andromachi, Venice Treacle, or Treacle of Andromachus’ within his section ‘Of Electuaries.’ His only comment regarding this substance is: ‘(Salmon) The Virtues and Dose are exactly the same with Mithridate, at sect. 20. but this is accounted somewhat the better Medicine. This is almost Word for Word with that in Galen, á. Περί Άντιδότων, composed first by Andromachus Neronis Medicus.’ This is significant as it shows Salmon’s use of Galen as an authority to underline both the longevity and effectiveness of this remedy. Salmon reinforces his assertion that the recipe appears almost unchanged since Galen’s version by including a phrase in Greek to suggest its originality. Similarly, he further highlights the authority of Galen by showing that this version is ‘the better Medicine’.

There are several instances of the use of Greek in Salmon’s text which are associated with Galen, and these often convey a sense of authenticity to the information they are linked to. For example, in his section ‘Of Pouders’, Salmon discusses ‘Diaspoliticum, the Egyptian Confect’, saying that: ‘It takes its name from Diospolis a City in Egypt, and is described by Galen δια ύγιειών.’ Here, the use of Greek to indicate Galen’s work De Sanitate Tuenda (On the Preservation of Health) provides a sense that Salmon was referring to an authentic Galenic source, and suggests that the reader would recognise the value of this information, whether or not they were able to read it and locate the reference. Similarly, the inclusion of this citation demonstrates the authority of

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591 Ibid.
592 Ibid., p. 561.
Galen in relation to this substance, as it appears within a relatively short comment by the author alongside more practical information such as the uses of the remedy, dosage, and instructions for consumption.

In addition to the use of Greek to show Galen as an authority in relation to specific substances, there are also examples of the importance of showing Galen as the original author of a recipe or remedy, which was also evident in the translations of the *Pharmacopoeia* by the Royal College of Physicians. This can be seen in both the 1653 and 1702 editions of Culpeper’s work, *Pharmacopoeia Londinensis*, and appears under the entry for ‘*Pilulæ Scribonii*’: ‘A. It is apropiated to such as have Phtisicks, and such as spit blood, but ought to be newly made, a scruple is sufficient taken going to bed. Galen was the Author of it.’

Here, the ‘A’ indicates that this is an addition to the text of the College’s *Pharmacopoeia*, and shows Culpeper providing further information, which includes attributing the recipe to Galen. It is significant that although this substance also appears in *A physicall directory*, the 1649 edition of Culpeper’s text, this is the only edition of the three that shows it under the main section of ‘Pills.’ Both the 1653 and 1702 editions list this entry within a segment of the text designated as: ‘The Pills left out by the Colledg in their New piece of Wit, are these.’ This suggests that, according to Culpeper, this substance, and its association with Galen, had been removed from the official *Pharmacopoeia* between the 1649 and 1653 editions of Culpeper’s translation.

Turning to the Royal College of Physicians’ *Pharmacopoeia*, ‘*Pilulæ Scribonii*’ appears in the ‘Index Compositorvm’ of the 1639 edition, and the entry for the substance within the text lists the ingredients in Latin, exactly as it is shown in Culpeper’s English translation. This indicates that in 1639, the substance remained part of the official *Pharmacopoeia*, but was subsequently removed.

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Accordingly, the substance does not appear in the ‘Index Remediorum’ of the 1650 or 1651 publications of the official *Pharmacopoeia*, or in the next significant new edition in 1677.\textsuperscript{597} This shows that Culpeper was likely to be referring to these editions (excluding the subsequent 1677 version) as the College’s ‘New piece of Wit’ which excluded ‘*Pilulæ Scribonii*’.\textsuperscript{598}

Despite retaining certain substances removed from the official *Pharmacopoeia*, Culpeper otherwise endeavours to show the relationship between his text and that of the Royal College of Physicians. This can be seen throughout Culpeper’s *Pharmacopoeia* by the way in which he labels each recipe as that of the College, and clearly denotes which are his additional notes and comments. Similarly, he also periodically refers directly to the official *Pharmacopoeia*, for example by showing the location of a substance within the College’s text: ‘*Diatron Pipereon*. Page 94. in the Latin Book.’\textsuperscript{599} Culpeper follows this statement with the College’s recipe for the substance, and his own comments on the remedy. As Culpeper indicates, the entry is indeed found on page 94 of the Latin edition of the *Pharmacopoeia* (1650) and appears alongside the three other substances that he shows are on this page.\textsuperscript{600} The recipe provided in the Latin edition is the same as the one that Culpeper provides in his English translation, and the comparison illustrates that he is clear in showing which additions are his own, as the Royal College version shows no information other than the recipe.

It is also important to note that in an earlier edition of the official *Pharmacopoeia*, the 1639 fifth edition, this substance is entitled ‘Species Electvarii Diatron Pipereon, *Galen*’ and the entry includes additional information on preparation that does not appear in the pared down version in


\textsuperscript{600} Royal College of Physicians of London, *Pharmacopoeia Londinensis collegarum hodie viventium studiis ac symbolis ornator* (London, 1650), p. 94.
the 1650 edition.\textsuperscript{601} This is significant as it illustrates Galen was more prominently linked to the remedy in 1639 than in 1650. However, the association with Galen was not entirely removed by 1650, and Culpeper explains the nature of the connection:

\textit{Culpeper.} A. It heats the stomach and expels wind. Half a drachm in poudre, or two drachms in Electuary (for so Galen who was Author of it appoints it to be made with clarified Honey, a sufficient quantity) if age and strength permit; if not, half so much, is a sufficient dose, to be taken before meat, if to heat the stomach and help digestion; after meat, if to expel wind.\textsuperscript{602}

Here, Culpeper indicates that Galen was the author of the recipe, and suggests the way in which Galen intended it to be taken. This is important as it shows that Culpeper valued this association with Galen, and that the authority it provided was significant enough to retain the reference.

The desire to highlight a link to Galen can again be seen in Culpeper’s text, as part of his comment on ‘Eclegma of Squils. Mesue.’\textsuperscript{603} As can be seen here, the title of the remedy appears to attribute it to Mesue, however, Culpeper argues that this was not the case:

A. And my Descant upon it was this, A. How the name of Mesue came to be obtruded upon this Receipt I know not; this I am confident of, Galen was the Author of it, neither is it probable the Colledg would have given the name of Eclegma, but Lohoch, had it been the Receipt of an Arabian; neither can it be the Printers fault, for he vapors at the latter end of the Book, that he hath made none, and he hath done it in English, that the vulgar may understand THAT in the Book, though nothing else.\textsuperscript{604}

\textsuperscript{603} Ibid., p. 117.
\textsuperscript{604} Ibid.
This again shows Culpeper's willingness to question the official *Pharmacopoeia*, and to add his own thoughts and evaluation of the substances that were included. Additionally, it illustrates the importance that Culpeper ascribed to establishing authorship of particular recipes, and underlines a sense that clarity and the ability to trace the history of a remedy was seen as significant.

The role of Galen and the authority provided by the continuity of this connection is further highlighted within Culpeper’s comments regarding *Eclegma of Squils. Mesue.* Here, he provides more detailed information than for other substances, indicating his position on the uses and effects of the remedy:

> [...] A. For the vertues of it see Vineger of Squils, and Oximel of Squils, only this is more mild, and not so harsh to the throat, because it hath no Vineger in it, and therefore is far more fitting for *Asthames*, and such as are troubled with difficulty of breathing, it cuts and carries away humors from the breast, be they thick or thin, and wonderfully helps indigestion of victuals, and easeth pains in the breast; and for this I quote the Authority of *Galen*. Alwaies take this as a general Aphorism in Physick, *Sour things are offensive to the wind-pipe*.605

The tone of this reference to Galen suggests that Culpeper saw it as reinforcing his own view of the virtues of the remedy and providing evidence for the assertion that this iteration of the substance was milder than others. It is significant that Culpeper explicitly refers to the authority of Galen, as well as associating this with the general ‘aphorism’ that is mentioned. This implies that Culpeper was keen to highlight Galen as an influence, and shows that this influence extended to medicine to a broader extent than simply the origin of a recipe.

The relevance of Galen can also be seen through the inclusion of this association in both the 1649 and 1702 editions of Culpeper’s text in addition to

the 1653 edition.\textsuperscript{606} Here, the pagination and placement of the recipe is different across all three editions, and especially between the 1649 and subsequent 1653 and 1702 editions, where the latter are more similar to each other, and have a more common spelling of ‘Galen,’ whereas the 1649 edition uses ‘Gallen.’\textsuperscript{607} These differences suggest that despite editing, the references to Galen were retained, and thus continued to be seen as relevant to the entry. This can also be seen through following Culpeper’s suggestion ‘For the vertues of it see Vineger of Squils,’ which further illustrates the role of Galen in relation to these substances: ‘A. Although they say they borrowed the receipt of Mesue, yet be pleased to accept the Vertues of it from Gallen.’\textsuperscript{608} This follows immediately after the recipe in the 1649 edition, but does not appear in the 1653 or 1702 versions. As mentioned above, the entry for ‘Vinegar of Squils’ in the 1702 edition includes the comment ‘Thus Galen’ which replaces the initial allusion to Galen present in 1649.\textsuperscript{609} This aspect is similar in the 1653 iteration, and all three retain the reference to adhering to Galen’s judgement (also mentioned above), although in different locations: 1649, and 1653 as a note in the margin; 1702, integrated into the text.\textsuperscript{610}

Although variation therefore exists in the way in which Galen is incorporated into the comments regarding this remedy, it is evident that his influence is nonetheless important, and continued to be included in the entry. Additionally, Culpeper prioritises the role of Galen over that of Mesue, making sure to correct the Royal College of Physicians’ mistaken attribution of the substance to Mesue, and to highlight that the ‘true’ authority on the remedy is Galen. This again underlines the perceived importance of establishing a continuity of influence over time, and to show the process by which a remedy had reached the period concerned.


\textsuperscript{607} N. Culpeper, A physicall directory or a translation of the London Dispensatory (London, 1649), p. 142. This edition also has a shorter comment by Culpeper, excluding one paragraph that appears in the 1653 and 1702 editions.


The connection between Galen and ‘Vinegar of Squills’ is also evident within the 1716 edition of William Salmon’s Pharmacopoeia, which shows the continuation of this association until at least that time. Under the entry for ‘Acetum Scilliticum, Vinegar of Squills’ Salmon includes the College’s recipe, which is essentially identical to Culpeper’s version, and, as in Culpeper’s text, follows this with a comment on the substance: ‘Salmon.) Galen commends this Medicament to be very wholesome, and that it preserves the Body sound and healthful to extream Old Age. [...] Take from one to 3 or 4 Spoonfuls in a Morning fasting, and walking a while after it.’\(^6\) This comment bears a striking similarity to Culpeper’s views on the remedy, which says: ‘Culpeper] A. A little of this medicine being taken in the morning fasting, and walking half an hour after, preserves the body in health, to extream old age [...]’.\(^7\)

Although Galen is frequently shown as the source of particular remedies and mentioned as an authority in popular translations of the Pharmacopoeia, there are also examples of criticism of Galen, or differences between the early modern and classical views of a remedy or substance. This can be seen in Culpeper’s work A physicall directory (1649) within his section on ‘Roots’ which includes an entry entitled: ‘Dauci. Of Carrots.’ Here, Culpeper says: ‘Of Carrots, are moderately hot and moist, breed but little nourishment and is extream windy, I omit what vertues Gallen writes of them, as being confident there was such a difference between them that our Carrots wil l never answer those effects.’\(^8\) The implication is therefore that Galen’s opinion is not relevant in this situation. Instead, Culpeper indicates that Galen was correct within the context of his own time, and that subsequent factors had affected the information supplied, rather than the quality of the original information being inadequate. Similarly, the inclusion of the reference does suggest a degree of authority, and in mentioning Galen at all, Culpeper implies that the association here would perhaps be expected, and therefore that a reason needed to be provided to explain the omission.

\(^6\) W. Salmon, Pharmacopœia Londinensis: or, the new London dispensatory (London, 1716), p. 505.  
By 1653 this particular entry is punctuated and capitalised differently, but is otherwise identical to the 1649 version, with the exception of a short addition at the end of the paragraph: ‘our Carrots will never answer those effects, or if any do, ‘tis the wild kind.’ This suggests that although modifications had been made to the text, the connection to Galen remained, and that the potential difference of opinion that was highlighted in 1649 had been moderated by 1653 to show that Galen was not necessarily incorrect, and that there was an instance in which his advice would still be relevant.

This view can again be seen within Culpeper’s section on ‘Roots’ as part of a discussion regarding ‘Poligonati, sigilli Solomonis &c. Of Solomons Seal.’ Here, Culpeper illustrates an example where his own perspective varies from that of Galen and Dioscorides, and explains the reason for the difference of opinion:

Let it be no dishonor to *Gallen* nor *Dioscorides* that English men have found out in late daies that these roots may safely be given inwardly, Intruth they may be excused if the difference of the climates they and we lived and now live in be but considered, neither I hope will my country men blame me for following only Dr. *Experience* in the vertues of this root, stamped and boyled in wine it speedily helps (being drunk I mean for it will not do the deed by looking upon it) all broken bones, it is of an incredible vertue that way, as also being stamped and applied to the place, it soon heals all wounds, and quickly takes away the black and blew marks of blows, being bruised and applied to the place, and for these, I am perswaded there is not a better medicine under the Sun, or as *Copernicus* and *Kepler* will have it, above the Sun.

This entry is essentially identical in the 1653 and 1702 editions, and shows a degree of debate regarding the use of Galen and other classical influences in the practical deployment of a specific remedy. Here, the variation between

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opinions is significant. Culpeper suggests that according to Galen it was unsafe to utilise this substance internally; however he describes how it can be used within the body, and says that it ‘is of an incredible vertue that way.’ Although the difference between these perspectives is important, Culpeper also justifies the reason for this by underlining that differences in climate, both due to the time period and physical locations of Galen and Dioscorides, would have affected their interpretations of the virtues of the substance. Additionally, it is important to note that Culpeper also says: ‘neither I hope will my country men blame me for following only Dr. Experience,’ which implies that experience alone was perhaps not seen as sufficient endorsement for a remedy or practical technique, and as such that the influence of an ancient authority was a significant part of the advice that Culpeper provided.

There are also examples of Culpeper criticising Galen more overtly, showing a less understanding attitude towards differences between their opinions. This can be seen within Culpeper’s section ‘SPECIES OR Pouders’ which includes an entry for ‘Diacalaminthe Simple. Page 89. in the Latin Book.’ This does appear on page 89 of the Royal College of Physicians’ Pharmacopoeia, and the Latin recipe there is identical to the English translation Culpeper provides in his text.

The comment that Culpeper makes in relation to this remedy begins: ‘Culpeper] A. It heats and comforts cold bodies, cuts thick and gross flegm, provokes urin & the terms in women. I confess this differs somthing from Galen, but is better at leastwise for our bodies in my opinion than his.’ Here, Culpeper highlights the variation between his perspective and Galen’s, and shows that even in disagreeing with Galen it was seen as appropriate to illustrate the difference of opinion. However, within this statement it is not clear whether Culpeper is suggesting that the recipe differs from Galen, or that the uses and virtues of the remedy are more positive in Culpeper’s view than in Galen’s. This ambiguity implies either that the early modern reader would perhaps have known where the inconsistency between Culpeper and Galen lay,

618 Ibid.
or that the specifics of the disagreement were of secondary importance to showing reverence for the authority of Galen, and to showing awareness of areas of debate.

Whilst this shows a relatively restricted criticism of Galen, in that it ultimately suggests only a difference of opinion, Culpeper also occasionally includes a more negative assessment of Galen and the knowledge that his work provided. This is evident under his section entitled: ‘Some Waters kind country men, the Colledg have plaid the men and left out in their new Dispensatory, which were in their old one; and they are these.’\textsuperscript{621} Here, the substance ‘Mathiolus, his Bezoar Water,’ is included with the comment:

\begin{quote}
A. For my own particular part, thus much I can testifie by experience in the commendations of it; I have known it given in acute, in peracute feavers with gallant success, and also in Consumptions, yea, in Hecticks, and in Galens supposed \textsuperscript{k} incurabe Marasmos, neither hath it missed the desired effects [...].\textsuperscript{622}
\end{quote}

The superscript ‘k’ within the text refers to a note in the margin, and this further highlights Culpeper’s criticism of Galen: \textsuperscript{1k} Which had it bin so, my self had not been alive to have written this Book.\textsuperscript{623} The implication is therefore that Galen was incorrect regarding the incurable nature of ‘Marasmos’ and the use of the word ‘supposed’ suggests the extent to which Culpeper discounted Galen’s information. However, including evidence as a note in the margin to reinforce his experience of a curable ‘Marasmos’ illustrates that Culpeper perceived a need for this additional information in order to justify the advice to disregard Galen’s view. Philip van der Eijk suggests that for Galen, ‘marasmos’ was the ‘inevitable process of wasting away [...] brought about by cooling and drying and ultimately ending in death.’\textsuperscript{624} This process, associated with ageing, implies

\textsuperscript{622} N. Culpeper, \textit{Pharmacopoeia Londinensis, or, The London dispensatory} (London, 1653), p. 68. Under his section on ‘Parts of living creatures and excrements,’ Culpeper also mentions ‘Cocks stones’ as being ‘admirable good in Hectick feavers, and (Galens supposed incurable) Marasmus, which is a consumption attending upon a Hectick feaver’ (p. 31).
a more nuanced interpretation of the term than Culpeper attributed to Galen, and van der Eijk also alludes to Galen’s point that: ‘this process can nevertheless be regulated and made as agreeable as possible by a range of dietary measures […] thus enhancing people’s quality of life and allowing some to reach a very advanced age.’⁶²⁵ This suggests that Culpeper’s evidence for disregarding Galen in this instance is not necessarily incompatible with Galen’s own view on the process, and as such that his understanding of Galen was perhaps inconsistent.

Although direct criticism of Galen is unusual in Culpeper’s text, as has been demonstrated, the use of comparison to show a difference of opinion can be seen in several examples. This is similarly evident within William Salmon’s *Pharmacopoeia*, which occasionally includes a comment on the information provided by Galen. As part of his section ‘Of SALTS,’ Salmon includes an entry for ‘53. Of crude or unprepar’d Vitriol’ which contains a relatively lengthy comment on the substance, part of which suggests that: ‘All Vitriol is hot, dry, and astringent, it kills Worms, provokes vomiting, (tho’ Galen says it stops it) cures the Leprosy, and all external Breakings out […]’.⁶²⁶ This is important as it shows a clear, and seemingly quite fundamental, difference between Salmon’s perspective on the uses of the substance, and the view that he attributes to Galen. Here, the inclusion of the reference to Galen suggests that his authority was seen as relevant in this instance, but that the significant nature of the conflict in advice was less important than the broader allusion to Galen and the influence of his work.

The more popular translations of the *Pharmacopoeia* include significantly more specific references to Galen than are found within the editions linked to the Royal College of Physicians, and these references also occasionally discuss theoretical points associated with Galen, not found within the Royal College translations. The importance of a connection to Galen can be seen throughout these works, particularly with regard to notable remedies such as theriac. Galen is utilised as an authority to reinforce the qualities and efficacy of a substance,

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and the inclusion of information to present him as the original author, or to suggest that the recipe had remained unchanged since Galen’s time, underlines the importance of his influence. The value ascribed to an association with Galen also highlights the role of establishing a continuity of influence over time, and shows a sense that clarity and the ability to trace the history of a remedy was seen as significant. The position of authorship within this process is also key, and is a facet that is also reflected within the Royal College translations of the *Pharmacopoeia*. Contrastingly, some criticism of Galen is also included; however, he is often shown to be correct within his own time, or the criticism is placed within the context of broader differences between early modern and classical views of a substance or approach.

**Galenic substances: 1618 and beyond**

The role of Galen, and the level of influence that is evident within the various editions of the *Pharmacopoeia*, fluctuates over time, as well as according to the type of edition or translation. The substances associated with Galen as an authority in the 1618 Latin edition of the Royal College's *Pharmacopoeia* alter through subsequent editions, and whilst some remedies are removed altogether, those that remain demonstrate the variation in the importance ascribed to Galenic influence in relation to specific substances or recipes. Galen is referred to within eight of the approximately twenty-four main chapters within the 1618 edition of the *Pharmacopoeia*, and these references serve as a marker from which to assess subsequent allusions to Galenic influence.\(^{627}\)

*‘Vina Medicata’ (Medicated wines)*\(^{628}\)

The first entry within the 1618 edition of the *Pharmacopoeia* which associates Galen with a particular substance by using his name in the title of the remedy is: ‘Vinum Scilliticum. Galeni.’\(^{629}\) This appears as the third item under ‘Vina Medicata’ (medicated wines) and provides the ingredients and method for producing the remedy:

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\(^{627}\) The eight sections which contain a reference to Galen are: ‘Vina Medicata’ (Medicated wines); ‘Syrupi’ (Syrups); ‘Species sive Pulveres’ (Species or Powders); ‘Electuaria’ (Electuaries); ‘Pilulæ’ (Pills); ‘Trochisci’ (Troches, or pastilles); ‘Ungueta’ (Ointments); and ‘Emplastra et Cerata’ (Plasters and Wax plasters).


\(^{629}\) Ibid., p. 15.
Scillæ albæ montanæ circiter Canis ortum collectæ in laminas concisæ, libram unam. Per dies decem in umbra refrigerâ, deinde scillæ laminas refrigeratas in vitreum vas mitte, & super-infunde vini albi veteris sextarios duodecim, & suspensum, vas per dies quadraginta habeto, postea scillam exime, & abijce. 630

The English translation of this recipe which John Quincy includes in *The dispensatory* of 1721 no longer retains the reference to Galen, but details the ingredients and method of production: ‘Vinum Scilliticum. Squill Wine. Take one Pound of white Squills divided and dried; put them into a Glass Vessel, and pour upon them of old French white Wine eight Pints; let them macerate fourteen Days, and then strain off the Wine for use.’ 631 This is the section of the entry that is shown to be from the *Pharmacopoeia*; however a comment by the author is also included, indicating that: “This was before ordered to stand in Infusion double the time, which was liable to dissolve the Squills so much as to make the Wine too slimy for use.” 632 This highlights one particular inconsistency between previous versions of the recipe and the one provided in this volume, and whilst Quincy’s translation differs from the Latin original in some respects, it retains the majority of the key instructions and components. However, it is likely that Quincy was following a Latin version that was published more recently than 1618, to reflect the most current edition that was available. As such, examining the 1721 Latin edition of the text illustrates a recipe for ‘Vinum Scilliticum’ which is essentially identical to Quincy’s 1721 English translation: ‘Rad. Scillæ albæ in Laminas concisæ, & exsiccatæ libram unam. Mitte in vitreum vas, & super infunde Vini albi veteris Gallici libras octo. Macerentur per quatuordecim dies, deinde coletur Vinum.’ 633 Here, ‘Rad.’ Refers to the root (Radix) of the Scilla, as can be seen in the ‘Catalogus

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Simplicium Officinalium’ under ‘Vegetabilia’ which shows that this is the only part of the plant to be used.\textsuperscript{634}

The changes between the 1618 Latin edition and the 1721 versions in Latin and English translation show an evolutionary process over time, and whilst the recipe itself remains relatively unchanged, several details are different, including the removal of the reference to Galen. For example, the ‘old French white Wine’ that Quincy lists, is present in the 1721 Latin edition (‘Vini albi veteris Gallici’), but not in 1618, which simply suggests that the wine should be old and white, but does not mention that it should be French.\textsuperscript{635} Similarly, both the amount of each substance, and the length of time that the mixture should be left before use also differ between the earlier and later editions. All three recipes call for one pound of white squills, but in 1618, the direction is to add twelve pints of the wine (‘sextarios duodecim’) whereas by 1721, this has reduced to eight pounds (‘libras octo’).\textsuperscript{636} Quincy illustrates in the introduction to his text that pints and pounds are interchangeable: ‘A Pound, which in English we call a Pint, is used in measuring Wines, and is always understood, when we speak of Wines or aqueous Liquors’ and this is evident in his translation of this entry, where he uses ‘Pints’ as the measurement.\textsuperscript{637} Similarly, the 1618 version instructs that the mixture is left for forty days (‘per dies quadraginta’), whilst both 1721 editions indicate it should be left for fourteen days (‘per quatuordecim dies’).\textsuperscript{638} These variations illustrate a degree of change over time, and show a process of incremental modification, rather than a significant and deliberate rejection of past methods. The alterations perhaps reflect the effect of experience, or the perpetuation of an error in copying or translation, and as such the removal of


\textsuperscript{637} J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), unnumbered page, two pages prior to page 1.

the association with Galen does not necessarily suggest a broader rejection of his ideas and authority.

It is also significant that this substance does not appear at all within the Latin edition of the *Pharmacopoeia* published in 1746. In this edition, there is an entry for ‘Scillæ Coctio’ and ‘Scillæ Exsiccatio’ in the index, neither of which corresponds to the ‘Vinum Scilliticum’ of the 1618 edition. Accordingly, the English translations of the same year, *The dispensatory of the Royal College of Physicians* and *The new dispensatory of the Royal College of Physicians*, both omit the substance, but *The dispensatory* retains the reference and corresponding entries for ‘Squills, the Baking them, the Drying them’ which is a direct translation of the 1746 Latin edition, and *The new dispensatory* contains ‘Squills their Exsiccation, their Vinegar’ which differs from the 1746 Latin version by including a recipe for the vinegar, but removing the ‘baking’ recipe. This again highlights the role of gradual change over time, and the way in which different substances, references and recipes were included and excluded from the various editions of the *Pharmacopoeia*, reflecting various influences on the content.

This is especially important to note with regard to the popular translations of this particular entry. In Nicholas Culpeper’s text, the substance appears within the section at the end of the text entitled: ‘A catalogue of the compounds in the order they are set down in every Classes.’ Here, it is listed under ‘Physical Wines’ and is shown as ‘Galen’s wine of Squills.’ This refers to the page containing the recipe for the substance, and also clearly associates the remedy with Galen. Although in the text itself, the spelling of Galen and squills differs, the entry is nonetheless present, and retains the reference to Galen: ‘Gallens

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642 Ibid.
Wine of Squils. Culpeper’s translation bears a stronger resemblance to the 1618 Latin edition than later ones, and retains certain elements that had been removed from the Latin version by 1721. For example, he preserves the references to ‘white Squills of the mountains’ (‘Scillæ albæ montanæ’), the ‘twelve sextaries of old French Wine’ (but adding the instruction for ‘French’, not present in 1618), and to ‘let it stand so forty dais’, as is recommended in 1618. This illustrates that developments over time did not necessarily consist of increasing divergence from the original 1618 edition, and that different translations retained different aspects of this Latin text.

The comments that Culpeper provides relating to the substance and the way in which the Royal College of Physicians advises it to be made are significant in showing how he viewed the College, and the information it provided in the Pharmacopoeia. It also depicts Culpeper’s perspective on the role of tradition and the process by which a recipe had changed over time, as well as showing the range of influences that affected his text. The initial part of the comment focuses on the instructions provided by the College, which Culpeper criticises by declaring that: ‘If admiration were not the daughter of ignorance I should most assuredly have admired at two things in this recept.’ This underlines that despite including the recipe essentially as stated by the College, there were aspects of the instruction that were unclear to Culpeper, or that provided an opportunity to illustrate his own learning and experience. This can particularly be seen in the first of the ‘two things’ that he highlights as questionable in the recipe:

1. At the time of gathering this same Squil, It seems the whol Colledg laid al their learned heads together to hammer out the time when this Squil must be taken out of the earth, & the result of their consultations was, That it must be gathered [circiter Canis ortum] about the rising of the Dog-star, but which of the two Dog-stars they mean, whether Syrius or

Procyon, or what rising of either, whether Cosmical, Acronyct, or Heliacal, I know not, nor I think themselves neither, a child in Astronomy cannot chuse but smile at their learned ignorance. It seems they well observe that excellent maxime of Hippocrates, in his Praefat ad Astron nemo debet &c. No man ought to commit his life into the hands of that Physitian who is ignorant of Astrology because he is a Physitian of no value. Indeed the truth is, the roots are brought to us from beyond sea, and we must be content with such as we can get.

Here, the substance of Culpeper’s criticism is effectively rendered irrelevant by the suggestion that the supply of squills was determined by the product that arrived from abroad, and as such that instructions for gathering were not significant in terms of the production of the remedy. However, this passage provided Culpeper with an opportunity to illustrate the disparity between the College’s astronomical knowledge and his own, whilst also offering the reader evidence that he had consulted the Latin edition, in the form of a quote from 1618. This display of the influences that contributed to the production of the text can also be seen in the inclusion of a specific reference to Hippocrates, which suggests that Culpeper drew from a range of sources in constructing his dispensatory.

The comment on this entry also further discusses the intricacies of the recipe provided by the College, but again, Culpeper uses it to make a wider point regarding the role of tradition in contemporary remedies:

It seems somthing strang to me why this Squill must be dried in the shaddow, In truth I cannot but wonder at the folly not only of the Physitians of our times, but also of the ancient, who build their faith upon tradition, though as opposite to the truth as the East is to the West […]. doth noth not Experience (a master worth ten of Tradition) teach that the hotter Sun the Hay is dryed in, the more vertue is in it?

647 Ibid., p. 95-96.
The implication is therefore that current experience provides a stronger foundation on which to base certain practices, however in mentioning the role of ‘the ancient’ Culpeper also underlines the importance of the past, and illustrates that he viewed ancient practitioners as acting in a comparable way to ‘the Physitians of our times.’  

The remainder of the particularly lengthy comment which Culpeper provides for this remedy addresses the role of Galen in the construction and use of the substance. The origin of the recipe is clearly linked to Galen through the phrase: ‘Now a word or two to the vertues, according to Gallen, from whom this recept was taken.’ This is followed by the uses and consequences of using the remedy, which again is attributed to Galen: ‘It conduceth wonderfully to health, for it attenuateth the humours […], it is given with good successe to such as have the gout, or the falling-sicknesse, thus Gallen.’ Here, the implication is that the advice and uses are directly attributable to Galen, and as such that his authority was significant in both recommending the circumstances in which to deploy the remedy, as well as the recipe for its preparation. However, whilst Culpeper highlights the role of Galen in this way, he is also critical of the College’s precise use of the Galenic recipe: ‘It is true our Physitians have written the recept verbatim out of Gallen, but yet me thinks they who boast they have taken so much pains in compiling this book, might have taken a little more, to have corrected the Authors failings.’ This suggests that in copying the recipe directly from Galen without altering it to reflect more modern ideas, Culpeper viewed the College as inadequate in the production of their Pharmacopoeia. It is also significant that he underlines ‘the Authors failings’ which shows that criticism of Galen in this way was not seen as inappropriate, and again that utility and experience were key influences in Culpeper’s view of how this type of text should be constructed.

The recipe for this substance also appears in William Salmon’s Pharmacopoeia as ‘Vinum Scilliticum, Wine of Squills’ and the recipe, shown as taken from the

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649 Ibid.
650 Ibid.
651 Ibid.
652 Ibid.
College, contains varying elements from each of the versions mentioned above, but no instructions or ingredients that are different entirely.\textsuperscript{653} This shows that although Salmon provided a version of the recipe that reflected an amalgamation of different characteristics, it remained within the framework of the existing recipes, and therefore also ultimately referred to the version attributed to Galen. The entry itself does not mention Galen, and this is also reflected in the index, which lists the substance as ‘Wine of Squills.’\textsuperscript{654} Similarly, the comment that Salmon provides to illustrate the uses and virtues of the remedy also deviate in come respects from the list that Culpeper shows as originating from Galen, however, many of the attributes are shown to be similar.

\textit{‘Syrupi’ (Syrups)}\textsuperscript{655}

The second entry within the 1618 edition of the \textit{Pharmacopoeia} that associates a particular substance with Galen is ‘Diacaryon, seu dianucum, Galeni.’\textsuperscript{656} This suggests two different names for the substance: ‘diacaryon’ or ‘dianucum’, but links both to Galen with the term ‘Galeni’. The entry appears within a section entitled ‘Melita & Oxymelita’ and comparison with John Quincy’s 1721 English edition of \textit{The dispensatory}, which provides the title of the section in both English and Latin, shows that this is ‘Honeys and Oxymels.’\textsuperscript{657} Although the substance is no longer present in 1721, and continues to be omitted in 1746 and 1760, this is perhaps an indication that the remedy was no longer perceived as useful or relevant, and as such had been removed as part of a gradual process over time.\textsuperscript{658} This is reflected by the increasing simplification of this particular section of the \textit{Pharmacopoeia}, which contained 17 separate entries in 1618, but by the time of Quincy’s 1721 English translation there are only 10 substances under this heading.

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\textsuperscript{653} W. Salmon, \textit{Pharmacopœia Londinensis: or, the new London dispensatory} (London, 1716), p. 500.\\
\textsuperscript{654} Ibid., p. 784.\\
\textsuperscript{655} Royal College of Physicians of London, \textit{Pharmacopoeia Londinensis in qua medicamenta antiqua et nova usitatissima} (London, 1618), pp. 23-46.\\
\textsuperscript{656} Ibid., p. 42.\\
\textsuperscript{657} J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), p. 60.\\
\end{flushright}
The exclusion of this remedy from later editions of the *Pharmacopoeia* is also reflected in later Latin versions. It does not appear in either 1721 or 1746, which shows that in this instance, translations were not used to make changes to the text.\textsuperscript{659} However, the importance of Galen in relation to this substance can be seen through the fact that his name remains linked to the substance in the ‘Index Compositorum.’\textsuperscript{660} This continued association suggests that the name was not only an indication of the origin of the remedy, but also had relevance in terms of the recognition or identification of the substance. ‘Diacaryon seu Dianucum Galeni’ as it is shown in the index therefore perhaps implied several features to a reader: authority; a sense of continuity with past practice; and a particular outcome or action within the body.\textsuperscript{661} As such, there is a sense that the association with Galen was part of the name of the substance, rather than simply a reference to its origin, and that it was required in order for readers to locate the substance in the index, and therefore the text itself, or to distinguish between other versions.

Although this substance does not appear in later translations by the Royal College of Physicians, it is retained in various popular editions of the *Pharmacopoeia*. This can be seen in Nicholas Culpeper’s 1649 edition, where it appears under ‘Syrups made with honey, and vinegar and honey’: ‘Diacaryon, Or Dianucum Gallen.’\textsuperscript{662} Here, Culpeper retains the name of the substance as it is given in the 1618 Latin edition of the *Pharmacopoeia*, including the alternative title, but separates the association with Galen, and removes it completely in the index: ‘Diacaryon.’\textsuperscript{663} This implies Culpeper intended to show that Galen was the source or original author of the remedy, rather than indicating that the word ‘Gallen’ was part of the substance’s name. Culpeper also includes a short comment with this recipe: ‘It is an excellent preservative in

\textsuperscript{661} Ibid.
\textsuperscript{663} Ibid., unnumbered page, third of the section ‘A catalogue of the compounds in the order they are set down in every Classes.’

\textsuperscript{661} Ibid.
\textsuperscript{663} Ibid., unnumbered page, third of the section ‘A catalogue of the compounds in the order they are set down in every Classes.’
pestilential times.\textsuperscript{664} This provides more information than was available in the edition by the Royal College, and suggests that the aims of Culpeper’s text lay in providing a comprehensive work, rather than a more concise reference text. The reference to this substance is still present in the edition of Culpeper’s text published in 1702; however, the title of the entry had been lengthened to: ‘\textit{Mel Nucum, alias Diacorion & Dianucum. 72 Or, Honey of Nuts.}’\textsuperscript{665} The comment provided also contains additional information, with the instruction ‘a spoonful being taken so soon as you are up’ being added to the previous remark.\textsuperscript{666} By 1702 the association with Galen is removed completely from this entry, both within the main text and the index.\textsuperscript{667} This is echoed within William Salmon’s popular translation of the \textit{Pharmacopoeia}, published in 1716, which includes an entry for ‘\textit{Mel Nuceum, alias Diacaryon, & Dianucum.}’\textsuperscript{668} The recipe closely resembles that of Culpeper’s text, and Salmon similarly disassociates Galen from the remedy.

Immediately following the recipe for ‘Diacaryon’ in the 1618 official \textit{Pharmacopoeia}, there is an additional substance which is attributed to Galen. The entry provides a recipe for ‘Dacodium Galeni’ and is shown in the index as ‘Diacodium Galeni.’\textsuperscript{669} This again suggests that the reference to Galen was significant in locating the substance in the ‘Index compositorum’ and also highlights that the spelling of the name of this remedy was not necessarily consistent. By 1650, the official Latin \textit{Pharmacopoeia} shows this substance under the broader heading of ‘Syrupi’ and the more specific heading ‘Syrupi Alterantes’ rather than within the sub-section ‘Melita and Oxymelita’ as in the

\textsuperscript{664} N. Culpeper, \textit{A physical directory or a translation of the London Dispensatory} (London, 1649), p. 131.
\textsuperscript{666} Ibid.
\textsuperscript{667} The relevant section of the index is missing from the digital copy available on Early English Books Online (EEBO) however an edition from 1695 shows the correct pages. This section of the index (‘A table of the compounds, in the order they are set down in every Class.’) is paginated differently, but contains the same substances in 1702 and in 1695, therefore it is possible to use this index to account for the 8 missing pages in the index of the 1702 edition, showing that the entry is: ‘\textit{Mel Nuceum, alias Diacaryon & Dianucum, or Honey of Nuts.}’ See N. Culpeper, \textit{Pharmacopoeia Londinensis; or, the London dispensatory further adorned} (London, 1695), unnumbered page, fourth of the section ‘A table of the compounds, in the order they are set down in every Class.’
\textsuperscript{668} W. Salmon, \textit{Pharmacopœia Londinensis: or, the new London dispensatory} (London, 1716), p. 533.
In 1650, it is entitled ‘Syrupus de Meconio, Sive Diacomium’ and whilst this suggests the addition of an alternative title, indicated by the use of ‘sive’ (‘or’), it also shows that the association with Galen is no longer in place. This is also reflected in the index, which lists the remedy as ‘Diacodium’, and also shows a separate entry for ‘Syrupus de Meconio’ which shows the same page number, illustrating that readers may use either name to locate the substance.

This suggests that by 1650, the link to Galen was no longer viewed as relevant to either the location or the use of this remedy, and despite a degree of fluidity in the nomenclature of the substance, the disassociation from Galen remained.

The official Latin edition of 1721 similarly shows both names within the text and the index, each slightly different, but neither referring to Galen. The text shows ‘Syr. De Meconio, sive Diacodion’ whilst the index lists ‘Syrupus de Meconio, sive Diacodium.’ This is reflected within the official English translation of the same year, and here John Quincy includes a reference to ‘Syrupus de Meconio, sive Diacodion. Syrup of Poppies, or Diacodium.’ Similarly, in the English translations of 1746 and 1760, the entries show minor differences in the format of names, but continue to leave the substance unattributed: ‘Syrupus è Meconio. Syrup of Poppies or Diacodion’ (1746) and ‘Syrupus e Meconio, sive Diacodion, Diacodion’ (1760). This change over time is also reflected in the popular translations of the Pharmacopoeia by Nicholas Culpeper and William Salmon. In 1649, Culpeper includes an entry for ‘Diacodium. Gallen’ but by 1702, this entry is more similar to the later official translations, including both the Latin ‘Syrupus de Meconion, sive Diacodium’ and the English ‘Syrup Meconium, or Diacodium.’ The title of this substance in Salmon’s text of 1716

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671 Ibid.
672 Ibid., unnumbered pages, second and sixth of the ‘Index Remediorum’ following p. 212.
674 J. Quincy, The dispensatory of the Royal College of Physicians in London (London, 1721), p. 44.
is also similar, showing it as: ‘Syrupus de Meconio, sive Diacodium, Syrup of Meconium’.\textsuperscript{677}

\textbf{‘Species sive Pulveres’ (Species or Powders)}\textsuperscript{678}

Following the initial substances present in the Latin \textit{Pharmacopoeia} that are associated with Galen, there are several other references distributed throughout the text, under varying chapter headings. Within the section ‘Species sive Pulveres’ (Species or Powders) of the 1618 edition, there are five substances that mention Galen. These also all appear within the 1649 edition of Culpeper’s \textit{A physical directory}.\textsuperscript{679} Here, Culpeper retains the association with Galen in reference to all five recipes, for example, ‘Diospoliticum, Galeni’ in 1618 remains ‘\textit{Diaspoliticum. Gallen}’ in 1649.\textsuperscript{680} However, whilst Culpeper continues to attribute these particular substances to Galen in the same way as the Royal College of Physicians, he also shows areas of disparity that had arisen over time. This is evident in his discussion of ‘\textit{Diacalaminthes Simplex. Gallen}’ which includes the comment that: ‘It heats and comforts, cold bodies, cuts thick and gross flegm, provokes urine and the terms in women, I confess this differs something from \textit{Gallen}, but is better at least wise for our bodies in my opinion than his.’\textsuperscript{681} Here, Culpeper illustrates that the recipe included in his volume produces a substance that is gentler to the patient than Galen’s version, although his tone suggests a degree of reverence for the authority of Galen, and a sense of justifying this change in recipe.

By 1695, Culpeper’s edition no longer contains references to Galen in relation to all five of these substances. All are still present in the edition, but only ‘\textit{Diacalaminth simpl.}’ and ‘\textit{Diatrion Piperion}’ retain an association with Galen,

\textsuperscript{677} W. Salmon, \textit{Pharmacopœia Londinensis: or, the new London dispensatory} (London, 1716), p. 525.


\textsuperscript{681} N. Culpeper, \textit{A physical directory or a translation of the London Dispensatory} (London, 1649), p. 151-152.
and both are evident within the comments relating to each substance. The part of the entry for ‘Diacalaminth simpl.’ that mentions Galen is identical to the comment made in 1649, and although some of the additional information is presented differently between the editions, the content is essentially the same. In 1649, Galen is associated with ‘Diatrion Piperion’ through the use of ‘Galeni’ in the title of the entry; however, by 1695 the association is solely within the comments relating to this substance. By contrast, it is the substances not associated with Galen in Culpeper’s text that are linked to him within William Salmon’s Pharmacopoeia, and although both ‘Diacalaminthe Simplex, Species of Calamint Simple’ and ‘Species Diatrion pipereon, a Confect of the three sorts of Pepper’ appear in the text, neither mention Galen.

Of the remaining three substances that mention Galen within this section of the 1618 Latin Pharmacopoeia, two are still clearly associated with Galen in Salmon’s editions of 1678 and 1716, and one is linked to Galen in a less direct sense. ‘Diospoliticum, The Egyptian Confect’ is shown in the comments as ‘described by Galen’ in both editions, whilst ‘Laetificans, Galens Pouder to make Merry’ connects the substance to Galen through the title. ‘Galen’s Pouder to make merry’ also appears in Salmon’s 1716 edition under an additional index section entitled ‘Some principal Errors of the College collected’ which lists substances that differ in this edition from the College’s version, and further information regarding the variation is provided within the entry for each remedy in the main body of the text.

682 N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 146 and 150.
687 W. Salmon, Pharmacopœia Londinensis: or, the new London dispensatory (London, 1716), unnumbered page, immediately following p. 796.
The entry which appears in 1618 as ‘Pulvis ad hæmorrhagiam, Galeni’ is shown by Salmon as ‘Pulvis Thuraloes, Pouder of Frankincense and Aloes’ but two fundamental ingredients are identical to between each version: frankincense and aloes. Although Salmon does not mention Galen in relation to this substance, his comment includes the statement that: ‘Here you have the use of the Medicine too; but ‘tis almost word for word (translation excepted) with Culpeper. This connects the substance to Galen in an indirect sense, as in 1649 Culpeper includes this remedy as: ‘A Pouder to stop blood. Gallen’ and in aligning his version with Culpeper’s, Salmon also suggests an implied association with Galen.

Although the 1618 Latin edition associates five substances with Galen under the heading ‘Species sive Pulveres’, this also changes in the different Latin editions over time. In the 1650 version, all of the same substances are present, but none of the five mention Galen. However, by 1721, ‘Diospoliticum Galeni’ is no longer included. Additionally, ‘Laetificans Galeno Adscriptus’ from 1618 is shown simply as ‘Lætificans’ in 1650, and whilst the ingredient lists remain extremely similar, the association with Galen is restored by 1721: ‘Pulvis Lætificans Galeni.’ The development of the Latin Pharmacopoeia is further illustrated by the fact that by the publication of the 1746 version, none of these five substances appear in the volume. Whilst this may be a reflection of changing naming conventions, the substances appear to have been entirely removed from the Pharmacopoeia, which is supported by the ‘Pulveres’ section in this edition being shorter than in 1618, 1650 and 1721.

The 1721 English translation of the Pharmacopoeia by John Quincy reflects the construction of the Latin version of the same year. Two of the five substances

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associated with Galen in 1618 are not included in the 1721 English edition ('Diospoliticum Galeni' and 'Pulvis ad Haemorrhagiam Galeni'). However, of the three substances which are present in the both the English and Latin editions of 1721, all are associated with Galen in English, but only one in Latin. ‘Pulvis Lætificans Galeni’ appears in the Latin text, and is provided with the subtitle: ‘Galen’s Cordial Powder’ in the English translation. Here, the connection to Galen is present within the name of the substance, suggesting that this was part of the way in which individuals were able to locate and utilise this particular remedy. This is reinforced by the appearance of Galen in the name of the index entry for the substance in both texts. However, it is important to note that Galen is also mentioned within the comment regarding this substance in the English edition, whereas the Latin edition contains only the recipe, thus providing no opportunity to show additional detail. The comment relating to ‘Galen’s Cordial Powder’ follows the list of ingredients, and is used to indicate that: 'This differs from the first Dispensatory of the College, only in omitting the Aloes-Wood, and it stands there ascribed to Galen for its Author; but Zwelfer says it is taken from the Antidotarium of Nicolaus. [...]'. The section continues, illustrating variations of composition between different authorities which shows the way in which this type of comment was used to provide additional information.

This is likely to have affected the way in which the two other substances in this section are associated with Galen, as it is in the 1721 English edition comments that he is mentioned in relation to both ‘Pulvis Diacalaminthes Simplex. Powder of Calamint Simple’ and ‘Species Diatrion Piperon. A Species with the three Peppers.’ The English text suggests that both substances were described by Galen, and whilst both remedies appear within the Latin edition of 1721, there is

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693 Royal College of Physicians of London, Pharmacopoeia Collegii Regalis Medicorum Londinensis (London, 1721), unnumbered page, third of the 'Index Remediorum.'; J. Quincy, The dispensatory of the Royal College of Physicians in London (London, 1721), unnumbered page, fifth of the 'Index of Remedies.'
695 Ibid., p. 79 and 85.
no association with Galen. Subsequently, the English edition of 1746 does not contain any of the five substances associated with Galen in the section ‘Species sive Pulveres’ in 1618, which reflects the 1746 Latin version, and this continues to be the same in the English translations of 1760 and 1788 by Henry Pemberton and Thomas Healde respectively.

‘Electuaria’ (Electuaries) and ‘Pilulæ’ (Pills)

There are four remedies found within the ‘Electuria’ section of the 1618 Latin edition of the *Pharmacopoeia* that contain a reference to Galen. These are ‘Athanasia Mithridatis, e Galeno,’ ‘Diacydonium Galeni cum Speciebus,’ ‘Electuarium Amarum Magistrale,’ and ‘Hiera Picra Simplex Galeni.’ Of these, three show Galen as part of the title of the remedy; whilst ‘Electuarium Amarum Magistrale’ lists the fourth substance as an ingredient, as do several other recipes within the *Pharmacopoeia*, discussed below. In subsequent editions of the *Pharmacopoeia* in Latin, the substance ‘Diacydonium Galeni cum Speciebus’ is evident in 1650, although without the corresponding association with Galen; however by 1721 it is no longer present, and the recipe for ‘Diacydonium’ here corresponds to the ‘Diacydonium Simplex’ of 1618, rather than a version related to Galen, or using the term ‘cum speciebus.’ Similarly, by 1746, the Latin *Pharmacopoeia* no longer includes the substance. The English translation of the *Pharmacopoeia* from 1721 mirrors the Latin edition of the same year, and contains an entry for ‘Diacydonium. A Confection of Quinces,’ the recipe for which again corresponds to the ‘Diacydonium Simplex’ of 1618, and similarly does not mention Galen. Following 1721, the substance does not seem to appear again, although Quincy’s comment on the recipe shown in 1721 suggests that the character of the substance had altered over time: ‘This hath, for a long time, had a place in most Dispensatories, but it

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698 Ibid., pp. 102-112.
699 Ibid., p. 77, 79, 92 and 98 respectively.
700 Ibid., p. 77, 79, 92 and 98 respectively.
is now altogether made by the Confectioners, by the Name of Marmalade.⁷⁰³
This idea is also evident in Nicholas Culpeper’s 1649 text which questions the correct placement of this remedy and, under the recipe for ‘Diacydonium with Pouders. Gallen,’ suggests: ‘Is not this then more like a syrup than an Electuary? Surely either the Colledge or I dote.’⁷⁰⁴ Here, Culpeper links the substance to Galen, and alludes to the relationship between his own text and that of the Royal College. By 1695, Culpeper’s Pharmacopoeia no longer associates this recipe with Galen, and also swaps the recipes for ‘Diacydonium with Species’ and ‘Diacydonium simplex.’⁷⁰⁵ The entries themselves remain in the same order as Culpeper’s previous edition, but the titles are reversed. William Salmon’s Pharmacopoeia also retains the recipe for ‘Diacydonium cum speciebus, Electuary of Quinces’ in both 1678 and 1716, where the ingredients and method are identical aside from occasional spelling and capitalisation differences, and there is no evidence of an association between the remedy and Galen.⁷⁰⁶

The substance ‘Athanasia Mithridatis’ described in 1618 as ‘e Galeno’ (‘from Galen’) is also indicated as such in Culpeper’s 1649 translation, where it appears as: ‘Athanasia Mithridatis. Gallen.’⁷⁰⁷ The recipe makes no further reference to Galen, however, Culpeper adds in his comments relating to this substance that: ‘It prevails against poison and the bitings of venemous beasts […], The Colledge hath made some petty altertions in the quantities of the Simples, but not worth the speaking of.’⁷⁰⁸ This suggests that the recipe had changed over time, although it is unclear whether the implication of Culpeper’s statement is that the College had altered Galen’s ‘original’ recipe, or an earlier version of their own. By 1695, Culpeper’s text includes this substance under the heading ‘ELECTUARIES left out in their new Master piece’ and ‘Athanatia

⁷⁰⁵ N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 161.
Mithridatis. Galen’ appears here as the first item.\textsuperscript{709} William Salmon similarly shows this substance under the subtitle ‘Electuaries left out in their new Dispensatory.’\textsuperscript{710} This begins to illustrate the relationship between the Royal College’s texts, and the various popular versions that were available, but also shows that differences are evident between each translation. For example, instead of referring to Galen within this recipe, Salmon shows it as: ‘Athanasia Mithridatis, King Mithridate his Medicine to prolong life.’\textsuperscript{711} This shows that the labelling of this remedy as ‘from Galen’ was not consistently important to the presentation of the recipe. However, the removal of this substance from the Royal College’s editions also suggests that from an ‘official’ standpoint, the remedy was no longer relevant to the \textit{Pharmacopoeia}, which implies that correspondingly, its origin would also no longer be significant.\textsuperscript{712}

As mentioned above, the substance ‘Hiera Picra Simplex Galeni’ appears in the 1618 edition of the \textit{Pharmacopoeia} as both a separate remedy, and as an ingredient in other recipes.\textsuperscript{713} The later Latin editions of the \textit{Pharmacopoeia} continue to include this substance, and it is shown as ‘Hiera Picra Simplex’ in both 1650 and 1721.\textsuperscript{714} In 1721, the instruction under the title indicates that the remedy may be made by creating an electuary from ‘Species Hieræ,’ a substance which appears under the section ‘Species, sive Pulveres’, and other ingredients.\textsuperscript{715} Although the remedy itself persists in these editions, the association with Galen is no longer in evidence, and by 1746, the Latin edition

\begin{footnotesize}
\begin{enumerate}
\item[709] N. Culpeper, \textit{Pharmacopoeia Londinensis; or, the London dispensatory further adorned} (London, 1695), p. 176.
\item[712] The substance does not seem to be present within the Royal College’s Latin editions of 1650, 1721 and 1746; or the English editions of 1721, 1746, 1760 and 1788.
\end{enumerate}
\end{footnotesize}
shows only ‘Hiera Picra’ as a powder, rather than indicating that it can be made into an electuary.\textsuperscript{716}

The various English translations of the \textit{Pharmacopoeia}, both by the Royal College and more popular versions, seem to retain an association with Galen longer than their Latin equivalents. In 1649, Nicholas Culpeper includes ‘\textit{Hiera Picra Simplex. Galeni}’, although by 1695, it is no longer linked to Galen.\textsuperscript{717} However, William Salmon illustrates the importance of Galen as the originator of this remedy, and in both 1678 and 1716 says: ‘\textit{Hiera Picra simplex}, the Holy but bitter Confect. […] \textit{Galen} was the Author of this Medicine, but in the Prescript \textit{Fernelius} is followed: It takes its Name from its signal Virtues and its Bitterness.\textsuperscript{718} Here, it is significant that although the recipe given in the text is ascribed to Fernelius, the original remedy is attributed to Galen, illustrating that the substance itself retained the authority associated with Galen as a figure, even after the ingredients or method had been altered. The suggestion that the recipe had been changed by Fernelius is reflected in John Quincy’s text \textit{The dispensatory of the Royal College of Physicians} (1721), which includes ‘\textit{Hiera Picra Simplex. Simple Hiera Picra}’ but refers the reader to another section for additional information: ‘This is made by a Mixture of the Species of Hiera Picra with despumated Honey, or Syrup of Violets, into an Electuary. See the Notes under the Species Hiera.’\textsuperscript{719} This refers to a recipe for the powder ‘Species Hieræ Picræ. \textit{Species of Hiera Picra}’ and shows the ingredients and method of fabrication, followed by a lengthy comment by the author.\textsuperscript{720} The comment suggests that:

\begin{quote}
This is a Composition of long standing amongst Dispensatory Writers, but by them is generally ordered into an Electuary with Honey, […]. The former Dispensatories used to call this \textit{Species Simplex}, in Comparison
\end{quote}

\textsuperscript{719} J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), p. 117.
\textsuperscript{720} Ibid., p. 87-88.
to the length of the others: It had Galen for its Author, but hath been corrected by Fernelius. This present Addition of the College hath very justly altered all the foregoing, [...] and all the Ingredients much better proportioned to their respective Virtues than before.\textsuperscript{721}

This illustrates the role of Galen as the originator of the remedy, and also shows Fernelius as a significant part of the overall narrative of the substance. Similarly, the process by which this type of recipe could be altered over time is evident in the changes that the College had made, but it is also important that Quincy chose to highlight these and explain their purpose.

From 1746, the Royal College’s English translations seem to contain only the powder, and not the instruction to turn this into an electuary. \textit{The new dispensatory of the Royal College of Physicians in London} (1746) includes an entry entitled ‘Hiera Picra. Holy Bitter’ which does not mention Galen, and although the recipe provides little detail, the ingredients resemble those already described.\textsuperscript{722} Similarly, in 1788, the substance ‘Pulvis Aloëticus. Aloetic Powder’ is included, which is listed in the index of the text as: ‘Pulvis aloëticus, \textit{— olim} Hiera picra’ (‘Pulvis aloëticus, \textit{— formerly} Hiera picra’).\textsuperscript{723} Again, this is an abbreviated recipe, which includes only two key ingredients, and does not link the substance to Galen.\textsuperscript{724}

Although these specific versions do not associate ‘Hiera Picra’ and its derivatives with Galen, they also use particularly short entries to describe the recipe, which provide no additional information after the ingredients and brief method. However, it is important to note that there are instances whereby the inclusion of a comment on the substance also includes a reference to Galen. This can be seen in Henry Pemberton’s edition of 1760, which illustrates a link between Galen and ‘Hiera Picra’ Here, he includes the sentence: ‘The using

\textsuperscript{721} J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), p. 87-88. In this passage, Quincy also details the key changes that have been made to the recipe and why they have occurred.
\textsuperscript{724} Ibid., p. 225.
here the gum of aloes is conformable to the original of Andromachus.\footnote{H. Pemberton, *The dispensatory of the Royal College of Physicians, London [...] The fourth edition* (London, 1760), p. 315.} This initially shows Pemberton linking this remedy to the past, demonstrating that its origins were long before the period in question. Furthermore, the "*" symbol refers to a footnote, which says: ‘See Galen. *de compos. medicam. secund. loc.* L. 8. c. 2.’\footnote{Ibid. For further information on this reference to Galen, see below.} This specifically associates the remedy with Galen, and provides a particularly precise reference to his work. Although editions either side of Pemberton’s text do not mention Galen in relation to this substance, its appearance here suggests that an underlying link remained, but was not necessarily articulated in volumes providing only a minimum of information. As such, where provision was made for additional detail, this was perhaps an opportunity to re-state an existing connection to Galen, rather than to attach (or re-connect) the name of an authority to a remedy.

The role of ‘Hiera Picra Simplex Galeni’ as an ingredient within other remedies, and whether or not ‘Galen’ (or similar) is used is also illustrative of the way in which an association with Galen could remain, without necessarily being stated. For example, of the six substances from throughout the 1618 *Pharmacopoeia* that include this as an ingredient,\footnote{Royal College of Physicians of London, *Pharmacopoeia Londinensis in qua medicamenta antiqua et nova usitatissima* (London, 1618). The six substances are: ‘Electuarium Amarum Magistrale.’ (p. 92); ‘Pilulæ Assaiereth Avicennæ.’ (p. 104); ‘Pilulæ de Rhabarba Ro, Mes.’ (p. 105); ‘Pilulæ de Agarico, Mes.’ (p. 106); ‘Pilulæ Cochiæ Rhasis’ (p. 108); ‘Pilulæ Indæ Mes. ex Haly.’ (p. 109).} Nicholas Culpeper consistently retains the overall recipes; includes the specific ingredient; and associates it with Galen using ‘Galeni.’\footnote{N. Culpeper, *A physicall directory or a translation of the London Dispensatory* (London, 1649), p. 115, 128, 131, 132, 134 and 136.} However, by 1695, three of the recipes include the ingredient, but not the association with Galen. In these instances, ‘*Electuarium Amarum Magistrale, majus.*’ 112. Or the greater bitter Electuary’ excludes the only reference to an authority that was present in 1618, whilst ‘*Pilulæ de Agarico.*’ 121. Or, Pills of Agarick’ and ‘*Pilulæ Cociae the greater.*’ 122’ also show the recipes without their association in the title to Mesue and Rhazes respectively. ‘*Pilulæ Cociae the greater*’ does retain a reference to Rhazes (amongst other authorities) in the comments; however the more prominent association with an
authority from the past is no longer in evidence. Conversely, the remaining three remedies are those that are shown under the section: ‘The PILLS left out by the College in this new Piece of Wit’ and all retain their original link to Galen, as well as the other authorities they were connected to in 1618. Therefore, ‘Pilulæ Assaireth. Avicenna’ ‘Pills of Rhubarb, Mesue’ and ‘Pilulæ Indæ. Mesue out of Haly’ retain their varied attributions as well as the association with Galen through the inclusion of ‘Species Hiera picra simple Galeni.’ This suggests that those substances moved into this section in accordance with changes made by the Royal College were perhaps subject to less stringent (if any) editing, and as such that their removal from the ‘official’ Pharmacopoeia perhaps contributed to the perpetuation of associations and influences from the past.

The preservation of a link to Galen in this way can also be seen in William Salmon’s texts. Although here ‘Electuarium Amarum Magistrale majus, The greater bitter Electuary’ is shown as containing ‘species Hiera simplex’ and therefore is not associated with Galen, there is also evidence that the connection between Galen and this particular substance remained important. In both 1678 and 1716, Salmon’s edition of the Pharmacopoeia shows all of the remaining recipes from 1618 which list ‘Hiera Picra Simplex Galeni’ as an ingredient, and continues to do so, although occasionally in a slightly altered format, for example: ‘Species Heræ Picræ Galeni.’ Of these five, three are shown under ‘Pills left out in the New Dispensatory,’ which is consistent with the fact that ‘Pilulæ Assaireth Avicennæ, Avicens Pills purging Choler,’ ‘Pilulæ de Rhabarbaro, Pills of Rhubarb,’ and ‘Pilulæ Indæ Mesuæ, Indian Pills or of Indian Myrobalans’ do not seem to appear in either the Latin editions of 1650,

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729 N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 169, 180 and 181.
730 Ibid., p. 188.
1721 or 1746; or the Royal College English translations of 1721, 1746, 1760 or 1788.733

‘Trochisci’ (Troches, or pastilles)734
The inclusion within popular editions of the Pharmacopoeia of a section indicating items which had been removed from the ‘official’ edition illustrates a tangible attempt to retain particular remedies, whilst also highlighting where differences existed between the ‘official’ version and the more popular ‘translation.’ In separating these substances into a distinct part of each chapter, the popular versions suggest that the Royal College was perhaps not correct in their decision to remove the item, whilst also underlining their perception of its continuing value. Similarly, the perpetuation of particular remedies within these editions also ensures that their influences are correspondingly preserved, and that the role of these types of authority remains evident. For example, the recipe for ‘Pastilli Andronis, Galen’ appears in 1618, and is shown with an identical title within the main part of Nicholas Culpeper’s text in 1649.735 However, by 1678 ‘Pastilli Andronis ex Galeno, Cakes of Andron from Galen’ is shown in William Salmon’s Pharmacopoeia under the heading: ‘Troches left out in the New Dispensatory.’736 This is also continued in Culpeper’s text of 1695 and in the 1716 edition by Salmon.737 The inclusion of this substance under this particular heading is reiterated by its absence within the Latin editions of the Pharmacopoeia from 1650, 1721 and 1746, and similarly in the ‘official’ English translations of 1721, 1746, 1760 and 1788.

Although by 1788 the remaining Troches associated with Galen in 1618 all appear to have been removed from the Pharmacopoeia, there are variations in when they disappear from the text, and whether they retain a link to Galen until

737 N. Culpeper, Pharmacopœia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 200; W. Salmon, Pharmacopœia Londinensis: or, the new London dispensatory (London, 1716), p. 628.
they are excluded. This can be seen in the idea that 'Trochisci Diacoral-liv. Galeni,' 'Trochisci Diasper-Maton, Galeni,' and 'Hæmopotoici Pastilli Galen' are all present in Culpeper's 1649 edition of the *Pharmacopoeia*, and the names and associations with Galen are also intact. All three are subsequently not present in the 1650 Latin edition of the text (and therefore the later Latin editions and Royal College English translations), and are correspondingly shown under items removed in Culpeper's 1695 version, and in Salmon's texts of 1678 and 1716. However, Culpeper's edition also retains the association with Galen for all three substances, whereas Salmon's version provides an English translation of the name (which Culpeper's does not), but without the link to Galen.

The four remaining troches that are associated with Galen in the 1618 Latin edition also illustrate the varying process by which substances changed and developed within the *Pharmacopoeia*, and the differences evident in whether a link to Galen is retained. For example, the recipe for 'Trochisci è Succino, Galen,' as with most of these substances, retains its name and the association with Galen in Culpeper's 1649 edition of the *Pharmacopoeia*. However, it is subsequently no longer present in either the popular editions of the *Pharmacopoeia*, or those issued by the Royal College of Physicians. Similarly, the recipe for 'Trochisci Polyidæ Sphragis, Andromachi Ex Galeno' is present in Culpeper in 1649, and it is significant that he retains the attribution as: 'Andromacus *out of* Galen.' This implies that although the original source of the remedy was Andromachus, there was also a degree of significance in the suggestion that Galen provided the recipe, and that this was the mechanism by

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which it had reached Culpeper’s text.\(^{743}\) However, following this publication, the association with Galen is no longer conveyed, but the link to Andromachus is preserved. This can be seen in Culpeper’s 1695 edition, which includes a recipe for ‘Trochisci Polyidæ Androm.’, and similarly in William Salmon’s versions of both 1678 and 1716, which show the remedy as: ‘Trochisci Polyidæ seu Sphragis Andromachi, Sealed Troches.’\(^{744}\) The Latin edition of 1650 also reinforces this approach, as it shows the title of this substance identically to Salmon’s text, and omits only the English translation.\(^{745}\) In contrast to this, the Latin versions, and their ‘official’ English counterparts from 1721 do not show this substance, and John Quincy confirms the exclusion of the remedy through the phrase: ‘Of those which are here rejected that were continued down to the last Edition of our College, are […] The Trochisci Polyidæ, or Sphragis Andromachi.’\(^{746}\) This is significant as although it illustrates that this substance was no longer deemed relevant to the ‘official’ Pharmacopoeia, it also shows that the association with Andromachus was perceived as more important than the link with Galen, which is no longer in evidence.

Whilst this suggests that over time these types of substances tended to be removed from the ‘official’ Pharmacopoeia, and their association with Galen similarly faded from the texts, there are also instances where a link to Galen was re-established following its removal. This can be seen with regard to both ‘Trochisci de Scilla, Galeni’ and ‘Trochisci de Vipera Andromachi ex Galeno’, which appeared in this form in the 1618 Latin edition.\(^{747}\) Nicholas Culpeper shows both substances in 1649, providing the English translations of their titles: ‘Troches of Squils. Galen’ and ‘Troches of Vipers. Andromacus out of Galen.’\(^{748}\)

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\(^{747}\) Royal College of Physicians of London, *Pharmacopoeia Londinensis in qua medicamenta antiqua et nova usitatisima* (London, 1618), p. 121 and 122. The page containing the recipe for ‘Trochisci de Scilla, Galeni’ is missing in the document consulted; however the index lists the substance, and shows that it appears on p. 121.

Here, it is evident that the substances remained linked to Galen, and although Culpeper highlights the role of Andromachus, Galen is shown as the source of the information. However, the Latin edition of 1650 shows both substances without any reference to Galen (or Andromachus with regard to the relevant substance), and this is also reflected in the 1721 Latin version.\(^{749}\) Similarly, Culpeper’s 1695 text includes both remedies without an association with Galen (or Andromachus), and this is also the case for William Salmon’s versions of 1678 and 1716.\(^{750}\)

Whilst these editions all show a disconnection between Galen and these particular substances, John Quincy’s text of 1721 illustrates that this was not necessarily a permanent separation. His entry for ‘Trochisci de Scilla ad Theriacam. Troches of Squills for the Theriaca’ provides the recipe for the remedy and an additional comment, which includes the assertion that:

This Process is the same, very near, as directed in the *Augustane*, and first *London* Dispensatory: Its first Contrivance is ascribed to Galen, who describes it *de Antidotis*, and in the *Theriaca ad Pisonem*, for which it was originally designed; but Zwelfer finds great fault with it on many accounts with relation to the Virtues of Squills: But let that be how it will, he says in the Troches there is so little as to avail hardly anything […].\(^{751}\)

This passage illustrates the role of Galen in relation to this remedy, and provides additional information regarding its original source. It also shows Quincy placing it within the context of a broader narrative, indicating that although aspects of the recipe were subject to debate, it was nonetheless important enough to include in this form, which Quincy suggests is comparable to the first edition of the *Pharmacopoeia* published in London. Similarly, the entry for ‘Trochisci de Vipera ad Theriacam. Troches of Vipers for the Theriaca’


includes the suggestion that ‘this Prescription comes nearest to that of Galen.’

The return to an association with Galen in this particular edition of the *Pharmacopoeia* could in some senses be attributed to the additional space that Quincy devotes to discussion and annotation of remedies. This implies that the link to Galen was not necessarily lost, rather that it had remained, but that the nature of particular texts prohibited any mention of influences or sources of information. Although this is likely to be the case regarding the Latin editions of the *Pharmacopoeia*, which primarily include only the recipe and method, the popular editions by both Culpeper and Salmon do make provision for this type of information. Therefore, the presence, or not, of an association with Galen was perhaps due to a variety of factors, including the immediate sources for a particular translation of the *Pharmacopoeia*, whilst a broader link to Galen may have been a continual, but underlying association.

‘Unguenta’ (Ointments) and ‘Emplastra et Cerata’ (Plasters and Wax plasters)

The final sections of the 1618 Latin edition which contain substances associated with Galen are ‘Unguenta,’ and ‘Emplastra et Cerata.’ Of the two ‘Unguenta’ which are linked to Galen in 1618, ‘Unguentum Basilicon Maius, Mes. Enneapharmacon Galeni’ seems not to be connected to Galen after this date, in either the popular or ‘official’ editions of the *Pharmacopoeia*. John Quincy provides an indication of the perception of this remedy in 1721, suggesting that: ‘All the London Dispensatories before this have likewise

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retained from Mesue an Unguentum Basiliicon Magis, but it is a most perplexed Mixture and never used; and therefore very justly omitted here.\textsuperscript{756} This implies that the connection to Mesue was perhaps viewed as more significant than an association with Galen, however, the reasons for omitting the remedy from the Pharmacopoeia appear particularly practical, and the role of previous authorities is secondary to the utility of the substance.

Contrastingly, the link between Galen and the substance ‘Unguentum refrigerans, Galeni’ seems to have been more significant, as the association appears to persist until the substance itself is no longer present in the Pharmacopoeia.\textsuperscript{757} This can particularly be seen in the more popular texts, and in 1649, Nicholas Culpeper shows the substance as: ‘Unguentum Refrigerans. Galenus. It is also called a Cerecloath.’\textsuperscript{758} Here, there is an indication regarding the perceived value of the remedy, as Culpeper’s associated comment suggests that: ‘It is a fine cooling thing, (for what denomination to give it I scarce know) and exceeding good, yea superexcellent to cure inflammations in wounds or tumours.’\textsuperscript{759} This recipe appears identically in the 1695 edition of Culpeper, although it is present under the heading: ‘Oyntments left out in this Dispensatory.’\textsuperscript{760} William Salmon similarly links this substance to Galen, and the English translation of the title that he provides reiterates the centrality of this association: ‘Unguentum Refrigerans Galeni, Galens Cooling Oyntment.’\textsuperscript{761} The recipe also features under a section entitled: ‘Oyntments left out in the New Dispensatory’ and appears unchanged in Salmon’s 1716 edition.\textsuperscript{762}

Whilst this particular substance appears to remain important within the popular translations of the Pharmacopoeia, its migration to sections which depict items removed from the ‘official’ Pharmacopoeia is corroborated by the fact that it

\textsuperscript{757} Royal College of Physicians of London, Pharmacopoeia Londinensis in qua medicamenta antiqua et nova usitatissima (London, 1618), p. 146.
\textsuperscript{758} N. Culpeper, A physicall directory or a translation of the London Dispensatory (London, 1649), p. 276.
\textsuperscript{759} Ibid.
\textsuperscript{760} N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 234.
\textsuperscript{761} W. Salmon, Pharmacopœia Londinensis. Or, the new London dispensatory (London, 1678), p. 765.
does not seem to be present in either the 1650 or 1721 Latin editions. Similarly, the removal of Galen’s ‘Unguentum Refrigerans’ is also mentioned in the comments relating to a separate substance, which John Quincy uses to make a broader point regarding the development of the *Pharmacopoeia*: ‘Under this Division of Ointments are left out many that were in before, either as injudicious Compositions, or because their Intentions are better answered by somewhat else in more Esteem and Use; as […] and *Refrigerans* of Galen: And instead of these are substituted […]’. Here, the implication is that whilst Galen remains important to the remedy in terms of its name, the substance itself was no longer viewed as relevant to the *Pharmacopoeia*.

This process is also reflected in the way in which ‘Diapalma seu Diachalciteos, Galeni’ changes between different editions of the *Pharmacopoeia*, before it is no longer present. This substance appears in Culpeper in 1649 as: ‘Diapalma or Diachalciteos. Gallen,’ showing both that the Latin title of the remedy had persisted into English translations, and also that the substance was still being attributed to Galen at this date. Subsequently, the recipe is mentioned in 1695 as: ‘Emplastrum Diachalciteos,’ and here Culpeper includes additional information suggesting changes over time: ‘Before it was to be made in this manner: [...]’. It is important to note that Galen is not mentioned within this entry, although Culpeper alludes to other changes to the title and composition of the remedy: ‘Before it was called Diapalma, because of the branch of the Palm-tree and Diachalciteos, because of the Chalcitis in it. But now neither of both be in it.’ This implies that the name of a substance could persist after its direct relevance had been lost, and also shows the development of remedies over time. This is similarly evident in William Salmon’s text, which again includes the remedy, and highlights the disparity between the name and the ingredients,

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767 Ibid.
whilst also providing an English translation: ‘Emplaster of Calcitis or burnt Vitriol.’

The Latin editions of the *Pharmacopoeia* from 1650 and 1721 both show ‘Emplastrum Diachalciteos,’ but neither link this substance to Galen. However, John Quincy’s 1721 English translation reiterates the previous connection, by showing that ‘Emplastrum Diachalciteos. Compound Plaister of Chalcitis’ is ‘a Composition as ancient as Galen, and is ascribed to him for its Author.’ The contrast here between the Latin editions and Quincy’s version could perhaps again be attributed to the space that Quincy devotes to additional embellishment of remedies, whilst the Latin text presents just the recipe. Nonetheless, it illustrates an association with Galen persisting until the substance is no longer included within the ‘official’ *Pharmacopoeia*.

In contrast to this, the substance ‘Emplastrum Barbarum Magnum, Gal’ which appears in the 1618 Latin edition of the *Pharmacopoeia* becomes detached from Galen before the remedy itself is no longer included in the texts. It is shown by Nicholas Culpeper in 1649 as ‘Emplastrum Barbarum magnum. Galen,’ which illustrates both the presence of the link to Galen, and also that it retained the Latin variation of the name, rather than an English equivalent. Subsequently, the remedy appears without the association with Galen, in both the Latin and popular editions of the *Pharmacopoeia*, until the beginning of the eighteenth century, where the substance itself is removed from the texts. The pattern of a gradual disassociation with Galen, before removal from the

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771 Following 1721, this remedy is no longer present in the Latin edition of 1746, the English translation from 1746, or the English versions by Henry Pemberton (1760) and Thomas Healde (1788).


774 This substance appears in the Latin edition of 1650, but not in 1721 or 1746; it is shown in William Salmon’s 1678 and 1716 editions, and in Nicholas Culpeper’s 1695 text. Subsequently, it is also not included in the English translations of 1721, 1746, 1760 or 1788.
Pharmacopoeia altogether is also reflected identically by the substance ‘Ceratum Oesypatum Galeni.’ As shown, this appears in 1618, and subsequently Culpeper includes the remedy with its link to Galen in 1649: ‘Ceratum Oesypatum. Galen.’ However, within Culpeper’s 1695 edition, there is no mention of Galen in association with this remedy. Similarly, William Salmon shows the substance as ‘Ceratum Oesypatum Mesue, Cerecloth of Oesypus,’ attributing it here to Mesue, rather than Galen. Salmon also indicates that changes had occurred over time regarding the composition of the remedy, illustrating the process by which recipes could alter over time:

It is impossible to make this into a Cerecloth with these Ingredients, unless you make it very soft. In their old Book there was Wax two pound, Rosin one pound, which although it was too great a proportion, making the Composition too hard; yet I am sure this is too little; ’tis much that a whole College could find no Medium between such great Extremities [...].

This also shows the extent to which Salmon followed the text provided by the Royal College of Physicians, as although he disputes the recipe, and provides his own comment, he nonetheless reproduces it as shown in the ‘official’ text. Following this, the substance seems no longer to appear in either the Latin or English editions by the Royal College.

The final two substances associated with Galen in the 1618 Latin edition of the Pharmacopoeia are: ‘Emplastrum Isis Epigoni Gal’ and ‘Ceratum Stomachicum, Galeni.’ These remedies also both appear in Culpeper’s version of 1649, and continue to be shown under their Latin titles: ‘Emplastrum Isis Epigoni. Galen’

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777 N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 236.
Culpeper also adds an additional comment relating to Galen’s version of ‘Emplastrum Isis Epigoni,’ indicating that: ‘Galen Apropriates it to the head and ulcers there: I know no reason but why it may as wel serve for other parts of the body.’ Neither of these substances are evident within the 1650 Latin edition of the Pharmacopoeia, and this is similar for the 1721 and 1746 Latin texts, as well as for the equivalent ‘official’ English translations. However, both remain within the popular editions of the text, and also continue to be associated with Galen in these works. The entry for ‘Emplastrum Isis Epigoni. Galen’ in Culpeper’s 1695 version is shown almost identically to the recipe in 1649, although it is presented under the heading: ‘Plasters as their Wor-[illegible] thought fit to leave out; are [...]’. William Salmon also includes the recipe in both 1678 and 1716 within a section entitled ‘Emplasters left out in the new Dispensatory’ and also provides an English translation of the title of the substance: ‘Emplastrum Isis Epigoni Galeni, Gallens Emplaster for Ulcers.’ Here, the link to Galen appears to have become part of the name of the remedy, illustrating the importance of this association. Similarly, ‘Ceratum Stomachinum Galeni, Galens Stomach Cerecloth’ is shown by Salmon in 1678, and aside from occasional spelling differences, is included identically in 1716. Both editions also present the remedy under the heading: ‘Cerecloths added by the Author,’ indicating that it was not available within ‘official’ editions of the text. As with the previous substance, Culpeper provides the recipe for ‘Ceratum Stomachicum. Galen’

781 N. Culpeper, A physicall directory or a translation of the London Dispensatory (London, 1649), p. 337 [page follows p. 309: numbering in this section of the text is inconsistent] and 315 [page numbering appears more consistent by this point].
784 N. Culpeper, Pharmacopoeia Londinensis; or, the London dispensatory further adorned (London, 1695), p. 248.
786 W. Salmon, Pharmacopœia Londinensis. Or, the new London dispensatory (London, 1678), p. 773-778 [pages are consecutive, however numbering is not consistent at this point in the text]; W. Salmon, Pharmacopœia Londinensis: or, the new London dispensatory (London, 1716), p. 679.
under ‘Plasters as their Wor-[illegible] thought fit to leave out’ in 1695, and here his attitude regarding the way in which substances were replicated from the Royal College’s text, as well as the complex relationship between the two, is particularly evident: ‘And thus you see I have left out Vigo his nonsense, or his most excellent Plaster of Vinegar and Saffron, in which is no Saffron, there being other things in the Book ridiculous enough if you are disposed to laugh.’ This appears immediately following the recipe for ‘Ceratum Stomachicum. Galen’ and illustrates that Culpeper was at times overt in his criticism of the Royal College. It also indicates that the inclusion of substances relating to Galen was not solely a consequence of adherence to an ‘official’ text, and is an example of the rejection of a remedy (and an authority) based on other factors, such as utility or efficacy.

Examining the ‘Galenic’ substances present within the 1618 edition of the *Pharmacopoeia*, and tracing their incidence within subsequent versions demonstrates several broader points regarding the development of this document over time, and in different formats. Many of the references to Galen in relation to a particular substance illustrate a process of incremental change over time, often retaining the majority of the key instructions and components of a remedy, and at times losing an association with Galen. There is little evidence, particularly with regard to Galen, of a significant and deliberate rejection of past methods, and changes over time are primarily as a result of increasing simplification of approach, or choices based on utility and experience. As such, development did not necessarily consist of increasing divergence from the 1618 edition, and different authors and translations show varying approaches to the construction of the text. The number of different ways in which Galen is used within these texts also reinforces his presence, as one author may show him as part of the name of a substance, another demonstrating Galen as the original author of the remedy, whilst another emphasises reverence for ancient authority by justifying changes made over time. This reflects the differing aims of the popular and Royal College texts, whereby the popular editions appear to target a comprehensive, rather than concise output. Similarly, the removal of a substance from the Royal College

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787 N. Culpeper, *Pharmacopoeia Londinensis; or, the London dispensatory further adorned* (London, 1695), p. 250.
edition appears to ensure that it remained within the popular text, indicating the complex relationship between the two. Furthermore, English translations of the *Pharmacopoeia* seem to retain an association with Galen longer than their Latin equivalents; whilst associations lost over time can also be re-established in later editions, highlighting the fundamental influence of Galen.

**Galenic texts: citations and references**

In addition to the association between Galen and particular pharmacological substances, and more general allusions to his influence, there are also references within these texts to a number of specific Galenic works. As is likely within a pharmacological text, these references are primarily drawn from Galen’s pharmacological works, although in some instances other texts are mentioned which contain a pharmacological or therapeutic element. The six texts evident within these works are: *De Antidotis* (*On Antidotes*), *De Compositione Medicamentorum per Genera* (*On the Composition of Drugs according to Kind*), *De Compositione Medicamentorum secundum Locos* (*On the Composition of Drugs according to Places*), *De Sanitate Tuenda* (*On the Preservation of Health*), *De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus* (*On the Powers [and Mixtures] of Simple Drugs*), and *De Methodo Medendi* (*On the Therapeutic Method*). The references to each text are examined in order to demonstrate the way in which they are employed, and the context and extent of their use.

*De Antidotis, On Antidotes*\(^{788}\)

The Galenic work most frequently referred to within the pharmacological texts studied is *On Antidotes (De Antidotis)*. This is a pharmacological treatise dealing with theriac, a ‘remedy in the larger group of so-called ‘antidotes’ which were used to combat poisons and venoms but also as a ‘panacea’ against all sorts of ailments.’\(^{789}\) It was written in two books, which are ‘full of practical experience and advice and provide an intelligent evaluation of older doctors’ recipes, based not only on their medical and pharmaceutic contents but also focusing on the precision (*akribeia*), clearness (*saphêneia*) and usefulness

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(chrêsimon) of their style.\textsuperscript{790} In many ways these characteristics reflect the way in which early modern pharmacopoeias in English are constructed, and their contents described. The type of analysis and information included alongside the recipes and methods of preparations within these texts often illustrates a similar attitude in presenting remedies, and Henry Pemberton comments in the preface to his text \textit{The dispensatory of the Royal College of Physicians} (1746), that:

\textit{The president and college have again thought it requisite to review the London pharmacopœia [...]. It were certainly a disgrace, and just reproach, if pharmacy should any longer abound with those inartificial and irregular mixtures, which the ignorance of the first ages introduced, and the perpetual fear and jealousies of poisons enforced, against which the ancients endlessly busied themselves in the search of antidotes, which for the most part they superstitiously and doatingly derived from oracles, dreams, and astrological fancies: and vainly hoping to frame compositions, that might singly prevail against every species of poison, they amassed together whatever they had imagined to be endued with alexipharmic powers. By this procedure the simplicity of physic was lost, and a wantonness in mixing, inlarging, and accumulating took place; which has continued even to our times. We have here endeavoured, as much as might be, to retrench this excess; though in some things we have submitted to the prevalence of custom, and have left them to the correction of posterity.}\textsuperscript{791}

Although this begins to suggest some of the problems that were perceived to exist within older iterations of the \textit{Pharmacopoeia}, it also shows the aspects and characteristics of remedies that remained important, and the process by which the content was reviewed. It is significant that Pemberton emphasises simplicity and utility in remedies, and also suggests that role of the ‘\textit{prevalence of custom.’} 

The similarity between the outlook present in \textit{On Antidotes} and the early modern approach to the inclusion of remedies within the \textit{Pharmacopoeia} is also


\textsuperscript{791} H. Pemberton, \textit{The dispensatory of the Royal College of Physicians} (London, 1746), p. viii-ix.
reflected in the specific citation of *On Antidotes* as a source of information. Of the two books of *On Antidotes*, Book 1 is the most commonly referred to within the various editions of the *Pharmacopoeia*, and within this, certain chapters are also more frequently mentioned. This is particularly evident within the substantial narrative section entitled ‘A narrative of the proceedings of the Committee appointed by the College of Physicians to review their Pharmacopoeia’, which begins Pemberton’s text *The dispensatory of the Royal College of Physicians*. This chapter contains all but one of the specific references to Galenic texts within this work, and shows the different ways in which they are used. 792 The first references to *On Antidotes* within Pemberton’s work use this Galenic text as a reference for discussion of the development of ‘mithridate and theriaca’ and the problems associated with ‘extending to yet greater lengths these forms already too copious.’ 793 Pemberton suggests that:

To this scheme is owing the enormous length of the celebrated mithridate and theriaca; for such medicines must of course recommend themselves by the number and variety of their ingredients [...] The first of these is pretended to be composed from experiments made with all kinds of simple antidotes separately by the famous king, whose name it bears, as *Attalus of Pergamus* had done before him *. 794

Here, the ‘*’ symbol refers to a footnote, which says: ‘* Galen. de antidot. L. I. c. I. ’ 795 The same reference is made on the following page of Pemberton’s narrative, and within the text there are two symbols referring to a footnote which indicates that both pieces of information were taken from Book 1, chapter 1 of *On Antidotes*. This first citation follows a comment regarding the preceding story of experiments by Mithridates, which says that: ‘as no records are left us of any

794 Ibid. Vivian Nutton suggests that ‘Attalus of Pergamum (ruled 138-133 BC) allegedly carried out pharmacological experiments with poisons on his own slaves.’ This passage continues, indicating that ‘A more celebrated royal experimenter was Mithridates V of Pontus (132-63 BC), who allegedly protected himself against poisoning by taking small doses of poison until he was habituated to it. He gave his name to a famous compound drug, Mithridation, which was claimed to be a universal cure because it contained all known antidotes.’ See V. Nutton, *Ancient medicine* (London, 2005), p. 142. Nutton also cites Galen (and Pliny) as the source of this information.
of these particular experiments, we may reasonably consider this tale as fabulous. Here, whilst Pemberton disputes the story itself, he nonetheless uses the information it contains for his own purpose, to illustrate the process by which this substance had reached his own time. This is reiterated in the subsequent passage, which suggests that: ‘And for the additions made to it by Andromachus, we are not informed of any pretence, upon which they were severally added, except, that by the viper’s flesh this medicine was to be rendered more useful against the bite of that animal *.’ Again, this cites an original source for readers to refer to, and despite implying that little information is present there, it does show Galen as explaining the reason for the inclusion of viper’s flesh in the remedy.

Pemberton continues to use Galen as a source of information regarding the development of theriac, and suggests that:

the theriaca gained so high a degree of credit, that even the wise Marcus Aurelius was prevailed on to make a daily use of it to the great prejudice of his health, till his head was so affected, that he dozed in the midst of business, and then omitting the opium in it, was not able to sleep at all +.  

The ‘+’ symbol at the end of this sentence alludes to an ‘Ibid’ footnote which again refers to Book 1, chapter 1 of On Antidotes. This particular reference to Galen is accurate, and can be corroborated by Sabine Vogt’s assertion that: ‘Galen himself was responsible for preparing and administering it [theriac] to Marcus Aurelius, Ant. I.I.’ This shows that Pemberton’s citations could be of practical use to readers, and also that he was able to accurately determine the location of information in Galen’s works.

The discussion of the ‘so high a degree of credit’ ascribed to theriac precedes a comment relating to the different ways in which this remedy, and similar treatments, were perceived in the past: ‘While these unmeasurable

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797 Ibid.
798 Ibid.
compositions were in such high repute, it is not to be expected that a due esteem for simplicity could even prevail. This sentence suggests that it would not have been possible during an earlier period to move away from the use of these substances. It provides an explanation for the longevity of this remedy, and the role of context in determining the perpetuation of a substance. Pemberton also begins to contrast the preference for simplicity in his own time, with a past emphasis on complex remedies with significantly more ingredients.

The discussion within this narrative section also addresses areas not altered from previous iterations of remedies, whilst additionally showing which aspects had been changed and why. For example, Pemberton highlights that: ‘The committee in their last draught made no farther alterations in the ingredients of the mithridate and **theriaca**, than rejecting such, as were not in the original (a), except [...]’ This illustrates a clear indication of the areas of the substance that had been altered (in this case to return to a previous version), and shows the relationship between the recipe included in Pemberton’s text and older varieties. The ‘(a)’ included in the text alludes to a ‘Remark’ at the bottom of the page, annotating the main body of the text. This says: ‘(a) Neither the description in verse of the elder Andromachus, nor the prose explanation of the younger, make any mention of the white pepper afterwards added to the composition of **theriaca +**, and the forming the agaric into troches with ginger is also another innovation’ Here, the ‘+’ symbol refers to a footnote, which says: ‘+ Galen. de antidot. L. I. c. 6, 7.’ Again, the accuracy of Pemberton’s references can be seen through the inclusion of this within an article by Laurence Totelin, which indicates that:

Galen, *Antidotes* 1.7 [...]: “Since the elegiac verses of Andromachus are composed in a rather unclear manner (**asaphesteron**), it has seemed to me that the best thing would be to add the verses of Damocrates whose interpretation is entirely clear (**saphōs**).” [...]

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801 Ibid., p. 117.
802 Ibid.
803 Ibid.
transmitted by Galen in *Antidotes* 1.6 [...]. Rendition in prose by Andromachus the Younger: *Antidotes* 1.7

The final chapter of Book 1 of *On Antidotes* that is mentioned is chapter 14. This occurs in conjunction with a reference to Galen’s *On the Preservation of Health* (see below) and follows the previous discussion of the changes that had been made to the recipe for theria: ‘[…] except substituting cinnamon for *casia lignea*, which, it is evident from Galen, was only used through the scarcity of the other.’ Here, the ‘*’ symbol again refers to a footnote, which says: ‘* De antidot. L. I c. 14.*’ Whilst Totelin suggests that chapter 14 contains other information (‘Rendition into iambic trimeters by Damocrates: *Antidotes* 1.14.’), the accuracy of Pemberton’s other references suggests that both are present within the chapter.

John Quincy also makes reference to *On Antidotes* within his text *The dispensatory of the Royal College of Physicians in London*. These references are less specific than those in Pemberton’s text, but nonetheless show the importance of attributing information to Galen. The most specific citation that Quincy provides to *On Antidotes* is within the comments relating to the recipe for ‘Trochisci Hedychroi Galeni ad Theriacam. Galen’s *Hedychroi Troches for the Theriaca.*’ Here, he says: ‘They were first described by Galen, *De Antidotis*, Cap. 10. for the *Theriaca Andromachi*; but they are not used for any other Purposes.’ It is likely that ‘Cap. 10.’ refers to the tenth chapter of Book 1, and suggests that Quincy intended the reader to be able to locate the citation if required. However, he also mentions *On Antidotes* in a more general way, which can be seen in the passage providing additional information relating to the remedy ‘Trochisci CyphEOS pre Mithridatio. *Troches of Cypress for the Mithridate*’ which says:

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806 Ibid.


This is but a troublesome Composition; but as it is made a standing Ingredient in the *Mithridate*, its Prescription is still necessarily retained here […]. It is originally ascribed to *Damocrites*, who, it seems, attempted to reform the *Mithridate*, and contrived these Ingredients into this Form on purpose for that: It is taken notice of by *Galen, De Antidotis*, and recommended in some Cases by it self: But modern Practice knows no other use for it, than what it was originally designed for.\(^{809}\)

Here, there is a sense that this reference was included to reinforce the authority of the information shown, and to justify the retention of this ‘troublesome Composition.’ It also perhaps suggests that they reader may have been able to locate the citation without a specific chapter reference due to prior knowledge or another method.

The final reference to *On Antidotes* within *The dispensatory of the Royal College of Physicians in London* is part of the entry for ‘Trochisci de Scilla ad Theriacam. *Troches of Squills for the Theriaca.*’ The passage relating to this remedy (discussed above) includes the information that ‘Its first Contrivance is ascribed to *Galen*, who describes it *de Antidotis*, and in the *Theriaca ad Pisonem*, for which it was originally designated.’\(^{810}\) This again suggests that the reader was intended to understand the relevance of the information, and to be able to locate it if necessary. The reference here to a second text is the only allusion within the pharmacological sources studied to the Galenic text *On Theriac to Piso (De Theriaca ad Pisonem).*\(^{811}\) This work has been described as Galen’s separate treatise on theriac,\(^{812}\) and was probably written ‘no earlier than 204 (it reports an equestrian accident that befell Piso’s favourite son at the Secular Games of that year), and probably later than 207.’\(^{813}\) Sabine Vogt notes that it ‘was in all probability written by Galen,’ which suggests a degree of

\(^{810}\) Ibid., p. 150.
uncertainty in its attribution.\textsuperscript{814} However, she also adds that ‘Nutton […]
discusses the authenticity of both treatises [\textit{De Theriaca ad Pisonem} and \textit{De Theriaca ad Pamphilianum}] and convincingly reaches the conclusion that \textit{Ther.Pis.} is, and \textit{Ther.Pamph.} is not, genuine’ suggesting (as Quincy does) that the work is by Galen.\textsuperscript{815}

Returning to references to \textit{On Antidotes}, William Salmon mentions Book 1 of this text within his \textit{Pharmacopoeia Londinensis}, and also includes the citation in Greek, with no English translation. It appears within the comments by the author for ‘\textit{Theriaca Andromachi}, Venice Treacle, or Treacle of Andromachus’ where the additional information says that the recipe is ‘almost Word for Word with that in \textit{Galen}, ἀ. Περὶ Άντιδότων, composed first by \textit{Andromachus Neronis Medicus}.\textsuperscript{816} This use of Greek lends an additional degree of authority to the statement, and reinforces the idea that Galen was the authentic source of the information. This is important as it provides a scholarly tone to this popular work, and suggests that Salmon’s readers may have been able to follow this reference and understand its significance.

\textit{De Compositione Medicamentorum per Genera}\textsuperscript{817} and \textit{De Compositione Medicamentorum secundum Locos}\textsuperscript{818}

Following \textit{On Antidotes}, the Galenic works most commonly referred to within the early modern pharmacological texts examined are: \textit{On the Composition of Drugs according to Places (De Compositione Medicamentorum secundum Locos)} and \textit{On the Composition of Drugs according to Kind (De Compositione Medicamentorum per Genera)}. These have been described as Galen’s ‘two main treatises devoted to compound remedies’ and therefore it is likely that if Galen were to be cited in relation to pharmacology, these works would be an

\textsuperscript{816} Ibid., p. 321, n. 26.
\textsuperscript{818} W. Salmon, \textit{Pharmacopoeia Londinensis: or, the new London dispensatory} (London, 1716), p. 581.
appropriate choice.\textsuperscript{819} \textit{On the Composition of Drugs according to Places} (hereafter \textit{Places}) was written in ten books, whilst \textit{On the Composition of Drugs according to Kind} (hereafter \textit{Types}) appeared as seven books. As Totelin describes, the books are ‘organised by methods of application in the case of \textit{Types} (4 books on various plasters; 2 books on ‘multi-functional,’ \textit{polychresta}, drugs; and one book on emollient, laxative, and analgesic drugs) and in the ‘head to toe’ order in the case of \textit{Places}’ and ‘it can be established that Galen wrote \textit{Types} before \textit{Places} and that he composed both treatises at the end of the second century AD or at the beginning of the third, and in any case after the great fire at Rome which destroyed many of his possessions in AD 192.\textsuperscript{820}

\textit{De Compositione Medicamentorum per Genera, On the Composition of Drugs according to Kind}

The references to \textit{Types} are relatively broadly spread throughout the seven books of this text, and again, it is Henry Pemberton who includes the most numerous citations of Galen. However, there are also two references to \textit{Types} within the 1618 Latin edition of the \textit{Pharmacopoeia Londinensis}, which is particularly unusual as this work rarely provides detailed citations. Both appear within the ‘Emplastra et Cerata’ chapter of the \textit{Pharmacopoeia} and are shown following the title of the remedy.\textsuperscript{821} The first entry refers to Book 2 of \textit{Types}, and says: ‘Emplastrum Barbarum Magnum, Gal: comp: med: sec. gen. l. 2.’\textsuperscript{822} This is consistent with Totelin’s description that the first four books of \textit{Types} examine plasters, and shows a particularly specific reference to a Galenic text. However, the second reference to \textit{Types} is more specific, providing both a book and chapter number: ‘Emplastrum Isis Epigoni Gal: comp. med: gen: l. 5. c. 2.’\textsuperscript{823} Here, according to Totelin’s description, the information is within a section of \textit{Types} addressing ‘multi-functional,’ \textit{polychresta}, drugs,’ however, as it appears as part of the second chapter of the book, it may be that this particular plaster is in fact also ‘multi-functional’ or that it appears in relation to the previous book.

\textsuperscript{820} Ibid.
\textsuperscript{823} Ibid., p. 175.
Henry Pemberton also mentions several different, but specific, books and chapters within *Types*, as part of the introductory ‘Narrative’ section in *The dispensatory of the Royal College of Physicians*. The references proceed sequentially throughout this section, mirroring their positions within *Types*. The first is as shown in *Figure 4*, a Greek quote followed by: ‘*Galen. de composit. medicam. per gener. L. I. c. I.*’

*Figure 4*  

The ‘*’ symbol within the footnote links the quote to a discussion regarding the advantages and problems associated with compound remedies. Pemberton says ‘There are however, very just reasons for some degree of composition’ however, subsequently adds:

But such obvious and natural motives are very disproportionate to the forementioned extravagancies. Some of the ancient empirics […] proceeded so far, as to admit, that accumulating ingredients of similar virtues might be usefully employed to fit the same composition for different constitutions, as one material might more affect some constitutions, and another, others. But this excuse, far as it might be extended, was, it seems, deemed yet insufficient *; a much more subtle exercise of fancy being required to explain the intricacies of these elaborate compositions.

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827 Ibid., p. 8-9.
The Greek passage that is shown corresponds to the beginning of the following statement, translated by Totelin as an Appendix to the article ‘And to end on a poetic note: Galen’s authorial strategies in the pharmacological books’:

11. In addition this argument shows the contentiousness of the Empiricists who refer almost all compound drugs to dreams, chance and accident, except for a very few drugs, which they say, have been discovered in accordance with the common reasoning of all men, which they themselves call *epilogismos*. . . {[examples]}.^{828}

This is the eleventh short paragraph of twelve shown by Totelin as the ‘Preface to Types 1’ and it corresponds to the first chapter of Book 1. Whilst this does begin to reinforce Pemberton’s point, chapter 1 (as translated by Totelin) as a whole is perhaps more illustrative of the broader argument. In particular, the sections numbered 7-9 in Totelin’s article more clearly state the idea that from Galen’s perspective, in some cases the process of compounding medicines had not been well understood:

7. [...] in the second book [of that lost work], I worked out another argument, since some [other people] think that in the mixing process the opposite powers of simple drugs cancel each other completely.
8. Thus if, they say, you mix the hottest water with the coldest, neither of the two mixed substances will remain as before, but some third substance will be generated, different from both.
9. These have been shown to talk nonsense because they do not realise that some of the drugs that are applied to the body act by means of innate powers, while others act by means of acquired qualities . . . {[various examples of qualities]}^{829}

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^{828} L.M.V. Totelin, ‘And to end on a poetic note: Galen’s authorial strategies in the pharmacological books’, *Studies in History and Philosophy of Science*, Volume 43 (2012), pp. 307-315, p. 313. The Greek phrase in Figure 4 continues only to the end of the word ‘Empiricists’ in Totelin’s translation; however the remainder of the passage is provided for context, especially as the Greek suggests that the theme carries on, by showing ‘e.t.c.’ (‘κ.τ.λ.’) at the end.

^{829} Ibid. Insertion in bold is mine; all others in this quote are Totelin’s.
The part included by Pemberton does however reinforce his point, and the relatively small space available within his text for footnotes may have contributed to the presentation of this particular section. However, it does suggest that the quote also acted to as a way to show Pemberton’s own scholarly abilities, whilst reiterating the authenticity of his Galenic source. Readers able to understand Greek would have been able to verify the contents themselves, and those unable to do so would nonetheless potentially have been able to follow the citation provided should a Latin edition have been available.

On the page immediately following the appearance of this citation, Pemberton includes a reference to Book 1, chapter 2 of Types: ‘De composit. medicam. per gener. L. I. c. 2.’\(^{830}\) This is in relation to a discussion regarding the various qualities that a medicine can be distributed into: ‘The first of these qualities, as well as those, which depended on them, were farther divided into four degrees, and each of these into three subdivisions, whereby medicines might be adapted to each case with the nicest subtlety by the rules of arithmetic.’\(^{831}\) This shows Galen’s role in determining the fundamental way in which medicines and their actions were described, and that Pemberton intended readers to be able to locate the information. However, it is important to note that whilst Pemberton includes these references, he is also at times critical of past practice. In the pages following the previous citation, he says: ‘Upon such vague and fanciful principles, as these, the most ridiculous farrago might be vindicated; yet thus for many ages did men exercise their ingenuity, and raise admiration from their followers, without the least improvement of the art of healing.’\(^{832}\) Although it is unclear whether this refers to the subdivisions of medicines, it nonetheless illustrates that past authority was not necessarily sufficient to ensure continued adherence, and that utility in the present was also an important factor.

The influence of the past on current attitudes to pharmacology is evident in the inclusion of these discussions and references, which show the path by which certain practices had reached the early modern period. It is also significant that parallels are drawn with problems experienced by ancient practitioners, and shown as remaining significant. This can be seen in one of the areas addressed

\(^{831}\) Ibid., p. 9-10.
\(^{832}\) Ibid., p. 11.
in Pemberton’s ‘Narrative’ section: ‘There was another general point of greater consequence, which required regulation; that is, the weights and measures, by which the ingredients in compositions are proportioned.’\(^{833}\) The solution to this particular problem is subsequently described, and Pemberton suggests that it is ‘agreeing with the mode of expression constantly used by Celsus and Scribonius Largus.’\(^{834}\) This illustrates the role of the past in explaining current ideas, and is reinforced by the inclusion of a reference to Galen encountering the same problem: ‘This ambiguity in the terms expressing weights and measures is universal, and very ancient; insomuch that Galen censures physicians for not distinguishing in their pharmaceutic writings, whether by pounds and ounces they meant in liquids, measures or weights.*\(^{835}\) Here, the past is used to show the longevity of the problem, and by indicating that Galen also experienced it, Pemberton aligns himself with a notable authority. The ‘*’ symbol within this passage refers to a footnote (see Figure 5) which provides a lengthy quote in Greek, as well as the reference: ‘De compos. medicament. per gener. L. VI. c. 8.’\(^{836}\)

\[\text{Figure 5}^{837}\]

The reference to Book 6, chapter 8 of *Types* is relatively specific, and provides evidence of the authenticity of both the story relating to Galen, and the source of the information. Here, the Greek wording broadly corresponds to the English.

\(^{834}\) Ibid., p. 44.
\(^{835}\) Ibid., p. 44-45.
\(^{836}\) Ibid., p. 45.
passage relating to the footnote, underlining the relationship between the two ways of conveying this point.

William Salmon also refers to Book 6 of *Types* within his text *Pharmacopoeia Londinensis*. This follows a similar model to the way in which he refers to *On Antidotes*, and is shown within the entry for ‘Ceratum Galeni, Galen’s Cerecloth’.838 The integration of the citation into the text can be seen in *Figure 6*, and it shows Salmon’s use of Greek to authenticate his reference to Galen. Book 6 of *Types* (mentioned here) is the second of ‘2 books on ‘multifunctional,’ *polychresta*, drugs*839* within *Types*, and the comment provided by Salmon also suggests that there were several functions for this particular substance: ‘It wonderfully dries up Humors in all parts of the Body.’840

![Image of a passage from a book](image.png)

*Figure 6* 841

*De Compositione Medicamentorum secundum Locos, On the Composition of Drugs according to Places*

Henry Pemberton is again the author who makes most frequent reference to the Galenic text *On the Composition of Drugs according to Places* (hereafter *Places*), all of which appear within his ‘Narrative’ section. The order in which these references are deployed in Pemberton’s text also reflects their order within *Places*, the first of which uses information from Book 1, chapter 2.842 It forms part of a discussion reviewing various types of substance and their place within the pharmacopoeia: ‘In the pills, *pillulæ cocciae majores* are not only now

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841 Section copied from Salmon’s text, showing part of the entry for ‘Ceratum Galeni, Galen’s Cerecloth.’: W. Salmon, *Pharmacopoeia Londinensis: or, the new London dispensatory* (London, 1716), p. 678.
omitted, but the ingredients of the *coccia minores* also reduced to the proportions, as they are set down in *Galen*.*843 This is significant as it shows a return to the form of the remedy found in Galen, and it also highlights that the Galenic version was simpler than subsequent variants. Pemberton reinforces the preferable nature of Galen's iteration by adding that: 'the form in Galen is a more eligible medicine, containing but half the quantity of the coloquintida, whereby it will be less ungrateful to the stomach.*844

The theme of returning to Galen as the original author of a particular remedy, as well as a simpler form, can also be seen in both references made by Pemberton to Book 7 of *Places*. The first, regarding a specific type of pill, is within a footnote, which says: *"De composit. medicament. sec. loc. L. VII. c. 2, 3."*845 This is used to provide the location of the simpler forms of the recipe: 'Our pharmacopoeia has only one opiate pill, the *pilula e styrace*, [...] This [...] is transcribed from *Mesue* *; but there are in *Galen* more simple forms of similar intention *: one of which the committee have substituted in the room of ours [...]*:846 Here, the suggestion is that over time these substances had become more complex, moving away from the simpler Galenic versions. The idea of restoring a remedy to the form presented in Galen can similarly be seen as part of a section addressing electuaries:

But to proceed to the other electuaries, the true *confectio Archigenis*, being the *paulina of Aristarchus* in *Galen* *; is so similar to that, we have transcribed from the unknown *Mesue* *; that no reason can be given, why the medicine should not be brought back to its first form, and author.*847

This shows that although the remedy had remained relatively unchanged over time, it was still preferable to return it to 'its first form, and author.' This implies that the influence of the past had a greater importance than simply the recipe

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844 Ibid., p. 103.
845 Ibid., p. 106.
846 Ibid., p. 105-106. Although there are two ‘*’ symbols within this passage, they fall on sequential pages, and the first provides a reference for Mesue, whilst the second relates to the citation of Galen.
847 Ibid., p. 115.
itself, and that older iterations of a remedy could be seen as authoritative. It also suggests that in some instances the fact that a formula had not changed significantly contributed to its continued use in that form. The ‘*’ symbol within this paragraph provides the citation in Galen for this recipe, and this is shown in the footnote as: ‘* Galen. de compos. medicam. sec. loc. L. VII c. 5. compared with Aet. L. VIII. c. 65.’ This reference provides a source for the original Galenic version of the recipe, as well as another version for comparison.

The final reference to Places within Pemberton’s text also appears to be the only specific reference to a Galenic text that falls outside of the introductory ‘Narrative’ section of the work. It is within the chapter addressing ‘Pulveres, Powders’ and is part of the entry for ‘Hiera Picra.’ Following the method and ingredients, there is a remark by the author, which says: ‘The using here the gum of aloes is conformable to the original of Andromachus *.’ The ‘gum extracted from Socotorine aloes one pound’ forms the main part of this recipe, and illustrates the importance of linking the most significant part of the remedy to the original recipe, shown here as extracted from Galen: ‘* See Galen. de compos. medicam. secund. loc. L. 8. c. 2.’ The addition of the word ‘see’ to the footnote also suggests that the citation had been included to provide evidence of the statement, and that the reader was therefore invited to verify it.

Attributing a recipe to Galen is also the reason that William Salmon includes a reference to Places within his text. The citation, shown in Figure 7, refers to Book 2 of Places, and illustrates an example of a substance that is linked to Galen. Here, Salmon makes it particularly clear that the remedy is ‘from Galen’ as this is included in both the Latin and English titles. He also, as in other examples, uses Greek to reinforce both the authenticity of the recipe, and the authority of its presence in his pharmacopoeia.

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849 Ibid., p. 318.
850 Ibid.
851 Ibid.
Whilst Salmon’s reference provides sufficient detail to suggest that he intended the reader to be able to locate the information if required, there are also examples of less specific citations which would necessitate a greater degree of prior knowledge in order to follow the reference. John Quincy includes this type of reference in the work *The dispensatory of the Royal College of Physicians in London* under his entry for ‘Pilulæ Aleophanginæ. Aromatick Pills with Aloe’s.’ Following the recipe, there is a remark by the author, which says:

> The Quantities of some of the Ingredients are somewhat diminished to what they were before. These are the *Pilulæ Aromaticæ* of Mesue; but it seems from *Galen, Lib. 1. de Comp. Med.* as if he borrowed the Prescription from *Lampone’s*, because it is almost the same as his *Hiera*.

Here, the reference to Book 1 ‘*de Comp. Med.*’ does not provide enough information to distinguish between *Types* and *Places*. Both usually appear with abbreviations of these three words at the beginning, followed by additional words (or parts of words) indicating whether the intention is *Types* or *Places*: either *De Compositione Medicamentorum per Genera*, or *De Compositione Medicamentorum secundum Locos*. Although Quincy mentions a similarity with Galen’s ‘*Hiera*,’ which Pemberton also discusses with reference to *Places*, the

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853 Section copied from Salmon’s text, showing the entry for ‘*Philonium Tarsense Galeni*’: W. Salmon, *Pharmacopœia Londinensis: or, the new London dispensatory* (London, 1716), p. 598.

The inclusion of this type of citation, which is specific in the book it refers to, but not the text as a whole, perhaps implies that the important aspect of the reference is mentioning Galen and his work, and therefore the authority provided contributes to the credibility of the information, rendering the specifics of the source less significant. It is also possible that the contents of Book 1 of both *Types* and *Places* were well known, and as such that the reader would be able to identify the origin of the information without a specific citation, either not needing to follow up the reference, or being able to locate it if necessary.

*De Sanitate Tuenda, De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus, and De Methodo Medendi*[^556]

The final three Galenic works that are mentioned within the early modern pharmacological texts studied are: *On the Preservation of Health*, *On the Powers [and Mixtures] of Simple Drugs*, and *On the Therapeutic Method*. As these works do not focus primarily on compound remedies, it is perhaps less likely that they will appear as supporting information in early modern discussions regarding specific substances. This is reflected in the fact that they are referred to significantly less often than the texts addressed above.

*De Sanitate Tuenda, On the Preservation of Health*

*De Sanitate Tuenda*, or *On the Preservation of Health*, contains Galen’s ‘views on the preservation of health and hygiene and the prevention of disease.’[^557] Philip van der Eijk describes it as a ‘key work’ in which Galen ‘defines health as the state of right balance between elementary qualities such as hot, cold, dry and wet, within the homoeomeronous parts of the body.’[^558]


[^558]: Ibid., p. 298.
Henry Pemberton includes a reference to *On the Preservation of Health* alongside a citation (mentioned above) to *On Antidotes*.\(^{859}\) The citations are provided to reinforce a discussion regarding the substitution of cinnamon for ‘casia lignea’ in a particular recipe. Here, Pemberton indicates that the committee intended to remove all ingredients that were not present in the original recipe, and that they would therefore also be returning to the use of cinnamon.\(^{860}\) The evidence provided to show cinnamon as the correct ingredient is from Galen and it suggests that ‘casia lignea’ had only been used due to the difficulty in obtaining cinnamon.\(^{861}\) This therefore reinforces Pemberton’s assertion that the recipe would be returned to its original iteration, and showing two different sources for the information underlines the authenticity of the point. The particular citation that is provided for *On the Preservation of Health* is: ‘De sanitat. tuend. L. VI. c. 1.’ however, Robert Green’s translation of the text does not corroborate this location. The first chapter of Book 6 is shown to address a ‘Summary of Preceding Books’ and therefore does not discuss specific ingredients or remedies.\(^{862}\) Nonetheless, chapter 10 does discuss cinnamon as Pemberton indicates: ‘And it is obvious that anyone lacking cinnamon adds a double quantity of the best cassia; [...]. But just as when we lack good bread, we eat even the worst, so we also use the best cassia in the lack of cinnamon.’\(^{863}\) This illustrates that whilst the reference provided by Pemberton is not quite accurate, the information he conveys is comparable to the point made in Galen.

John Quincy also makes a brief reference to *On the Preservation of Health*, but does not accompany it with a particular book or chapter reference. The citation is included within the comments relating to the recipe for ‘Species Diatron Pipereon. A Species with the three Peppers.’\(^{864}\) Here, Quincy suggests that: ‘This is prescribed by Galen, *De tuenda Valetudine*, where he recommends it

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\(^{860}\) Ibid.
\(^{861}\) Ibid.
\(^{863}\) Ibid., p. 264.
against Crudities and a Redundance of cold Humours.\textsuperscript{865} Although the title of the text differs slightly from \textit{De Sanitate Tuenda}, the sense is the same: defending or preserving health. It is also possible to locate this advice in Green’s translation, where it appears within Book 6, chapter 10, entitled ‘Hot and Cold Dyscrasias of Head and Stomach.’\textsuperscript{866} Here, Galen mentions the ‘Species with the three Peppers’: ‘For if phlegmatic fluids from the head flow down into a stomach warm by nature, ready aid is afforded them, if they take the simple three pepper medicine in the morning.’\textsuperscript{867} Similarly, following discussion of a different substance, Galen advises that: ‘it is not possible to use such a drug continuously, or the three pepper medicine, or calaminth. But if a patient with a cold abdomen uses these every day, he will experience no harm.’\textsuperscript{868} This is aligned with Quincy’s description of Galen recommending the ‘three pepper medicine’ for ‘Crudites’ as this was a word associated with undigested substances in the stomach.\textsuperscript{869}


\textit{On the Powers [and Mixtures] of Simple Drugs (De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus)} was written in eleven books and alongside the work \textit{On Mixtures} is the place where Galen’s ‘system and theory of pharmacology […] is most extensively explained.’\textsuperscript{870} Pemberton mentions \textit{Simple Medicines} twice within his ‘Narrative’ section, and the first reference is within a footnote previously mentioned, which also cites \textit{On the Composition of Drugs according to Kind}. The passage addresses the distribution of medicines into categories based on qualities, and the subdivision of these into degrees and further divisions which contributed to an ability to use arithmetic to accurately determine the action of a substance and adapt it to

\textsuperscript{865} J. Quincy, \textit{The dispensatory of the Royal College of Physicians in London} (London, 1721), p. 85.
\textsuperscript{866} Galen, R.M. Green, \textit{A Translation of Galen’s Hygiene (De Sanitate Tuenda)} (Illinois, 1951), pp. 262-265.
\textsuperscript{867} Ibid., p. 263.
\textsuperscript{868} Ibid., p. 264.
\textsuperscript{869} See definition of ‘Crudity’ in T.H. Croker, T. Williams, and S. Clarke, \textit{The Complete Dictionary of Arts and Sciences}, Volume 1 (London, 1766), pages unnumbered: ‘CRUDITY, among physicians, is applied to undigested substances in the stomach; to humours in the body which are unconcocted, and not prepared for expulsion’.
specific cases. Here, the footnote indicates that this idea can be found in Book 5 of Simple Medicines: `+ Galen. de medicament. facultat. L.V. c. 1, 2.` This reference is corroborated by Sabine Vogt’s description of the beginning of this work: ‘The first five books of SMT outline Galen’s theory of the four humours as applied to pharmacology, and the subdivisions according to the intensity and the distinction between basic and derivative qualities.’ Here, Pemberton provides a particularly specific reference to theoretical information provided by Galen, and also reinforces its importance by showing two citations, from different texts. This also alludes to a level of consistency between Galen’s works, and underlines his role in providing a coherent and underlying framework for some aspects of pharmacology.

Pemberton also makes reference to a more specific piece of information from Simple Medicines, which is presented as part of a discussion regarding sugar as an ingredient in syrups: ‘The committee have recommended the finest sugar in all syrups. Perhaps their reason for so doing will be most apparent by a short sketch of the several processes, sugar undergoes between its preparation from the cane, and its last refining.’ This introduces the importance of the type of sugar utilised in particular recipes, and the point is subsequently reinforced by detailing the process of refinement. The narrative includes a passage which says:

> Of this we see an example in dried raisins and figs, the saccharine substance, we find upon them, being their juice converted into that form. The like is found upon very rich sugar-canues, when wounded, which seems alone to have been the sacchar or saccharon of the antients.

Here, the associated footnote not only shows a Galenic source, but also includes citations for Dioscorides and Pliny: `* Dioscorid. L. II. c. 104. Galen. de simpl. med. facult. L. VII. Plin. histor. nat. L. XII. c. 8.` This is significant as the

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871 H. Pemberton, The dispensatory of the Royal College of Physicians (London, 1746), p. 9-10
872 Ibid., p. 10.
875 Ibid., p. 93.
876 Ibid.
text refers to ‘the antients’ and Galen is therefore shown as part of a wider group of ancient authors. The implication is that in order to make a statement relating to ‘the ancients’ as a group, several references were required to show that ideas were shared between different authors. Similarly, in referring to a particular substance, Dioscorides may have been a more immediate choice (perhaps hence his appearance at the beginning of the list), but the inclusion of an additional reference to Galen would perhaps have provided further authority to the statement. The citation of Book 7 of Simple Medicines is likely to be accurate, as Vogt suggests that: ‘Books VI-XI provide a catalogue of drugs and their healing properties, in large sections dealing with herbs and plants (books VI-VIII) […].’

De Methodo Medendi, On the Therapeutic Method

On the Therapeutic Method (De Methodo Medendi) was written in the second century AD, the first six books between 169-176, and the final eight books towards the end of the century. It has been said that in this work, ‘Galen aims to establish a rational methodology which would allow the doctor to select the appropriate treatment for a particular disease in a particular patient and to modify this treatment in a rational manner according to the course of events.’

On the Therapeutic Method is one of the few Galenic texts that is specifically mentioned in the 1618 Latin edition of the Pharmacopoeia. The reference appears immediately after the title of the remedy, which is also attributed to Galen: ‘Pulvis ad Hæmorrhagiam, Galeni. Meth. l. 5. c. 4.’ This indicates that the recipe itself had been taken from Galen, but also that this association was particularly important. It is likely that the efficacy of the treatment contributed to its continued use, and that no other substance had been found to achieve the intention as effectively. This is particularly evident in two English translations of the particular passage that is cited in the Pharmacopoeia, and comparison between the different versions is also significant in showing the accuracy of early modern translations.

879 Ibid., p. Ivii.
Firstly, the English translation from 2011 of the relevant part of Book 5, chapter 4 of *On the Therapeutic Method*:

> Therefore, the best of all the medications I know, and the one which is safer to use for hemorrhages from the meninges, is the one I shall speak of. Mix one part of frankincense with half a part of aloes, and then, when it comes to the time for use, mix in the white of an egg to such a degree that the whole has a honeylike consistency. Next, let this be taken up by the softest hairs of a hare, and then let it be applied in abundance to the vessel and to the whole wound. Bind externally with a linen cloth in an underbandage, making the first four or five turns on the hemorrhaging vessel itself [...] I use this medication in very many forms. Sometimes, as I said, I mix one part of aloes to two of frankincense, sometimes I mix an equal amount of both, or a little more frankincense than aloes, or a lot more, although not yet twice as much, and sometimes I put in manna instead of frankincense.\(^{881}\)

This is followed by a comment highlighting the efficacy of this technique: ‘However, let me return again to the point where I left off the discussion. I made mention of the medication previously spoken of because I am persuaded that it is better than all others, and I would be amazed if someone were able to discover a better one.’\(^{882}\) This suggests that Galen believed it was unlikely that this remedy could be improved, and its position within the 1618 *Pharmacopoeia* indicates that, until at least this period, he was correct.

There is also a translation printed within Thomas Gale’s text *Certaine workes of Galens, called Methodus medendi* (1586). Here, the title page for Book 5, shows chapter 4 as addressing ‘The Medicaments that wil make a crust which doth much to the stopping of a flux of bloud’ and *Figure 8* illustrates the way in which each book is introduced.\(^{883}\)

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\(^{882}\) Ibid., p. 27.

The same section of Book 5, chapter 4 is shown in Gale’s work, and says:

Therefore that medicine that I will now set here out, is the best that I know of all other, which I also use without peril in fluxes of blood, of the coates called Membrana, of the brayne, one part of Frankencense mixed with halfe one part of Aloes, after when thou wilt use it teper it with so much white of an Egge, as it may be thicke lyke Honey, & put to these most soft haires of an Hare, and then apply it largely both to the vessell, and also to ý ulcer, binding it outwardly with a soft linen roller, and let the roller goe foure or five times about the vessell that flowed, & then go toward the roote of the vessell in those parts [...]. This medicine (as I have saide,) I use many waies, sometime to the Aloes, the double waignt of Frankencense, sometime equall portion of both, sometime the Frankencense to be a little more than the Aloes, or else a greater portion, but not double, and sometime putting in the stead of Frankencense, Manna [...].

The similarity of the translations, including the detailed instructions for this particular recipe, imply that the references to Galen and his works (especially those with very specific locations) were both accurate and verifiable. Consequently, Gale also includes the sentence regarding the fortunes of this particular remedy: ‘But lette us turne likewise, to that againe, that in speaking we have little finished, and I have made the longer mencion of these medicines

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884 Section copied from Gale’s text, showing the title page of Book 5: T. Gale, *Certaine workes of Galens, called Methodus medendi* (London, 1586), p. 83.

rehearsed, because I am persuaded that it excelleth al other, and I marvell if it shall chaunce any man, to finde a better [...]^{886}

The references to specific Galenic works within these editions of the *Pharmacopoeia* illustrate a variety of different uses for this type of information. They show the fundamental role of Galen in providing a coherent and underlying framework to some aspects of pharmacology, and his influence on the way in which medicines and their actions were described. There are also examples of the use of Galenic texts to illustrate that a particular remedy had been taken from Galen, as well as highlighting instances in which a remedy had been restored to a form originally found in Galen. This aspect is also often found alongside the suggestion of a return to a simpler previous iteration of a remedy, and shows that past authority alone was insufficient in determining the ongoing use of a substance and utility in the present remained significant. As has been shown, these references were both verifiable and accurate, and as such the provision of these types of citations suggests that the authors intended the reader to both understand and locate the information if necessary. Similarly, the use of Greek, particularly within the popular editions of the *Pharmacopoeia*, also conveys a more scholarly, authoritative tone to the information, whist suggesting the authenticity of the source and broader research. Finally, the parallels that are occasionally drawn between problems experienced by ancient and early modern practitioners illustrate a commonality of experience, and underline that ancient influence, particularly Galenic, remained significant.

The *Pharmacopoeia* texts studied within this chapter illustrate the use of Galen in a number of different ways, and underline the complexity of the relationship between ancient and early modern medicine. These texts often devote minimal space to discussing medical theory, and prioritise the presentation of the recipe for each substance under sections addressing compound remedies. Within this context, the appearance of a name or association alongside a recipe shows the importance ascribed to this additional information, and instances of a reference to Galen therefore demonstrate that this was seen as a valuable addition to the text. This is particularly evident within the Royal College of Physicians’ editions

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of the *Pharmacopeia*, which provide fewer comments on each recipe than the popular versions, and consequently fewer specific references to Galen. However, several of the ways in which Galen is utilised are common to both types of texts; for example the importance of establishing the authorship or origin of a substance, often including a reference to Galen, can be seen in all types of editions. The amendments that are evident between different versions of the *Pharmacopeia* demonstrate an ongoing development process, the complexity of which is shown by the removal of a substance from the ‘official’ *Pharmacopeia* periodically ensuring that it is retained within the popular editions.

The ‘Galenic substances’ examined within the 1618 Latin edition of the *Pharmacopoeia* and their subsequent occurrence show several broader points regarding the development of the document, and the use of pharmacological substances. The references to Galen with regard to these remedies illustrate a process of incremental change over time, rather than depicting a comprehensive and deliberate rejection of ancient authority. Amendments across the different editions of the *Pharmacopoeia* are primarily shown as the result of choices based upon utility and experience, reinforced by an increasing preference for a simplified approach. Associations to Galen lost over time are also occasionally re-established, indicating an underlying influence that remained present. Similarly, the justification for changes over time and the explanations of this process that are provided throughout these texts illustrate an ongoing reverence for ancient authority, and the importance of the context of the past.

The references to specific Galenic texts that are evident within the various editions of the *Pharmacopeia* demonstrate the significance of Galen in providing a fundamental framework for some aspects of pharmacology, and the way in which medicines are described. They also reinforce the suggestion that a particular remedy had been taken from Galen, or provide evidence that a substance had been returned to its original Galenic form. The citations shown within the text are often an accurate reflection of the content of the Galenic work, and indicate that they were intended to authenticate the information they were associated with. Similarly, the use of Greek, particularly within the popular
translations, provides a sense of authority and a learned aspect to the work, reiterating the authenticity of the research and ancient influence.

Parallels are occasionally drawn between the experiences of the ancients, and that of early modern practitioners. This reinforces the link to the past, and underlines the importance of a continuity of influence over time. A sense of clarity and the ability to trace the history of a substance has also been shown to be significant, especially where a remedy is demonstrated as unchanged since Galen’s time, or in the many instances which show that the key ingredients and instructions had been retained. Development therefore did not necessarily constitute increasing divergence from the 1618 edition of the *Pharmacopoeia*, and change was a complex process which varied between different authors and versions of the text. The importance of the past and establishing authorship of a particular substance remain significant, and with regard to specific remedies, themes such as utility and experience are key to the retention of both an association to Galen, and a place within the *Pharmacopoeia*. 
Chapter 3
Galen, the ancients and early modern surgery

The history of surgery has been written from a wide range of perspectives, and with a diversity of aims in the presentation and analysis of material. In general, ‘broad-based’ histories of medicine, addressing wider themes and time periods, refer more frequently to Galen than specific, targeted pieces. This is due to the often longer time period addressed, and the corresponding need for additional contextualisation, whether to connect a surgical chapter to an overall text, or to show how themes within the early modern period have developed over time. This can particularly be seen throughout The Western medical tradition: 800 BC to AD 1800, which necessarily includes both information regarding Galen’s own lifetime, as well as his influence later in the period covered by the text.  

The historiographical discussion that Christopher Lawrence includes as a substantial section within Medical theory, surgical practice, effectively presents the key themes and authors that have contributed to, and changed, the history of surgery. The title of the chapter, ‘Democratic, divine and heroic: the history and historiography of surgery’ indicates the dual intent to outline both the history of surgery itself, as well as to show the different ways in which it has been approached. The structure of the piece reflects changing attitudes over time, beginning with ‘popular mythologies’ and ‘serious histories’, before moving to discuss Lawrence’s perspective of Owsei Temkin’s specific influence in this area. He ends by examining ‘the surgeon as democratic hero’, underlining the importance of the ‘rise of the ‘surgical point of view’ which emphasises that a specifically surgical way of viewing the body and its workings had a significant

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889 Ibid., p. 1-23.
impact upon medicine more broadly.\textsuperscript{890} This is particularly evident through the idea that: ‘once surgeons had defined the interior of the body as their rightful domain and their social status was assured, practice eventually followed.’\textsuperscript{891} There are examples throughout this chapter which show that it is possible to see the way in which surgeons made the interior of the body part of their practice during the seventeenth and eighteenth centuries, especially in instances whereby the correct diet forms part of the overall treatment advised by a practitioner.

Lawrence’s analysis remains an accurate and valuable contribution to the historiography, and forms the basis for (amongst other contributions) the more recent work by Keir Waddington, which outlines the history of surgery from 1500 to the modern period.\textsuperscript{892} Waddington succinctly demonstrates the key areas that have emerged within the historiography of surgery, noting that: ‘historical research has come to reveal a more contested history; how complex relationships existed between technology, practice and professionalization, and how surgery reflected professional goals and theories of the body as well as the socioeconomic, cultural, political and institutional contexts in which surgical knowledge was constructed and surgery performed.’\textsuperscript{893}

Waddington also briefly discusses the influence of the type of material studied within this area, suggesting that the elite surgeons providing the evidence ‘wanted to project surgery in particular ways. They embraced a language of progress that celebrated the achievements and surgical heroes of their age. The result was an overt link of surgery to modernity and breakthroughs.’\textsuperscript{894} Although in many ways this view has persisted, Waddington concludes by commenting that over time: ‘rather than a progressive narrative, a more contested history of surgery is revealed, one that helps question our

\textsuperscript{892} K. Waddington, ‘Surgery’, in K. Waddington, \textit{An introduction to the social history of medicine: Europe since 1500} (Basingstoke, 2011), pp. 120-143. Waddington highlights his use of Lawrence by showing in the endnotes that the section ‘Status and training’ ‘draws on Christopher Lawrence […]’ (p. 343), and mentions Lawrence’s influence throughout the chapter.
\textsuperscript{893} K. Waddington, ‘Surgery’, in K. Waddington, \textit{An introduction to the social history of medicine: Europe since 1500} (Basingstoke, 2011), pp. 120-143, p. 120.
\textsuperscript{894} Ibid., p. 121.
assumptions about progress, breakthroughs and the adoption of new ideas or methods in medicine. The findings of this thesis particularly interact with the idea that elite surgeons ‘sought to bring surgery closer to book-learning and physic by emphasizing the value of regimen and pharmacy’ and that this, amongst other trends, ‘aided the emergence of a new class of learned surgeon who based his practice on anatomy, regimen and medicines, and encouraged a surgical perspective on internal disease that was to dominate medicine in the late eighteenth century.’ Waddington also suggests that following the First World War, ‘personal preference was important: individual surgeons modified operations as they adjusted procedures, instruments and the nature of pre- and postoperative care provided’, however the argument presented within this thesis illustrates that this approach was evident much earlier, and that the individual experience of the surgeon was key in both their perception of medical theory, and in their practical measures.

Andrew Wear addresses surgery within his work Knowledge and practice in English medicine primarily as part of a chapter entitled ‘Surgery: the hand work of medicine’. This illustrates the traditional perspective that surgery was a manual craft, most commonly associated with ‘cutting out disease by excision or amputation or with mechanical repairs such as setting bones or putting dislocations back in place.’ Wear outlines surgical education and status during this period, as well as the more technical aspects of becoming a surgeon. He suggests that: ‘operative techniques have been discussed in some detail in histories of surgery’, and consequently does not focus on this area, instead looking more broadly at the context in which surgeons were working, underlining that: ‘the craft emphasis on practicality, dexterity and the value of experience, together with the need to attract customers, meant that surgical innovation and possible (though not inevitable) improvement occurred regularly.

896 Ibid., p. 122.
897 Ibid., p. 139.
900 Ibid., p. 248.
throughout the period. Alongside highlighting the craft aspects of surgery, Wear also demonstrates that surgeons as a group were more likely to emphasise the continuity between physic and surgery, whilst physicians broadly sought separation.

The relationship between physicians and surgeons forms a significant part of this piece, and Wear highlights the areas in which their practices could overlap, particularly through the importance of diet to the maintenance or restoration of health. This can similarly be seen through the idea that: ‘knowledge from physic produced a more complete and effective surgical outcome.’ It is important to note that surgeons at sea were less restricted by the separation of physic and surgery, as they would have had to provide both types of service (as well as that of apothecary) at sea. Wear suggests that this consequently influenced the type of material that was presented within works written by surgeons with experience at sea, with these more likely to include either specific ‘antidotaria’ sections, or more frequent advice regarding medicinal preparations; although these aspects were important to all surgical authors during this period. Wear suggests that: ‘the continuities within medical practice have often been overlooked’ and as such, ‘much remained unchanged. Regimen was relatively unaltered. Therapeutics, though enlarged by chemical remedies, was still largely evacuative and was more heroic than ever.’ This information corroborates the findings of this thesis regarding the ongoing importance of Galen, especially with regard to Wear’s view that although much of the medical knowledge prevalent during the early modern period could also be identified within ancient or medieval medicine, this did not ‘lessen its reality for people living in the sixteenth and seventeen centuries.’ Further parallels can be drawn between Wear’s work and this thesis through the perception that: ‘the localised and more general visions of the body can be interpreted as

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902 Ibid., p. 220.
903 Ibid., p. 212, see also p. 225-229.
904 Ibid., p. 227.
905 Ibid., p. 228.
906 Ibid., p. 3 and p. 472.
907 Ibid., p. 3.
representing the surgeon’s manual skill and learned knowledge respectively. This underlines the role of medical theory within surgery, which Wear contextualises in the book’s final section: ‘theory and learning did not disappear from medicine in the eighteenth century, but medicine became much more flexible, both in relation to the barriers that had separated the different parts of medicine, and in the acceptance of empirical philosophy into medicine.’

In addition to texts such as Wear’s, there are also examples of relatively general histories which nonetheless examine several similar subjects. For example, Elizabeth Lane Furdell addresses many of the themes of this thesis as part of a chapter entitled ‘English medical orthodoxy and its challenges’. This piece suggests that: ‘classical knowledge and pure medicine had been distorted and defiled, it was thought, by incorrect medieval texts and translations; reformation in medicine depended on the accurate rendering and editing of the words of its founders, especially Galen.’ Furdell also examines the role of medical institutions such as the Royal College of Physicians and the Surgeons’ Guild, showing the tasks performed by each, and their role in the education and regulation of their practitioners. The divisions within medicine during this period are particularly emphasised alongside specific challenges to Galenic medicine, both by Paracelsus, Jan Baptista van Helmont and others.

In contrast to the information conveyed within these types of broad histories, general histories taking a more narrative approach have also been written by, and for, those working within surgery as an ongoing medical practice. These works, led by the discussion of specific individuals, often demonstrate an intention to capture the history of the art and present it positively, in a way that illustrates a path to the present day. William MacCormac’s work exemplifies this approach, arising from his position within the Royal College of Surgeons and includes both the institutional history of his organisation and its relationship to

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909 Ibid., p. 472.
911 Ibid., p. 1.
the Company of Barbers,913 and broader discussions of the development of surgery over time.914 Whilst these pieces do not specifically mention Galen, they suggest other figures perceived as significant foundations for surgical theory and practice, including, for example Hippocrates, Heliodorus, and Oribasius.915 The ‘path to present’ approach of this work indicates the importance ascribed to building upon the past, and the underlying argument frequently follows the sense that: ‘absolute originality does not exist, and a new discovery is largely the product of what has gone before.’916

Despite the somewhat outdated emphasis on the heroic role of individual medical practitioners, these works nonetheless provide useful information, both historiographically and through the details they contain. For example, an article entitled ‘Nova et Vetera: The serjeant-surgeons of England and their office’ published in The British Medical Journal in 1900 contains an unusually comprehensive list of the serjeant-surgeons attending the monarch between 1415 and 1884.917 This ‘new and old’ (‘nova et vetera’) section of the journal also focuses on serjeant-surgeons in 1925, describing the key figures holding this office during the early modern period, and placing them within their institutional context.918 The focus on particular individuals characterises this approach, and continues over time, particularly within addresses by surgeons, for surgeons.919 However, by the late 1960s, the influence of new approaches

916 Ibid.
917 Anonymous, ‘Nova et Vetera: the serjeant-surgeons of England and their office’, The British Medical Journal, Volume 1, Number 2045 (March 10 1900), p. 583. Although no author is shown, evidence from a similar article published in the BMJ in 1925 suggests that this piece was written by D’Arcy Power, see Anonymous, ‘Nova et Vetera: The serjeant-surgeons to the King’, The British Medical Journal, Volume 1, Number 3344 (January 31 1925), p. 224. Power was a notable surgeon-historian working at the beginning of the twentieth century.
within the history of medicine becomes evident as these types of addresses broadened to include, for example, brief analysis of eighteenth-century social conditions, anatomical dissection, and hospitals, in addition to the outline of individuals and institutions responsible for driving the development of surgery. More recently, Charles Bagwell has quite broadly discussed the development of surgery (and physic) over time, and although this narrative study focuses on the medieval period, it nonetheless addresses the separation between physic and surgery, and their respective institutional basis. It also describes the influence of Galen both in his own time, and throughout the early modern period, outlining Galenic physiology and the influence of later editions of his work.

The focus on individuals, however, is not unique to older, ‘path to present’ histories written by surgeons, and there are many examples which illustrate the use of particular practitioners to demonstrate wider points about the history of surgery. Lucinda Beier’s study of seventeenth-century surgeon Joseph Binns illustrates the types of afflictions attended by Binns, and his broader experience of the fluid nature of the medical marketplace in which he worked. Beier discusses Binns’ background, career, and the medical context in which he worked, whilst also capturing the experience of patients alongside the intention behind Binns’ approach. However, Beier acknowledges that the limitations of this approach lie in the fact that: ‘there is much Joseph Binns’s casebook does not tell us, both about his own practice and about the ordinary practice of surgery in seventeenth-century England’, indicating that it is difficult to generalise from such a specific source. It is important to note that whilst Beier does not provide significant information regarding Binns’ theoretical stance, much of his work appears to take a broadly Galenic approach to treatment.

This piece also highlights that although ‘Binns’s therapeutic methods did not

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922 Ibid.
924 Ibid., p. 94.
925 Ibid., see in particular p. 61 which shows the importance of humoural theory and that ‘Surgeons also prescribed diets which were expected to prevent or reduce infection and help in the healing process”; and p. 73, illustrating the use of a light diet during treatment.

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change over the entire thirty years covered by the casebook', he also absorbed the use of chemical remedies into his practice, conforming to a more general sense that surgeons during this period were quicker to do so than their physician counterparts.

Daniel Turner, one of the surgeons discussed throughout this chapter also forms the basis for studies using an individual to illuminate the environment in which surgeons were working during this period. Philip Wilson’s work demonstrates the relationship between the biographical detail he presents about Turner and the broader context of his practice in London during the eighteenth century. Wilson utilises Turner’s texts in a similar way to Beier’s use of Binns’ casebook to show the types of afflictions encountered, and the way in which they were treated. The more comprehensive of Wilson’s works includes additional source material to ‘reconstruct’ what has been characterised as the ‘“lost” half-century of London surgery,’ between 1700 and 1750. He also addresses the separation, or lack thereof, between the work of physicians and surgeons, and the network of working relationships that existed between different practitioners.

Similar themes are discussed within Michael McVaugh’s article on Richard Wiseman (another surgeon examined below), which places the individual practitioner within the social and medical context of his time. The single allusion to Galen within this piece reinforces one of the broader points of this thesis: that surgical authors chose information from a variety of sources based on utility. McVaugh indicates that Wiseman referred to Galen amongst other


927 Beier suggests that: ‘In his employment of both herbal and metallic remedies he was typical of the surgeons, who were quicker to adopt the new Paracelsian remedies than were the physicians.’ See L.M. Beier, ‘A London surgeon’s career: Joseph Binns’, in L.M. Beier, Sufferers and healers: the experience of illness in seventeenth century England (London, 1987), pp. 51-96, p. 62.


authors, and ‘was well acquainted with existing surgical and anatomical literature, both in vernacular languages and in Latin […]’, though he maintains a certain independence from all his authorities.\textsuperscript{931} There are also several other examples of studies which take the biographical information of a surgical practitioner and deploy it to show the mechanics of the way in which individuals became surgeons, and the subsequent role that they played within the medical environment of their time.\textsuperscript{932} In particular, Roy Porter argues that William Hunter’s career should be examined within the context of his personal rise to surgical success, rather than as part of a broader discussion focusing on surgery as a specific ‘profession’ and the institutions often associated with this.\textsuperscript{933}

An institutional focus has often been criticised for over-emphasising the power of organisations such as the Royal College of Physicians, and for failing to account for the experiences of both practitioners and patients; however, this focus has also been used more recently to show the influence of the Royal College of Barcelona in the development of surgical activities in early modern Spain.\textsuperscript{934} This article also highlights the separation of England from the rest of Europe with regard to some aspects of medical theory and practice, and alludes to the ways in which Spanish and English surgery interacted during this period.\textsuperscript{935} England remained intellectually connected to the continent, but also provided a separate and distinctive approach to medicine which is reflected in both the primary material, and the historiography. This particular medical context is also underlined by Clive Taylor, who argues as part of his discussion of John Hunter and the development of pathology, that: ‘In many ways, John


Hunter was the right man, in the right place, at the right time. London in the eighteenth century was almost unique among the major cities of Europe in having no medical school for the training of physicians, or for that matter, surgeons.\footnote{C.R. Taylor, ‘From anatomy to surgery to pathology: eighteenth century London and the Hunterian schools’, \textit{Virchows Archiv}, Volume 457, Number 4 (October 2010), pp. 405-414, p. 406.}

Toby Gelfand has similarly examined the circumstances within eighteenth-century France, discussing the influence of several key French practitioners, as well as the role of the relationship between the Faculty of Medicine and the guild of surgeons.\footnote{T. Gelfand, ‘Empiricism and eighteenth-century French surgery’, \textit{Bulletin of the History of Medicine}, Volume 44, Number 1 (January 1970), pp. 40-53.} Gelfand’s argument is significant as it highlights the importance ascribed to theory alongside observation and experience during this period, and the perception that ‘the observations of the Ancients were preferable to the speculations of the Moderns’.\footnote{Ibid., p. 46.} This piece also underlines the way in which French surgeons downplayed the role of major operations in surgical practice ‘as one aspect of their programme to gain professional status.’\footnote{Ibid., p. 52.} Reflecting similar contentions in England during the seventeenth-century, as well as many of the underlying themes of this thesis, Gelfand argues that the ‘fundamental issue was whether the practitioner of surgery was to become the intellectual and social peer of the practitioner of medicine.’\footnote{Ibid., p. 40.}

Harold Cook’s focus on the medical institutions of Stuart London also explores the role of empiricism, and uses these ideas to illuminate the broader context of the experience of seventeenth-century medicine.\footnote{H.J. Cook, \textit{The decline of the old medical regime in Stuart London} (New York, 1986).} Cook argues that although ‘the physicians of seventeenth-century London tried to maintain the dignity of learned medicine by exercising the juridical authority of the College of Physicians,’ ultimately, the failure of the ‘old medical order’ constituted ‘a failure of the learned physicians to maintain their place as judges of other medical practitioners.’\footnote{Ibid., p. 19 and 255.} The ideas relating to the importance of ancient learning and the practical experience of the medical practitioner discussed throughout this thesis are also evident as a specific contrast within Cook’s work: ‘was medical practice
best when governed by a group that upheld the importance of broad and ancient learning, or was it best when practitioners were allowed freedom to practice as they wished, even when their practices were based on narrower, empirical trials?\(^{943}\) The varied answers to this question are made more complex by the role of the patient within this conflict. Cook develops the ideas presented by Nicholas Jewson on this subject, noting that: ‘changed public values about what constituted proper knowledge played a very significant role in undercutting the authority of the physicians to judge medical practice. Old-fashioned learning became devalued in favor of a more utilitarian empiricism.’\(^{944}\)

The varying importance of medical institutions such as the Royal College of Physicians can be seen through Cook’s citation of R.S. Roberts’ important articles from 1962 and 1964, describing them as: ‘a fine general guide to the seventeenth-century medical milieu, showing how important were practitioners and events beyond the College.’\(^{945}\) This illustrates the more intricate medical framework that has gradually been exposed over time, and the diversity of practitioners and perspectives that were active within the medical marketplace.

As Lucinda Beier reiterates, ‘the traditional view of medical historians has been that in the sixteenth and seventeenth centuries few licensed medical practitioners existed, and that those few served the needs only of members of the upper classes who could afford them.’\(^{946}\) The ‘traditional view’ that Beier describes has been developed in varying ways, allowing for a more complex understanding of the ways in which medical occupations during this period can be defined. The chapter ‘Medical practitioners’ by Margaret Pilling and Charles Webster within *Health, medicine and mortality in the sixteenth century* exemplifies this change, and underlines the importance of practitioners that lay outside the organisational structures associated with particular medical institutions.


institutions such as the Royal College of Physicians. This piece also examines the practitioners that did lie within particular regulatory structures, and outlines the varying processes of licensing and practice as well as the differentiating factors that characterised each type of practitioner and organisation.

The particular identity ascribed to different medical practitioners is further pursued by Pelling, who has shown the diversity of practices that were carried out by surgeons within the early modern period, placing barber-surgeons specifically into their social and medical context, and highlighting the limited effect of regulation upon their practices. The fluidity of occupation uncovered within this study also contributes to debates regarding the professional status of surgeons during this period, building on Nicholas Jewson’s 1974 article, suggesting the importance of the patient’s role in determining the actions and status of the physician. Pelling’s chapter ‘Trade or profession? Medical practice in early modern England’ also addresses the role of barber-surgeons within society, and discusses the occupational framework that they were operating within. This also illustrates the circumstances in which a patient would choose to see a barber-surgeon (perhaps alongside, before or after other practitioners and self-care measures), and the numerous practitioners of this type that were available to them. Pelling accounts for the previously unexpected availability of medical practitioners to all levels of society by suggesting that certain types of practitioners often held other occupations alongside their medical activities. This allowed for the existence of many more medical personnel than would be suggested, for example, by the examination of medical licences, and demonstrates the fluidity of practice that characterised this type of medical care.

Pelling's work has also reflected the broader move towards examining themes relating to gender within the history of medicine, an area which has been approached from many different perspectives. Arthur Wyman addresses the female practitioner of surgery, whilst Doreen Evenden focuses primarily on the few examples of female practitioners that were licensed to carry out surgery. This study underlines the effect of gender upon the licensing process, and shows the position of women within the broader contexts of surgical licensing and, more commonly, of unlicensed medical care.

Although surgeons have tended to receive less attention than other types of medical practitioner, there have nonetheless been several important areas that have developed over time. Owsei Temkin explores the older contention that ‘if modern medicine really is more akin to older surgery than to older internal medicine, the question may well be raised whether this kinship can possibly be explained by the role of surgery in the rise of modern medical thought.’ This idea is developed through an examination of the influence of surgeons, both individually and collectively, culminating in Temkin’s suggestion that although it can be agreed that: ‘the surgeons studied anatomy and that they enriched medical literature with their discoveries and observations of use to every medical man’, the ‘surgical point of view’ contributed more significantly than any one particular surgeon was able to. This view is important as it implies there was a different and specific way in which surgeons approached medical knowledge. Despite this useful aspect of the piece, parts of the article illustrate the extent to which views have changed over time concerning the development of surgery. Temkin’s point that: ‘since surgery, in its practical possibilities, was still restricted until the advent of anaesthesia and antisepsis, medicine has


955 Ibid., p. 255.
appeared as the progressive branch while surgery has seemed to lag behind\textsuperscript{956} appears outdated in comparison to more recent studies highlighting the thoughtful and intelligent approach taken to the development of surgery during this period.\textsuperscript{957} It also fails to take into account that surgeons were often more likely than physicians to absorb new ideas, particularly in the case of chemical remedies, which surgeons were quicker to adopt despite not necessarily taking on the corresponding theories.

The introduction to \textit{The medical renaissance of the sixteenth century} effectively summarises many of the key areas of surgery that are relevant to this thesis, which illustrates that these concerns remained important beyond the sixteenth-century remit of the work. The progress within anatomy during the sixteenth century is used to explain why more attention has been paid by historians to this particular area, and that correspondingly less emphasis has been placed upon areas with greater continuity.\textsuperscript{958} The notion of progress is addressed in several senses, and it is noted that progress can be viewed in different ways, by different people and time periods. It is important to highlight the suggestion that: ‘in the sixteenth century making medicine better might be seen in addition, as a question of making it more rational, or more observational, or closer to its pure and original sources, or freer from the dependence on authority.’\textsuperscript{959} This is further reflected by the idea that physicians and surgeons ‘did not merely ‘go back to the Greeks’ but sought to manipulate Greek knowledge into the circumstances of sixteenth century practice’.\textsuperscript{960} These factors resonate with the findings of this thesis, particularly through the selection of Galenic ideas and methods according to utility as determined by the experience of the practitioner. This piece also alludes to the point demonstrated elsewhere in this thesis that Galen could be used as a model for extending beyond his own ideas, as


\textsuperscript{957} For example, Andrew Wear describes ‘a concerted attempt to raise the status of surgery’ during this period, and that ‘it made sense for learned surgical writers to educate their surgical readers in the theory of physic.’: A. Wear, ‘Surgery: the hand work of medicine’, in A. Wear, \textit{Knowledge and practice in English medicine, 1550-1680} (Cambridge, 2000), pp. 210-274, p. 221 and p. 223.


\textsuperscript{959} Ibid.

\textsuperscript{960} Ibid., p. xii.
provision was made within his works for the possibility of development.\textsuperscript{961} Galen similarly practiced this approach to the accumulation of knowledge, and consistently built upon, or challenged, the ideas of his predecessors.

Vivian Nutton’s study of Renaissance surgery within this text illustrates that the ‘gulf between surgeon and physician was not as wide as has been thought; that, particularly when contrasted with the barbers and barber-surgeons, the two groups had much in common; and that there was a strand of humanism that was as important in the development of surgery as in that of medicine.\textsuperscript{962} Nutton also highlights the theme present within this thesis regarding the selection of theory and practice according to utility, by suggesting that: ‘the obvious relationship between treatment and cure (or amelioration) gave surgeons a benchmark against which to test any novelty’, and also to evaluate older ideas.\textsuperscript{963} This chapter is concluded in part by the assertion that: ‘there were, in the sixteenth century, practical men as well as theoreticians who believed that the newly revived medicine of Galen and Hippocrates might contribute a great deal to surgery.’\textsuperscript{964} Although no longer newly revived during the seventeenth and eighteenth centuries, this thesis has shown that this perspective persisted, and the value ascribed to the medical knowledge of the ancients remained significant.

As has been mentioned above, historians of early modern surgery have sought to move beyond institutional, professional and individual histories. This has been approached by addressing areas such as the interaction between practitioners and the human body, and by further defining surgery as an occupation, placing it within a broader context to examine surgical ideas and attitudes during the early modern period. Sandra Cavallo suggests that ‘an exclusive focus on the medical activities of surgeons has led scholars to neglect other important aspects of their practice’, and her work \textit{Artisans of the body in early modern Italy} reflects the importance she ascribes to ‘the social, public and family life of barber-surgeons and to the ways in which these spheres interacted

\textsuperscript{961} A. Wear, R.K. French, and M. Lonie (eds), \textit{The medical renaissance of the sixteenth century} (Cambridge, 1987), p. xii.  
\textsuperscript{963} Ibid., p. 76-77.  
\textsuperscript{964} Ibid., p. 98.
with their professional experience’, in addition to practitioners’ professional activities.965

Cavallo highlights Andrew Wear’s assertion that surgeons often emphasised their interest in the theoretical aspects of surgery in addition to the practical or manual activities, and suggests that: ‘this approach is even more noticeable in the Italian material: here practical information and references to manual dexterity, given considerable weight in the treatises of English surgeons, are secondary to the display of theoretical knowledge about the working of the body and its anatomy; references to physical strength, as a desirable attribute of the surgeon, are all together absent.966 This comparison illustrates one of several key dichotomies that Cavallo addresses throughout the book, which asks ‘to what extent were the dichotomies internal-external, manual-intellectual, learned-empirical which informed prescriptive definitions of the respective domains of physicians, surgeons and barbers reflected in daily practice?’967 In answer to this question, Cavallo suggests that the study ‘has re-mapped the intellectual and professional boundaries that define the experience of being a surgeon in the early modern period, and, by extension, those of the professional community to which the surgeon belongs’, highlighting that evidence from Bernardo Calvo’s work from the beginning of the eighteenth century ‘challenges the distinction between physic and surgery not just in terms of the surgeon’s everyday practice (the subject of much scholarly argument) but also at a theoretical level’.968 The importance of this challenge can be seen through the idea that it shows ‘the limitations of the distinction between popular and learned healers that has long informed accounts in the history of medicine’.969

Cavallo also explores some of the themes addressed within this thesis, underlining the role of different medical authorities within Calvo’s work. She suggests that: ‘Calvo continually displays his own knowledge of the medical

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966 Ibid., p. 20; see also A. Wear, *Knowledge and practice in English medicine, 1550-1680* (Cambridge, 2000), p. 211-212.
968 Ibid., p. 244. Cavallo also shows that: ‘the separation between the outside and the inside of the body is alien to the theory of humours which, as many have suggested, was universally employed to describe the functioning of the body, by patients and practitioners alike.’ (p. 20).
969 Ibid., p. 245.
literature, at every turn quoting the opinions of the ancients (Galen, Hippocrates, Paulus Aegineta, Celsus) as well as the views of those he regards as 'the moderns.' It is interesting to note that Cavallo shows that the authors Calvo refers to 'whether well known or less known, classical and recent, seem all to be on the same level and are used indiscriminately as sources. In particular it does not appear that the ancients merit any special debt or greater trust.' This corroborates the finding within this thesis that often the information utilised by surgical authors from a wide range of sources was not privileged by time period or perceived authority, and ancient authors are often spoken of as contemporaries, rather than presented differently according to their status or origin.

The study of anatomy and its history is often where a link between Galen and early modern surgery is most evident within the historiography. This is particularly due to the longevity of the effect of Galen’s own contribution to anatomy, and the complex process by which anatomy was developed, and certain ‘mistakes’ of the past were challenged. The importance of anatomy to the early modern surgeon has been frequently discussed, and Cavallo shows that by the early eighteenth century, anatomy had ‘a crucial role, but more as an accessory which assists the surgeons’ thinking about the body or the patient than as a source of manual expertise.’ This is also compatible with the findings of this thesis in terms of the importance of utility in the deployment or perpetuation of theories, and the experience of the surgeon in determining the significance of each aspect of theory or practice.

In his study of the history of anatomy and anatomising, Andrew Cunningham seeks to move beyond the traditional narrative of Renaissance anatomy. This narrative is commonly characterised by the emphasis of Vesalius as key figure in the development of the field, and proposes that this development primarily took the form of the rejection of older viewpoints, in favour of 'an alternative ancient Greek tradition in anatomy, that of 'seeing-for-oneself' (autopsia) and

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970 S. Cavallo, Artisans of the body in early modern Italy: identities, families and masculinities (Manchester, 2007), p. 28.
971 Ibid.
972 Ibid.
personal experience of dissection.' Cunningham further suggests, in a passage with important parallels to this thesis, that: 'the anatomical Renaissance as a whole ought to be seen not as a matter of the rejection of the doctrines and practices of the Ancients who performed anatomy, but as an attempt to emulate them, and to emulate not only their methods (observation and seeing-for-oneself in dissection) but also their entire projects of investigation, as those projects were understood by the sixteenth-century anatomists.' With regard to the importance of Galen within the history of anatomy, Cunningham underlines that he 'became the dominant figure in medicine of the Greek tradition from shortly after his death in about 200 AD until around 1700 AD and even beyond,' and, as has been shown elsewhere in this thesis, Galen’s anatomical texts remained an important part of the significant body of work by Galen that was frequently cited or discussed by early modern practitioners.

Galen’s works are also shown to be particularly important to the fourteenth-century surgeon Guy de Chauliac. Margaret Ogden’s focus upon the use of Galen by Guy illustrates an extensive use of many different texts, taking the form of translations into Latin from both Greek and Arabic. The role of translation in the dispersal of Galenic texts throughout different places and time periods is key in determining the type, quality and perception of the Galenic material that is later cited, especially given that the existence of certain Galenic works is only known through the existence of translations. Ogden provides a list of the Galenic texts that Guy was citing within his own work, as well as

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974 Ibid., p. 6.
975 Ibid., p. 25. It is important to note that: ‘Galen makes no secret of the fact that he is acquiring, and urging his followers to acquire, a detailed knowledge of human anatomy from the dissection of apes; to minimize possible false inference, he recommends that his followers use the apes which are ‘most like man’, today identified as Barbary apes. Moreover, he says, one should seize every chance one has of inspecting the human cadaver, and he instances the inspection of the bones of some corpse whose flesh had been washed away by the action of a stream in which it had died.’ (p. 26) For a more detailed discussion of the relationship between Galen’s anatomy, Vesalius, and both practitioners’ use of animals, see C. Singer, ‘Some Galenic and Animal Sources of Vesalius’, *Journal of the History of Medicine and Allied Sciences* (January 1946), pp. 6-24.
addressing the various translations and his assessment of them. Ogden also suggests that: ‘Guy was apparently the first author of an encyclopedic medical treatise to be aware that the Latin versions of Galen’s works varied in the clarity and accuracy with which they transmitted Galen’s meaning’, an area of study that remains significant regarding Galen and his works.

‘Galen’s contribution to surgery’ is addressed by Luis Toledo-Pereyra, who suggests that ‘his surgical work has tended to be neglected and its existence even denied.’ Whilst the latter is refuted by Toledo-Pereyra through the idea that ‘he did surgery extensively while he was physician to the gladiators at Pergamon and was proud of his surgical techniques and dressings for wounds’, the broad neglect of Galen’s surgical works is also reflected in the minimal attention that has been focused upon his role in early modern surgery. Alongside the information provided regarding Galen’s own lifetime, this article also alludes to an aspect relevant to the early modern period, highlighting that Galen’s technique in extracting bladder stones ‘did not differ a great deal from the methods used by William Cheselden in the eighteenth century.’ This underlines that in some instances the practical method used by Galen had remained relatively unchanged over time.

Toledo-Pereyra sets out the intellectual and social context in which Galen was discussing and practicing surgery, exploring the range of his surgical work and the instrumentation of his craft. In parallel with several of the themes explored above, the article also addresses Galen’s view on the importance of anatomical knowledge, a viewpoint that persisted after Galen’s lifetime, continuing to the early modern period. This is highlighted alongside Galen’s perspective on professional separation by the suggestion that: ‘in Galen’s mind a surgeon was a qualified physician who should have a well developed knowledge of anatomy.

978 See, for example R.J. Hankinson (ed.), The Cambridge companion to Galen (Cambridge, 2008).
980 Ibid., p. 357.
981 Ibid., p. 372.
982 Ibid., see in particular p. 362 and p. 364-365.
983 Ibid., p. 359.
and physiology, and an awareness of the value of dissection.\textsuperscript{984} There is evidence here of Galen's inclination to suggest that the model medical practitioner would be remarkably similar to himself, and it reflects his tendency to create and perpetuate the image of an ideal physician that was aligned with his own skills and beliefs.

The anatomical theme is also represented by Heinrich von Staden, who presents Galen's dissection and vivisection within the cultural context that he was working, and shows Galen's interactions with this culture.\textsuperscript{985} Although this piece focuses on the more intricate details of the language Galen uses to describe his public dissections, and the way these were presented, it can also be used to demonstrate parallels between Galen's own approach, and the perspective of early modern practitioners. Von Staden suggests that:

Even as he claims major anatomical discoveries for himself, Galen thus paradoxically tries to privilege his own authority in dissection over that of his contemporaries by means of assimilating his views to those of two "scientific" precursors [Plato and Hippocrates] who lived five and six centuries earlier and who never practiced systematic dissection. In this respect too – constructing authority for oneself, and for one's innovations and "improvisations," by means of invoking a distant, classical past – Galen's revival of the scientific authority of Hippocrates, of Plato, and of other classical writers bears striking resemblance to the "renaissance" of the classical epoch promoted and performed by the Second Sophistic.\textsuperscript{986}

This is particularly reminiscent of the way in which Galen is used within the early modern period, suggesting both that this is an inherent method of promoting personal ideas and authority, and that practitioners may have been following Galen as a specific model in this approach.

A more direct link is made between Galen and early modern surgery by Mary Erler, whose article ‘The first printing of Galen: the formation of the Company of


\textsuperscript{986} Ibid., p. 62
Barber Surgeons’ suggests a link between the publication of a text entitled *The Questyonyar of Cyrurgeryens* (1542), and the ‘amalgamation of the Barbers’ and Surgeons’ companies in 1540, a union which produced a fresh concentration on the company’s training and teaching function.\(^\text{987}\) Erler notes that ‘England continued receptive to classical medicine longer than the continent’\(^\text{988}\) but also shows the importance of the publisher, and the market that they were providing for, in the appearance of this work: ‘indeed, in the case of both the English *Questyonyar* and its French source, Galen’s appearance in the vernacular seems due as much to publishers’ initiative as to academic demand.’\(^\text{989}\) It is also significant that in respect of the tendency within the historiography of surgery to separate the various medical occupations into physician, surgeon and apothecary, the preface of the English version of the *Questyonyar* specifically follows Galen in emphasising the unity of medicine, and the ‘interdependence’ of its parts.\(^\text{990}\)

Despite the ubiquitous nature of humoral theory during the early modern period, little has been specifically written about the relationship between ancient theory and the surgical texts of this time, and the learned aspects of seventeenth and eighteenth century surgery remain understudied.

**Galen, the ancients and early modern surgery**

This chapter addresses the perception of Galen illustrated by seventeenth and eighteenth century surgical authors, and examines the way in which explicit references to Galen were incorporated into the surgical literature of this period. It also explores the role of Galen within a broader medical framework, underlining the influence of his knowledge and perspective on the theoretical approach at this time. Additionally, the chapter looks at the role of ancient authority in surgery, and begins to explore the varying ideas denoted by the term ‘ancient’. The importance of reconciling ancient and modern ideas can be seen throughout these texts, and the role of ancient theory is examined

\(^\text{987}\) M.C. Erler, ‘The first printing of Galen: the formation of the Company of Barber Surgeons’, *The Huntington Library Quarterly*, Volume 48, Number 2 (Spring 1985), pp. 159-171, p. 159. It is also interesting to note that the French source of this text ‘similarly represents the first printing of Galen in French.’ (p. 159).


\(^\text{989}\) Ibid., p. 165.

\(^\text{990}\) Ibid., p. 167.
alongside contemporary approaches to determine the extent to which ancient ideas remained relevant. Similarly, changes to surgical theory over time are also identified, and the relationship between modern advances and adherence to tradition is shown to be particularly significant, providing a sense of the importance of the contextualisation of past ‘errors’ and accounting for deviation from ancient authority.

The authors whose texts are examined throughout this chapter are primarily drawn from William Black’s ‘Chronological chart of medical and surgical authors’ within his work *An historical sketch of medicine*. As discussed in Chapter 1, this sets out Black’s perception of the key medical and surgical authors from each century from 400 BC to the date of publication, categorised by the area each individual or organisation addresses. Similarly, English authors were prioritised within this chapter, although some translations into English have also been included. The validity of this method of selection can be seen through the way in which the practitioners often mention each other as significant or influential, and specifically Percivall Pott’s reference to Daniel Turner illustrates the relative importance of different surgical texts over time: ‘To come still nearer, or even into, our own time, Dr. Daniel Turner compiled a treatise of surgery, which was universally dispersed, and read all over the kingdom, and was at that time generally looked upon as a true representation of the London practice [...]’.

Richard Wiseman’s work *Severall chirurgicall treatises*, published in 1676, is the earliest text examined within this chapter, and the prominence of Wiseman during this period can be seen through the fact that ‘He was promoted principal surgeon and sergeant-surgeon to the king on 15 February 1672’. The importance of this work to the ongoing perception of surgery is evident through the significant number of editions that were produced, as following the first

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991 W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), unnumbered page, following p. vi. See also Appendix E.
edition in 1676, it was ‘republished unchanged with the title Several Chirurgical Treatises in 1686 and the title Eight Chirurgical Treatises in 1696, 1705, 1719, and 1734.’ The representative nature of Wiseman and his work is also evident in the suggestion that:

In his account of head injuries he favoured the brace trepan for craniotomy in line with continental practice, and in contrast to the hand trepan, or trephine, used by most British surgeons. Wiseman’s work was quoted frequently in British and foreign texts, and over 100 years later was still read by students.

Several works by Daniel Turner are also considered within this chapter, and in many ways he represents a perspective of medicine that traverses the divide between surgeon and physician, shown by his decision to relinquish ‘his Barber-Surgeons' Company position in 1711’, before being ‘admitted as a licentiate to the Royal College of Physicians.’ The role of practice within Turner’s work is significant, and his output reflects both experience and a desire to improve the art of surgery: ‘Most of the thirty-four texts and treatises published before his death describe aspects of either his own surgical practice or his further attempts to reform the surgical art.’

The link between surgery and anatomy is particularly illustrated by William Cheselden (1688-1752), a surgeon and anatomist who ‘completed his apprenticeship and passed the final examination of the Barber-Surgeons’ Company on 29 January 1711.’ His significance within the surgical sphere

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995 Ibid.
can be seen through the idea that he was ‘Appointed assistant surgeon at St Thomas’s Hospital in 1718’ and ‘was made a principal surgeon within a year, enabling him to develop his own operative techniques, especially for bladder stone extraction’, also becoming a fellow of the Royal Society in 1711.\(^9\) His work, *The anatomy of the humane body* is discussed within this chapter, and is a ‘a student’s manual with plates, basic physiology, and operative surgery. It proved extremely popular, achieving thirteen London editions, lastly in 1792’.\(^1\)

Cheselden’s apprentice Samuel Sharp is also addressed within this chapter, and the importance of his work, as well as the European context in which it was received, can be seen through the suggestion that he:

> [...] rapidly acquired an extensive practice, and in 1739 published *A Treatise on the Operations of Surgery*, illustrated with fourteen plates of instruments; it was the first monograph in English on the subject and achieved eleven editions, and translations into French, Portuguese, Dutch, Spanish, and Italian.\(^2\)

This is similarly reflected in the suggestion that:

> In 1750 he published *A Critical Enquiry into the Present State of Surgery*, which achieved four editions, and translations into French, Dutch, Spanish, German, and Italian. This influential work focused on controversial surgical issues including hernia, cerebral concussion, lithotomy, tonsillectomy, and amputation.\(^3\)

This particularly shows the wide-ranging nature of his work, and the positive way in which it was received throughout Europe. His role within the broader surgical sphere in England during this period is reiterated by the idea that Sharp

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\(^1\) Ibid.
'was the immediate link between Cheselden and both Percivall Pott and John Hunter. Sharp cultivated anatomical and operative precision, introducing numerous improvements in techniques and instruments.'\textsuperscript{1003}

The importance of surgical improvement shown by Samuel Sharp is similarly evident within the work of Percivall Pott, who ‘saw many patients’ at St Bartholomew’s Hospital, and here ‘acquired the profound clinical experience so evident in his later written work.’\textsuperscript{1004} His particular surgical advances were the result of his desire to ‘challenge long established and painful therapeutic measures, in particular to restrict the use of hot iron cauteries, of caustic applications, and of dangerous mechanical equipment employed to reduce major joint dislocations.’\textsuperscript{1005} Pott’s approach to surgery has been described as including ‘a wholesome scepticism’ which took the form of ‘placing emphasis on personal observations described with clarity and accuracy.’\textsuperscript{1006} His work is also particularly valuable as he ‘he recorded success and failure alike, believing more was gleaned from an unfavourable than a favourable case.’\textsuperscript{1007}

The final two authors addressed within this chapter are brothers William and John Hunter. Working both together and separately throughout their careers, their relationship was characterised by both cooperation and dispute.\textsuperscript{1008} A particular controversy connected to Galen arose in connection to William Hunter, who was:

\textsuperscript{1006} Ibid.
\textsuperscript{1007} Ibid.
Accused in 1757 in the *Monthly Review* of ignorance in holding that Paulus Aegineta, not Galen, first described a true aneurysm, he was defended by Smollett in the *Critical Review*. Hunter detected an error in the Greek text of Paulus that caused the confusion. He was right but Paulus was quoting Antylus, hardly known in the eighteenth century, who first described the true aneurysm.\(^{1009}\)

This illustrates the importance ascribed by Hunter to correctly attributing particular aspects of medical theory to Galen, and underlines the ongoing role of ancient knowledge and the context in which it was understood and perpetuated.

**Galen and early modern surgery**

The authority of Galen during this period can be seen through the way in which Richard Wiseman mentions him directly in relation to advice, remedies, and specific definitions of words or concepts. This can particularly be seen on the first page of his section ‘Of tumours’, where Wiseman says:

> What a *Tumour* is (when we understand a Disease by the word) is so sufficiently explained by *Galen*, that I shall not trouble myself with any farther disquisition about it. It is by him defined, *A Disease in which the parts of the body recede from their natural state by an undue increase of their bigness.*\(^{1010}\)

Here, the use of italics to highlight the definition suggests to the reader that Wiseman is directly quoting Galen, and although it is not possible to ascertain the source from the information provided, it is significant in illustrating the centrality of Galen, and the idea that he was spoken of as a contemporary. Wiseman’s additional comments reinforce the importance of this interpretation of a tumour, and also show the perceived relevance of Galen as a source of theoretical information.

There is also evidence of Galen being used as a model for surgical practice, and this can be seen in a section of Daniel Turner’s *The art of surgery* entitled ‘Of Wounds in general.’ Here, as part of a discussion about certain precautions that need to be taken during manual operations, and distinguishing particular points about the body and its reaction to affliction and surgical intervention, Turner says:

[...] or the Diseases arising *primarily* from the Part itself, or *secondarily*, by Consent from some other however distant, yet communicating therewith by Means of the said *Nerves*. As for Example, when by a Blow upon the Neck, the Arm or Hand happens to lose either *Sensation*, *Motion*, or both, you will understand with *Galen*, that your Remedies are to be applied to the *Vertebrae* of the Neck: If the like Accident befall the Loins, and thence [...].\(^{1011}\)

This implies that Galen had documented this effect, and it is significant that his work is used in this way to demonstrate the required action in this particular situation. Here, it is suggested that applying remedies to the vertebrae would not necessarily be the most obvious course of action, and as such reinforcement is provided by underlining that this is consistent with Galen. This shows the value that was still placed upon the authority of Galen, both in terms of the information that he provided, and the influence he retained.

This can further be seen in the work of Richard Wiseman, who consistently shows adherence to Galenic advice. For example, in ‘hot Tumours’ Wiseman states that: ‘*Galen* forbids Wine; yet permits it to them *qui babent ventriculum debilem*, for their Stomack’s sake: which is necessary to be observed; for unless that be kept up, in vain are all our endeavours.’\(^{1012}\) This implies that failing to follow Galen’s advice would render any other intervention ineffective, and whilst this is set alongside others’ views on the use of wine, it is Galen’s that appears last, and in the most authoritative tone.

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The continued relevance of Galen during this period is apparent in Turner’s discussion ‘Of Fractures in general’ which, as part of the definition of fractures, includes the idea that:

The Rupture is, with some, of the like Import; but as Custom has appropriated the former to these Accidents of broken Bones, so by the latter is understood among the same Artists, a Breach or Rent in the Peritonæum, as we obser'd formerly in our Section of Wounds; where we acquainted you with that both Hippocrates and Galen have given that Name, i.e. of Wounds, even to these Solutions, as well as those in the softer Parts. But quitting controversial Disputes about Names, where we understand or know the thing signified thereby [...]  

Turner’s definition of the rupture includes a reference to the remit of the definition provided by Hippocrates and Galen for wounds. The suggestion that this ‘controversial dispute’ regarding the nomenclature of wounds and ruptures is still occurring with reference to Galen, illustrates the extent to which his influence persisted.

There are also many examples of more specific use of Galen in surgical literature, and this can be seen in Percivall Pott’s work. In a discussion regarding the realignment two sections of bone following a fracture, Pott says that: ‘The reason of all this is so obvious, without having recourse to a particular specific juice under the name of callus, that it would be an insult upon the reader’s understanding to explain it farther.*’ The footnote that is associated with the ‘*’ symbol refers to the following phrase: ‘* On the subject of callus, the editor of Du Verney tells a story from Galen, and which himself seems not to disbelieve, viz. that a callus in a particular case, was so redundant as to transude through the skin, and to keep the compress constantly wet.’ This is significant as it illustrates Pott using Galen, via the work of Guichard Joseph Duverney, in order to reinforce a point regarding the idea that there is no need to talk about callus in this instance. There are several important points to note in

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1013 D. Turner, The art of surgery: in which is laid down such a general idea of the same, Volume II (London, 1722), p. 124.
1015 Ibid.
this extract. Firstly, that the reader is considered to have a degree of knowledge in this field, and as such certain pieces of information are deemed unnecessary to convey at length. Secondly, it demonstrates that Duverney had consulted Galen and found this anecdote suitably relevant to include in his work. Finally, it shows that Pott viewed both Duverney and Galen as significant enough to be included in this discussion, and there is no suggestion that the Galenic story has lost any degree of relevance or accuracy through the process of being transmitted via other practitioners.

Furthermore, Daniel Turner in his section relating to ‘Callous Ulcers’ describes the different methods of approaching the treatment of part of this affliction:

This way of cutting off the Callous Lips of Ulcers, as well as Burning, was not only customary with Severinus, by some call'd crudelis Chirurgus, or the severe Surgeon; but is recommended also by Sennertus, and even Galen prefers that way of Extirpation by the Knife, to the Escharotic, being much easier to the Patient, and less subject to intervening Accidents, if safely situate.\(^{1016}\)

The ‘Escharotic’ mentioned here is described by Turner in his ‘Tabula Ætiologica’ as ‘implying the same as the Caustic’, which suggests that in this instance physically cutting away the unwanted matter was preferable to using a remedy which effectively burnt it away.\(^{1017}\) Turner’s inclusion of Galen in this passage alongside other practitioners illustrates the extent to which he was still viewed as relevant. Additionally, it is suggested that Galenic approaches were occasionally viewed as more severe than alternatives due to the use of the phrase ‘even Galen’ which suggests that readers may have expected him to promote the remedy that also happened to be more painful to the patient.

More specifically, in the additional work An appendix to Dr. Turner’s Art of Surgery, published in 1725, there is a sense that Galen was able to provide practical examples of surgical practice. For example, the section ‘Wounds of the

\(^{1016}\) D. Turner, The art of surgery: in which is laid down such a general idea of the same, Volume II (London, 1722), p. 45.

\(^{1017}\) D. Turner, ‘Tabula Ætiologica’ in D. Turner, The art of surgery: in which is laid down such a general idea of the same, Volume II (London, 1722), unnumbered pages at the end of Volume II, this reference falls on the twelfth page of this section.
Tongue’ begins with the words: ‘Galen takes Notice of a Case somewhat like, where one, under the Force of a Convulsion, bit off entirely the Extremity of the same Part, which healing after, was attended with some Impediments (as was reasonable to think) in the pronouncing certain words.’\textsuperscript{1018} This is followed by the mention of Langius, who ‘observes these Wounds to admit of healing.’\textsuperscript{1019} Finally, the placement of other relatively contemporary practitioners alongside Galen is continued by a reference to Paré, who: ‘has an Instance of one, whose Tongue was slit in two, \textit{Lib. 9. Chap. 27}. The same Author proposeth also an Instrument for restoring Speech lost by these Accidents, as you will find, \textit{Lib. 22. Chap. 5}.’\textsuperscript{1020} Although it is Paré’s work that is referred to most specifically in this instance, alongside a citation to utilise it further, the idea that Galen is presented within the same paragraph as much later practitioners illustrates that he is periodically referred to as a contemporary. In this particular passage, there is nothing in the text to indicate the vast time period that separates Galen from the later authors, and as such it suggests both that the reader was likely to be aware of Galen’s ancient origin, and that this distinction was not deemed significant enough to highlight.

The specific references to sections of Paré’s work suggest that Turner intended to reinforce his own point through the authority of others, but also that he wanted readers to be able to locate additional information not present in the work itself. This idea is reflected in occasional references to specific Galenic texts that can be found within the surgical literature of this period. Richard Wiseman in his \textit{Severall chirurgicall treatises} includes relatively few references to individual Galenic texts, although he does occasionally draw attention to a particular work. For example, in a chapter entitled ‘Of Wounds of the Head’, he says that: “The Head, according to \textit{Galen De usu part.} is the noblest Member of our Body, the principall Faculties being there seated […].”\textsuperscript{1021} Here, the abbreviation ‘\textit{De usu part.}’ refers to \textit{De Usu Partium} (\textit{On the Usefulness of the Parts of the Body}), a text translated in one instance by Niccolò da Reggio from

\textsuperscript{1018} D. Turner, \textit{An appendix to Dr. Turner’s Art of Surgery} (London, 1725), p. 58.
\textsuperscript{1019} Ibid.
\textsuperscript{1020} Ibid.
Greek into Latin in the fourteenth century. This suggests that Wiseman’s readers would have been aware of the titles of Galenic works, and therefore understand this abbreviated reference to a particular text, which he also mentions with regard to fractures: ‘as Galen says De Usu partium, sed etiam Defensio, but also a Defence […].’ Similarly, Wiseman subsequently refers to another text in the section ‘Of fractures’: ‘To proceed methodically, I shall begin with their Definition of a Fracture, who, according to Galen de Methodo medendi, make it to be […].’ This cites the text De Methodo Medendi, also known in English as On the Therapeutic Method.

Additionally, William Hunter, at the beginning of Lecture II of his Two introductory lectures (1784) explains that ‘The human body has been, commonly enough known, by the name microcosmus; as if it did not differ so much from the universal system of nature, in the symmetry and number of its parts, as in their size.’ This is immediately followed by the assertion that: ‘Galen’s excellent treatise of the use of the parts, was composed as a prose hymn to the Creator; and abounds with as irresistible proofs of a supreme Cause, and governing Providence, as we find in modern physico-theology.’ Here, Hunter compares Galen’s work De Usu Partium with modern physico-theology and finds parallels of both information and quality. This is significant as it further reinforces the reliability that was ascribed to Galenic knowledge, and demonstrates its perceived relevance during this period.

Whilst several practitioners mention specific Galenic texts as sources of information and examples relevant to the work at hand, there is also the suggestion that the Galenic corpus, and also that of the ancients more broadly, constituted a body of work so large as to be prohibitive. This can be seen in the idea that:

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1024 Ibid., p. 464.
1025 W. Hunter, Two introductory lectures, delivered by Dr. William hunter to his last course of anatomical lectures, at his theatre in Windmill-Street […] (London, 1784), p. 63.
1026 Ibid.
When a young Student in Surgery casts his Eyes on the numerous Bandages described by Galen in his Book de Fasciis, he presently despairs to learn them; and there is no Country Surgeon who dares so much as think of it and this is the Cause why so necessary a part [of] this Art is often neglected.¹⁰²⁷

Here, Monsieur Le Clerc shows in A description of bandages and dressings (1701) that whilst the information available in Galen is undoubtedly thorough and useful, the volume of information makes it difficult for younger practitioners to engage with the material and use it effectively; which also contributes to the neglect of the art as a whole. This is echoed in his work The compleat surgeon, which includes a modified version A description of bandages and dressings containing the phrase: ‘This Bandage is easie, and any one can make it; and it may suffice for almost all Cases of the Head, where Galen employs fourscore or a hundred, which are very difficult to retain for those who are not daily conversant in them.’¹⁰²⁸ This extract appears in The compleat surgeon (1701), and also in several later editions of A description of bandages and dressings.¹⁰²⁹ It reinforces the idea that Galen provided a large volume of information, but that remembering the nuanced differences between types of bandage is both difficult and time consuming. Here, the implication is not that the quality of Galen’s advice is at fault, but simply that it is so thorough that perhaps a less suitable, but more generally useful bandage would suffice in most situations.

The idea that ancient sources provided such a quantity of knowledge that it could become unmanageable is also demonstrated in the work of Percivall Pott. At the beginning of Section IV ‘Fissures, and Fractures of the Cranium, without Depression’, Pott says:

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¹⁰²⁷ M. [C.G.] Le Clerc, A description of bandages and dressings, according to the most commodious ways now used in France (London, 1701), p. 2. The frontispiece of this text indicates that Charles Gabriel Le Clerc was ‘Physician in Ordinary to the French King’.
¹⁰²⁸ M. [C.G.] Le Clerc, The compleat surgeon: or the whole art of surgery explain’d in the most familiar method (London, 1701), p. 6.
Fractures of the cranium were, by the ancient writers, divided into many different sorts, each of which was distinguished by an appellation of Greek etymology, borrowed either from the figure of the fracture, or the disposition of the broken pieces. These are to be found in most of the old books, but as they merely load the memory, without informing the understanding, or assisting the practitioner, modern authors have generally laid them aside.\(^{1030}\)

This passage does not criticise the categories that the ancients divided fractures of the cranium into; indeed, it explains the reasoning behind the nomenclature and shows this to be an acceptable derivation. However, Pott also begins to suggest that this level of detail is unnecessary, and moreover that it undermines the practitioner’s understanding. This demonstrates a desire to emphasise the importance of the practical nature of surgical knowledge, whilst suggesting that although the information provided by the ancients was correct in this instance, the corpus of work and its content was too voluminous to be practical. Nonetheless, mentioning that the ancients divided fractures of the cranium in this way implies a degree of authority to the information, and also shows that this had pervaded early modern thinking about surgery to the extent that it still needed to be addressed.

**Galen and the early modern medical framework**

The way in which early modern practitioners periodically refer to Galen and other ancient authorities illustrates that this information formed part of the underlying framework of medical and surgical knowledge. It is evident that there was a perception that much could be learned from ancient authors, and that often the information they provided was both useful and relevant. Given the number of specific references to Galen that can be found within the surgical literature of this period, it is likely that several reasons contributed to the durability of Galenic authority. These include the perpetuation of older approaches, longevity, a reluctance to criticise ancient ideas, and instances of a successful amalgamation of ancient and modern perspectives.

William Hunter, in the *Two introductory lectures* which were published in 1784, after his death, underlines the extent and longevity of Galenic influence, and begins to suggest the reasons for this durability.\textsuperscript{1031} The beginning of this text sets out the history of anatomy, and contains a description of the progress of the art: ‘Thus Anatomy, for a long series of years, had been advancing to that degree of perfection, to which it was brought in Galen’s time; and from that time, it declined again.’\textsuperscript{1032} This highlights the idea that Galen provided a solid foundation for anatomy which reached a level of perfection not seen again until much later. Whilst this suggests a degree of infallibility in the work of Galen, Hunter moderates this with the phrase: ‘For those times his writings must be allowed to be excellent’, which suggests that whilst Galen was seen to be extremely competent within the context of his own time, he is perhaps also viewed as constrained by the period in which he lived.\textsuperscript{1033}

Subsequently within this text, Hunter further explores the reason for Galenic anatomy continuing to be influential over such an extended period, and he presents this as a relatively simple process of transference:

Thus was the learning of the Grecians transferred to the Arabians. But though they had so good a foundation to build upon, our art was never improved while they were masters of the world; and no wonder. They were satisfied with commenting upon Galen; and, I believe, made no dissections of human bodies.\textsuperscript{1034}

Here, the implication is that a lack of innovation during this time led to the persistence of Galenic ideas that had been established previously. Similarly, the length of time that Galen, and the ideas that his work provided, remained important to medical theory is also shown to contribute to the perpetuation of this perspective:

In the beginning of the sixteenth century [...] These first improvers made some discoveries from their own dissections: but it is not surprizing that

\textsuperscript{1031} W. Hunter, *Two introductory lectures* (London, 1784).
\textsuperscript{1032} Ibid., p. 25.
\textsuperscript{1033} Ibid., p. 25.
\textsuperscript{1034} Ibid., p. 31.
they should have been diffident of themselves, and have followed Galen almost blindly, when his authority had been so long established, and when the enthusiasm for Greek authors was rising to such a pitch.\footnote{W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 40.}

In suggesting that the resilience of Galenic theory was partly due to its longevity, Hunter implies that it should not have continued for so long, especially as the use of the word ‘blindly’ indicates that further dissection or investigation would have allowed the practitioners of this period to see the body more clearly than was possible through Galen. Furthermore, Hunter attributes the interest in Galenic ideas during the sixteenth century to a resurgence of interest in the classical period. This concurs with Andrew Cunningham’s assessment that:

\begin{quote}
[...] the anatomical Renaissance as a whole ought to be seen not as a matter of the rejection of the doctrines and practices of the Ancients who performed anatomy, but as an attempt to emulate them, and to emulate not only their methods (observation and seeing-for-oneself in dissection) but also their entire projects for investigation, as those projects were understood by the sixteenth-century anatomists.\footnote{A. Cunningham, \textit{The anatomical renaissance: the resurrection of the anatomical projects of the ancients} (Aldershot, 1997), p. 6.}
\end{quote}

As Cunningham indicates, the increasing importance of dissection was allowing practitioners to ‘see for oneself’, which Hunter alludes to above, showing that discoveries were beginning to be made as the result of dissection.

This can also be seen in the idea that Vesalius was ‘equally laborious in reading the ancients, and in dissecting bodies. And in making the comparison, he could not but see, that there was great room for improvement, and that many of Galen’s descriptions were erroneous.’\footnote{W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 40.} This underlines the importance of comparing the work of the ancients to contemporary bodies, and reinforces the value that was placed upon classical learning alongside modern experience. It is significant that whilst Vesalius found error in Galen’s work and was able to publish his findings, this was not necessarily accepted immediately and
comfortably by others within the medical sphere: ‘In this work he found so many occasions of correcting Galen, that his contemporaries, partial to antiquity, and jealous of his reputation, complained that he carried his turn for improvement and criticisms to licentiousness.’

This reluctance to criticise the ancients can also be seen in Samuel Sharp’s discussion of Ambroise Paré’s attempt to ‘explode the actual Cautery and establish the Ligature of the Vessels’ to stop bleeding, especially during amputations. This represented the revival of a classical method, and indeed Sharp alludes to this, pointing out that Paré did not understand Latin, and as such could not have:

[… ] read in Celsus a very positive Recommendation of the Ligature. Indeed Celsus speaks of the Ligature of the Vessels so frequently and with such Familiarity, that the use of it should seem to have been common in those Days; nay he expressly prohibits the actual or potential Cautery, unless the Vessel be so situated that it cannot be tied.

Despite Sharp’s demonstration that use of ligatures was based ultimately in ancient tradition, he continues, showing that Paré experienced opposition to this recommendation: ‘Parey, after the Publication of his new Invention, was attack’d with great Vehemence by some of his Contemporaries, who eagerly defended the use of the Fire, the Virtue of which had been delivered down from the Ancients as almost sacred in many Disorders. This suggests that whilst Paré was in one sense continuing an ancient practice, he was contradicting one that had travelled to this period with a greater degree of continuity, and as such an ‘almost sacred’ practice.

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1038 W. Hunter, Two introductory lectures (London, 1784), p. 41.
Here, the complex, and often contradictory nature of ancient authority during the early modern period is evident, and this is further shown in Sharp’s subsequent assertion that Paré:

[...] was weak enough upon this Occasion to justify his Practice by Authorities from Hippocrates, Galen, Avicenna, and many other Writers who speak slightly of the Ligature; by this Measure he would have given away the Glory due to his Discovery, but it was not in his Power either to benefit his Cause or injure his Reputation by this Proceeding.\textsuperscript{1042}

This implies that Paré had identified a need to justify his use and recommendation of ligatures by recourse to ancient authority. Sharp’s description of this as ‘weak’ shows a sense that by 1750 this type of innovation with reinforcement from the ancients was perhaps beginning to seem inadequate, and that practitioners were less reliant upon ancient knowledge. Sharp further underlines this perception in a discussion regarding the treatment of ‘a Disorder spoke of by various Writers under the Title of Haematocele’:

However, the Maxim of cutting away a great quantity of the Teguments, in order to effect a radical Cure, is very old. Celsus recommends it, and what is particular, makes no mention of the Palliative Method, (Tapping) but speaks of the Excision as though it was the common Practice of those Times: The Moderns too speak of it very familiarly, and yet I suspect this Operation has not been performed often by any one of these Writers, but that the Rule has been adopted, because no Man’s Experience has yet embolden’d him to contradict it.\textsuperscript{1043}

This suggests that the more radical method is perpetuated in theory as the best way to proceed, even though this is perhaps a result of it not yet having been contradicted, rather than it being the most suitable course of action.

\textsuperscript{1042} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 283.
\textsuperscript{1043} Ibid., p. 89. A definition of ‘Haematocele’ can be found in R. Hooper, \textit{Quincy’s Lexicon-Medicum. A new medical dictionary} (Philadelphia, 1817), p. 358-359: ‘Haematocele [...] A swelling of the scrotum, or spermatic chord, proceeding from or caused by blood.’ This also shows ‘Teguments’ to denote the skin (p. 803).
Samuel Sharp’s disapproving tone in this instance with regard to the perpetuation of ancient knowledge is also reflected in the work of Percivall Pott. In a section entitled ‘Of the Fistula Lachrymalis’, which refers to an affliction of the eye (tear-duct), Pott says: ‘there are many, who, by their manner of dressing it, after they have opened it, do really, tho’ not intentionally, produce the same effect as our forefathers aimed at.’ This is followed by a description of the procedure that Pott is concerned with, which is reinforced by the following assessment:

This is one of several instances still remaining of our adhering to old methods of practice, after the principles on which such methods were originally formed have been allowed even by ourselves to be erroneous; for this manner of dressing the sore is effectively the same as the antients made use of, while they supposed the disease to be an abscess of the caruncle, and encysted tumor, or a callous ulcer with carious bone; and was by them intended very properly for the destruction of such callosity [...]..

This extract illustrates the perception that whilst the ancients were proceeding as was appropriate for the knowledge of the time, once improvements to this knowledge had been made, surgical theory and practice should alter accordingly.

The importance of reacting to change, and being open to the modification of ancient ideas is further shown in The chirurgical works of Percivall Pott through the idea that:

A surgeon should be ever cautious; but ill-grounded apprehensions will necessarily prevent improvements, and hinder us in some cases from attempting what may prove beneficial to mankind. Had every successor to Hippocrates been of his opinion, the operation of lithotomy had never

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1045 P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 206. Pott’s chapter on the Fistula Lachrymalis also provides further detail regarding its definition, character and treatment (pp. 179-219); see also S. Cooper, A dictionary of practical surgery, Fourth edition (London, 1822), p. 445, which further describes the affliction, and also alludes to the perceived problem of ‘the force of ancient custom.’
arrived at its present state of perfection, and mankind had been suffered to languish under, and be destroyed by, a most tedious as well as excruciating malady.\textsuperscript{1046}

Here, Pott underlines the balance that he believed needed to be created between caution in practice and innovation, and the development and improvement of his craft over time. This is continually shown to be a difficult endeavour, especially given the extent to which ancient authority remained evident as part of the background to medical knowledge.

The difficulty in reconciling old and new ideas can be seen in Samuel Sharp’s discussion of the existence of a particular type of affliction: ‘But as I am aware how difficult it is to dispossess ourselves of Opinions that have never before been doubted, I might in this Place produce some Examples to illustrate how little the universal Reception of a Doctrine is a Proof of its Infallibility.’\textsuperscript{1047} Sharp also provides two examples of this, suggesting for a particular affliction that: ‘after having been admitted for so many Centuries to be distinct Disorders of those Parts, are now, by the most able Practitioners, supposed to be imaginary.’\textsuperscript{1048}

It is significant that although authors retained an awareness of ancient influence, they were also able to be critical of the past, both generally and concerning specific areas. For example, following his description of two ailments that he believed had become confused with others to the point of creating imaginary disorders, Sharp continues, highlighting that:

Perhaps, to this inquisitive Age, it may appear surprising that for so long a Course of Time, no one should have detected the Falsity of this Opinion: But it was the Fatality of those Days, that Physicians and Philosophers believed the Bounds of Science were fixed, and all they studied, was how to accommodate their own Opinions to those of Hippocrates, Aristotle, Celsus and Galen. It is no Wonder then, whilst this Humour prevailed, that any particular Mistake should under the Sanction

\textsuperscript{1046} P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 127.
\textsuperscript{1047} S. Sharp, A critical enquiry into the present state of surgery (London, 1750), p. 75.
\textsuperscript{1048} Ibid., p. 75.
of these great Men be transmitted to Posterity; and it is certain this very Doctrine is one of those Instances; for we read in Celsus so ample and distinct an Account of this supposed Hydrocele, that I cannot but look upon all the subsequent Descriptions of Writers since him, as so many Copies of that one Original.\textsuperscript{1049}

This excerpt addresses many of the key areas that are concerned with the continuation or otherwise of ancient authority into the early modern period. Firstly, it shows that the mid-eighteenth century was viewed as an ‘inquisitive age’, which promoted innovation and allowed for the criticism of the ancients. Secondly, it illustrates the way in which Sharp viewed the practitioners that preceded him. His comment regarding the fixity of the boundaries of science reflects a perception of ancient authority as constricting, both in terms of areas of study and the answers that were able to be found and deployed. It also shows practitioners trying to mould their discoveries and observations into the shape of existing theory, and that the ancients provided a model which was reproduced, and consequently gained a sense of tradition and authority.

The role of tradition is significant in the longevity of ancient ideas, and the authority of ancient practitioners can be seen throughout the surgical literature of this period. The relevance of ancient knowledge is shown through a passage in Percivall Pott’s work, which, in a discussion regarding ‘The encysted Hydrocele of the Tunica comminis’, makes the point that, as an affliction: ‘It was very well known to many of the ancients, and has been very accurately described by some of them\textsuperscript{*}; but later writers have often mistaken it for, and represented it as, a species of wind-rupture, or pneumatocele; a disease existing in their imaginations only.’\textsuperscript{1050} Here the ‘\textsuperscript{*}’ symbol refers to a footnote which says: ‘* By Albucasis, by Celsus, Paulus Ægineta, and others \textsuperscript{[Gιώαìýαý]}. The former of these descriptions our countryman Peter Lowe, has most probably copied \textsuperscript{[Gιώαìýαý]}.’\textsuperscript{1051} It is significant that Pott refers to several authorities, ranging from Albucasis, an author from the tenth century; Celsus, active around 40 AD; and Paulus Ægineta, a seventh century author, before underlining that Peter

\textsuperscript{1049} S. Sharp, A critical enquiry into the present state of surgery (London, 1750), p. 76.
\textsuperscript{1050} P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 381-382. Pott describes the ‘tunica communis’ as a ‘cellular membrane, which invests the spermatic vessels’ on page 381, which also contains additional detail on the affliction concerned.
\textsuperscript{1051} P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 381-382.
Lowe, a seventeenth century surgeon, not only utilised this information, but ‘copied’ it, which suggests that modification was viewed as unnecessary.\textsuperscript{1052} This provides a sense that ancient knowledge had in some instances travelled through time relatively intact, and Pott’s use of Celsus amongst later authors implies that there was not necessarily a hierarchy of information based on its source.

Similarly, Samuel Sharp highlights that with regard to ‘Hydrocele’: ‘In the very Definition of this Disorder, I think the Moderns have all run into an erroneous Division, which cannot but confound a young Reader. They tell us there are two Species of hydrocele’s […].’\textsuperscript{1053} This reinforces the idea that ancient knowledge in some cases was viewed as equal in value to contemporary work, and occasionally as more useful.

Although this perspective is not necessarily reflected in the majority of references to ancient knowledge, it does illustrate a wider trend within the discussion of ancient authority and its role in contemporary medicine. Ancient influence is evident in many of the definitions and divisions that affect surgical theory, and this can be seen as part of Daniel Turner’s discussion ‘Of Wounds of the Blood-Vessels’, which says:

\begin{quote}
All I would infer hence is, that the Tumour we call Aneurisma, may be contain’d within the arterial Tunicles, or that the same are capable of such Distention, as to give Being to such like Tumours; and that consequently we may still retain the Antient’s Division thereof into genuine and spurious, or true and false […].\textsuperscript{1054}
\end{quote}

This explicit acceptance of the ancient division suggests that there was a need to explain that the old explanation remained valid, but that ultimately it was acceptable to retain medical language in this way.

\textsuperscript{1052} All dates (except Lowe) taken from L.I. Conrad, M. Neve, V. Nutton et al., \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 115, 8 and 9 respectively. Lowe published \textit{A discourse of the whole art of chyrurgerie} in 1612.\textsuperscript{1053} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 64.\textsuperscript{1054} D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume I (London, 1722), p. 478.
The relevance of ancient language can also be seen through the idea that even where a name had changed over time and no longer corresponded to the ancient version, authors highlighted that this change had occurred. For example, Turner, in a discussion of ‘other particular Tumours’ explains:

Nor shall I in what follows, multiply Divisions, intending to comprehend what remains, under this Distinction, of Tumours Acute, and Tumours Chronical; or if you had rather I should keep to the antient Terms, of Tumours from Fluxion, and Tumours by Congestion.\textsuperscript{1055}

In this passage, Turner initially suggests that he is endeavouring to avoid complicating the discussion, and therefore including both the new terms and the old terms for these disorders is unlikely to have been confusing to the reader. Indeed, the implication is that Turner is providing essential information in order to clarify his explanation, as both sets of terms existed in parallel.

This idea can again be seen in Turner’s work through the phrase: ‘We come now to the last of the four General Tumours, the Schirrus: And this the antient Writers will have to be the Off-spring of Melancholy.’\textsuperscript{1056} Despite Turner’s assertion that ‘we cannot easily comprehend’ the nature of the ‘Melancholy’ of the ancients in this situation, he nonetheless includes this in his discussion of the affliction.\textsuperscript{1057} Here, there is a sense of nostalgia in the inclusion of information regarding the ancients, and this is also evident in Turner’s 1695 work Apologia chyrurgica, where he takes the time to say: ‘I conceive it no unpardonable Deviation, if we look back upon Antiquity, and take a view of that sublime Respect which was formerly paid to the true and faithful Practitioner of this noble Art.’\textsuperscript{1058} This demonstrates that in certain instances, the sphere of ancient medicine was viewed in a particularly positive light and that practitioners during the late seventeenth and early eighteenth centuries continued to find many aspects which were appealing and perceived as worth emulating.

\textsuperscript{1055} D. Turner, The art of surgery: in which is laid down such a general idea of the same, Volume I (London, 1722), p. 95.
\textsuperscript{1056} Ibid., p. 65.
\textsuperscript{1057} Ibid., p. 66.
The role of ancient knowledge in early modern surgical theory

In addition to historical references, it is also evident that ancient knowledge formed a more fundamental part of the framework of early modern medicine. This is illustrated by many examples of the practical and theoretical models that the ancients provided, which are described during the eighteenth century. Percivall Pott includes in a footnote the description that: ‘The sentiments of a very ancient writer on this matter are so very just and apposite, that I hope the reader will excuse the length of the quotation’, which is followed by a quote ascribed by Pott to Oribasius. This underlines that early modern authors utilised ancient practitioners to reinforce their own work, but also that ancient knowledge was integrated into medical theory, with certain ways of phrasing ideas, as well as the ideas themselves, seen as unable to be improved.

The fundamental nature of ancient knowledge in early modern medicine is also demonstrated by Daniel Turner’s discussion in a section ‘Of Fractures in general’, which outlines the complexity of the division of fractures into simple and compound. Although he portrays this as a relatively straightforward division, he also shows that a simple fracture ‘accompany’d with any dangerous Symptom’ can be described as a compound fracture, even if the skin has not been breached. However, Turner adds to this assessment by saying: ‘yet will I not find Fault with this general Division of the antient Practitioners, which still takes Place among us’, which underlines that the overarching categories provided by the ancients were still both relevant and utilised.

Similarly, the role of ancient authority in areas that remained uncertain, or without an absolute definition or explanation, is illustrated in Turner’s section ‘Of Fractures of the Cranium.’ Here, he says:

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1060 D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume II (London, 1722), p. 126. This page also illustrates Turner’s brief definition of simple and compound fractures.

1061 Ibid., p. 126.
nor can there be any time precisely fix’d wherein we can pronounce the Patient absolutely out of Danger after these Accidents. Some of the antient Writers tell us of one Hundred Days, I must confess I lost a very hopeful Patient, who was got up to Eighty Eight, and had been to Appearance, after the Operation of Trepaning, the greatest part of that Time, as well as ever in his Life [...].

This underlines the importance of ancient information in the treatment of patients, but also shows that this relationship was not necessarily straightforward and without ambiguity. In highlighting that he lost his patient after eighty-eight days, Turner reinforces the ancient idea that the patient will not be out of danger until one hundred days following the injury. However, the suggestion that a particular time value can be placed upon the recovery at all is questioned by Turner, and although this undermines the specific number provided by ‘some antient writers’, he does not criticise the number itself and illustrates it as a reasonable proposal.

This interaction between ancient and early modern ideas is also reflected in a comparison presented by Samuel Sharp in his section ‘On Concussions of the Brain’ within A critical enquiry into the present state of surgery. Here, Sharp outlines the advice and observations of the Academie de Chirurgie in Paris, and shows that the approach of both ancients and moderns has been similarly cautious in treating this particular type of affliction:

In the course of these Considerations on the Disorders of the Brain, there is a very good Rule of Practice proposed by the Academy relating to Abscesses of the Brain from external Accidents. They observe that hitherto the Moderns have been as tender of making an Incision into the Substance of the Brain, in order to discharge any Matter which may possibly lie latent there, as the Ancients were of wounding the Dura Mater for the same end.

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1062 D. Turner, The art of surgery: in which is laid down such a general idea of the same, Volume II (London, 1722), p. 186.
1063 S. Sharp, A critical enquiry into the present state of surgery (London, 1750), p. 237-238. Sharp’s reference in this passage relates to a footnote which cites the location of this information in the Memoires de l’Academie de Chirurgie.
This is followed by the suggestion that if certain symptoms persist, ‘though neither of them appear on the surface of the Brain, we ought to push our Enquiry into the Substance of the Brain, by making a Puncture or Incision opposite to that Part of the Cranium which received the Injury.’\textsuperscript{1064} Whilst this contradicts the ancient reluctance to wound the ‘Dura Mater’, or ‘the outer Covering of the Brain’, it shows that this idea was still evident during the eighteenth century, and as such that parallels were continuing to be drawn with ancient medicine.\textsuperscript{1065}

The perceived value of ancient knowledge can also be seen in more practical aspects of surgery during this period. For example, Daniel Turner highlights the ancient origin of a particular type of stitch in his section ‘Of Wounds in general’: ‘Lastly, there remains a fourth Kind, called the \textit{Sutura sicca}, or the \textit{dry Stitch}, a very pretty Invention of the Antients, and sometimes of good Service, where the timorous Patient will not admit of sewing up the Wound […].’\textsuperscript{1066} Turner continues, explaining the other instances where this stitch can be appropriate, and also suggests that ‘this \textit{dry Stitch} is well enough known among the expert Practitioners of \textit{Chirurgery}.’\textsuperscript{1067} This illustrates that an ancient invention was still in use in 1722, and that this was significant enough to mention as part of the text. Furthermore, the idea that this type of stitch was known amongst expert surgeons implies that more experienced practitioners were more likely to have the breadth of knowledge to include this, and also that ancient knowledge retained a sense of exclusivity and authority which contributed to the reputation of early modern practitioners.

The material influence of the ancients on early modern surgery can also be seen in the discussion which leads on from Turner’s advice regarding wounds and stitches, which begins to address the ‘roller’ or bandage:

\textsuperscript{1064} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 238.
\textsuperscript{1065} D. Turner, ‘Tabula \textit{Ætiologica}’ in D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume II (London, 1722), unnumbered pages at the end of Volume II, this reference falls on the ninth page of this section.
\textsuperscript{1066} D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume I (London, 1722), p. 306.
\textsuperscript{1067} Ibid., p. 307.
Since I have made Mention of the *Roller*, that necessary Part of the *Apparatus*, in dressing of Wounds in general, it may be expected, I should enlarge upon the diverse Kinds thereof, which, from their several Intentions, and differing Ways of Management, received from the Antients diverse Appellations; thus one was named [...]\textsuperscript{1068}

Here, Turner specifically mentions five different names and functions of bandages which he implies were designated by the ancients. However, this is followed by the assertion that these bandages, though known and seemingly worthy of mention, are not necessarily useful in most instances:

> These, I say, with others of the like Kind, more specious than truly advantageous, I pretermit; because the single or double-headed Roller differently managed, as the Prudence of the Artist, rightly considering all Circumstances, shall direct, will sufficiently answer all the proper or necessary Intentions.\textsuperscript{1069}

Whilst Turner suggests that in conjunction with the skill and experiences of the practitioner, one type of bandage is generally sufficient, he does also underline that he provides more detail regarding the treatment of specific wounds, where ‘we may likely have Occasion to give some more particular Directions about the same.’\textsuperscript{1070}

The association between practical surgical materials and the ancients can also be seen in Richard Wiseman’s work, which is referenced in a footnote in *The chirurgical works of Percivall Pott*. Within a section discussing extension, which forms part of the process of setting a broken bone, the beginning of the footnote takes the form of a quote: ‘“Instruments for extension are threefold; first, the


\textsuperscript{1069} D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume I (London, 1722), p. 310; see also S. Johnson, *A dictionary of the English language*, Fourth edition, Volume II (London, 1777), pages unnumbered. This describes ‘specious’ as: ‘Spe’cious. adj. [specieux, Fr. speciosus, Lat.] 1. Showy; pleasing to the view. 2. Plausible; superficially, not solidly right; striking at first view.’, whilst the definition for ‘pretermit’ within this text is: ‘To Pretermit. v. a. [prætermitto, Lat.] To pass by.’

\textsuperscript{1070} D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume I (London, 1722), p. 310.
surgeons hands, &c. secondly, funes & habenæ, a sort of bandage fit to pluck at, in order for extension; thirdly, there are organa & machinemata, engines used by us, and invented by the ancients.”

This shows the relationship between ancient inventions and seventeenth and eighteenth century practice, also underlining that the perceived relevance of ancient influence extended across this period. Pott subsequently expands upon the information provided by Wiseman within the footnote, adding that: ‘There are not wanting instances of the muscles surrounding a bad though simple fracture, having been torn by extension, and spasm and other mischief thereby produced. See cautions on this subject, laid down by many old writers, particularly by Galen and Albucasis.’ This suggests that practitioners would have been able to access the work of these authors relatively easily, especially as Pott leaves the cautionary aspects of this procedure to them.

Pott’s assertion in the introduction to this section that ‘it is by no means my intention to write a regular treatise on fractures [...] I mean to throw out a few hints, which I hope may prove intelligible and useful’ implies that only the information viewed as most significant would have been included. As such, the reference to the influence of the ancients on the procedure, and as well as specific recourse to Galen and Albucasis illustrates the extent to which the surgical past was integrated into present practice. Furthermore, the reference to Galen (c. 200 AD) alongside Albucasis (working around 940 AD) also illustrates a sense that ‘old writers’ (as Pott describes them) encompassed a vast time period, and did not necessarily privilege the information of one era over another.

This can also be seen in a further reference made by Pott to the work of William of Saliceto, a thirteenth century surgeon. As part of a discussion of the treatment of a particular condition, Pott highlights in a footnote that: ‘Gul. De

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1072 Ibid.
1073 Ibid., p. 635-636.
1075 See N. Siraisi, Medieval and early Renaissance medicine: an introduction to knowledge and practice (London, 1990), p. 96. This suggests that ‘Guglielmo of Saliceto’ was flourishing during the 1270s.
Saliceto, and indeed many other of the ancient writers, speak of using both cautery and terebra to the purpose of deriving the matter and sanies which lodge in the sac, into the nose; and, by making a depending orifice, to procure a firm basis to heal on. Whilst Pott does not necessarily agree with the method presented here, it does highlight that writers from the thirteenth century could be referred to as ancient, which suggests that the word ‘ancient’ could be used in varying ways to denote practitioners deriving from a vast time period.

The continuing relevance of ancient knowledge in early modern surgery

The continuing relevance of ancient ideas is evident in Daniel Turner’s text, published in 1722, where his mention of Galen and Hippocrates as influencing the way in which certain afflictions are described underlines their significance. Although in this instance Turner does not necessarily use the term ‘rupture’ in the same way as Galen or Hippocrates would have done, he acknowledges that there are contemporary practitioners that may do, and as such that the controversy remains. This suggests that the ancient convention in this instance was still relevant.

The longevity of ancient ideas is also evident in the work of Percivall Pott, who underlines one particular instance where practice had changed very little since the time of Celsus (c. 40 AD):

The truth is, this doctrine of the necessity of cutting out a portion of the intestine, (though it is as old, or, perhaps, older than Celsus*) is almost a necessary consequence of the manner in which thesesores, (upon a supposition of their being fistulous) almost always have been, and do still continue to be, generally treated.

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1077 D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume II (London, 1722), p. 124. The relevant passage here says: ‘The Rupture is, with some, of the like Import; but as Custom has appropriated the former to these Accidents of broken Bones, so by the latter is understood among the same Artists, a Breach or Rent in the Peritonæum, as we observ’d formerly in our Section of Wounds; where we acquainted you that both Hippocrates and Galen have given that Name, i.e. of Wounds, even to these Solutions, as well as those in the softer Parts.’
The ‘*’ symbol within this passage refers to footnote containing a Latin quote attributed by Pott to Celsus. This further reinforces the ancient origin of the idea, and in addition to Pott’s assertion that this affliction continues to be treated in this way, it highlights the continued importance of ancient knowledge.

Similarly, the influence of ancient ideas can also be seen in Samuel Sharp’s *A critical enquiry into the present state of surgery* (1750). Here, Sharp advises: ‘I shall now enter into the Consideration of the *Circocele* and *Varicocele*, Distempers we very seldom meet with, but which are still spoke of by all Writers with as much Familiarity as though they occurred every Day.’ This implies that whilst the condition itself is not necessarily commonly encountered, it is deemed important enough to be widely addressed. Sharp sets out his perspective on the complexity of the affliction, suggesting that:

> With regard to the *Varicocele*, I believe it is scarcely ever seen […]. It is possible indeed, that an independent *Varicocele* may have existed, but I am rather inclined to believe, that as Surgeons have seen it attendant on another Complaint, they have imagined it might also appear alone; however it has been described by Writers in all Ages from the Time of *Celsus*, who speaks of it under the Head of *Circocele*, though he does not use the Appellation itself.

This concludes Sharp’s discussion of ‘Varicocele’ and shows that contemporary medical knowledge could be based upon assumptions arising from other afflictions. However, for Sharp, evidence from a text was not necessarily sufficient to confirm the existence of a particular affliction, which implies the perceived value of experience. This also illustrates that the inclusion of an affliction within the relevant literature was able to perpetuate an idea which other practitioners contested. This demonstrates the wider role of tradition in shaping medical theory, and shows that by 1750 the continuation of ideas was still related to the content of medical literature drawn from a vast time period. Additionally, it highlights that this contributed to, rather than challenged, the experiences of practitioners and the role of contemporary collaboration.

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1079 S. Sharp, *A critical enquiry into the present state of surgery* (London, 1750), p. 97. This page also outlines the definition of these two disorders, associated with the testicles.

1080 Ibid., p. 98-99.
The broader influence of tradition and ancient authority in early modern surgery is also illustrated in *The chirurgical works of Percivall Pott* (1775). This volume contains many references which suggest that there had been relatively little change over time in surgery, and Pott periodically discusses the ancients and the moderns within the same sentence. In terms of placing the ancients and moderns in such close proximity in his writings, Pott appears to be slightly different to other, similar writers at this time, who tend to maintain a degree of separation between these types of references. For example, in the introduction to a section entitled ‘Fissures, and Fractures of the Cranium, without Depression’, Pott says:

> What are the symptoms of a fractured cranium? is often asked; and there is hardly any one who does not, from the authority of writers, both antient, and modern, answer, vomiting, giddiness, loss of sense, speech, and voluntary motion, bleeding at the ears, nose, and mouth, &c. This is the doctrine of Celsus, which has been most invariably copied by almost all succeeding authors, and implicitly believed by almost all readers*.  

Here, the '*' symbol refers to a quote in a footnote which is likely to be attributable to Celsus, although Pott does not explicitly convey this. This passage reinforces the idea that information from across a vast period was integrated into eighteenth century surgical texts, and shows the extent to which ancient knowledge was utilised during this time. It also demonstrates Pott’s tendency to place both ancient and modern writers in parallel throughout his work, which underlines a potential lack of hierarchy in medical information. This can again be seen later in the same section of the work: ‘But all the ancient, and many of the modern writers, speak of a particular kind of fracture, in which the scalp covering it is perfectly fair and uninjured; and this they call a contra-fissure.’  

This emphasises the continuity of ideas between the ancients and the moderns, and implies that similar types of theories and information could be found in both.

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1082 Ibid., p. 103.
Pott additionally, in his section ‘On Fractures and Dislocations’, outlines that: ‘Such application having been made as the surgeon thinks right, the next thing to be done is to put on a proper bandage.---That used by the ancients, and by the majority of the present practitioners, is what is commonly called a roller.’ The use of the word ‘proper’ within this passage suggests that the bandage used by the ancients was viewed as the correct one, and consequently most modern practitioners followed this model. By locating this item within the context of the past, Pott also appears to show that an ancient basis for knowledge was significant, and conveyed a sense of authority in the technique it relates to.

Similarly, in the section ‘Fissures, and Fractures of the Cranium, without Depression’, Pott includes a discussion relating to the opportunities and limitations provided by intervention through ‘trepanning.’ Following information regarding instances in which it is suitable, one of which involves the use of trepanning as an elective, preventative measure, Pott says:

Many practitioners, both antient and modern, have therefore disused and condemned it; and have, in cases where there have been no immediate bad symptoms, advised us to leave the fracture to nature, and not to perform the operation as a preventative, but to wait until its necessity may be indicated by such symptoms, as may both require and vindicate it. This is a point of the utmost consequence in practice; and ought to be very maturely considered.

Here, Pott implies a continuity between the opinions of the ancients and the moderns, and shows that in this instance they are concurrent in their suspicion of the use of the trepan as a preventative measure. This also shows a degree of reluctance to perform potentially dangerous procedures unnecessarily, and an awareness of the consequences of doing so, which is reflected in the perspectives of both the ancients and the moderns.

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1084 Pott’s definition of ‘trepanning’ can be seen in his discussion of the technique: ‘The operation of the trepan is frequently performed in the case of simple fractures, and that very judiciously and properly; but it is not performed, because the bone is broken, or cracked: a mere fracture, or fissure of the skull, can never require perforation, or that the dura mater under it be laid bare; the reason for doing this springs from other causes than the fracture, and those really independent on it.’ in P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 84.
In addition to underlining the aspects of ancient and modern practice that he views as the positive, pragmatic aspects of surgery, Pott also shows that in some instances the ideas from both periods can be the same, but that the practice itself is flawed. For example, he underlines that: ‘Paulus Ægineta, Albucasis, Severinus, and many others of the best of the ancient writers, have given a particular account of this operation; and it has at all times been practised by some, tho’ it has generally been decried, and dreaded.’

This phrase refers to a method of approaching the treatment of an ‘hydrocele’ through employing a large incision which involved ‘dividing or laying open the whole cavity or bag containing the water.’ Pott’s use of the words ‘decried, and dreaded’ illustrates that this procedure was not viewed as an ideal approach; however, the passage also demonstrates that this practice (as well as the affliction that it aims to remedy) had persisted over a vast time period, and that the concurrence of ideas between the ancients and the moderns could also take the form of less positive surgical practices.

In some instances, Pott also takes this further, underlining that he sees both the ancients and the moderns as incorrect with regard to particular ideas. For example, in the preface to the section ‘A Treatise on Ruptures’, he says that:

The disease which makes the subject of the following tract, is one in which mankind are, on many accounts, much interested; no age, sex, rank, or condition of life, is exempt from it; [...] and it has in all times, from the most antient, down to the present, rendered those who labour under it subject to the most iniquitous frauds and impositions.

The passage continues, highlighting that those suffering from a rupture can be subject to unscrupulous practitioners exploiting ‘the weakness of the infirm and fearful’ and showing that this has not changed over time. Pott especially underlines that as ‘A rupture is a disease, which, if judiciously and honestly

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1087 P. Pott, *The chirurgical works of Percivall Pott* (London, 1775), p. 433; see also S. Cooper, *A dictionary of practical surgery*, Fourth edition (London, 1822), p. 660: ‘The term hydrocele, if used in a literal sense, means any tumor containing water; but surgeons have always confined it either to a collection of fluid in the cellular membrane of the scrotum; in a cyst, or the common cellular texture, of the spermatic cord; or in the tunica vaginalis of the testicle.’
1089 Ibid.
treated from the first, can never be productive of much profit to a surgeon; it requires very little attendance […'], surgeons should therefore not generate a great deal in return for treatment under these circumstances.\textsuperscript{1090}

The idea that the ancients and the moderns were in some instances equally flawed in their approach can similarly be seen in a footnote which Pott includes as part of his discussion ‘Of the Fistula in Ano.’\textsuperscript{1091} Here, he says: ‘There is hardly an author ancient or modern, who has not inculcated this doctrine, though daily experience might have convinced them of its falsehood.’\textsuperscript{1092} This is expanded within the footnote with the explanation that: ‘[…] it does by no means, follow, that either this sinus must be divided through its whole length; or that the disease cannot be cured; and, therefore, that it is better not to meddle with it at all. Frequent experience proves the contrary.’\textsuperscript{1093} The implication here is that although the generally accepted opinion has been that unless the circumstances of this remedy are exactly as required, surgical intervention becomes ineffective and unsuccessful, Pott believes that his own experience undermines this view. As such, the perpetuation of a doctrine by both the ancients and the moderns which is perceived by Pott to be false, suggests that he views these particular authors as equally flawed. This implies a fundamental link between the work of the ancients and the moderns, and illustrates the extent to which they were perceived as having ideas and practices in common. It also reiterates the role of experience in assessing the knowledge and theories of the past.

Percivall Pott’s work underlines the continued importance of ancient ideas to contemporary theory and practice, and he often appears keen to emphasise the value of ancient knowledge. Although in many ways he is different to other authors in the frequency of his references to past ideas, his own significance as a figure during this period suggests that his views are likely to have been widely shared. Pott’s importance can be seen through the use of his work within a surgical dictionary, the fourth edition of which was published in 1822. Samuel Cooper’s \textit{A dictionary of practical surgery} effectively paraphrases Pott’s chapter

\textsuperscript{1090} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 224.
\textsuperscript{1091} For a definition of this affliction, see P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), pp. 563-565.
\textsuperscript{1092} Ibid., p. 607.
\textsuperscript{1093} Ibid.
‘Of the Fistula in Ano’ and attributes the text accordingly: ‘Pott may be considered as the source authority of the foregoing remarks.’ This reinforces the position that Pott held in terms of influencing contemporary perception, and as such suggests that his views would have been both available and influential in determining the role of the ancients in various areas of surgical theory and practice.

In his approach to tradition in surgery, Pott shows the importance ascribed to evaluating information based upon its contemporary validity. This can be seen in the following passage, which summarises his view:

> Before I enter upon the account of the present and most proper method of treating simple undepressed fractures of the skull, it may, perhaps, be not amiss to make a short enquiry into the opinions which our remote ancestors have delivered down to us on this subject, to take a cursory view of their intention and conduct, and to examine, whether the difference between their practice, and ours be well grounded or not; it being neither antiquity nor novelty, but utility only, which can demand our regard.

The tone of this extract underlines the value that Pott places upon ancient authority where appropriate. It also demonstrates that instances in which he advocates ancient theory or practice are not simply based upon adherence to tradition, but that his own assessment has shown them to have contemporary value, further reinforcing their importance.

Although *The chirurgical works of Percivall Pott* demonstrate many examples of recourse to ancient knowledge, and comparison between the works of the ancients and the moderns, his text also illustrates instances which show a belief in the limitations of ancient thought. This can particularly be seen in the section ‘Fissures, and Fractures of the Cranium, without Depression’, where Pott says:

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I am aware that the direction given by most of the old writers on this subject is very different from what I have mentioned; but the instruments with which they operated, were so different from ours, and the advantages arising from the comprehension of the fracture within the trephine are so great, and so manifest, that I must take the liberty of inculcating a constant attention to it, as to a circumstance from which great advantages are derivable.\textsuperscript{1096}

Here, the debate surrounds Pott’s assertion that during the operation of ‘trepanning’ ideally the ‘instrument might always comprehend the fracture within it’, thus the boundary of the trepan should encompass the fracture, which he implies was previously not the case due to the instrumentation available.\textsuperscript{1097} Pott shows that the different instruments of the ancients caused a different approach to be taken under these circumstances, which illustrates that he is able to question ancient knowledge, and utilise it only when it remains relevant to his own practice and experience.

However, this passage also demonstrates that even in disagreeing with the practices of the ancients and seeking to move beyond them, Pott is still keen to emphasise the connection between past knowledge and contemporary practice. This can similarly be seen in the work of Daniel Turner, who, in a discussion regarding the apparatus required for attending to dislocations, says: ‘Lastly, Your Assistants, as well by their Strength as Judgment too, where they can be had well qualify’d for the Work: Or these failing, suitable Instruments for the same; of which the Antients have provided some, and which modern Improvements have made farther useful.’\textsuperscript{1098} Here, Turner highlights that improvements in instrumentation had been made over time, but also that in this instance the basis for the instruments remains with the ancients, and their apparatus had been made more useful, rather than entirely replaced. This also indicates the importance ascribed to highlighting the process by which these developments had occurred, and placing them within the context of the past.

\textsuperscript{1096} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 105.
\textsuperscript{1097} Ibid.; see also p. 84, which shows more information regarding the technique of ‘trepanning’, also mentioned above.
\textsuperscript{1098} D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume II (London, 1722), p. 235.
Approaches to the reconciliation of ancient and modern knowledge

The way in which Pott and Turner frequently link the work of the ancients and the moderns can also be seen in the texts of other authors, although many have tended to portray these two groups as more separate and occasionally as quite different in their approaches. This is particularly evident in Charles Gabriel Le Clerc’s work *The compleat surgeon* (1696), which was translated from the French. In a section entitled ‘Of the Operation of the Paracentesis of the lower Belly’, Le Clerc advises: ‘The Disease is manifest by the great Swelling; and the Operation is perform’d with the *Trocar*, which is a Cane or a Pipe, made of Silver or Steel, with a Bodkin sharp-pointed at the End in it; although the Ancients were wont to do it with a Lancet.’ The use of the word ‘wont’ suggests that that ancients were accustomed to using a lancet in this situation, and as such did not benefit from other ways of approaching the affliction. Le Clerc later adds that the use of the ‘Trocar’: ‘makes so small an Orifice, that it is not to be fear’d lest the Water should run out, which might happen in making use of the Lancet’, which underlines that the modern method is preferable to that utilised by the ancients.

Samuel Sharp also occasionally demonstrates a similar tone in *A critical enquiry into the present state of surgery*, where, in Chapter VII ‘Of Amputations’, he says that: ‘The Extremities are subject to many Disorders which require Amputation, but a spreading Gangrene has been always esteemed one of the most pressing Motives, and indeed amongst the Ancients, to all Appearance, the only one.’ This begins to suggest that the ancients were particularly hesitant to undertake amputations, except in cases were it was unavoidable. This attitude is mirrored in Samuel Cooper’s *A dictionary of practical surgery*, which, although published several years after Sharp’s text, outlines a similar perception of the ancients: ‘The Greek, Roman, and Arabian practitioners

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1099 M. [C.G.] Le Clerc, *The compleat surgeon: or the whole art of surgery explain’d in the most familiar method* (London, 1701), p. 267; see also S. Cooper, *A dictionary of practical surgery*, Fourth edition (London, 1822), p. 915. This describes ‘Paracentesis’ as: ‘The operation of tapping or making an opening into the abdomen, thorax or bladder, for the purpose of discharging the fluid confined in these parts […]’ and also provides further information on the affliction. The definition for ‘Trocar’ within this text (p. 1054) also reinforces Le Clerc’s argument against the use of something resembling a lancet, underlining that the Trocar is generally preferable, and correspondingly recommended most widely.


amputated limbs with feelings of alarm, and, in general, with the most melancholy results; while modern surgeons proceed to the operation completely fearless, we'll knowing this it mostly proves successful.¹¹⁰² Here, the sense is that the ancients were restricted in their practice by the state of knowledge at the time, and as such subsequent practitioners had been able to proceed further than was previously possible. Whilst neither author overtly criticises the ancients, both imply that limitations were evident in their knowledge, and that a fundamental difference existed between ancient and modern practice.

The idea that ancient ideas remained relevant, but were viewed as different to contemporary practice can be seen in the work of Percivall Pott. As part of his discussion of the ‘Means for a Radical Cure’ of a specific type of hydrocele, he advises:

One of the methods made use of by the ancients, to let out the fluid from an hydrocele of the vaginal coat was, (as I have already observed) by making a pretty large division of the scrotum and dartos, and having by that means laid the tunic bare, to make an opening into that also, and thereby discharge the contents. This method sometimes produced a perfect cure in the first instance, but much more frequently produced only a temporary relief.¹¹⁰³

Here, it is evident that Pott recognised a perceived weakness in the practice of the ancients, and although he seeks to reiterate that occasionally this method was ideal, he also concedes that ‘much more frequently’ it failed to procure a positive and lasting outcome. This further underlines the sense that some authors saw a significant difference between their theories and practices and those of the ancients. However, in mentioning the ancients at all in relation to modern knowledge, these practitioners also reinforce a link to the past.

The collaborative tone that this implies can further be seen in the section ‘On Fractures and Dislocations’ in The chirurgical works of Percivall Pott through the

¹¹⁰³ P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 432. The ‘as I have already observed’ that Pott alludes to within this passage can be found on p. 426, where a further reference to the ancient method of treatment is also evident.
phrase: ‘The ancient method of applying the roller in case of simple fractures of
the leg or thigh, was to make * four or five turns round the fracture first, and
then to continue the bandage upward and downward, until the whole limb was
enveloped properly.’\textsuperscript{1104} This is followed by the idea that ‘although they have the
same ends in view’, modern practitioners carry out the procedure in a different
way.\textsuperscript{1105} This is significant as it shows a desire to reassure the reader that the
ancients were absolutely correct in their intentions, and suggests that Pott was
reluctant to criticise their underlying aims. This can similarly be seen in the idea
that:

\begin{quote}
Whether the old or the later method be followed, whether one or more
rollers be made use of, the whole is executed while the limb is kept by
means of the assistants in the same extended posture in which the
coaptation was made, so that the whole bandage is finished before the
leg is deposited on the pillow [...].\textsuperscript{1106}
\end{quote}

This illustrates that for Pott the ancient and modern methods in this instance
were interchangeable, and as such providing certain other conditions were met,
both approaches were equally suitable. Furthermore, this section also contains
a footnote (denoted by the ‘*’ symbol within Pott’s text) which says: ‘* See a
particular account of this in Fab. ab Aquapendente, and in Serjeant
Wiseman.’\textsuperscript{1107} This is important as it shows that in many ways no distinction
based on date was made between practitioners and knowledge from a vast time
period, rather the distinction was based upon the perceived usefulness of the
information they offered. Here, the inclusion of Fabricius ab Aquapendente,
active in the early seventeenth century, alongside Richard Wiseman, working in
the late seventeenth century, shows the collaborative way in which practitioners
utilised surgical theory, experience and practice, and the fundamental link that
existed between ancient and modern practitioners.\textsuperscript{1108}

\textsuperscript{1104} P. Pott, The chirurgical works of Percivall Pott (London, 1775), p. 646.
\textsuperscript{1105} Ibid.
\textsuperscript{1106} Ibid.
\textsuperscript{1107} Ibid.
\textsuperscript{1108} Dates taken from L.I. Conrad, M. Neve, V. Nutton \textit{et al.}, The Western medical tradition: 800
BC to AD 1800 (Cambridge, 1995), p. 282 and 297 respectively.
The importance of this link can also be seen through the way in which practitioners explain the differences between ancient and modern theory and practice. By drawing attention to inconsistencies between ancient and modern knowledge, early modern authors illustrate the extent to which the past was viewed as still relevant, even if in some instances the information had been superseded. This is demonstrated in the work of Charles Gabriel Le Clerc, who refers to the practice of the ancients almost in substitute for contemporary information:

In what Parts do the Critical Tumours usually arise?
In the Glandules, which the Ancients call’d the Emunctories of the Brain, Heart and Liver; for they gave the Name of Emunctories of the Brain to the thick Glandules which lie under the Ears, that of the Emunctories of the Heart to those that are under the Arm-pits; and that of the Emunctories of the Liver, to those under the Groin. Now Malignant Tumours may arise in all these Parts, but the Venereal happen only in the Groin.1109

This passage concludes his short chapter ‘Of the general Method to be observed in the curing of Tumours’ and shows the importance of the differences between ancient and modern naming conventions for Le Clerc. The proportion of this paragraph that is dedicated to an explanation of the different ways in which the ancients referred to what Le Clerc calls ‘Glandules’ underlines the influence of ancient practices. It is also significant that Le Clerc does not provide additional information regarding the ‘Glandules’ in this section, which suggests a level of assumed knowledge in the reader, and highlights that in this instance the information he deemed important to convey was that which related to ancient nomenclature. It is interesting to note that in the ‘Tabula Ætiologica’ that Daniel Turner includes in the second volume of his work The art of surgery (1722), there is an entry which says: ‘Emunctorium, ab emungo, to clean, or wipe away, to drein off, as by a Sink or common Sewer; figuratively with us apply’d to certain Glands, as the Parotid, which are called the Emunctories of

1109 M. [C.G.] Le Clerc, The compleat surgeon: or the whole art of surgery explain’d in the most familiar method (London, 1701), p. 142.
the Brain; those in the Arm-pits and Groins to the Blood in general.\textsuperscript{1110} This implies that the ancient way of naming these glands that Le Clerc highlights had become incorporated into surgical language as a symbolic description, rather than as the primary way in which they were described in practice. Nonetheless, this reinforces the link that remained between ancient and modern ideas, and demonstrates a further way in which ancient knowledge could be incorporated into contemporary surgical practice.

The explanation of differences in approach between the ancients and the moderns can further be seen in the introduction to William Cheselden’s work, \textit{The anatomy of the humane body} (1713). Following a very short introductory passage, the text highlights that:

\begin{quote}
The Ancients suppos’d, That the HEART and BRAIN were first form’d, and that all the other Parts proceeded from them: They distinguished them into Spermatic and Sanguineous; and thought, because the Brain was cover’d with Two Membranes, that all the other Parts must be so too; and frequently ingag’d themselves in Disputes about the Derivation of Parts; with many other Things of the like Nature, Consequences of their Hypothesis.\textsuperscript{1111}
\end{quote}

This section continues, briefly outlining that the use of ‘Glasses’ had allowed the moderns to discover certain aspects of foetal development which contradict the process outlined by the ancients that Cheselden conveys in his introduction.\textsuperscript{1112} Following this, there is an explanation regarding why this information was included, illustrating the wider aims of the work and how it was intended to be received:

\begin{quote}
Thus much we thought necessary to Premise, that the Reader might have a general Idea of the Body, and that he may see for what Reason we take no Notice in this Treatise of the Distinctions and Divisions of
\end{quote}

\textsuperscript{1110} D. Turner, ‘Tabula Ætiologica’ in D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume II (London, 1722), unnumbered pages at the end of Volume II, this reference falls on the eleventh page of this section.

\textsuperscript{1111} W. Cheselden, \textit{The anatomy of the humane body} (London, 1713), p. xix.

\textsuperscript{1112} Ibid. Here, Cheselden says that: ‘the Moderns, assisted with Glasses, have discover’d, That all the Parts exist in Miniature, from the first Formation of the Foetus […]’
Parts, made by ancient Anatomists, and those who have Copy’d after ‘em.\textsuperscript{1113}

Here, Cheselden shows the relationship between ancient and modern knowledge by underlining that it was seen as important to recognise and outline the differences that existed, even though in this case he intends to move beyond the ancient approach, to an improved, modern outlook. It is also significant that Cheselden seeks to both explain and defend ancient knowledge, demonstrating that differences in approach between the ancients and the moderns were viewed as understandable, and that explicitly highlighting these differences was valuable to the reader. Whether this is included as a method of contextualising current knowledge, or to show the progress that has been made over time, it nonetheless illustrates that ancient views were influenced by certain limitations in past knowledge, and therefore that Cheselden was not necessarily criticising the work of the ancients.

The integration between ancient and modern knowledge, and the way in which differences between these approaches are explained is evident in the first volume of \textit{The art of surgery} by Daniel Turner (1722). Here, as part of a discussion ‘Of encysted Tumours’, Turner outlines that: ‘We did in the foregoing Section divide these \textit{encysted Tumours} into three Sorts, explaining their Original, \textit{viz. Atheroma, Steatoma and Meliceris}, whose Greek Nomenclature shall be given hereafter.’\textsuperscript{1114} This illustrates that the way these particular types of tumour were referred to was derived from antiquity; and in highlighting that the Greek names would be utilised thereafter, Turner both underlines the importance of ancient knowledge, and suggests that whilst alternative names existed, he had chosen to adhere to ancient nomenclature. This sense of ancient and modern knowledge existing in parallel can also be seen in this chapter through further discussion of encysted tumours: ‘For as to their Causes, the antient Writers derive them from \textit{Phlegm} and \textit{Melancholy}, in a degenerate State; but we, from the \textit{nutritious Juices}, ousing out of some \textit{excretory Duct}, at

\textsuperscript{1113} W. Cheselden, \textit{The anatomy of the humane body} (London, 1713), p. xx.
\textsuperscript{1114} D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume I (London, 1722), p. 166. Entries for these three types of encysted tumours can be found in Turner’s ‘Tabula Ætiologica’ in D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume II (London, 1722), unnumbered pages at the end of Volume II.
the Sides or Extremities of the Vessels [...]".\textsuperscript{1115} The passage continues, explaining this in greater detail, which contrasts the initial concise reference to the ancient view of the causes of encysted tumours. However, Turner’s inclusion of the ancient approach to this affliction alongside the modern interpretation of its cause illustrates the extent to which ancient knowledge was viewed as relevant, even if differences existed. It is also significant that Turner explains the difference by referring to the underlying medical theory of the ancients, which he implies to be slightly different to modern interpretation, but still fundamentally based upon the fluids of the body.

This can similarly be seen in the work of Percivall Pott, which also shows the difficulty that was often encountered in reconciling ancient and modern knowledge and practices. As part of a discussion relating to the treatment of cataracts, Pott observes that:

\begin{quote}
The opinion was a necessary consequence of the theory then most frequently embraced, and was therefore generally credited; and, as very often happens with regard to preconceived notions, it was thought to be confirmed by facts.

This doctrine has, it is true, been contradicted by some of our best modern practitioners; but still it not only remains the opinion of many, but has a very considerable share in determining the preference supposed to be due to one method of operating over another.\textsuperscript{1116}
\end{quote}

Here, the use of the phrase ‘necessary consequence’ underlines Pott’s desire to explain differences between ancient and modern knowledge, showing the belief that within the context of the time, ancient perceptions were both reasonable and understandable. It is also significant that Pott illustrates the importance of ancient knowledge through suggesting that whilst this idea had been ‘contradicted’, it remained central both to the formation of opinion, and to the approach that was taken to the affliction.

\textsuperscript{1115} D. Turner, \textit{The art of surgery: in which is laid down such a general idea of the same}, Volume I (London, 1722), p. 168.

\textsuperscript{1116} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), pp. 706-707.
Although Pott outlines the difference between ancient and modern knowledge and practice with a view to explaining what was believed previously, and integrating this into modern theory as appropriate, William Hunter, working a short time later, illustrates a less accommodating attitude towards ancient knowledge which was no longer correct from his perspective. For example, as part of a section within his *Two introductory lectures* (1784) which examines the divisions of the body that were relevant to the study of anatomy, Hunter says that: ‘For the sake likewise of explaining the meaning of words which often occur in older writers; I must just mention two divisions of the solids, which are now in disuse.’\textsuperscript{1117} Here, the implication is that whilst these terms are no longer in use, Hunter still identifies a need to describe them in this way. His initial statement within this passage is followed by an explanation of the first division of the solids of the body, where he suggests that: ‘The moderns have dropped this division of the solids, because they know that a muscle and a bone are each of them compounds of parts that are unlike.’\textsuperscript{1118} This demonstrates that Hunter perceives a significant difference between ancient and modern ideas and that he attributes this to an improved knowledge of the body.

Following his discussion of the first division, Hunter addresses the second division which he initially identified in the solids of the body:

The other obsolete division of the solids, is that of 1. *sanguinary*, and 2. *spermatic*. Such parts of our body as are plentifully supplied with blood-vessels, and are thence red coloured, the muscles for example, they called sanguinary; and the expression may be useful. The absurdity is in the next part of the division [...]\textsuperscript{1119}

The ‘absurdity’ to which Hunter refers is the ‘spermatic’ classification of ‘such parts of our body as have few or no red blood-vessels’, although no further explanation is provided regarding the reasons for the dismissal of the term.\textsuperscript{1120} This implies not only that Hunter viewed aspects of ancient authority as no longer relevant, but also that he saw a tangible difference between the two

\textsuperscript{1117} W. Hunter, *Two introductory lectures* (London, 1784), p. 85.
\textsuperscript{1118} Ibid., p. 86.
\textsuperscript{1119} Ibid.
\textsuperscript{1120} Ibid.
approaches. However, the way in which he mentions older terms and divisions in order to emphasise that they are ‘obsolete’ does suggest a degree of continuity and significance in their use. His intention here is demonstrated by the idea that: ‘This division of the solids has been retained, rather for the sake of explaining so many words, which are constantly used by Anatomists, than for its importance or accuracy.’\textsuperscript{1121} Whilst this suggests that the words are both insignificant and incorrect, the assertion that they are ‘constantly used by Anatomists’ underlines the ongoing importance of ancient influence.

References to the ancients and their theories or terms are extremely prevalent within the surgical literature of this period, and it is significant that authors frequently endeavour to reconcile ancient and modern knowledge. The form that this reconciliation takes often differs between practitioners, and also between the treatment of different types of knowledge and practice, according to the experiences of the author. This can particularly be seen in Samuel Sharp’s work \textit{A critical enquiry into the present state of surgery}, the first chapter of which is ‘Of Hernia’s’ and in the first paragraph of this substantial section, Sharp underlines that this:

\begin{quote}
[...] is a Branch of Surgery which seems to have receiv’d very great Improvements from the Moderns, particularly in what regards the Operation for these Disorders. I shall therefore endeavour to point out these Improvements, and, in order to make them more intelligible, shall first give an anatomical Description of the Seat of each particular \textit{Hernia}.\textsuperscript{1122}
\end{quote}

The way in which Sharp introduces this section begins to indicate his attitude towards ancient knowledge, and the process by which it had changed prior to his own experience. For example, he implies that the improvements within this particular area of practice are noteworthy but complex to understand, which suggests that he is not reluctant to criticise ancient theory, and indicates a perception of ancient approaches as inadequate in this instance. This passage also shows the importance that Sharp places upon highlighting the differences

\textsuperscript{1121} W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 85.
\textsuperscript{1122} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 1 [unnumbered page, preceding p. 2].
between ancient and modern ideas, rather than emphasising continuity. His presentation of improvements in a way which separates them from previous knowledge and practice illustrates a desire to define the boundary between ancient theory and modern innovation. However, this does also highlight the extent to which ancient knowledge (and its succeeding forms) constituted an underlying basis for practice, as Sharp identifies a need to emphasise instances that deviate from established ideas.

As part of a discussion of ‘Hernia Ventralis’, Sharp illustrates an example which shows ancient authority, but also demonstrates that modern improvements had led to changes in practice: ‘Celsus describes this Hernia, and recommends the same method of Radical Cure as is proposed for the Exomphalos; but the Moderns confine the Treatment of them to Trusses […]’.\textsuperscript{1123} Here, he alludes to the ancient description of the affliction and the way in which treatment was approached, but suggests that this had been replaced by a differing method, which he presents as a more reasonable, less intrusive technique. The importance of contemporary knowledge is also reinforced by the passage following this, which provides information regarding certain instances where Sharp’s initial guidance would differ, both from the ancient view and the more general modern standpoint.\textsuperscript{1124}

However, Sharp’s inclusion of a reference to Celsus as a specific source of authority does highlight the continued importance of ancient knowledge, and shows the extent to which practitioner experience (both in terms of theory and practice) influences their treatment of the ancients. This can be seen in the statement: ‘But it is no Wonder there should be a Variety of Sentiments, because the Case differs in different Subjects, and Surgeons judge from those which have fallen under their Observation.’\textsuperscript{1125} Sharp immediately follows this phrase with information about his own experiences regarding the operation for this type of hernia (‘Exomphalos.’) He underlines the perception that had he performed the operation at a more advanced stage of the affliction, he would have seen a different structure entirely, and he uses this to account for

\textsuperscript{1123} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 55. A brief explanation of this affliction is also provided on this page. Sharp’s discussion of ‘Exomphalos’ and its treatment can be found on p. 50-55.
\textsuperscript{1124} Ibid.
\textsuperscript{1125} Ibid., p. 50.
differences in authors’ descriptions. He also reinforces this with an example of a further operation, where he saw a different progression and appearance of the affliction. This again demonstrates the centrality of practitioner experience in the perception of ancient ideas, and provides the opportunity for an explanation of differences between ancient and modern knowledge.

Percivall Pott’s discussion of ‘Exomphalos’ (alternatively known as an ‘Umbilical rupture’) also provides an example of the presentation of ancient ideas alongside modern views, and the tone of his assessment is extremely similar to Sharp’s discussion of ‘Hernia Ventralis’, which also mentions Celsus’ recommendation for the affliction. The similarity of these passages highlight that this approach to ancient ideas was not unique at this time, and also that this view was continuing into the late eighteenth century. Pott’s section illustrates that whilst the ancients retained a degree of authority, it was also acceptable to show alternatives, or even to directly criticise ancient method:

The cure, as proposed by authors, is either radical, or palliative. Celsus, Paulus Ægineta, Albucasis, Aquapendens, Guido, Severinus, Rolandus, and others, mention a radical cure by ligature; Fab. ab Aquapendente proposes, “aut medicamentis aut ferro umbilicum “adurere;” but after having described both methods, he lays them under such restraints, from age, habit, size of the tumor, time of the year, &c. as amounts almost to a prohibition against putting them in practice at all; and it is to be hoped that no body will attempt to revive them.

Here, Pott refers to authors writing during a vast time period, from Celsus, active around 40 AD, to Rolandus (Roland of Parma) in the thirteenth century, and Guido (Guy de Chauliac) working in the early fourteenth century. This demonstrates the influence of past authors on medical practice, as well as

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1127 Ibid., p. 50-51.
1128 P. Pott, *The chirurgical works of Percivall Pott* (London, 1775), p. 315. The Latin here translates as ‘either drugs or burning the navel with an iron tool’ but the sense essentially denotes cauterising.
Pott’s awareness of their writings, but also alludes to the difference between ancient and modern approaches.

This passage is followed by a discussion of the two different ‘methods by ligature’ which Pott implies would be used as the ‘radical cure by ligature’ suggested by the authors he lists.\textsuperscript{1130} He briefly outlines the way in which each type is carried out and describes the intention behind each approach. Despite including this information, Pott subsequently underlines that: ‘The objections to either of them are so obvious, that it is hardly necessary to say any thing concerning them; though in this age of quackery and credulity, I should not wonder to see them revived, and practised.’\textsuperscript{1131} This implies that fundamental changes had occurred to the established method and practice with regard to this affliction, and although Pott concedes that some may not have accepted this change, he indicates that experienced and reputable practitioners would understand and incorporate his objections.

It is significant that Pott does not necessarily criticise ancient ideas within their own time, but simply highlights that the moderns differ in their approach. He notes that Fabricius ab Aquapendente also recognised the limitations of the methods he describes, to the extent that it ‘amounts almost to a prohibition against putting them in practice at all.’\textsuperscript{1132} This underlines the idea that the ancients retained a degree of authority during this period, but that there was a desire to show where modern practice deviated from past approaches. The inclusion of so much information derived from, and influenced by, ancient practice implies a sense of requirement in placing new ideas into the context of the past, and also in showing both the pathway to such changes, and the reasoning behind their acceptance.

**Understanding changes to surgical theory and ‘errors’ in past practice**

In illustrating the way in which ideas and practices had changed since ancient times, many practitioners suggest that this was part of a ‘natural’ and gradual change over time. This is something in particular that follows Galen in that he also encouraged further innovation and examination of the body in order to

\textsuperscript{1130} P. Pott, *The chirurgical works of Percivall Pott* (London, 1775), pp. 315-316.
\textsuperscript{1131} Ibid., p. 316.
\textsuperscript{1132} Ibid., p. 315.
update and improve knowledge. This can be seen in Galen’s *On the Usefulness of the Parts of the Body*, in which he advises:

In this present work I wish only to remind all my readers not to be so lazy as to omit any of the parts but in every case to endeavour, just as I am doing, to investigate the nature of the substance, the form, and the contexture of them all […]. Then, if all these particulars clearly show the correctness of the reasoning about the action, they should accept it, but if it is found to be defective even in the least detail, they should regard it with suspicion to that extent and not hold by it any longer. So in my own procedure I have observed everything over a long period of time, I have weighed what all the writers have said about each instrument, and whatever I have found that agrees with the clear evidence, I have considered altogether more trustworthy than what diverges from it. This, moreover, is the method I recommend for every dissertation, not for this present one alone.\textsuperscript{1133}

This is significant as it illustrates Galen’s view that ideas should be compared and evaluated against the best information of the day, and in many ways this is also reflected across the surgical literature of the early modern period.

The process by which Greek anatomical and medical knowledge made its way to his own time period is discussed by William Hunter in *Two introductory lectures*, published in 1784. Following comments regarding Vesalius ‘about the middle of the sixteenth century’, he says:

And from that time, in the subsequent hundred years, the circulation of the blood, and many other important doctrines, unknown to the ancients, had been so generally adopted, and diffused over Europe, that the learning of the Greeks in natural knowledge, was allowed to be imperfect; and men of a more acute and aspiring cast of mind, after

having gone through their school education, were prompted to look with their own eyes into every part of nature.\textsuperscript{1134}

This suggests that particular innovations, as well as a broader inclination towards observing the body, contributed to what Hunter perceives as the positive development of anatomical knowledge. Here, the implication is that although ancient knowledge was able to be criticised and improved during this period, the authority of ancient theory was not necessarily diminished, given that certain ideas and anatomical doctrines were ‘unknown’ and as such could not have been taken into account. The contextualisation of early modern medical knowledge in this way illustrates the extent to which authors sought to highlight differences between themselves and the ancients, whilst also demonstrating a reverence for the past and the reasons for theoretical ‘mistakes’.

Acknowledgement of the past is often also evident in a less defined way, as can be seen in Charles Gabriel Le Clerc’s work \textit{The compleat surgeon}. Here, as part of an answer to the question ‘What are the Parts appropriated to Generation in Women?’ Le Clerc mentions that ‘The Vesiculae, or little Bladders which they [the ovaries] contain, are usually term’d Ova or Eggs by Modern Anatomists […]’\textsuperscript{1135} This implies that a change had occurred over time, but that it represented a gradual and evolutionary process which had not necessarily become fixed or certain. References to these types of changes, often presented as relatively minor developments, can be seen across the surgical literature of this period. This illustrates the perceived importance of alluding to ancient influence whilst also highlighting areas of difference, or demonstrating where changes had occurred over time.

In addition to highlighting areas of ancient knowledge that have entirely changed, surgical authors at this time also demonstrate a sense of continuity with the past. This can often be seen through the presentation of certain approaches as modified versions of ancient practice. For example, Samuel Sharp in \textit{A critical enqiry into the present state of surgery} (1750) says:

\textsuperscript{1134} W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 51.  
\textsuperscript{1135} M. [C.G.] Le Clerc, \textit{The compleat surgeon: or the whole art of surgery explain’d in the most familiar method} (London, 1701), p. 82.
I believe some of the Moderns flatter themselves, that they have mitigated the Cruelty of the Operation for this Species of Sarcocele, in confining the Extirpation to the Excrecence instead of Castrating; but it is certain the Ancients also followed this Practice; for though Celsus does not seem to speak with his usual Cleanness on the Nature of the Disorder [...] 1136

To this, Sharp also adds that the obscurity of Celsus’ description here is perhaps understandable due to the potential that it ‘might from Circumstances we are not acquainted with, be intelligible and familiar to his Cotemporaries.’ 1137 The idea that Sharp and his contemporaries may not have sufficient information to appreciate this ancient viewpoint contributes to Celsus’ authority, and reinforces the role of ancient knowledge in contemporary practice. This passage illustrates that Sharp identifies ancient influence in approaches which others have viewed as modern innovation, and he also appears keen to ‘correct’ this perception. The strength of the statement that ‘it is certain the Ancients also followed this Practice’ illustrates the assured way in which Sharp speaks about ancient ideas, implying a sense that ancient practice was able to be determined at this time, and that it remained relevant. This demonstrates the importance that Sharp placed upon ancient influence and the contextualisation of medical knowledge. Underlining the ancient origin of this approach to ‘Sarcocele’ shows the idea that a significant process had occurred over time, changing the perception of a particular treatment and also of ancient influence more broadly.

Sharp further addresses this process by suggesting that:

What possibly may have laid the Foundation for this Opinion is the Doctrine of Fabric. ab Aquap. 6 who really does recommend Castration, for which he assigns this Reason [...] Fab. ab Aquapendente having proposed this Method, a Reader might be naturally inclined to imagine it had also been proposed by the Ancients, but the Fact is not true, though

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1137 Ibid., p. 96.
by the way, this is not the only Instance of a Degeneracy of Practice betwixt the Times of Celsus and Fab. ab Aquapendente.\footnote{S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 96. The superscript '6' within this quote refers to a footnote: 'Page 275.'}

Here, his reference to the treatment for ‘Sarcocele’ shows that over time perception had changed regarding both the correct approach to this affliction, and the origin of each method. This is significant as it illustrates an example of practitioners between antiquity and Sharp’s time dismissing a particular approach, which was subsequently recovered to use at a later date. The importance of this is that it demonstrates ancient theory had not survived completely intact to the eighteenth century, but that it retained a significant level of influence. Furthermore, Sharp alludes to the idea that other instances of ‘Degeneracy of Practice’ were evident between ancient times and the period of Hieronymus Fabricius ab Aquapendente’s lifetime (1533-1619).\footnote{L.I. Conrad, M. Neve, V. Nutton \textit{et al.}, \textit{The Western medical tradition: 800 BC to AD 1800} (Cambridge, 1995), p. 282.} This reinforces the value and authority placed upon ancient knowledge, and suggests that in terms of perceived practical benefit, it occupied a position above certain aspects of theory available in the early seventeenth century. This passage also shows Sharp encouraging his readers to evaluate information, rather than automatically accepting established ideas as correct, and underlining that changes and modifications to theory over time were expected, but not necessarily positive.

Sharp further demonstrates the complexity of evaluating ancient knowledge during this period as part of a discussion regarding different types of ‘Hernia’s’ and approaches to their treatment:

This Operation is likewise absolutely exploded by the Moderns, but I am inclined to think it would generally prove successful if it was practised with the following Improvements, which is very little different from the Method practised by Parey\footnote{S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 12. The superscript '6' within this quote refers to a footnote: ‘Book 8. Chap. 16. English Edit. 1678.’; similarly, ‘7’ refers to a footnote saying: ‘Page 250.’}, Wiseman\footnote{Page 250.}, and others, who seem to favour this Operation.\footnote{Page 275.}
Whilst this extract ultimately questions ancient theory, it also shows that from Sharp’s perspective improvements were possible which would make this ancient knowledge usable, and as such that it contained a degree of fundamental value. This is reinforced by the idea that later practitioners were utilising a modified version of the ancient approach, and that this would not necessarily be unacceptable in modern times, especially with Sharp’s suggested modifications.

The idea that a change could be applied to ancient knowledge in order to either reconcile it with a modern perspective, or make it more suitable for modern practice, is subsequently reiterated in Sharp’s text. This is evident in his section ‘Of Amputations’ which includes a passage comparing ancient and modern practice:

> The Ancients, and indeed the old Surgeons, laboured under three principal Disadvantages in Amputation, which have been gradually removed by a succession of Improvements. They were ignorant of the Double Incision, so that the Bone always protruded considerably; they had no Tournequet, and therefore could not so well command the Haemorrhage; and lastly, they wanted the crooked Needle, from which we reap such eminent Advantages.\(^{1141}\)

Here, Sharp describes various aspects of treatment now available to practitioners undertaking an amputation. He suggests that the ancients were disadvantaged in their practice due to not having the use of these methods, but that incremental changes over time had led to significant improvements in practice. Although Sharp highlights deficiency in ancient practice, he does not necessarily present ancient knowledge as valueless as a result. Instead, he simply implies that not enough was known previously to reach the full potential of practice in this instance, but that nonetheless a valuable fundamental basis existed.

Similarly, within this chapter, Sharp also highlights that the ancients were proficient within the constraints of their knowledge, and although they perhaps could not have achieved the same successes as the moderns, they were nonetheless taking steps towards the improvements that he had identified. This can particularly be seen when he addresses ‘The first Inconvenience which I have mentioned as a Consequence of the ancient Method of Amputating.’

The ‘inconvenience’ concerned is the ‘Protrusion of the Bone’, and Sharp describes the general rule held by the moderns as being ‘that the more lax the Skin is, the more readily will the Wound heal, and the smaller will be the Cicatrix.’ Here, he advises that: ‘But though the old Surgeons could not apply this Maxim to Practice, so usefully as the Moderns now do, yet they made some Efforts towards it.’

This is followed by an explanation of the way in which the ancients attempted to achieve this effect by drawing back the skin prior to the amputation in order for it to be used to bring over the exposed bone to promote healing after the operation, thus to ‘obviate in some degree the Inconveniences I [Sharp] have stated.’ This suggests that the ancients were perceived to be on the right track, but again, disadvantaged by the limitations of their knowledge.

Sharp’s additional assessment of this practice regarding amputation further reinforces his viewpoint: ‘However this seems to have been all the Contrivance they were provided with to answer so great an End, unless it may be admitted that Celsus had a faint Idea of the Double Incision; and to speak my own Mind, I question whether it can be doubted.’ This implies that none of the three ‘principal Disadvantages in Amputation’ that Sharp mentions as hindering the ancients were satisfactorily overcome in their time, and only one was beginning to be addressed. However, the allusion to Celsus being aware of the ‘double incision’ alongside Sharp’s affirmation that this may not be able to be

1143 S. Sharp, A critical enquiry into the present state of surgery (London, 1750), p. 265; see also R. Hooper, Quincy’s Lexicon-Medicum. A new medical dictionary (Philadelphia, 1817), p. 200, which describes ‘Cicatrix’ as: ‘(From cicatrico, to heal up or skin over.) A seam or scar upon the skin after the healing of a sore of ulcer.’
1145 Ibid.
1146 Ibid.; see also S. Sharp, A treatise on the operations of surgery, with a description and representation of the instruments used in performing them (London, 1739), pp.215-220. This provides a more practical outline of the operation of amputation, and illustrates the use of the ‘tournequet’ (p. 216), double incision (p. 219 and 220), and the crooked needle (p. 218) which Sharp mentions in A critical enquiry into the present state of surgery (1750).
questioned, underlines the perceived value of ancient theory, but also shows that he is keen to emphasise both ancient influence and ancient competence where possible.

Sharp highlights the role of the ancients in a wide range of different afflictions and surgical practices, which suggests the extent of ancient influence. Furthermore, he also demonstrates a view that ancient intentions were often significantly aligned with modern perspectives, but were hindered by limitations in knowledge of the body and its workings. This illustrates a sense that ancient ‘errors’ were therefore understandable, and that theories and methods were expected to have evolved naturally over time as knowledge developed. This is particularly reinforced in *The chirurgical works of Percivall Pott* (1775), which says, in describing the bandage used in the treatment of a fracture: ‘This is of different length, according to the surgeon’s choice, or as it may be used in the form of one, two, or more pieces. Hippocrates used three *; Celsus six; but the present people seldom use more than one.’\(^{1147}\) This implies a sense of fluidity in certain practices, as although Pott suggests modern practitioners utilise only one piece, he does not criticise others for employing different numbers, highlighting that practitioner experience is the key factor affecting this decision. The role of many different influences on modern surgical theory can also be seen in the footnote associated with this passage, where the ‘*’ symbol refers to the advice: ‘* See on this subject Fab. ab Aquapendente, Wiseman, Scultetus, Hildanus, Petit, Du Verney.’\(^{1148}\) Here, Pott refers his readers to authors from a time period relatively close to his own, but he does this in order to provide additional information regarding the relationship between ancient and modern ideas.\(^{1149}\) This illustrates the wide range of sources from which influence is able to be drawn, and also implies that the geographical origin of information is not viewed as significant in the quality or content, as Pott makes no distinction on these grounds in this instance.\(^{1150}\)


\(^{1148}\) Ibid.

\(^{1149}\) See W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCCLXXII [1782]), unnumbered page, following p. vi, which, for example, lists J. Scultetus as a seventeenth century surgical author, G.F. Hildanus as a seventeenth century anatomist and surgical author, and Petit as an eighteenth century surgical author. See also Appendix E.

\(^{1150}\) Geographical locations: Fabricius ab Aquapendente, Italy; Richard Wiseman, England; see L.I. Conrad, M. Neve, V. Nutton *et al*., *The Western medical tradition: 800 BC to AD 1800*
In underlining the differences between Hippocrates, Celsus and ‘present people’, Pott shows that a change has occurred over time, but does not necessarily emphasise one method as more appropriate. This sense of gradual differentiation is also reflected in his discussion of the treatment of fractures of the cranium (see Figure 9):

Reduction of the number of instruments to be used in an operation, and an extreme simplicity and plainness in those which may be required, are a part of the merit of modern surgery. The majority of the instruments, with which our ancestors perforated the cranium, were contrived to make way for the admission of other instruments; such as the scalper excisiorius, the cycliscos, the scalprum lenticulatum, &c. with which they removed a portion of bone. Even the modioli, which were used by them, were so small in the diameter of the saw, as to take away a very small piece at each application; which circumstance necessarily lessened the benefit which might be expected from the use of it, and rendered its repetition more frequently necessary that it needed to have been, if it had been made larger.\textsuperscript{1151}

This passage demonstrates that ‘modern surgery’, as Pott describes it, had improved for this operation both due to the use of fewer instruments and a refinement of their functions. However, he does not suggest that it was therefore inappropriate for the ancients to proceed in the way they did, but that they worked effectively within the constraints of available knowledge and experience. Pott’s use of the phrase ‘necessarily lessened the benefit’ implies that the lower level of success that he assumes in this instance was an understandable and unavoidable outcome for this time.\textsuperscript{1152}

\textsuperscript{1151} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 99-100. This section also contains images of some of these instruments (between pages 96-97 and 98-99 – see Figure 9). The labels here are slightly unclear and therefore difficult to identify as an exact match to the text. However, the 1790 edition lists the illustrations as 1. Mallcus plumbeus. 2. Cycliscos. 3. Meningophylax. 4. Scalper planus. 5. Scalper cavus.’ and ‘1. 2. 3. 4. 5. Guarded Terebræ. 6. 7. 8. Guarded Medioli.’: P. Pott, \textit{The chirurgical works of Percivall Pott, F.R.S. Surgeon to St. Bartholomew’s Hospital. A new edition, with his last corrections} (London, 1790), unnumbered pages, following p. 148 and p. 152 respectively.

This attitude is extremely prevalent within the surgical literature of this period, and there are many examples which underline the fallibility of ancient theory as a result of a perceived lack of knowledge in certain areas. In a section of Charles Gabriel Le Clerc’s *A description of bandages and dressings* (1701) examining ‘The Dressings for Bleeding’, the following observation is included:

The Ancients made little Frictions from below upwards, with the Ligature on the Place of the intended Orifice before they tied it round the Arm, because being ignorant of the Circulation, they said this would put the Blood in Motion. Tho’ this Reason will not hold now a Days, you may nevertheless do this, because it warms the Part, and brings Spirits to it, and so the Blood flows more freely out.\(^\text{1154}\)

\(^{1153}\) Two sections copied from Pott’s text, showing the various instruments mentioned with regard to the treatment of fractures of the cranium: P. Pott, *The chirurgical works of Percivall Pott* (London, 1775), unnumbered pages, image labelled ‘A’ appears between pages 96-97 and ‘B’ appears between pages 98-99.

\(^{1154}\) M. [C.G.] Le Clerc, *A description of bandages and dressings, according to the most commodious ways now used in France* (London, 1701), p. 34-35. The text for this quote was checked against the 1714 edition (p. 34-35) as some words were unclear in this edition.
Here, the process itself is still seen as beneficial, but for a different reason to that of the ancients. This shows the perspective that the ancients were working competently within the constraints of their knowledge, and in this instance the discovery of the circulation of the blood is shown to have affected practice.

The way in which authors emphasise the value of ancient theory, whilst also explaining the reasons for deviation from modern knowledge can also be seen in the work of William Cheselden. He emphasises in a section ‘Of the Sutures and Bones of the Head’ that: ‘The Ancients not knowing that by this Formation the Bones Ossey’d, more conveniently imagin’d the Sutures were design’d for Perspiration; and therefore prescrib’d Fontenels upon them for Diseases of the Brain.’ Here, the implication is that the skull was ‘thus divided into many Bones’ and that the ancients were unaware that the formation by ossification led to these divisions. Cheselden highlights that the ancients explained the function of areas where sections of skull meet as providing exit points for perspiration, and therefore certain practices were based upon this viewpoint. This passage in Cheselden’s text continues with a short explanation stating that the positioning of certain parts indicates that this could not have been the function of the ‘sutures’. This reinforces the idea that although in this instance ancient theory was incorrect from Cheselden’s perspective, it was important for him to show that there was a specific and understandable reason for this.

Cheselden also illustrates a further area that was seen to influence aspects of ancient theory, suggesting that: ‘Ancient Anatomists, that took their Descriptions from Brutes, reckon Four Muscles of the Ear; and from them most of our Copying Writers.’ This comment within his section ‘Of the muscles’ implies that the dissection of animals may have had an effect on ancient knowledge; however he does not necessarily criticise the information obtained in this way.

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1155 W. Cheselden, The anatomy of the humane body (London, 1713), p. 5; see also R. Hooper, Quincy’s Lexicon-Medicum. A new medical dictionary (Philadelphia, 1817), p. 782. This provides the following definition for ‘Suture’: ‘2. In anatomy the word suture is applied to the union of bones by means of dentiform margins, as in the bones of the cranium.’
1156 W. Cheselden, The anatomy of the humane body (London, 1713), p. 5; see also R. Hooper, Quincy’s Lexicon-Medicum. A new medical dictionary (Philadelphia, 1817), p. 582. This shows ‘Ossification’ as: ‘(From os, a bone, and facio, to make.) See Bone.’ The entry for ‘Bone’ also further illuminates this process (pp. 120-122).
1158 Ibid., p. 47.
and reinforces the ancient view in this instance later in the text: ‘The Auditory Bones are mov’d by Four Muscles [...]’. In contrast to this, William Hunter in his Medical commentaries, the second edition of which was published in 1777, presents a differing view taken from the work of his brother John Hunter:

The very different state of the parts in the quadruped, and in the human body, no doubt, must have occasioned error and confusion among the writers of more ancient times, when the parts of the human body were described from dissections and observations made principally upon brutes: and the circumstances in the structure of the parts, which are peculiar to the foetus, having been imperfectly understood, we may suppose, has likewise contributed to make perplexity and contradiction among authors.  

This is taken from a section entitled ‘Observations on the State of the Testis in the Foetus, and on the Hernia Cogenita, by Mr. John Hunter’ and shows John Hunter’s view regarding the effect of the dissection of animals on ancient ideas. It is significant that he attributes the ‘error’ and ‘contradiction’ evident in theory relating to this subject both to the influence of dissecting animals and to a limited knowledge of structures specific to the foetus. This suggests that varying factors can be seen as contributing to changing theories of the body, and provides additional evidence of differences between ancient and modern knowledge being reconciled through explanations for these differences. Furthermore, the use of the phrase ‘more ancient’ as well as the broader statement ‘contradiction among authors’ implies that this was not something confined solely to ancient knowledge, but affected a wider range of medical and surgical ideas and practices over time. 

Following the inclusion of his brother’s work, William Hunter illustrates his agreement with the contents by underlining that: ‘In my autumn course of lectures, 1756, (and indeed in every course, which I have read since that time) I demonstrated the principal things contained in my brother’s account.’

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1161 Ibid.
1162 Ibid., p. 89.
addition to reinforcing this perspective in his *Medical commentaries*, William Hunter also addresses this theme within his *Two introductory lectures*, published in 1784. Here, he exemplifies the relationship between ancient and modern knowledge more broadly during this period through the idea that:

> If we read the works of Hippocrates with impartiality, and apply his accounts of the parts, to what we *now* know of the human body, we must allow his descriptions to be imperfect, incorrect, sometimes extravagant, and often unintelligible, that of the bones only excepted. He seems to have studied these with more success than the other parts, and tells us that he had an opportunity of seeing an human skeleton. \(^{1163}\)

This appears within the first lecture on anatomy, and is part of what Hunter describes as a ‘general sketch of its origin and progress.’ \(^{1164}\) His inclusion of this assessment illustrates a sense that the ancients should not be judged according to modern standards of anatomy, but their work evaluated within the context of their own time. Similarly, the idea that viewing a human skeleton had improved the accuracy of Hippocrates’ information reinforces the perspective that there was often a reason for ancient theoretical ‘mistakes’, which in this instance had nonetheless been overcome. It also illustrates the importance ascribed to observation and experience within the construction of medical knowledge.

The explanations provided for differences between ancient and modern knowledge and their inconsistent approaches are varied, and often convey a sense that the disparity is understandable and expected. This can particularly be seen in Samuel Sharp’s *A critical enquiry into the present state of surgery*, as part of a section discussing ‘circocele’, which Sharp says ‘is described to be a Dilation of the Vessels of the *Spermatick Cord*.\(^{1165}\) However, he also suggests that ‘I have never but once seen any Inconvenience result from it’ which he contrasts with the idea that ‘the Cautery or the Knife are every where recommended’ for its treatment. \(^{1166}\) This difference in perspective is further

\(^{1164}\) Ibid., p. 4.
\(^{1166}\) Ibid., p. 100 and 98.
highlighted through Sharp’s discussion regarding various approaches to remedy the disorder:

I have formerly put in practice several Methods for restoring a due Tone to the Vessels affected by a Circocele, but without Success: I supposed the Ancients may likewise have attempted it in vain, which probably led them to the recommendation of so severe a Treatment as the Cautery or Knife: But if it is our Misfortune that we cannot relieve the Malady by Medicine, on the other hand it happily is seldom followed with any fatal Circumstance, or really any other Inconvenience than the Dispiritedness which People are subject to, who labour under any Species of secret Disorders.\footnote{S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 100-101.}

Here, it is significant that Sharp illustrates the reason that the ancients may have turned to more radical methods in treating this disorder as a result of milder methods failing to produce a suitable result. He also implies that in his view there was still no appropriate way to remedy ‘circocele’, but that the lack of severity of the affliction renders more invasive methods unnecessary. It is important to note the sense of affinity with the ancients that is demonstrated in this passage. Although Sharp uses the word ‘ancients’, which indicates a more remote or removed perception of their knowledge, the way in which he describes the understandable decision that was made regarding approach here implies they were practicing only a relatively short time before Sharp.

Percivall Pott also alludes to the idea that fallibility with regard to medical knowledge was both understandable, and not confined to the ancients. This is particularly evident in his section ‘Observations on that Disorder of the Corner of the Eye, commonly called Fistula Lachrymalis’, which says:

The ancients, who supposed this disorder in its first state to be an inflammatory defluxion from the brain on the caruncle tending to suppurate, directed their first attention to prevent such consequence; for which purpose they employed phlebotomy, cathartics, issues, setons, collyria, and refrigerant applications of all sorts*; and these not
succeeding, they had recourse to such as they thought would hasten the suppuration of the supposed abscess +.\textsuperscript{1168}

Here, the footnote associated with the ‘*’ symbol further reinforces that ancient practice was based upon their perceptions of the ‘nature of the disease’, as in providing additional detail regarding the treatments utilised by the ancients, and with what frequency, Pott also shows that these practices indicated to him the way in which the affliction was perceived.\textsuperscript{1169} The additional footnote linked to this passage contains the text: ‘+ Mr. Serjeant Wiseman most certainly did not understand this disease, and mistook it either for a tumour of the encysted kind, or for an inflammatory defluxion, and treated it as such’.\textsuperscript{1170} This is reinforced by further information in the footnote regarding Daniel Turner’s view on the affliction, which Pott follows with the assertion that:

I think it is perfectly clear, that neither of them had any true idea of it at all, they both mistook the caruncle for the lachrymal gland, and the disease for an encysted or a scrophulous tumor, which ought to be brought to suppuration; the lachrymal sac, the ductus ad nares, their use, and the disorder of them creating the complaint in question, they were totally unacquainted with.\textsuperscript{1171}

This suggests that both Wiseman and Turner had misunderstood the ‘Fistula Lachrymalis’ in a similar way to the ancients, and that their actions were accordingly based upon this incorrect perception. Here, the implication is that practical approaches to afflictions, although perhaps no longer viewed as appropriate, were nonetheless based upon the experience and knowledge of the practitioner. Pott also acknowledges within this footnote that Turner represents an author almost absolutely contemporary with himself, thus indicating that from his perspective, fallibility was evident throughout surgical literature, and was not necessarily linked to the age or historical basis of the information, and shows change taking place over a shorter period as well as on a larger time scale.

\textsuperscript{1168} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 196.
\textsuperscript{1169} Ibid.
\textsuperscript{1170} Ibid.
\textsuperscript{1171} Ibid., p. 197.
The idea that Pott illustrates with regard to continual development in surgical theory and practice is also reflected in Daniel Turner’s work. The chapter ‘Of the Bubo’ contains a short section introducing the ‘Nature of those Glands in general, which are the Seat of these’, and begins with the observation that:

The antient Anatomists were at a Loss for the true Office of these Parts, assigning them no other than that of Bolsters or Pillows, for the easier Support and Conveyance of the Blood-vessles; but the Moderns have incontestably prov’d them to be Receptacles of the Lymphatic Juice ...\(^{1172}\)

Turner continues this passage further explaining the relationship between the glands and the lymphatic juice. Here, the implication is that the ancients were unable to sufficiently explain the role of these glands, and had therefore assigned them a function deemed by Turner to be incorrect. This is further underlined by the idea that the moderns have ‘incontestably prov’d’ their view in this instance, illustrating the complete replacement of the ancient theory. As such, it appears that whilst developments are acknowledged to continually occur, there are examples of situations in which the moderns have entirely altered an approach or theory. However, Turner does also highlight that:

Whether the Origin of this Lymph, be in these Glands or elsewhere, is not so matterial to our Purpose: A late noted Anatomist \(^a\) derives the Source from the Extremities of the Blood-vessels themselves, by Mediation of some exceedingly slender and fine Tubes, or Pipes, being so confident of the Discovery, as to have given us a Plan of the same [I think to the naked Eye imperceptible] Extremities of these Tubuli [...].\(^{1173}\)

Here, the superscript ‘a’ refers to a footnote that identifies ‘Mr. Cowper’ as the ‘late noted Anatomist’, which shows recourse to an author from a relatively recent time period. The text Turner refers to in the footnote as Cowper’s ‘large

\(^{1172}\) D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume I (London, 1722), p. 96.

\(^{1173}\) Ibid., p. 96-97.
Anat.’ is likely to be *The anatomy of humane bodies*, published in 1698.\textsuperscript{1174} However, the way in which he dismisses the information as ‘not so material to our Purpose’ suggests either a desire to concentrate on matters directly related to his own work, or a lack of confidence in Cowper’s assessment, as is also implied by the implication that the origin of the ‘lymph’ may be ‘elsewhere’.

Although Turner appears to retain reservations regarding the theory of the origin of ‘lymph’, he is nonetheless keen to underline that the ancients had incorrectly attributed the function of the glands concerned, and that the moderns had entirely resolved this particular problem. There are also many additional examples throughout the surgical literature of this period which illustrate the importance placed upon modern advances. They often take the form of highlighting specific new discoveries that have influenced theory and practice, such as Charles Gabriel Le Clerc’s observation that: ‘Modern Anatomists have discover’d that the Diaphragm is compos’d of two Muscles, \textit{viz.} one Upper, and the other Lower.’\textsuperscript{1175} Similarly, William Cheselden demonstrates the effect of new technologies through the phrase: ‘the Moderns, assisted with Glasses, have discover’d, That all the Parts exist in Miniature, from the first Formation of the \textit{Fœtus}, and that their increase, is only the extension and thickening of their Vessels, and that no Part can own its Existence to another.’\textsuperscript{1176} Here, the implication is that increased knowledge and the ability to view the body in greater detail had contributed to improvements in practice.

**The role of modern advances in surgery**

The emphasis on modern advances and their various effects upon surgical theory and practice can be seen in the work of many different surgical authors of this period. For example, Percivall Pott says, with regard to ‘Fistula Lachrymalis’, that: ‘A more minute and careful examination into the anatomy of the parts has given us a more true idea of the disorder, and furnished us with a more rational, as well as a more successful method of treating it.’\textsuperscript{1177} This

\textsuperscript{1175} M. [C.G.] Le Clerc, *The compleat surgeon: or the whole art of surgery explain’d in the most familiar method* (London, 1701), p. 40.
underlines the importance ascribed to a more general advance, which has allowed for a relatively specific improvement in the treatment of a particular disorder.

The significance ascribed to modern developments, and the idea that they can have both specific and broader effects can also be seen in the work of William Hunter, who sets out the circumstances that led William Harvey to discover the circulation of the blood:

[...] our great Harvey, as was the custom of the times, went to Italy to study medicine; [...] soon after Harvey's return to England, his master in Anatomy, Fabricius ab Aquapendente, published an account of the valves in the veins, which he had discovered many years before, and no doubt taught in his lectures when Harvey attended them.

This discovery evidently affected the established doctrine of all ages, that the veins carried the blood from the liver to all parts of the body for nourishment. It set Harvey to work upon the use of the heart and vascular systems in animals [...] 1178

This extract begins to illustrate the importance of this discovery and the effect that it had upon anatomical and surgical theory. This can further be seen in Hunter's assessment of Harvey's discovery of the circulation of that blood, that: 'It was by far the most important step that has been made, in the knowledge of animal bodies, in any age.' 1179 The emphasis that Hunter places on the importance of this doctrine can be seen in his assertion that it is the most significant development he can identify to date, and this is reinforced by the idea that: 'accordingly we see, that from Harvey to the present time, Anatomy has been so much improved, that we may reasonably question if the ancients have been further outdone by the moderns, in any other branch of knowledge.' 1180 This illustrates the extent to which Hunter perceived this discovery as altering practice, questioning if any other area of ancient knowledge had been transformed to this degree.

1178 W. Hunter, Two introductory lectures (London, 1784), p. 42.
1179 Ibid.
1180 Ibid.
The significance of circulation theory is also demonstrated by the assertion that:

Many parts of the body, which were not known in Harvey’s time, have since then, been brought to light: and of those which were known, the internal composition and functions remained unexplained; and indeed must have remained unexplicable, without the knowledge of the circulation.\textsuperscript{1181}

This reiterates that the discovery of the circulation of the blood was viewed as a positive improvement, which had a profound effect upon many aspects of medical theory and practice. It also implies that without this innovation, progress would have been limited, and as such the incomplete knowledge of past practitioners would have been perpetuated, to the detriment of effective treatment.

William Hunter also illustrates the importance of an increased knowledge of the body with regard to the material developments occurring within anatomy, and during his \textit{Two introductory lectures} mentions that:

In the latter part of the last century, Anatomy made two great steps, by the invention of injections, and the method of making what we commonly call preparations. These two modern arts have really been of infinite use to Anatomy; and besides have introduced an elegance into our administrations, which in former times could not have been supposed to be possible.\textsuperscript{1182}

Here, Hunter presents a comparison with ‘former times’ which suggests that these innovations could not have occurred prior to the end of the seventeenth century, indicating also that additional developments had played a role in contributing to this particular advance. Furthermore, Hunter demonstrates the wider implications of the material improvements to anatomical study in suggesting that:

\textsuperscript{1181} W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 43.
\textsuperscript{1182} Ibid., p. 55.
The modern improved methods of preserving animal bodies, or parts of them, has been of the greatest service to Anatomy [...]. Large collections of such curiosities, which modern Anatomists are striving, almost everywhere to procure, are of infinite service to the art; especially in the hands of teachers. They give students clear ideas about many things, which it is very essential to know, and yet which it is impossible that a teacher should be able to shew otherwise.\textsuperscript{1183}

This illustrates the value that was placed upon modern advances, both in terms of providing additional theoretical information and in the practical applications they produced within the education of subsequent practitioners.

The importance of improvement in surgery can also be seen in the section of John Hunter’s text \textit{A treatise on the blood, inflammation, and gun-shot wounds} (1794) which consists of ‘a short account of the author’s life, by his brother-in-law, Everard Home.’ Here, Home conveys that John Hunter:

[...] discovered a new mode of performing the operation for the popliteal aneurism, by taking up the femoral artery on the anterior part of the thigh, without doing any thing to the tumor in the ham. The safety and efficacy of this mode have been confirmed by many subsequent trials; and it must be allowed to stand very high among the modern improvements in surgery.\textsuperscript{1184}

This demonstrates the importance that Home ascribes to innovation in surgery, and also suggests that from his perspective, other significant improvements had been made by the moderns.

In addition to modern advances in both theory and treatment, John Hunter also alludes to the effect of technology upon the types of afflictions experienced

\textsuperscript{1183} W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 57.
\textsuperscript{1184} J. Hunter, \textit{A treatise on the blood, inflammation, and gun-shot wounds, by the late John Hunter. To which is prefixed, a short account of the author’s life, by his brother-in-law, Everard Home} (London, 1794), p. xxxi-xxiii; see also S. Cooper, \textit{A dictionary of practical surgery}, Fourth edition (London, 1822), p. 142, which includes information ‘Of the Popliteal Aneurism, and Operation for its Cure.’
during this period. The introductory sentence to the part entitled ‘Of Gun-Shot Wounds’, highlights that: ‘Gun-shot wounds may be said to be an effect of a modern improvement in offence and defence, unknown in the former mode of war [...]’.\textsuperscript{1185} This illustrates that gun-shot wounds were viewed by Hunter as a new type of affliction, not previously experienced. This is reiterated later in the passage by the phrase: ‘But even now, the wounds received in war are not all gun-shot wounds: some, therefore, are similar in many respects to those received in former times.’\textsuperscript{1186} Here, the implication is that although not all wounds received during war would be as a result of gun-shots, those that are retain a fundamentally different quality to those received in ways more recognisable in the past.

These examples have briefly demonstrated the presentation of modern advances in a way that distances them from practices of the past. However, there are also many instances which show authors conveying developments within the context of the past, or in contrast to it. This can be seen in Samuel Sharp’s work, which in relation to his discussion of amputation suggests that:

\begin{quote}
The old Surgeons treated Mortifications by different Methods, as they took their Rise from different Causes, and were complicated with different Habits of Body. The Moderns seem to have abridged these Distinctions, considering a Mortification to arise either from an external or internal Cause, or sometimes from Cold, which is look’d upon as a distinct kind of external Cause.\textsuperscript{1187}
\end{quote}

This again shows the idea that older methods were based upon the knowledge of the time, and as such could not necessarily be criticised. However, Sharp also underlines that there had been a process of simplification over time, which had led the moderns to a more streamlined theory. Consequently, he implies that the methods of the past were perhaps unnecessarily complicated, and that the modern method presents a more concise and efficient theory.

\begin{flushright}
\textsuperscript{1185} J. Hunter, \textit{A treatise on the blood, inflammation, and gun-shot wounds} (London, 1794), p. 521.  \\
\textsuperscript{1186} Ibid.  \\
\end{flushright}
Criticism of the ancients in this way is also evident in *The chirurgical works of Percivall Pott*, which includes the following passage within a section discussing the older methods of approaching a rupture, in particular previous ‘Attempts towards a radical Cure’:

> According to the degree of anatomical knowledge, and humanity of the proposer, they will be found to be more or less rational and gentle, but are all of them painful, hazardous, and most frequently fallacious, and have therefore been totally disused by all modern practitioners, who have either knowledge, compassion, or honesty.\textsuperscript{1188}

This suggests that in the past, these methods could be rendered more or less successful by the knowledge of the practitioner concerned, but that overall they were dangerous and painful. Pott asserts that as a result, competent and considerate modern practitioners had entirely dismissed these approaches, and he emphasises the cruel nature of the methods of the past. This implies that increased knowledge over time had contributed more broadly to the improvement of practice, both in terms of success and in the comfort of the patient.

Similarly, Samuel Sharp addresses the role of the past in hindering the work of the moderns in certain instances, and this can be seen as part of a section focusing on ‘Hydrocele’:

> From this Catalogue of the several kinds of Hydrocele’s, which are admitted by some of the greatest Surgeons, I believe it will hardly appear credible that most of them should be the Production of Fancy, and have no foundation but in the mistaken Opinions of their first Inventors. However I shall attempt to prove it, both from the unreasonableness of the Doctrine, and the little Argument they produce in support of it.\textsuperscript{1189}

Here, the implication is that from Sharp’s perspective, certain ideas laid out in the past were continuing to affect contemporary practice, and as such were

restricting development. However, this also highlights the role of tradition in perpetuating theories which were not necessarily still accepted by all practitioners, and this is further reinforced by the assertion that particular ‘Productions of Fancy’ were maintained by their association with ‘some of the greatest Surgeons’.

Although modern advances are often emphasised throughout the surgical literature of this period, both in relation to the developments and errors of the past and as more isolated discoveries, there is also frequently a sense that improvement was possible and desirable. This is illustrated by Sharp, who says in the preface of his *A critical enquiry into the present state of surgery*:

> These are the principal Authors amongst the Moderns who have wrote on Operations in general; but notwithstanding the Merit of their Performances, it is to be hoped, there is still room for farther Improvements; and I shall esteem it my greatest Happiness, should it appear that in this Enquiry I have done any thing which may tend to promote an Art, in the advancement of which, the Good of Mankind is so nearly concerned.\textsuperscript{1190}

Sharp implies that whilst many developments had been made by the authors he describes, there was still room for the improvement of the art, and that participating in this development was seen as part of his role as a practitioner and author.

This also illustrates a sense that surgical theory and practice was not viewed as a static entity, and as such that improvements and changes to the art were both expected and necessary. Sharp provides a further example of this in his discussion of the treatment of certain ‘Diseases of the Urethra’:

> I will not take upon me to answer this Assertion, by declaring that the Method I have proposed is perfect: It probably may admit of Improvement; but still I can affirm that in this manner I have cured a great

\textsuperscript{1190} S. Sharp, *A critical enquiry into the present state of surgery* (London, 1750), unnumbered page, fourth of the ‘Preface.’
Number of Disorders of the *Urethra* [...] which I presume will be a sufficient Motive for us to follow this Method of Practice, till some one more skillful than myself shall oblige the World with so useful a Discovery.\textsuperscript{1191}

The ‘assertion’ that Sharp is answering here is that his proposition of ‘such a compendious Method of Cure [...] when it is said by Men of the greatest Experience, that different kinds of *Bougies* are necessary for the different Stages of the Cure.’\textsuperscript{1192} This suggests that his advice contrasts the more prevalent contemporary view, but that he nonetheless believes his approach to be suitable until a more appropriate one is available.

In addition to the possibility of changes occurring in practice, authors also underline the effect of written ideas in determining the longevity and practical success of theories. This can be seen in Daniel Turner’s work, which advises with regard to ‘Dislocation of the Collar-Bone’:

Mr Cowper has intimated in his Writings, that this *Luxation* had been unobserv’d by most Authors; but, if I mistake not, those of any Note who handle this Part of *Chirurgic* Practice, especially among the Moderns, have taken Notice thereof: And it might seem strange, that a Case so frequently occurring, should pass unheeded by any of them.\textsuperscript{1193}

Here, Turner appears to disagree with Cowper’s assessment that this type of dislocation is neglected in the literature, and attempts to highlight that more notable modern authors would have discussed such a common affliction. This illustrates the complexity of medical authority during this period, and underlines the role of different texts in determining the perspective of each practitioner.

The idea that disagreement regarding both theory and practice was prevalent between modern authors is further demonstrated in *The chirurgical works of Percivall Pott*, where, with regard to a ‘blind internal fistula’, he says:

\textsuperscript{1192} Ibid., p. 177.
\textsuperscript{1193} D. Turner, *The art of surgery: in which is laid down such a general idea of the same*, Volume II (London, 1722), p. 251.
Some of the best of the modern writers have, I think, represented this state of the disease, in such manner, as to make it seem to labour under difficulties, which I cannot say that I ever found it really did; and have thereby thrown the appearance of obscurity and trouble, on what is generally clear, and easy.\textsuperscript{1194}

This illustrates the role of a range of authors in determining the perception of a particular affliction, and provides an example where the moderns are seen to be overcomplicating a more straightforward disorder. This contrasts the viewpoint previously discussed, which shows Samuel Sharp criticising the ancients for a similar lack of conciseness, where he asserts that in a different situation, ‘The Moderns seem to have abridged these Distinctions’ held by the ancients.\textsuperscript{1195} As a result, it can be said that whilst the approach of the ancients is frequently drawn into question, there is also evidence of modern perspectives being criticised.

A further example of this is illustrated by William Hunter, who, as part of a section which lists ‘The capital errors which have prevailed in different ages in the philosophy of human bodies’ asserts that: ‘3. The third, an error which has been very generally introduced into the writings of the best modern authors, is the drawing conclusions with regard to the living body, from experiments made upon the dead body.’\textsuperscript{1196} This demonstrates an instance which suggests the limitations of modern knowledge, and underlines Hunter’s perspective that errors were able to be made by contemporary authors and practitioners. His additional inclusion of an item on the list which begins: ‘An absurdity, prevalent with many moderns [...]’ also shows his view regarding the severity of certain errors in modern judgement.\textsuperscript{1197}

The view that modern knowledge could also be fallible is further demonstrated by John Hunter. In a section ‘Of the general opinion of the formation of pus’, he conveys the older perception of this topic, before moving on to discuss modern

\textsuperscript{1194} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 616; see also p. 615 for additional information regarding ‘blind internal fistula’.
\textsuperscript{1195} S. Sharp, \textit{A critical enquiry into the present state of surgery} (London, 1750), p. 247.
\textsuperscript{1196} W. Hunter, \textit{Two introductory lectures} (London, 1784), p. 96.
\textsuperscript{1197} Ibid.
ideas, including the experimental evidence provided by his brother-in-law Everard Home, ‘as given in his Dissertation on the Properties of Pus, page 32, under the idea that pus had a corroding quality.’\textsuperscript{1198} After explaining the ‘old opinion’ Hunter asserts that: ‘This was a very natural way of accounting for the formation of pus, by one entirely ignorant of the moving juices, the powers of the arteries, and the operation of an abscess after it was opened [...]’.\textsuperscript{1199} This suggests that evaluated within the context of the time, Hunter viewed this as an understandable conclusion to draw as the result of particular limitations in knowledge. However, as his assessment moves closer to his own time period, Hunter becomes less forgiving regarding the theories he presents:

\[\text{[...]} \text{ we would forgive such opinions, before the knowledge that such surfaces could and generally did form pus without a breach of the solids; but that such an opinion should exist afterwards, is not mere ignorance, but stupidity; [...] such ideas discover defect of knowledge and incapacity for observation.}\textsuperscript{1200}\]

Here, the implication is that once certain discoveries had been made, particular doctrines must be concurrently altered to reflect this, and instances where this had not occurred were unacceptable from Hunter’s perspective. The subsequent assessment of modern views increasingly demonstrates Hunter’s frustration regarding the incorporation of new information into current theory: ‘The moderns have been still more ridiculous, for knowing that it was denied, that solids were ever dissolved into pus, and also knowing that there was not a single proof of it, they have been busy in producing what to them seemed proof.’\textsuperscript{1201} This underlines his view that doctrine should be updated to reflect discoveries and developments, but also begins to suggest that where no proof could definitively be provided to reinforce older ideas, some were looking to information of a lower quality than Hunter would otherwise expect. He also highlights the importance of observation within the development of medical knowledge, and of taking into account findings obtained as a result.

\textsuperscript{1198} J. Hunter, \textit{A treatise on the blood, inflammation, and gun-shot wounds} (London, 1794), pp. 417-419.
\textsuperscript{1199} Ibid., p. 417.
\textsuperscript{1200} Ibid., p. 418.
\textsuperscript{1201} Ibid.
The idea that the practitioners of an author’s own time were fallible or inappropriate in their outlook is not unique to John Hunter and the 1790’s. It can also be seen a century earlier in Daniel Turner’s *Apologia chyrurgica*, which includes a passage criticising his contemporaries:

> Were either *Galen* or *Hippocrates* now living, to see this spurious Issue made so much of, their Pretences unquestion’d, their Abuses even countenanc’d, and they advanc’d, whilst their legitimate Offspring are degraded and disesteem’d; were they inform’d of this worthy Rabble, who basely take upon them the exercise of our Art; or did they know how every Water-slinging *Piß-prophet* boasts himself as great a Doctor as the most gradually-commenc’d Physician

Here, his negative assessment of the state of practice illustrates the perception that in some areas modern advancement had failed to provide improvement. This also shows the authority that Turner ascribes to ancient authors including Galen and Hippocrates. However, given that the full title of this text is: *Apologia chyrurgica. A vindication of the noble art of chirurgery, from the gross abuses offer’d thereunto by mountebanks, quacks, barbers, pretending bone-setters, with other ignorant undertakers. Wherein their fraudulent practices are plainly detected by several remarkable observations, their fair promises prov’d fictions, their administrations pemicious, their confident pretences injurious and destructive to the welfare of the people*, it is unlikely that Turner would have highlighted the more successful or positive improvements that had been made, even if he recognised them to have occurred in other sectors. This passage also underlines the importance ascribed to Galen as a foundation for medical knowledge, and as a peak from which this type of practice had fallen.

The relationship between modern advancement and ancient authority is particularly complex, and often the opinion of a particular author is dependent upon both experience, and the affliction or theoretical point being considered. Ancient knowledge formed a significant part of the framework of early modern

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medicine, and can often be seen in the definitions and divisions that affect surgical theory. In many ways ancient and modern knowledge are shown to exist in parallel, although authors also periodically emphasise one perspective over another.

This is particularly evident with regard to specific modern advances, and can be seen in William Hunter’s assertion that:

Were it possible to doubt of the advantages, which arise in Surgery, from the knowledge of Anatomy, we might have ample conviction, by comparing the present practice with that of the ancients: and upon tracing the improvements which have been made in later times, they would be found, generally, to have sprung from a more accurate knowledge of the parts concerned.\textsuperscript{1203}

This illustrates an example of the value that was placed upon certain modern advances, both as a source of theoretical information and its consequent practical uses, particularly with regard to anatomical developments. The comparison between ancient and modern ideas can also be associated with the criticism of ancient views; either as entirely contrary to modern perception, or as a way of highlighting modern improvements, both incremental and more significant. Although authors are relatively reluctant to overtly criticise ancient authority, limitations are often underlined alongside the view that certain fundamental differences existed between ancient and modern practice. Here, it is also important to note the balance that was sought by practitioners with regard to caution in abandoning ancient ideas, and development and innovation in surgery. This is frequently shown to be a complex aim, which is compounded by the idea that ‘Galen had advised no one to accept even Galen’s results without seeing for themselves.’\textsuperscript{1204}

This begins to suggest the contradictory nature of much of the information relating to ancient authority during the early modern period. It is evident that ancient information was significant at this time, both theoretically and within the

\textsuperscript{1203} W. Hunter, \textit{Two introductory lectures} (London, 1784) p. 67.
treatment of patients, but that this relationship was not necessarily without ambiguity. Practitioners often found difficulties in reconciling ancient and modern knowledge and practices, but the relevance of ancient theories and terms can be seen by the frequency of references to them. It is also possible to say that even references which criticise the ancients still acknowledge their importance, and reinforce a link to the past. Similarly, whilst references specifically to Galen are not necessarily always positive, they underline an awareness of the ideas that he represents, and show that these remained prevalent. Furthermore, authors identifying medical and surgical terms that they no longer view as relevant often demonstrates that they are still in use, and in explaining the modern equivalent, the importance of the ancient version is reiterated.

This illustrates the broader role of tradition in shaping medical theory, and it is evident that many ideas deriving from the past significantly affected contemporary practice. Some authors highlight that tradition perpetuated theories that were no longer accepted, whilst the content of medical and surgical literature is shown as extremely important in determining which ideas did persist. However, other authors seek to recover ancient influence where it had been detached from contemporary perception, as can be seen in Percivall Pott’s discussion of the ‘The general doctrine, relative to fractures’, and the way in which they are treated by various authors:

This is the general arrangement of the subject by most of the writers on it, and a very just and proper one it is; but notwithstanding the parade of books under these various heads, much less alteration will be met with, since the times of Hippocrates, Galen and Celsus, than an inquirer might expect, or than the subject is capable of.\textsuperscript{1205}

This suggests that although improvements had occurred, this had been less significant than the reader may expect, and consequently, Pott implies that further potential for improvement remains. His outlook also underlines the importance ascribed to the contextualisation of knowledge, and there is a sense that an ancient basis for information was significant, frequently conveying a

\textsuperscript{1205} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 634.
sense of authority. However, locating knowledge in the context of the past can also be seen as a hindrance to progress, which Pott also addresses: ‘I am aware that some of my readers may be inclined to charge me with affecting to deviate from the commonly prescribed rules; and to contradict opinions, which a great length of time, and a long succession of writers have given sanction to.’  

This reinforces the role of tradition and the significance of the past in both the perception of ideas, and the way in which they were conveyed to the reader.

Although authors are often keen to highlight differences between ancient and modern approaches, they also endeavour to contextualise ancient knowledge within its own time, and as such it retains a degree of value in this respect. There is a sense that the ancients worked effectively within the constraints of available knowledge and experience, and that although they were consequently unable to reach the full potential of their ideas in practice, a valuable fundamental basis nonetheless existed.

As such, ancient perceptions were seen as both reasonable and understandable within the context of their time. The importance of explaining ‘errors’ in ancient theory can particularly be seen in the idea that:

In short, an attentive consideration of what our remote ancestors have delivered down to use on this subject may satisfy us, that their observations on the appearances and symptoms of the ills attending this kind of mischief, that is, fractures of the cranium, were in general extremely just and true, (perhaps, more so than those of many moderns) that their curative intention, or method of aiming at the relief or cure of such ills, was rational and just; but that the instrumental part of their art was so deficient, so awkward, and so unhandy, that they were thereby, not only in general prevented from accomplishing the good they intended, but were not infrequently driven into almost unavoidable mischief.  

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1207 Ibid., p. 99.
This highlights that in many respects the ancients were viewed as absolutely correct regarding fractures of the cranium; however their limited instrumentation consequently limited their proficiency in treatment.

The longevity of ancient ideas, and the way in which they were incorporated into contemporary theory illustrates the authority held by past practitioners. The information utilised by authors during the early modern period is drawn from a vast time period, and in many ways information is not privileged by when it is derived from. The way in which authors such as Galen are discussed frequently implies that they are contemporary with the early modern author, and there is often no indication within a text of the vast time period separating each author or practitioner that is referred to. This suggests that the reader is likely to be aware of the ancient origin of certain authors and pieces of information, and also perhaps that the distinction between time periods was not deemed significant enough to explicitly highlight.

The importance of ancient influence in early modern surgery is evident throughout the literature of this period, and the authority associated with ancient information reinforces its relevance. Samuel Sharp describes the 'Stamp of Authority which is sometimes deriv'd from Antiquity', and similarly, Percivall Pott underlines that: ‘Several of these methods have indeed the sanction of antiquity, and have been described and even practised by many of the old surgeons.’ This underlines the importance ascribed to ancient authority, and the influence that it exerted on contemporary theory and practice.

The complexity of the relationship between ancient and modern ideas can also be seen through instances in which there was still uncertainty regarding the 'correct' perspective or approach. There was a particular reluctance to criticise the ancients where no alternative consensus had been reached:

Perhaps it may seem strange thus to dispute a Doctrine established on what is called Matter of Fact; but I shall here observe, that in the Practice of Physick and Surgery, it is often exceedingly difficult to ascertain a

Fact. Prejudice or want of Abilities sometimes misleads us in our Judgement where there is evidently a right and a wrong; but in certain Cases to distinguish how far the Remedy and how far Nature operate, is probably above our Discernment [...].

Here, the limitations of both ancient and modern knowledge contribute to the uncertainty that Sharp highlights. This also more broadly illustrates the difficulty in reconciling ancient and modern ideas, especially as practitioner experience also contributes to the theory or approach that they advocate.

In many ways Percivall Pott’s assessment succinctly conveys the nature and complexity of the relationship between ancient and modern knowledge during this period:

Our ancestors deserve our best thanks for the assistance which they have given us; where we find them to be right, we are obliged to embrace their opinions as truths; but implicit faith is not required from man to man; and our reverence for our predecessors must not prevent us from using our own judgements. Ancient and modern are mere sounds, and can signify nothing in this case, unless with the former we can connect an idea of truth established and confirmed by time and experience, and with the latter, that of demonstrable improvement upon what has gone before.

Throughout the surgical literature, references to the ancients are extremely prevalent, both explicitly, and as a more general influence. The perception of changing ideas as a natural and expected process illustrates the way in which ‘errors’ in ancient knowledge could be explained and understood during this period, and the emphasis on evaluating ideas in relation to the context of their time is extremely significant. Similarly, the contextualisation of early modern knowledge is shown to be particularly important, and ideas from across a vast time period contribute to this process. The role of different texts in shaping

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medical theory is also evident through the parallel use of both ancient works and contemporary works.

The reconciliation of ancient and modern knowledge is dependent upon the context in which they are each deployed, and authors often demonstrate varying opinions throughout the same text, whilst the area or affliction under discussion also influences the way in which ancient authority is both perceived and employed. Ideas also frequently differ between practitioners, and as such the role of personal experience is significant in shaping the perspective of the author, and their treatment of different types of knowledge and practice. In many instances, it is suggested that information should be compared and evaluated against the best information of the day, whether this was ancient or modern, and also that it should be examined in relation to the specific topic addressed. This idea is reflected across the surgical literature of this period, and influences both the use of ancient knowledge and its evaluation.
Conclusion

The purpose of this thesis has been to analyse the way in which Galen was utilised and perceived within medicine during the early modern period. The importance of Galen can be seen through Francis Clifton’s suggestion, under the marginal note: ‘Reflection upon all that is past’, that: ‘Thus the affair stood among the Greeks and Romans to the time of Galen, who, as he was the greatest and the ablest Physician next to Hippocrates, (especially if we except Celsus) made the greatest alteration of any that went before him, as we shall see presently.’ This introduction to the section Clifton devotes to discussing Galen’s life, work, and contribution to medicine underlines the importance of Galen as an individual figure, as well as forming part of the broader group of the ‘ancients’ that influenced medicine. This work has shown the frequency with which Galen is alluded to, and contributes a wide-ranging assessment of the varying ways in which he was utilised.

Galen himself was a codifying and structural influence on medicine within his own lifetime, contributing primarily through the compilation and presentation of the ideas around him, amalgamating these into a coherent and useable medical system. He was one of the most prolific authors of antiquity, and as a result his works have been studied, translated, summarised and assessed within a number of traditions, including Greek, Syriac, Arabic, Latin, and various European vernacular languages. Within his own texts, Galen presents an edited image of himself which undoubtedly influenced subsequent perceptions. His approach to medical knowledge and the assessment of both his contemporaries and past medical figures are reflected within the texts and practices of early modern authors, who follow his model in many instances.

The effect of Galen on medicine since his lifetime has been significant, and Vivian Nutton has suggested that ‘To describe the fortunes of Galen over the

1211 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 80.
centuries is almost to write the history of medicine since his death.\textsuperscript{1212} Given the importance of his contribution over time, surprisingly little attention has been dedicated to this within the seventeenth and eighteenth centuries. Although historians often allude to the decline of Galen, and the form of his influence termed ‘Galenism’, this is not often accompanied by specific details of the process and the timescale in which it occurred. The decline of Galenic authority is commonly placed prior to the period studied, and framed by the topic addressed within the particular historical work at hand. As such, the complexities of this process, and the length of time that Galenic influence persisted have been neglected in favour of a less specific approach to a broad decline.

This thesis has utilised three different types of medical literature from the seventeenth and eighteenth centuries as case-studies to examine the effect of Galen upon different aspects of, and approaches to, medicine. The use of these sources was intended to show different perspectives of Galen, and to underline the way he was utilised within different contexts. The histories of medicine allowed the exploration of Galen both as a subject presented within the works, and as a source of historical information. This was carried out through the examination of explicit references to Galen and their context, which illustrated the significant number of different ways in which he was mentioned within these texts. Here, the parallel use of Galen as a historical subject, and as a source of information relevant to contemporary practice demonstrates the importance of this type of material in determining the extent and longevity of his influence. These works provide significant analytical detail as they represent a generation of histories no longer focusing solely on lists of medical men and their works. The emphasis on providing historical information in order to learn from the past and contribute to the development of medicine ensures that these sources present important detail regarding perceptions of Galen, reinforced by their interaction with contemporary debates, both within and beyond medicine.

Similarly, the use of both ‘official’ and popular editions of the Pharmacopoeia allowed for comparison between pharmacological texts with differing aims and

audiences, but addressing broadly the same areas of medicine. Taking the 1618 edition of the *Pharmacopeia* as a starting point provided an initial position from which to compare subsequent iterations of the remedies it contained. The formulaic construction of each edition of the *Pharmacopoeia*, although varied, allowed particular substances and their association with Galen to be traced over a significant period of time. This was particularly important with regard to showing the different ways in which Galen could be linked to a substance, as well as to draw attention to other types of allusion, including references to specific Galenic texts. The various ‘official’ editions of the *Pharmacopoeia* were intended to provide a standardising influence on medicinal substances, and as such references to specific authorities within their unembellished content demonstrates the importance of this detail where it is included. Similarly, the use of more popular editions provided a differing perspective regarding the development of ancient influence on the remedies of the period.

Discussions of surgery within the early modern period have focused primarily on its reputation as a manual art, and consequently many of the more learned aspects have received less attention. The surgical texts examined in this thesis allow for the exploration of the theoretical aspects of surgery, and the use of a body of knowledge within the practical aspects of the art. This was carried out through the analysis of many specific references to Galen, and the context in which they arose. The educational tone of these types of text is particularly important as it demonstrates the information that was deemed significant to medical education, and links to Galen under these circumstances particularly highlight his authority in terms of continuing surgical practice. In addition to addressing the role of Galen within the surgical literature of the period, this chapter also looks more broadly at the perception and use of ancient knowledge, and the way in which this was incorporated, or not, into the theoretical framework that was evident. Allusions to the ‘ancients’ show the use of a less specific, intangible aspect of medical influence, and the deployment of this information illustrates the relationship between past and present theory and practice.

The use of different types of treatises allowed for significant conclusions to be drawn regarding the use of Galen within each different field of medicine, as well
as to demonstrate the overall themes that emerged. The use and portrayal of Galen within the histories of medicine illustrates an important conjunction between Galen as a source and as a subject. Given his prolific output, it is unsurprising that his works were employed as a source of information regarding practitioners prior to his lifetime; indeed, Galen was a fundamental route to ancient knowledge, often not available elsewhere. This preservation of older knowledge was a significant aspect of his authority within these texts, whilst the volume of information that he provides about his own life and work also notably contributes to the way in which he is subsequently presented. The backward-facing nature of a history text more than accounts for the use of Galen in this way; however, the continuing use of his work, and material based on this, as a source of genuinely valuable contemporary information, more than 1500 years following his death is less immediately assumed.

Chapter 1 has particularly shown the use of Galen as a marker of time, providing a fixed point from which to address other practitioners and medical developments. This is important as it underlines the fundamental nature of Galen in terms of framing discussions of medicine in the past, and demonstrates the ongoing effect that he had upon all aspects of medicine. In situating medical practitioners from such a vast time period, Galen contributes significantly to the structure of these texts, providing a framework for historical discussion and a way in which to define time periods, often significantly following his lifetime. The centrality of Galen to medical knowledge has also been demonstrated by the volume of information presented about his life, work and contribution to medicine. Although histories of medicine are likely to include material about notable figures from the past, large sections are devoted to discussing Galen, and the information provided is both detailed, and not confined to these specific parts. In addition to the presentation of this type of biographical information, there is also evidence of the importance ascribed to Galen’s knowledge and perspective. In these instances he is shown to be a codifying influence, as well as a significant portal through which to access Hippocrates, and the medical ideals that this entailed. His contribution, however, is not presented without criticism, and one of the most common objections relates to the voluminous nature of the work he produced. Whilst this is undoubtedly drawn into question, it is important to note that often the criticism
rests upon the difficulty of summarising and effectively utilising the content, indicating the inherent value that was perceived to exist, despite the problematic nature of accessing it.

The use of varying editions of the *Pharmacopoeia* to trace the influence of Galen over the same time period contributed several significant points in addition to those specifically evident within the histories of medicine. The relatively concise nature of the information included within this genre suggests that references to any theoretical detail were of particular importance, and consequently discussions regarding Galen indicate that a tangible use was intended. Chapter 2 demonstrated the importance ascribed to determining the author, or origin of a particular substance, and here an association with Galen provided a sense of authority to the use of a remedy. Similarly, tracing the ‘Galenic’ substances evident within the 1618 edition of the *Pharmacopoeia* and their occurrence within subsequent versions has illustrated a process of incremental change, rather than a comprehensive decline of Galenic authority. It is evident that in some instances an association with Galen had been restored, following a period during which he was not connected to a substance. This also indicates that his name had become part of the nomenclature of particular remedies, in addition to providing recipes, information and a point from which to develop.

The role of the background and experiences of the author has been shown as particularly significant in terms of the extent to which Galen continued to be utilised in connection with various remedies. Similarly, the textual context of the information also had a notable effect on the content. This is evident within the comparison between the ‘official’ editions and translations of the *Pharmacopoeia*, and the more popular versions, only available in the vernacular. Perhaps contrary to initial expectations, it is the popular texts that refer more frequently to Galen, and provide more detail in this respect. Partly attributable to the additional embellishment evident in general within these texts, the references also show a more prevalent use of Greek and underline a sense of authority within the work. This contributes a learned aspect to the text and reiterates the authenticity of the information it contains. The complex relationship between these two broad forms of the *Pharmacopoeia* is also
highlighted through the finding that the removal of a substance from the ‘official’ edition appears to ensure that it remains within the popular editions. The contradiction of the Royal College of Physicians in this respect is illuminating in terms of the difficult relationship between the two levels of publication, but also demonstrates that the authors of the popular editions continued to see value within remedies no longer supported by the Royal College.

The similarly instructional tone of the surgical literature examined demonstrates the ideas and theories that were viewed as most relevant to surgical practice, and as such provides a more tangible sense of the way in which Galen, and ancient influences more broadly, were incorporated into this area of medicine. Allusions to Galen within these texts often appear as the advice of a contemporary, and show no acknowledgement of the vast time period that had passed between his lifetime and the present. This indicates that his perspective was evaluated alongside other views, and that a theoretical basis for the practical aspects of the art was seen as essential. Whilst references to Galen are not always positive, they show an awareness of the ideas that he represented, depicting his work as a significant point from which to develop.

The prevalence of references to ‘the ancients’ as an amalgamated group within these treatises is addressed throughout Chapter 3, which demonstrates the complex relationship between ancient knowledge and modern advancement. There are a number of examples showing the influence of the ancients upon the names and definitions of procedures, instruments, divisions, and other aspects of surgery, which highlights the fundamental nature of their role. There is a sense of ongoing comparison between ancient and modern ideas, underlining the importance ascribed to continual assessment of the theoretical aspects of surgery, and justifying deviation from the knowledge of the past. It is clear that a balance was sought between development and innovation in surgery, and adherence to ancient knowledge; focusing too significantly on either of these was seen as unconstructive, and there is evidence of ongoing debate surrounding these topics. Similarly, where differences to past practice are demonstrated, the reasons and context for this change are outlined in order to justify the newer approach.
In addition to the themes outlined above which are more specific to each chapter, several important points have emerged that are common to all sections, and each genre of text. The role of Galen as a source of ancient knowledge, and medical information more broadly, is particularly significant. Recourse to his work is evident throughout these texts, both in a historical sense and as a source of contemporary information. Chapter 1 in particular demonstrates that these authors engaged directly with Galen’s works, and the nuanced analysis and deployment of their content shows a more complex picture than simply the acceptance or dismissal of Galenic ideas. Many of the issues addressed within the Galenic corpus remained significant during the early modern period, and ongoing debates allowed for the use of Galen in many contexts, with a sense of commonality. This is reflected through the way in which Galen’s ideas were utilised, and the importance of observation and experiment, both in emulation of Galen and in the use of his theories, cannot be overstated. The importance of evaluating knowledge within the context of the time in which it was developed, and against the experience and observations of the practitioner, is central to approaches to medicine, and can be seen in the majority of allusions to the past, as well as to contemporary ideas.

The increasing move towards simplicity evident throughout all of the aspects of medicine addressed within this thesis facilitated the use of Galen, and the value ascribed to the parts of his work that offered a seemingly purer, more original version of medicine can be seen throughout. Although there is criticism regarding the voluminous nature of his works and the difficulty in effectively utilising their content, Galen also provided a model of simplicity which represented a more useable framework than the often over-complicated theories of the moderns. Simplicity thus became a key criterion for adherence to particular theoretical aspects of Galen’s work, and ensured that despite the, at times, problematic nature of the volume of his works, he also characterised a simpler approach, recaptured from the past.

It is also clear that utility, in many forms, was the most important factor in determining the acceptance of Galen and ancient knowledge more broadly. This meant that if a piece of information was useful practically, theoretically, contextually, or historically, it was retained or deployed, regardless of its origin.
This represents a shift from the broad acceptance of ancient authority through convention or veneration, towards criteria based upon the utility of the information provided, assessed on a more individual basis, dependent on the theoretical and practical circumstances. Within this context, medical progress can be seen as broadly ongoing, but this process has been shown to be particularly complex, reflecting the complexities of the decline of Galenic influence. Whilst it is clear that Galen held a different position within early modern medicine than earlier periods, the decline that is evident is less comprehensive, and took place over a significantly longer period than has previously been suggested.

In order to address the changing role of Galenic influence over time, this work has focused primarily on explicit references to Galen. However, at several points during its construction areas have arisen that could accommodate further research, but were beyond the scope of this project. There is significant capacity for a similar study which addresses the less tangible remnants of Galenic influence that are likely to remain evident throughout these, and similar, sources. In particular, the humours as a fundamental basis for medicine, and the extent to which aspects are recognisable as deriving from Galen would be a valuable extension to this project. Similarly, the popular perspective of Galen as an individual, both as a historical figure and within contemporary medical thought would be an interesting comparison to the more learned perceptions highlighted within this thesis. The findings of Chapter 2 regarding the differences between ‘official’ and more popular editions of the Pharmacopoeia could be further developed, utilising different sources to address the way in which learned views interacted with the views of society more broadly with regard to the use and influence of Galen. Finally, within this thesis, the histories of medicine were initially intended as a source to explore a perception of Galen from outside the immediate medical sphere. However, on further examination, the majority of these texts were written by those seeking to address the history of their art. Whilst this is extremely valuable, as has been shown above, these works fall within the same tradition as the other genres that were utilised, and as such do not provide information regarding views of Galen external to medicine. Therefore, there is also scope to address the presentation of Galen
within sources not immediately connected to medicine, to understand his impact upon society more broadly, rather than primarily within the medical sphere.

This thesis has examined in detail the use and perception of Galen during the early modern period; challenged the often straightforward presentation of decline; and addressed the numerous different ways in which Galenic authority remained evident. This has been shown to take the form of both historical influence, and more contemporary use, demonstrating that the decline of Galenic influence on medicine cannot be dismissed as an inevitable and uncomplicated process clearly resulting from specific medical developments. The use of these types of sources as case-studies has allowed the broad topic of Galenic influence to be explored from different perspectives, which reinforces the significance of the findings, especially those common to each genre. Whilst the use of Galen was undoubtedly less ubiquitous by this period, there are nonetheless numerous different ways in which his work and ideas were employed, and even criticism of his approach tends to be placed within the context of the constraints of his time, and portrayed as understandable given the information available to him. This indicates that, rather than using the language of decline, it is possible to show that medicine was perceived as developing from Galen as a basis, building upon this foundation, and framing new knowledge within this context.

The importance of Galen as a model for practice is exemplified through the idea that ‘Galen had advised no one to accept even Galen’s results without seeing for themselves’, an approach that is evident throughout the material studied. The use of Galen as a fundamental way in which to access ancient knowledge is key in the continuing use of his works, although this is also reinforced by his influence as a broader source of information as can be seen within all three case-studies. The ongoing debates surrounding many of the topics that Galen addresses also support his authority, as a sense of commonality ensured that his perspective remained relevant. As such the evidence suggests that development from his ideas is a more accurate way in which to view the decline of his influence, and that medical progress continued to occur within the

complex context of the medical knowledge of the past. The significant and nuanced engagement with the content of Galen's works reiterates the importance of his contribution, and the value ascribed to the simplicity offered by past approaches is evident, as described by William Black: ‘The moderns have drowned medicine in a sea of theory, and have out-done Plato, Aristotle, Galen, and all the subtle doctors of antiquity. They babble incessantly [...]’.\footnote{1214} This places Galen within a broader ancient context, but also shows the significance of an accumulation of medical ideas over time and the framework that this provided. Whilst the theories of the ancients were not accepted without question, the criteria for their perpetuation fundamentally rested within the importance of utility. As Percivall Pott succinctly suggests: ‘it being neither antiquity nor novelty, but utility only, which can demand our regard.’\footnote{1215} This reiterates the value of utility in the assessment of medical knowledge, and the role uncovered within this thesis of the experience and observations of the practitioner in determining the continuing authority and influence of Galen. Although Galen was criticised for the voluminous nature of his theories and works, he could also be utilised as a model for the simple and useful aspects of medicine that his texts and approach represented. Practitioners were able to use his authority to criticise both other ancient authors, and certain modern individuals that did not reach the ideals of this outlook, and a shift is evident from the acceptance of ancient authority based on convention, to evaluating the simplicity and utility of information on an individual basis, facilitating the ongoing and significant use of the influence of Galen.

\footnote{1214} W. Black, \textit{An historical sketch of medicine and surgery, from their origin to the present time} (London, MDCCCLXXXII [1782]), p. 298.\footnote{1215} P. Pott, \textit{The chirurgical works of Percivall Pott} (London, 1775), p. 93.
Appendices

Appendix A

Galen as source – summary of Galenic works referenced

This table shows the titles (in Latin and English) of all the different Galenic works that are mentioned within the early modern texts studied, and also shows in which of the other Appendix documents they are discussed.

<table>
<thead>
<tr>
<th>Galenic text – Latin title</th>
<th>Galenic text – English title</th>
<th>Relevant Appendix</th>
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</thead>
<tbody>
<tr>
<td>De Methodo Medendi</td>
<td>On the Therapeutic Method</td>
<td>B</td>
</tr>
<tr>
<td>In Hippocratis Aphorismi</td>
<td>On Hippocrates’ ‘Aphorisms’</td>
<td>C</td>
</tr>
<tr>
<td>De Locis Afectis</td>
<td>On the Affected Parts</td>
<td>B</td>
</tr>
<tr>
<td>De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus</td>
<td>On the Powers [and Mixtures] of Simple Drugs</td>
<td>C</td>
</tr>
<tr>
<td>In Hippocratis Epidemiarum Libri (In Hippocratis de morbis vulgaribus)</td>
<td>On Hippocrates’ ‘Epidemics’</td>
<td>C</td>
</tr>
<tr>
<td>De Usu Partium</td>
<td>On the Usefulness of the Parts of the Body</td>
<td>B</td>
</tr>
<tr>
<td>Ad Glaconem de Methodo Medendi</td>
<td>Therapeutics to Glacon</td>
<td>C</td>
</tr>
<tr>
<td>De Curandi Ratione per Venae Sectionem</td>
<td>On Treatment by Bloodletting</td>
<td>B</td>
</tr>
<tr>
<td>De Compositione Medicamentorum secundum Locos</td>
<td>On the Composition of Drugs According to Places</td>
<td>C</td>
</tr>
<tr>
<td>De Ptisana</td>
<td>On Barley Soup</td>
<td>B</td>
</tr>
<tr>
<td>De Praenotione ad Epigenem</td>
<td>On Prognosis</td>
<td>B</td>
</tr>
<tr>
<td>De Sectis ad eos qui Introducuntur</td>
<td>On Sects for Beginners</td>
<td>B</td>
</tr>
<tr>
<td>De Anatomicis Administrationibus</td>
<td>On Anatomical Procedures</td>
<td>B</td>
</tr>
<tr>
<td>Quod Optimus Medicus sit quoque Philosophus</td>
<td>The Best Doctor is also a Philosopher</td>
<td>B</td>
</tr>
<tr>
<td>De Temperamentis</td>
<td>On Mixtures</td>
<td>B</td>
</tr>
<tr>
<td>De Naturalibus Facultatibus</td>
<td>On the Natural Faculties</td>
<td>B</td>
</tr>
<tr>
<td>Galenic text – Latin title</td>
<td>Galenic text – English title</td>
<td>Relevant Appendix</td>
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<tr>
<td>De Placitis Hippocratis et Platonis</td>
<td>On the Doctrines of Hippocrates and Plato</td>
<td>B</td>
</tr>
<tr>
<td>De Sanitate Tuenda</td>
<td>On the Preservation of Health</td>
<td>B</td>
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<tr>
<td>De Praesagitione ex Pulsibus</td>
<td>Prognosis by Pulses</td>
<td>C</td>
</tr>
<tr>
<td>De Crisibus</td>
<td>On Crises</td>
<td>C</td>
</tr>
<tr>
<td>In Hippocratis de Salubri Victus Ratione</td>
<td>On Hippocrates’ ‘Regimen in Health’</td>
<td>C</td>
</tr>
<tr>
<td>De Ordine Librorum Propriorum</td>
<td>On the Order of my Own Books</td>
<td>B</td>
</tr>
<tr>
<td>*Definitiones Medicae</td>
<td>Medical Definitions</td>
<td>C</td>
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<tr>
<td>*Introductio seu Medicus</td>
<td>Introduction</td>
<td>C</td>
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</tbody>
</table>

(The asterisk denotes a spurious Galenic text, as identified in R.J. Hankinson (ed.), *The Cambridge companion to Galen* (Cambridge, 2008))
These tables of citations and references show where Galen is utilised as a source, and link each individual reference to the specific Galenic text. They are arranged in order of the number of times each text is mentioned in the early modern works, and then by the order in which they appear in Kühn. Rows are numbered consecutively throughout this Appendix in order to facilitate cross-referencing.

### De Methodo Medendi, On the Therapeutic Method

#### Fourteen books

<table>
<thead>
<tr>
<th>No.</th>
<th>Early modern text and context of reference</th>
<th>Early modern reference to text</th>
<th>English translation of Galenic text</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly consider'd</em> (1732)</td>
<td>Book 1&lt;br&gt;‘His impudence to the Faculty was so great (as Galen tells the Story b) that he would often say his predecessors knew nothing as to the preservation of health, or the cure of diseases; [...]’&lt;sup&gt;1217&lt;/sup&gt;</td>
<td>Book 1, chapter 2&lt;br&gt;‘Nor does he stop committing outrages in all the other works, like, I suggest, through those [writings] he sent to Nero when he starts right away with these very words: I have established a new sect and, as all doctors who came before passed on nothing useful regarding either the preservation of health or the relief of disease, it is the only true sect. As he proceeds in the letter, he says that</td>
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<td>Marginal note indicates that the paragraph addresses ‘The conduct of Thessalus’</td>
<td>Footnote says: &lt;sup&gt;b&lt;/sup&gt; Book 1. of his <em>methodus medendi</em>.&lt;sup&gt;1218&lt;/sup&gt;</td>
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</tbody>
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<sup>1218</sup> Ibid., p. 50.
Hippocrates had created a tradition that was harmful. [...] Nevertheless, such a man feels no shame when he awards himself the crown. Accordingly, I think it falls to me to say something to him regarding his insolence toward the ancients, although it is certainly not my custom to refute harshly those who are foolish.\(^1\)

<table>
<thead>
<tr>
<th>2</th>
<th>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</th>
<th><em>Book 2</em></th>
<th>This specific point is not immediately apparent within the modern English translation of the text, however, there is evidence suggesting the importance that Galen placed upon the conditions under which phlebotomy, and other procedures, were carried out.(^2)</th>
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<td>See also row 24.</td>
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<td>‘The Extremes of Heat and Cold, were thought by all the old Writers in Physick, as well as by <strong>HIPPOCRATES</strong>, to be a Reason against Bleeding. For <strong>GALEN</strong> frequently cautions Physicians against Bleeding in very <em>hot</em> or very <em>cold</em> Weather +; in Summer-time, or a hot Country <em>; and <strong>MESUE</strong> does the same, as we have seen.(^3)’ Relevant footnote says: ‘</em> Method. Medend. Lib. 2.(^4)’</td>
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<td>3</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em></td>
<td><em>Book 3</em></td>
<td>‘But what they [laymen] don’t know is how</td>
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</table>

\(^1\) Galen, I. Johnston and G.H.R. Horsley (ed. and trans.), *Galen: Method of Medicine, Books 1-4*, Volume I (London, 2011), p. 13-15. Thessalus is described in this edition as ‘fl. first century AD’ and ‘as the main target of Galen’s vituperation throughout the work but particularly in this first book. He may be taken as having established the Methodic sect.’ (p. 9, n. 2).

\(^2\) J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (London, 1747), p. 91-92. This passage also includes a reference to ‘De curandi ratione per Sanguinis Missonem. Ad Glauconem, &c.’ which is discussed below, row 24.


modern physicians (1747)

Discussion examines the 'third and last Method which HIPPOCRATES took, to moderate the Fever, or keep it to a proper Standard, which was to regulate the Patient’s Diet, as the Disease required.'  

Footnote says: "The Name of Dogmatists was given by GALEN to those Physicians who practiced according to a certain Rule or Method, to distinguish them from Empiricks, who prescribed to Distempers in the Lump (κατὰ συνδροµὴν) or practiced only by Rote. The Indication, says he, in Diseases, or the Thing which is indicated, is the beginning of the Art of Medicine, or the Goal from which a Physician sets out, in curing Diseases. And he who is able to discover by what Means the Thing which is indicated, may be brought about, truly deserves the Title of a Physician. Now he who has Experience alone, to direct him in effecting his End, is properly speaking an Empirick; but he, who pursues a rational Method of doing it, is a Dogmatist, or a Rational Physician. [Greek phrase, see Figure 10]. GALEN. Method they ought to do these things. This is what the doctor must add. As a result, the indication from the diseases is a beginning and starting point, as it were, for the therapeutic method, and is not as yet any part of the medical art, or at least not a noteworthy or specific part, but something also common to laymen. Therefore, the person who is able to discover by whatever means what will be revealed from the primary indication is the one who treats the disease. And if he finds out through experience, he will be called an “observer” or an “Empiric” whereas, if he finds out through some theory or method, [he will be called] a “Rationalist,” or “Methodic,” or “Dogmatic.” Therefore the laymen, for we must be consistent, comes to the doctor directing him to put the limb back into place, or to set the broken bone, or to remove the meliceris. However, the means necessary for doing each of these things is the invention of the medical art. The Empirics say all these things are discovered through experience. I say that some are discovered..."

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1224 Ibid., p. 86-87.
1225 Ibid., p. 87.
1227 Ibid., p. 245. Insertion in italics is mine, non-italic insertions are the translators'.
| 4 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725) | Book 5, chapter 7

He [Galen] tells us in the same place, that he had seen the Artery in the Ankle, after a wound there, unite without leaving an Aneurysm: and in another \(^\text{a}\), recites a parallel case, where a puncture had been made by mistake in the Artery of the Cubit; the incision he observes was very small; and for that reason perhaps was the only instance, in which he ever saw this Artery close, as it did in four days: for in all other accidents of this nature, he always found an Aneurysm succeed.'

Footnote says: \(^\text{a}\) Meth. Med. 5. 7. \(^\text{1228}\) | Book 5, chapter 7

'Therefore, let me also begin from my own prior experience, adding to the common pool those things I happen to have seen. [...] Such a thing happened on one occasion in a young country lad who wanted a vein to be cut in the spring, for this particularly is a custom among our countrymen. When the doctor bound the arm which he was about to phlebotomize, it happened that the artery was made to bulge so that the doctor cut this open instead of the vein. The division was small and the blood that immediately spurted forth in a pulsatile manner was yellow, thin and hot.'

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Within this passage, the phrase ‘same place’ refers to *De Curandi Ratione per Venae Sectionem*, and ‘in another’ indicates *De Methodo Medendi*.

The doctor, who was very young and inexperienced in the practice of the craft, thought he had cut through the vein. [...] The doctor who had cut the artery was amazed at the rationale, encountering my prior knowledge in such matters. I indicated to him what had happened and went over the restoration of what had been cut. I directed him not to release [the bandage] without my being present, and not to do so sooner than the fourth day, but to keep the bandage as it was, only moistening the sponge. [...] That man, whom I saw with an incision in an artery at the elbow, was the only one in whom a division of an artery was treated in this way. In all other instances, an aneurysm arose, larger in some, smaller in others.¹²²⁹

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simples together soon grew into that vogue, that about two Centuries after, Mantias the disciple of Herophilus, and Heraclides of Tarentum, wrote express treatises concerning the rules and method of their composition. Footnotes say: 'a Galen. Compos. Med. 2. 1. b Meth. Med. 5, 6.'

Material of the medications capable of bringing this about is discussed in the treatises on medications. These are likely to primarily include: De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus (On the Powers [and Mixtures] of Simple Drugs), De Compositione Medicamentorum per Genera (On the Composition of Drugs according to Kind), and De Compositione Medicamentorum secundum Locos (On the Composition of Drugs according to Places). Footnote ‘a’ also mentions Book 2, chapter 1 of either De Compositione Medicamentorum per Genera or De Compositione Medicamentorum secundum Locos.

J. Barker, An essay on the agreement betwixt ancient and modern physicians (1747)
Within the short section at the end of ‘CHAP. II’ that Barker specifically dedicates to discussing Galen.
Several citations are given within this passage – see also rows 8 and 10.

Book 8, chapter 4
'To be a little more particular; if we inquire, with what Intention he bled in acute Distemper, we shall find, that it was either to lessen the Quantity of Blood, when the Constitution was Plethoric, and thereby to diminish the morbifick Matter *; or to abate the Heat +; or lastly, to make a Revulsion of the morbifick Matter from the Part affected; that is, in other Words, to prevent the

Referenced in footnote ‘+’

Increase of the Fever, and promote the Concoction of the febrile Matter — “for Nature,” to use Galen’s Words, “being relieved by this Means, and part of the Burthen which oppressed her being carried off, she will the more easily get the better of what remains. And, therefore, as she is never forgetful of her Office, she will concoct those Humours which are capable of being concocted, and carry off such as are capable of being carried off.”

Footnotes say:

- "If the Patient’s Strength will allow of it, we ought to bleed, to abate the Fever, and prepare the Body for the Use of other Remedies, even though there be no Signs of Plenitude.” Method. Medend. l. 8. c. 4.
- “Method. Medend. l. 11. c. 15.”

<table>
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<th>7</th>
<th>F. Clifton, <em>The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it</em> (1732)</th>
<th>Book (not stated), chapter 8</th>
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<td></td>
<td>'As his <em>education</em> and <em>genius</em> had set him above the level of his brethren, he was sometimes too free with them, and too full of</td>
<td>'The famous Trajan was, of course, the man who repaired all the roads in Italy that were like this, paving over the wet and muddy</td>
</tr>
</tbody>
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1238 Ibid., p. 157.
1240 F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 84.
<table>
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<th>8</th>
<th>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</th>
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<tr>
<td>Within the short section at the end of 'CHAP. II' that Barker specifically dedicates to discussing Galen.</td>
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<tr>
<td>Several citations are given within this passage – see also rows 6 and 10.</td>
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Within the section dedicated to Galen, under the marginal note: ‘*His conduct to physicians.*’

himself; looking with contempt upon what they did, and comparing himself to *Trajan* in point of usefulness. This behaviour naturally created him the ill-will of the Faculty, who in return plagu’d him as much as they cou’d.’

Footnote says: ‘*See the book of his *methodus med.* c. 8.*’

parts with stones, raising them up with high banks, removing things that were thorny and sharp, and throwing bridges over rivers that were difficult to cross. […] You shouldn’t be surprised, then, that although I bear witness to Hippocrates’ discovery of the method of medicine, I myself turned my hand to writing this particular treatise. I came to this book, as I said a little earlier, not because the method itself was entirely undiscovered, but because it was lacking in some respects, since I found that none of my predecessors had completed the method. Indeed, some did not know it at all, while those who did know it were unable to add what was lacking.’

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of being concocted, and carry off such as are capable of being carried off."

Relevant footnote says: ‘+’ Method. Medend. l. 11. c. 15.1243

concocted and will excrete what can be excreted, calling to mind the specific functions.’1244

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**Book 12**

‘Galen, who knew the sense of Hippocrates best, interprets the word Αφωνον to include not only an Apoplexy but a Syncope; and in both these cases so earnestly recommends bleeding, that he says, several have been killed by a different method i.’

Footnote says: 'i' Meth. Med. 12.1245

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**Book 12, chapter 2**

‘Evacuation rather than administration of food is the cure of such conditions. It is possible to see very many of those patients, when they are in such a state, dying every day due to the ignorance of their doctors.’1246

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**Book 12, chapter 5**

‘That syncope is an acute collapse of capacity has been stated by my predecessors.’1247

The Greek word ‘Αφωνον’ translates as ‘voiceless’ or ‘dumb’ and Freind also suggests ‘speechless’ as a description from Hippocrates.

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**Book 13, chapter 9**

See row 6 for the remaining text from this passage in Barker’s text.

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**Footnotes**

1245 Ibid., p. 239.
1246 Ibid., p. 265.
Within the short section at the end of ‘CHAP. II’ that Barker specifically dedicates to discussing Galen, several citations are given within this passage – see also rows 6 and 8, and Appendix C.

To be a little more particular; if we inquire, with what Intention he bled in acute Distempers, we shall find, that it was either to lessen the Quantity of Blood, when the Constitution was *Plethoric*, and thereby to diminish the morbifick Matter.*\(^{1248}\)


Evacuating the excess of blood of the inflamed part, this evacuation is thought of in a twofold way: the transfer of blood contained in what is inflamed to other parts, and the evacuation of the body externally.\(^{1250}\)

| J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume II (1725) |
| Reference is within a discussion of ‘The Statutes of the College of Salernum’\(^ {1251}\) |
| ‘The examination is very strict, either in Galen’s *Therapeuticks*, or the first of the first of Avicenna, or in the *Aphorisms*.\(^ {1252}\) |
| No specific reference provided |


\(^{1249}\) Ibid., p. 157.


\(^{1252}\) Ibid., p. 230.
### De Locis Affectis, On the Affected Parts

**Six books**

<table>
<thead>
<tr>
<th>No.</th>
<th>Early modern text and context of reference</th>
<th>Early modern reference to text</th>
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</table>
| 12  | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume II (1725) | *Book 1, chapter 1* and *Book 6, chapter 4* | "He [Alfonso Ferri] too has describ’d, first, as he thinks, a caruncle or carnosity at the neck of the bladder, and explain’d the manner of curing it. But Galen a mentions it, tho’ he says nothing of the cure."[1255]  
Footnote says: ‘a Loc. Affect. 1, 1, & 6, 4.’[1256] |
|     | Reference is within a section discussing ‘some modern improvements in Medicine and Surgery’[1254] |  | "Further, if we consider that some flesh growing out from an ulceration is obstructing the neck of the bladder, we can draw our conclusions from the symptoms preceding the ulcer as well as from the urine removed by the catheter."[1257] |
| 13  | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I | *Books 4 and 6* | "And here he makes a very severe, but a very just reflection upon the practice of  
*Book 4, chapter 11*  
‘When I saw the last patient of this group, I was anxious to dry thoroughly the organ  
*Book 4, chapter 11*  
‘But sometimes the lower opening of the bladder is obstructed by thick humours or when a stone is wedged in. On occasion this is caused by an inflammation or by another similar swelling which renders the [urethral] canal narrow or completely impassable."[1258]  
Ibid., p. 388.  
Ibid., p. 390.  
Ibid., p. 20.  
Ibid., p. 178. |

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[1255] Ibid., p. 389-390.  
[1256] Ibid., p. 390.  
[1257] Ibid., p. 20.  
[1258] Ibid., p. 178.
| 1260 | Ibid., p. 108. |
pathology, and varying approaches to the treatment of ‘Palpitation’. Of the Pulse is often a fore-runner of not only a Palpitation, but of a Syncope and sudden death, and indicates some obstruction about the Heart; as Galen \(^c\) prognosticated in the case of Antipater the Physician, who died soon after in this manner.\(^{1262}\)

Footnote says: ‘\(^c\) Loc. affect. 4. 11.’\(^{1263}\)

Antipater was at first shocked when he found a complete irregularity of his arterial pulse. […] Antipater met me one day, stretched out his arm and laughing asked me to feel his pulse. […] Feeling his pulse I found a complete irregularity, not only in the order of the pulses, which we call an irregularity of the sequence, but also one in the filling of the arteries. […] I observed him very frequently for six months to see if any change occurred and palpated his radial pulse. […] I had assumed that this irregularity of the pulse came about by a narrow passage in the great pulmonary veins. […] But it appeared to me correct to prescribe for him a regimen similar to one for the asthmatics and to employ a medicine which had the same qualities as those [used for asthmatics]. After a six-month lapse, as I said before, he experienced some but not a great deal of dyspnea together with short-lasting palpitations of the heart; first one, then twice and three times a day; and then they came four times and more frequently; then the attacks of dyspnea increased up to 15 times a day. Then suddenly, the respiration became very agitated; then it


\(^{1263}\) Ibid., p. 265.

stopped and he died very suddenly, like some other people suffering from heart disease, about which I will report in the next chapter.  

| 15 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725)  
Within a section regarding the pathology, and varying approaches to the treatment of ‘Palpitation’.  

**Book 5, chapter 2**  
‘Certain it is, that Galen advised bleeding universally; and it is a remarkable case he gives us of one, who every spring was seiz’d with a violent Palpitation: bleeding every spring three years successively in the fit, took it off; which the patient observing, the fourth year he prevented the fit by bleeding earlier, and had the like success for several years after.’

Footnote says: ‘Loc. affect. 5. 2.’ |

| 16 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725)  
Within a section regarding the work of Alexander of Tralles – see also row 13.  

**Books 4, 6 and 7**  
‘He mentions a Tubercle in the Lungs, which occasions a difficulty of breathing, but is not attended with any Expectoration or Fever: a distemper taken notice of by Galen, and a common species of consumptions amongst us, especially in scrophulous bodies: […]’

Point drawn from a number of books, see for example:  
**Book 4, chapter 11**  
‘Often these patients experience a sensation of constriction, and for this reason they breathe frequently and rapidly, greatly expand their chest but inhale little air. If this develops without fever, it indicates a growth, ...'}

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1265 Ibid., p. 269.
Relevant footnote says: \footnote{1268}{Loc. Affect. 4, 6, 7.} an accumulation of sticky or thick humors, a fullness due to accumulation of other humors, or that [the lung] is surrounded by an exudation of pus or of another sticky, heavy or abundant humor.\footnote{1269}

**De Usu Partium, On the Usefulness of the Parts of the Body**\footnote{1270}

Seventeen books

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<tr>
<td>17</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it</em> (1732)</td>
<td>Book 1, chapter 9</td>
<td>‘Then let us make our fresh start with Hippocrates’ statement as if it were the voice of God.’\footnote{1273}</td>
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<td></td>
<td>Within a chapter entitled <em>Of the state of Physick from the Restauration of Learning in 1453, to the present times.</em></td>
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\footnote{1269}{Galen, R.E. Siegel, *Galen On the affected parts* (London, 1976), p. 130.}
\footnote{1270}{See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume III-IV. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen*: UP.}
\footnote{1271}{F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 138-139.}
There are two footnotes relating to this passage, the one denoted by a superscript 'a' contains a phrase in Greek and the reference: 'L. I. c. 9. ad initium.' The one denoted by a superscript 'b' is addressed within Chapter 1.

<table>
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<tr>
<th>18</th>
<th>F. Clifton, <em>The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it</em> (1732)</th>
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<tr>
<td></td>
<td>Within a section entitled: 'Of the State of Physick among the Greeks.'</td>
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<td><em>Book 8, chapter 3</em></td>
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<td>‘Their disciples were numerous enough, but came far short of their masters; (a thing that often happens) several of them entertaining notions much out of the way, as Philotimus (a disciple of both) who thought the Brain of no manner of use; and yet Galen mentions him as a good Anatomist otherwise; and a good practitioner (^{a}): so far from necessary is a perfect knowledge of many things in Anatomy, to make a man successful in the Practice of Physick.’ (^{1274})</td>
</tr>
<tr>
<td></td>
<td>Footnote says: ‘(^{a}) See l. 8. <em>de usu partium</em>, c. 3.’ (^{1275})</td>
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| 19 | J. Le Clerc, *An answer to what Dr.* |
|----|*Book 11* |
|    | *Book 11, chapter 10* |
|    | ‘In both these example of prodigious wisdom there is something marvelous to be detected, particularly in the fact that these men not only deprive the encephalon of being the source of the nerves or the heart of being the source of the arteries, but also declare one or the other part to be completely without usefulness. Some, like Philotimus, confess it openly, and others, like Aristotle, imply such an opinion by circumlocution.’ \(^{1276}\) |
|    | This passage, however, does not allude to Galen’s mention of Philotimus as a good anatomist. |

\(^{1275}\) Ibid., p. 29.
\(^{1277}\) J. Le Clerc, *An answer to what Dr. Freind has written in his History of physick* (London, 1728), p. xlviii.
| Freind has written in his History of physick (1728) | *Oribasius*, says the Doctor [Dr. Freind], gives us the first account of the salivary Glans, which is either omitted by Galen, or *is lost together with some of Galen’s Works*. But it seems *Galen* was not worthy Dr. *Freind*’s reading; for if he had, he might there have found *Oribasius*’s account in so many Words. *Oribasius* did well to copy *Galen* in his accurate Description; but *Freind* has nothing to value himself on his Reading.’

Footnote says: ‘* Book XI. of the use of the Parts; and in the Book of the Voice and Breath.’

‘Since the tongue becomes hard to move when it is dried out, as one sees clearly in persons who are excessively thirsty and in those who have had all the moisture of the mouth dried up in burning fevers, Nature has made marvelous provision to keep the tongue from being easily affected by such a trouble. Now I have said earlier in speaking of the larynx that there are glands like sponges placed beside it, one on each side, to serve this purpose. The same thing has been done in the case of the tongue, and channels from these glands pour forth through the lateral and lower parts of it a phlegmlike humor, moistening the tongue itself and the lower parts, the sides, and the whole circuit of the mouth. The upper parts have the channels leading down from the encephalon, and I have spoken about these earlier.’

| F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (1732) | General reference ‘What proficiency he himself made in Anatomy is to be seen at large in his *admin. Anatom.* and his surprising books *de usu partium*.’

Within the section that Clifton dedicates to addressing Galen’s life and work.

General reference to *De Usu Partium* and *De Anatomicis Administrationibus*

See also rows 33-34

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</table>
| 21  | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725) | Chapter 13 | Chapter 22 and Chapter 23  
This reference is found within chapter 23 of the text, not 13 as Freind suggests. The rationale for placing this information at the end of the book is explained by Galen in chapter 22: 'I have shown elsewhere that the ancients applied the term vein to arteries as well, and this was agreed by others before us. Because of this, and because the subject-matter would be similar, and in the interests of brevity of expression, I thought it better not to write a separate book about arteriotomy, but to make this addendum to the work on phlebotomy, in that part where I consider which veins one should cut when particular parts are affected.'  
Chapter 23  
'I shall now tell you how I got the inspiration to have recourse to arteriotomy. Urged on by certain dreams I had, two of which were... |

References:  
| 22 | F. Clifton, *The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it* (1732)  
Reference is within the section that Clifton dedicates to addressing Galen’s life and work. | ‘[…] at the age of twenty eight return’d to Pergamus. His health, which had been very bad till then, grew better after that (the manner of it he tells you himself b) and remain’d firm and good to the last, tho’ he liv’d to be a very old man.’  
Footnote says: 'b See his book *de curatione per V. S.*'  
No specific reference provided |  
| 23 | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747)  
Reference is within a footnote, which discusses Hippocrates’ views on the | ‘[…] This Rule, never to bleed after the fourth Day, is chiefly applicable to Inflammatory Fevers; in which, if the Obstruction is not removed within four Days, Matter is commonly formed; but, when this is the Case, Bleeding can do no good, and |  
1284 | Ibid., p. 98.  
| 24 | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | *The Extremes of Heat and Cold, were thought by all the old Writers in Physick, as well as by HIPPOCRATES, to be a Reason against Bleeding. For GALEN frequently cautions Physicians against Bleeding in very *hot* or very *cold* Weather +, in Summer-time, or a hot Country *⁺; [...]⁺⁺* Relevant footnote says: ‘⁺ De curandi ratione per Sanguinis Missonem. Ad Glaucnonem, &c.”⁺⁺⁺ | No specific reference provided |

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1287 Ibid., p. 91-92.
1286 Ibid., p. 91.
### De Ptisana, On Barley Soup

One book

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<td>25</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘Again, if we inquire by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the <em>Hippocratic</em> Plan; and that his Intention was only to promote the Concoction of the mobific Matter, by keeping the Fever to the proper Standard.*'</td>
<td>‘Hence it is most beneficial for burning fevers, holding the opposite qualities as it is cooling, moistening, purgative of putrefying juices, furnishing considerable nourishment to the body, whilst at the same time digesting semi-putrid juices and converting them into good juices.’</td>
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<td></td>
<td>Several citations are given within this passage – see also Appendix C, rows 1 and 18.</td>
<td>Footnote says: * Comment. 1. in Aphorism. 8, 9. De Ptissana Liber. De Arte Curativa ad GLAUCONEM. C. 10. 13.*</td>
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<td>26</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘These Passages may seem to contradict the general Rule about giving Spoonmeats (ῥοϕήµατα) in the beginning of Fevers; but it must be observed, that he [Hippocrates] is here speaking only of Diseases, which are very acute, and of short Continuance, and such as require more powerful Diluents than’</td>
<td>‘You must not simply administer barley soup when a disease appears, for you need to determine several other factors. It is neither correct to dose people with it who are in a critical state, nor is it correct to give it to those who require the letting of blood, purging or a clyster; nor to those whose</td>
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1292 Ibid., p. 65-66.
the *Ptissan*, according to the Observation of Galen *, who himself enumerates the particular Cases, in which it is not proper to give the *Ptissan* at first.  

Footnote says: ‘* Lib. de Ptissana.’

stomachs are filled with waste matter; nor to those suffering great pain; and certainly not to those needing a medical vapour-bath, the letter of blood or purging; not yet to those affected by very dry diseases.

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| 27 | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | ‘The Hippocratck Diet in Fevers then, may properly be distinguished into two kinds, viz. the full, and the low Diet; the first consisted of the whole *Ptissan* (*Ptissan tota*) and the second of the strained *Ptissan*, or *Barley Gruel*, after the thicker Part had been strained off. GALEN, indeed, in a Treatise in which he professes to explain the Doctrine of HIPPOCRATES on this Subject, makes mention of a third kind of Diet, which consisted of half the one, and half the other *.

Footnote says: ‘* De Ptissana, Liber.’

‘As for patients for whom barley soup is usually beneficial, you should not give it to them at once, but rather just the liquid at first, or at least more liquid and less pearl barley, then both these in equal proportions, then pearl barley on its own. For pearl barley contributes a great deal to the strength and nurture of the body, whilst the liquid is easy to digest, concoct and assimilate.’

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1294 Ibid., p. 100.
1297 Ibid., p. 96.
### De Praenotione ad Epigenem, On Prognosis

One book

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<td>28</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘For he not only foretold that a Fever would be a Quartan, as he acquaints us, upon its first Approach, but also the very Day on which it would go off’ <em>GALEN. De praecognitione Liber, ad Posthumum. + Ibid.</em></td>
<td><em>Chapter 2</em>&lt;br&gt;‘All unsuspecting, I made not only verbal but also practice prognoses of the future and cures until the following event took place, as you [Epigenes] well know, since you were present from beginning to end throughout the whole illness of Eudemus the Peripatetic philosopher. One day he began to feel a little indisposed after his bath, and at the eighth hour he had a shivering fit which prevented him from taking food. [...] On the fourth day, when he was with us on his way to the bath, turning to you with a smile, he said, “Will it be safer to let the eighth hour go past on this particular day, the fourth, or should I take my bath now?” Expecting no trouble, you told him to go and take his bath, as did all the others present: only I stayed silent. When he asked the reason for my silence, I told him I was not entirely without suspicion that the beginning of a bout of quartan fever had occurred on the’</td>
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As above, footnote says: ‘*Galen. De praecognitione Liber, ad Posthumum. + Ibid.*’

Chapter 3

‘[...] but I return to the case of Eudemus. Thoroughly exhausted by the three quartans, he was given up for lost by his doctors, as it was already, I think, mid-winter. [...] Thus when I foretold the exact day on which the first of the three quartans would end, I awakened surprise; when I correctly declared the basis of the resolution of the second attack, all were astounded; as for the third, they prayed to the gods for my discomfiture. But when that too ended on the day that I had predicted, I gained no slight reputation, not only for my predictions but also for my treatment.’


| 30 | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | ‘But the most extraordinary Instance of his Sagacity, in this respect, was an acute Fever, in which he foretold that there would

Chapter 13

‘Besides, what happened in your [Epigenes’] presence when some of the
be an Haemorrhage at the Nose on the fifth Day of the Disease. The Story is an uncommon one, for which Reason I think I cannot conclude this Chapter better than by relating it; which I shall do, as nearly as I can, in his own Words. A young Man at Rome had been ill of a Fever five Days, and notwithstanding the proper Time for Bleeding was then over, as it ought to have been done on the second or third Day, or at the latest, on the fourth; yet, as it did not seem to be forbidden, either by the Season of the Year, the Age, or Weakness of the Patient, or by his Way of Life; but as, on the contrary, all these Circumstances concurred in Favour of it, his Physicians agreed to open a Vein. But "after having diligently weighed within myself, says our Author, the Signs which Hippocrates has left for foretelling a Haemorrhage, I declared that I thought they were right in their Intention of opening a Vein, but that, if they would but wait a while, Nature herself would do the Business for them, by throwing off the Load with which she was oppressed. The other Physicians stood amazed at this. In the mean Time the Patient started up, as if he leading men in Rome were considering venesection is discussed in my commentaries, where I show that Hippocrates gave a full demonstration of it. The young man was in the fifth day of his illness: the help of venesection seemed to have been omitted, although, from the outset, his condition demanded it on the second, third, or, at the latest, the fourth day. But since neither the season of the year nor the age of the patient nor any lack of vital power nor the previous regimen in his illness offered any indication to the contrary, but all agreed together in pointing to venesection, the doctors reached a fair decision and determined to cut the vein. But I carefully observed all the obvious signs that were said by Hippocrates to portend a haemorrhage, and then said that, although they had rightly decided to extract some blood, the patient's own nature also was fast coming to this by itself as it strove to expel what was oppressing it: this would occur soon, even if we did nothing. When the doctors heard this, they were indeed surprised, but then the patient stood up in bed, as if he wanted to jump out. When

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1305 Ibid., p. 68.
was going to jump out of Bed; and being asked why he did so, where there was no Reason for it; he replied, that he was afraid, lest a red Serpent, which he saw crawling upon the Roof of the Bed, should fall down upon him, and was therefore willing to get out of the Way. The other Physicians did not suspect that this Symptom portended any future Efflux of Blood, but as for myself, when I had considered the Signs, and particularly a Redness, which I had before observed upon the right Side of the Nose, extending to the Cheek; and which was now become much more conspicuous, I thought it an evident Token that there would shortly be a Hæmorrhage from the right Nostril; upon which I whispered one of the Servants, who was in Waiting, to fetch a Vessel to catch the Blood in, but to take Care to hide it under his Cloaths when he came in; and then, turning about to the Physicians, I told them, loud enough to be heard by them all, that if they would wait a little longer they would see a Flux of Blood from the Patient’s right Nostril. They laughed at my mentioning the right Nostril in particular; but I replied, that both these Things would happen, or that neither of them would. For by the Rules of the Art there would not only be a Flux of Blood, but asked why he had jumped up when there was nothing to fear, he said that he saw a red snake crawling from the roof and was scared that it might lose its hold and fall on him: he was therefore avoiding the place where he had been lying. They still thought that this had nothing to do with the impending haemorrhage, but I examined everything closely, including the right side of his nose, extending to the cheek bone, where I saw a redness, hitherto faint, had now begun to be much more prominent. It then became clearer than ever that the haemorrhage would come from his right nostril. So I spoke quietly to one of the invalid’s slaves there, and told him to have ready under his cloak a bowl suitable for receiving blood, and then I announced in the hearing of all the doctors that, if they would only wait a moment, they would see the man bleeding from the right nostril. They laughed at me for proposing to include the right nostril in my prognosis. “Well then”, I said, “either both must happen or I must be wrong on both counts: for both derive their prognosis from the same theory. The patient will suffer a haemorrhage and this will come from the right nostril, which I have asked you to observe.” They broke into laughter, as you recall; but as soon as I saw the
that Flux would be from the right Nostril. Upon this, I ordered the Man who had got the Vessel to keep his Eye upon the Patient, and to catch the Blood, as soon as he began to see it spout forth. I had scarce done speaking, when the Patient pulled his Finger from his Nostril, and we saw it covered with Blood. The Servant ran with the Bason; the Company set up a Shout; and the Physicians, one and all, slipt out of the way as fast as they could.\footnote{Galen. De Præcognitione, &c.}

And thus Art triumphed over Ignorance. “The Patient lost four Pound and a half of Blood.”\footnote{Footnote says: ‘* Galen. De Præcognitione, &c.’}
### De Sectis ad eos qui Introducuntur, On Sects for Beginners

One book

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<td>31</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it</em> (1732)</td>
<td>‘But though the Physicians before Hippocrates were undoubtedly Empiricks, having nothing but Experience to go upon; yet as a Sect they never were known in the world, till Serapion’s time, or thereabouts. What their tenets were, and how they differ’d from the Dogmatists (who look’d upon Hippocrates as their head too) may be seen at large in Celsus, and Galen b, or le Clerc, who has given a fine description of them.’</td>
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<td></td>
<td>Footnote says: ‘b See Celsus’s preface, and Galen’s books upon the Sects, and especially that <em>de subfiguratione Empiricae Sectae</em>.’</td>
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<td>32</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly</em></td>
<td><em>Chapter 4</em></td>
<td>‘Whereas what is common in diseases, and’</td>
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<td>‘But, in those cases in which the dogmatics</td>
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1309 Ibid., p. 34.
1311 F. Clifton, *The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it* (London, 1732), p. 49. No footnote symbol appears within the text here to link the footnote to a specific point, however this is the only paragraph on the page which mentions Galen, and comparison to the English translation shows the connection.
consider'd: with a plan for the improvement of it (1732)

what is particular in certain cases, is as much the object of a Physician's consideration, one as well as the other, as the knowledge of the kind or species, to which any disease belongs; as Galen has shewn very clearly, in the case of a bite by a mad-dog: where if the wound be treated like a common wound, the patient will soon go mad; but if it be treated as a wound from such a bite, he may perhaps recover.'

Footnote says: ‘a L. de Sectis. c. 4.’

do not have a manifest symptom which is indicative of the cause, they do not hesitate to ask for the so-called antecedent cause, e.g., whether one was bitten by a mad dog or a snake or something else of the kind. For the wound itself does not look any different from the other wounds, except at the very beginning. For, in the case of the mad dog, the wound throughout looks similar to the wound of someone who has been bitten by something else. [...] Such symptoms, which are produced by the so-called venomous animals, are almost invariably fatal, unless they are properly treated right from the start.’

De Anatomicis Administrationibus, On Anatomical Procedures
Fourteen books

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<td>33</td>
<td>J. Freind, The history of physick; from the time of Galen, to the beginning of the sixteenth century, Volume II (1725)</td>
<td>‘One thing is very observable, and very much to be lamented is, that there is scarce any thing of these antient writers remaining in the Arabick translations (I speak of the old one's) but what is now extant in the Greek copies: except the last five books of</td>
<td>No specific reference provided</td>
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Galen de Administr. Anatom. From which one may infer, that either the Arabians destroy’d all which they did not translate, or what is more reasonable to imagine, that what is now wanting, was lost before their time; at least destroy’d in the fury of their first incursions: for, as has been observ’d, it was near one hundred and fifty years before they turned their thoughts even to this sort of learning.'

F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (1732)

What proficiency he himself made in Anatomy is to be seen at large in his admin. Anatom. and his surprising books de usu partium.'

Reference is within the section that Clifton dedicates to Galen.

Quod Optimus Medicus sit quoque Philosophus, The Best Doctor is also a Philosopher

One book

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<td>34</td>
<td>F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (1732)</td>
<td>'What proficiency he himself made in Anatomy is to be seen at large in his admin. Anatom. and his surprising books de usu partium.'</td>
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<tr>
<td></td>
<td>Reference is within the section that Clifton dedicates to Galen.</td>
<td></td>
<td>See also rows 17-20</td>
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<td>35</td>
<td>J. Barker, An essay on the agreement betwixt ancient and modern physicians (1747)</td>
<td>'We find that some amongst the Ancients affected to despise this Doctrine as much as the Moderns do; and a Physician, who</td>
<td>Chapter 1</td>
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<td>‘Again, Hippocrates says that one should employ great fore-thought in the</td>
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1315 F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 88.
Within a section addressing the prediction of the ‘Periods and Crises’ of diseases, and whether either the knowledge, or methods of the ancients remain valid.\textsuperscript{1317}

pretended to prognosticate a critical Sweat, or an Haemorrhage, was treated by these Ignoramus’s with the contemptuous Name of a Conjurer, as \textit{Galen} tells us*. This Author however despised these empty Sneeers, as much as they affected to despise him, and rendered himself eminent by his Predictions in acute Diseases.\textsuperscript{1318}

Footnote says: ‘+ \textit{Galen}. Si Quis Optimus Medicus &c.’\textsuperscript{1319}

construction of a ‘prognosis’ of the present, past, and future state of the patient; today’s doctors are so perfectly studied in this branch of the art that if someone predicts a haemorrhage or a sweat they denounce him as a magician or a speaker of riddles. Such fellows are hardly likely to tolerate one who is able to predict other matters beyond these; nor are they likely to base their instructions for diet on the expected peak of the disease – in spite of the fact that Hippocrates himself advocated such diets.\textsuperscript{1320}

\begin{center}
\textit{De Temperamentis, On Mixtures}\textsuperscript{1321}
\textit{Three books}
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| 36  | J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (1747) | Book 3 | Book 3, chapter 4  
‘And \textit{Galen}, also, makes use of the Appellation in this Sense, when he says, that, by the Word Nature, he means that \textit{Temperament of the Animal which is}  
construction of a ‘prognosis’ of the present, past, and future state of the patient; today’s doctors are so perfectly studied in this branch of the art that if someone predicts a haemorrhage or a sweat they denounce him as a magician or a speaker of riddles. Such fellows are hardly likely to tolerate one who is able to predict other matters beyond these; nor are they likely to base their instructions for diet on the expected peak of the disease – in spite of the fact that Hippocrates himself advocated such diets.\textsuperscript{1320}|

\textsuperscript{1317} For additional detail, see: J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 64.
\textsuperscript{1318} J. Barker, \textit{An essay on the agreement betwixt ancient and modern physicians} (London, 1747), p. 64-65.
\textsuperscript{1319} Ibid., p. 64. The symbol differs between the citation in the text and the footnote, however, this reference does link to this point, this is the only footnote on p. 64, and surrounding footnotes also show that this is the correct reference.
**De Naturalibus Facultatibus, On the Natural Faculties**

Three books

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| 37  | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | Book 2, chapter 4 | Book 2, chapter 4

‘And, indeed, as the Concoction of the Humours is best effected by a moderate Degree of Heat *, the Method which he took in the beginning of Fevers, to moderate the too great Heat by Bleeding and diluting, was best calculated to promote the Concoction of the Humours, [...]’

Footnote says: ‘* The Work of Concoction was always thought to be the Effect of a cold, dry, and wet. The nature of substances which most readily nourish us, meanwhile, is that which is closest to ours. All others lie somewhere between these two extremes, varying in the extent of their capacity to act upon, and be acted upon by, our bodies.’

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1323 Ibid., p. 13.
proper Degree of Heat. Thus GALEN --- *Concoctionem* alterationem quandam esse, --- alterationem vero ipsam a *Calido* potissimum perfici; atque idcirco tum nutritionem tum concoctionem, tum omnem succi generationem, jam vero et in excrementis ipsis qualitates a calore innato provenire, HIPPOCRATES omnium post hominem memoriam *primus* recte dixit; ARISTOTLES post eum recte est interpretatus --- De Facult. Natural. L. 2. C. 4.\(^{1326}\) correctly stated first by Hippocrates of all writers whom we know, and were in the second place correctly expounded by Aristotle.\(^{1327}\)

This section is the English translation of the Latin passage provided by Barker. I have omitted some of the text, as Barker does, and have indicated this similarly by using ‘[-- -]’.

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### De Placitis Hippocratis et Platonis, On the Doctrines of Hippocrates and Plato\(^{1328}\)

Nine books

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<td>38</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly considerd: with a plan for the improvement of it</em> (1732) Within a section shown in the margin as addressing: ‘Prodicus a great trister.’</td>
<td>Book 8, chapter 6 ‘But Prodicus, a disciple of Hippocrates, (who was next in reputation to the family itself) soon grew weary of his master’s method; and instead of pursuing the business of Observation, gave himself up to criticise upon words, the much easier work of the two: in which, however, he acquitted</td>
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himself but indifferently, if we may believe Galen.\(^{1329}\)

Footnote says: ‘\(^{a}\) See l. 8. de Hipp. & Plat. placitis c. 6, &c.\(^{1330}\)

obviously he was not mistaken in the name, as Prodicus was, but in the knowledge of the nature of the humor. He speaks of it in the following way: […] Not much later he again writes about it: […]. In this passage his statement about the diseases that result from phlegm is excellent. But his earlier statement, that “all the colliquescence of tender flesh, when intermingled with pneuma, we call white phlegm”, is not correct. For it has been shown that the generation of phlegm results from nutriment rather cold by nature and inadequately prepared by innate heat.’\(^{1331}\)

**De Sanitate Tuenda, On the Preservation of Health**\(^{1332}\)
Six books

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<td>39</td>
<td>F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (1732)</td>
<td>Book 1, chapter 8</td>
<td>‘But Galen does expressly assure us (^{b}), that AEsculapius actually prescribed Exercise of various kinds to his Patients, and therefore may very well be counted the Inventer.’</td>
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\(^{1329}\) F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 18-19.

\(^{1330}\) Ibid., p. 19.


\(^{1333}\) F. Clifton, The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it (London, 1732), p. 6.
Asclepios, who caused not a few odes to be written and humorous mimes and songs to be composed by those in whom the excessive activity of passion made the constitution of the body hotter than normal. And others, not a few also, he caused to hunt, ride, and exercise in arms; and in those for whom he prescribed this he limited not only the form of activity, but also the arms in those whom he ordered to exercise in arms.  

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### De Ordine Librorum Propriorum, On the Order of my Own Books

One book

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| 40  | F. Clifton, *The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it* (1732) | ‘After he had gone thro’ all the learning of the schools, and turn’d his thoughts to Physick, when he was about seventeen, and, as he himself says, by vertue of a dream a; [...]’.  

Footnote says: ‘a’ See his Epistle to Eugenianus, about the order to be observ’d in reading his books.’ | *Chapter 1*

The opening section of this book shows that it takes the form of an ‘Epistle to Eugenianus’: ‘You were right, Eugenianus, to point to the need for some handbook which would explain the order of my writings; for they do not all have the same purpose, function, or subject-matter.’ |

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1337 Ibid., p. 81.
Chapter 4

‘My father was himself competent in the fields of mathematics, arithmetic, and grammar, and reared me in these as well as the other subjects necessary to the training of the young. In my fifteenth year he steered me towards dialectic, with a view to my concentrating entirely on philosophy; in my seventeenth he was persuaded by clear dreams to make me study medicine at the same time as philosophy. And yet even with this great good fortune, and the fact that I was able to learn whatever I was taught thoroughly and more quickly that anyone else, I would still have gained very little understanding if I had not devoted my whole life to the cultivation of medical and philosophical studies.’

---

1339 Ibid., p. 27-28.
Appendix C

Galen as source – table of references and citations

Galenic texts without English translation

These tables of citations and references show where Galen is utilised as a source, relating to texts not currently available in English, which limits the possibility of verifying the reference. They are arranged in order of the number of times each text is mentioned in the early modern works, and then by the order in which they appear in Kühn. Rows are numbered consecutively throughout this Appendix in order to facilitate cross-referencing.

*In Hippocratis Aphorismi, On Hippocrates’ ‘Aphorisms’*

Five books

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<tr>
<th>No.</th>
<th>Early modern text and context of reference</th>
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<th>Details of Galenic text</th>
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<tbody>
<tr>
<td>1</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘Again, if we inquire by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the Hippocratic Plan; and that his Intention was only to promote the Concoction of the mobific Matter, by keeping the Fever to the proper Standard.’</td>
<td>Comment 1, Aphorism 8, 9</td>
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<td></td>
<td>Within the short section that Barker dedicates to addressing Galen’s life and work.</td>
<td>Footnote says: ‘* Comment. 1. in Aphorism. 8, 9. De Ptissana Liber. De Arte Curativa ad GLAUCONEM. C. 10. 13.’</td>
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<td></td>
<td>Several citations are given within this passage – see also Appendix B, row 25, and Appendix C, row 18</td>
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<td>2</td>
<td>J. Barker, <em>An essay on the</em></td>
<td>‘Before we attempt to purge in Fevers then,</td>
<td>Comment 1, Aphorism 22</td>
</tr>
</tbody>
</table>


\(^{1341}\) J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (London, 1747), p. 158. This passage also includes references to ‘Ad Glauconem de Methodo Medendi’ which is discussed below (row 18), and ‘De Ptisana’ which is shown in Appendix B.
| J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | Within the short section that Barker dedicates to addressing Galen’s life:  

To be a little more particular; if we inquire, with what Intention he bled in acute Distempers, we shall find, that it was either to lessen the Quantity of Blood, when the Constitution was *plethoric*, and thereby to diminish the morbifick Matter.  

Comment 1, Aphorism 23 |
|---|---|---|---|
| agreement betwixt ancient and modern physicians (1747) | we must enquire which of the two it is; for, if it be *fixed*, as it is, for Example, in the first Stage of inflammatory Fevers, such as *Pleurisies*, *Quinsies*, and the like, it is in vain to attempt to carry it off by *Purgatives*  

Footnote says:  

* Τοις μὲν δὲ ταυτών έκβαλλόν προσηκιν' τεκίλτυ ταύτης ἐν ΚΙΝΗΣΕΙ καὶ ἘΡΤΣΕΙ, &c. We should evacuate those Humours which are *fluctuating* and in *Motion*; but when the Humours are fixed in any Part, we should not purge (Φάρμακοι) before they begin to be concocted. Galen, in Aph. rifm. Comm. i, Aph. 22. |

Figure 11 |

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<th>Page</th>
<th>Text</th>
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| 4    | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747)  
Within the short section that Barker dedicates to addressing Galen's life and work.  
Quote follows immediately after row 3, which also cites a comment regarding the same Aphorism.  
Footnote says: ‘Lastly, if we ask with what View he made use of Evacuations in Fevers, such as Purging, Sweating, &c. the Answer is, that he trod in *Hippocrates's* Steps in that, as he did in all other Respects, for he observed the Signs of the Turgescency and Concoction of the Humours, and from thence he drew his Indications for purging, as *Hippocrates* had done before him.’ |
|      | Comment 1, Aphorism 23 |
| 5    | J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747)  
Within a discussion regarding *Hippocrates*'s own Practice, for that must be allowed to be the best Comment on his Works.  
Footnote 1348 says:  
For if it be requisite to use Remedies, (i.e. powerful Remedies, such as Bleeding, Purging, &c.) says *Hippocrates*, they should be used in the Beginning of Diseases; but when they are come to the Height, it is better to be quiet. |
|      | Comment 2 |

1345 Ibid., p. 158.
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<th></th>
<th>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</th>
<th>'Thus when HIPPOCRATES calls the Elements, as mixed together in the Constitution of the Body, by the Name of Nature *, he is speaking of Nature in a passive Sense, --- or means something passive by it.' Comment 2, Aphorism 34</th>
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<td></td>
<td>Within a passage addressing 'a few of these Definitions; NATURE [...]^{1349}</td>
<td>Footnote says: 'HIPPOC. de Natura Hominis: GALEN. 2. Com. in Aphoris. Hip. 34.^{1350}'</td>
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<tr>
<td>6</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>'The sole Intention of HIPPOCRATES, in giving purging Remedies in acute Diseases, was to carry off the peccant Matter * which gave Occasion to them. In doing this he took Nature for his Guide. For his Rule for using Comment 6, Aphorism 47</td>
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<td></td>
<td></td>
<td>Comment 1, Aphorism 21</td>
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<td>7</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
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^{1347} Ibid., p. 130.

^{1348} Ibid., p. 130-131.

^{1349} Ibid., p. 12.

^{1350} Ibid.
Evacuations of all kinds, was, as he tells us, to follow the Road which Nature pointed out +. But it was not a sufficient Reason with him for purging, or using any other Evacuation, that Nature seemed to tend that Way, unless her Motions were likely to prove salutary to the Patient §.¹³⁵¹

Footnotes say: ‘* It was the Doctrine of all the old Physicians, that, as a Plethora, or Redundancy of Blood, indicates Bleeding, so does a Cacochymy, or Corruption of the Humours, Purging. See GALEN, in Aphorism. Comment. vi. Aph. 47.’

Second footnote is shown in Figure 13.

¹³⁵² Ibid., p. 124-125.
Judgement whether any Evacuation is likely to be beneficial, from the Tendency of the Humour to be evacuated, and the Nature of the Part: For if the Humour to be evacuated be redundant Blood, and it tends to a proper Place, for instance the Nostrils, such Evacuation will be beneficial, but if it tends to the Brain, or Lungs, it will be hurtful, if not fatal to the Patient.” See Galen, in Aphorism. Hipp. Comment. 1. Aph. 21. 1352


Eleven books

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<td>8</td>
<td>D. Le Clerc, The history of physick, or, An account of the rise and progress of the art (1699) Within a section entitled: ‘CHAP. V. HERMES, or MERCURY, or THOTH the Inventor of Physick, by some confounded with MOSES.’</td>
<td>‘Among the Books of Mercury, of which the Ancients make mention, and which relate to Physick, there were some already suspected, even in the time of Galen. (c) Such was that, which he says was attributed to the Ægyptian Mercury, which contain’d the Thirty six Herbs of the Horoscopes. These, he says, were meer trifles only, that amus’d the Reader to the loss of his time.’ Reference is within a marginal note: ‘(c) De simplic. Medicam. facult. lib. 6. in</td>
<td>Book 6</td>
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<th>Page</th>
<th>Text</th>
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</table>
| **9** | D. Le Clerc, *The history of physick, or, An account of the rise and progress of the art* (1699)  
Within a section entitled: 'CHAP. V. HERMES, or MERCURY, or THOTH the Inventor of Physick, by some confounded with MOSES.'  
'The Book of the thirty six sacred Herbs of the Horoscopes, cited by Galen as before, however supposititious, is at least a proof that it was the common opinion, that MERCURY did not confine himself to Physick, otherwise they wou'd never have father'd such Books upon him.'[^1355] |
| **10** | J. Le Clerc, *An answer to what Dr. Freind has written in his History of physick* (1728)  
This reference is within the preface to this text, and is used to comment upon the quality of Dr. Freind's research when producing his work *The history of physick.*  
'The Doctor falls into another Mistake, in his Claim for the Greek Physicians; by putting it too low, and in taking it from Compilers. *Galen recommends Rhubarb against all Bleedings, the Bloody-Flux, and the Cæliac-Affection; and the Physicians, in many succeeding Ages, say no more of it. And therefore if the Doctor has not been more accurate in other parts of his History, than in this, he must fall short of all the Applause he tells us he deserves.'  
Footnote says: '* De Medic. simp. fac. Lib. 8.'[^1356] |
| **11** | F. Clifton, *The state of physick, ancient and modern, briefly consider'd* (1732)  
'And yet he declares elsewhere (viz. where he is finding fault with his master Pelops, for attempting to give a reason for every thing' |

[^1355]: Ibid., p. 18.  
| 12 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume II (1725)  
Reference is within a section discussing the use of viper's flesh. | ‘Galen’ gives us the History of two or three cures as extraordinary in an *Elephantiasis*, from the same Medicine. And our own experience informs us, what surprizing things may be done by such a method of *Diet*, in many cases, particularly in diseases of the *Skin*, and an *Atrophy*.  
Footnote says: ‘g Simpl. Med. 11.’ | Book 11 |

Footnote says: ‘a De simplic. medicam. facult. l. 11. N° 24. de cancris ustis.’  
Footnote says: ‘g Simpl. Med. 11.’

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In *Hippocratis Epidemiarum Libri* (or, *In Hippocratis de morbis vulgaribus*), On Hippocrates’ ‘Epidemics’

Each of the ‘Epidemics’ texts addressed by Galen is in a different number of books. He produced commentaries on Epidemics I, II, III, and VI, in three, six, three, and eight volumes of commentary respectively.

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<td>13</td>
<td>J. Freind, <em>The history of physick; from the time of Galen, to the beginning of the sixteenth century</em>, Volume II (1725)</td>
<td>‘Galen indeed tells us, “that some authors had been of such an opinion, and that Worms coming up from the Intestines to the orifice of the Stomach, might produce such a Cough: but he seems to think this notion entirely groundless; for he had himself seen worms in this very place a thousand times, which yet occasion’d no cough at all.’”</td>
<td><em>Epidemics 6, Comment 2</em></td>
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<td></td>
<td></td>
<td>Footnote says: ‘d Comment. 2. in Epidem. 6.’</td>
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<td>14</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘Accordingly PLATO considers Nature as a divine Art, or as the highest kind of Art, and GALEN defines it to be the principal of those Arts which administer to Health.’</td>
<td><em>Book 6, Comment 5</em></td>
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<td>Relevant footnote says: ‘+ GALEN, in Lib. vi. HIPPOC. de Morbis Vulgar Comment 5.’</td>
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<td>15</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (London, 1747)</td>
<td>‘Thus GALEN tells us, that it is the Business of one and the same Art to form a Thing,’</td>
<td><em>Book 6, Comment 5</em></td>
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</tbody>
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1362 Ibid., p. 15.
| 16 | **modern physicians (1747)** | and to preserve and repair it after it is formed. As therefore Nature formed the Body at first, it is her Office to restore it again to Health, when it becomes diseased +. 
Footnote says: ‘+ GAL. in Lib. vi. HIP. de Morbis Vulgar. Com. V.’ |
|---|---|---|
| 17 | **J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747)** | ‘[...] The Art of Physick, then, is prior in Rank and Dignity to the Physician, because it is by the Help of this Art, that he is able to remove Diseases. And in the same manner, as the Instruments which he makes use of, are subservient to the Physician, and the Art of Physick, so is the Physician, and his Art, subservient to Nature, who orders all the Operations in the Body *.”' 
Footnote says: ‘* GALEN in Lib. vi. HIPPOC. de Morbis Vulgar. Com. V.’ |

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1363 Ibid., p. 22-23.
lest he should be understood in this Sense; and therefore, where he says, that *Nature cures Diseases*, he adds immediately, that notwithstanding she has found out ways of acting, she does it not with Contrivance, or Design; but does what is necessary without being taught. Which is as much as if he had said, that she acts mechanically, or as a necessary Agent. See GALEN *Comment. 5.* in Libr. 6 *Hippoc. de Morb Vulgar.*.\(^{1365}\)

### Ad Glaucionem de Methodo Medendi, Therapeutics to Glaucion\(^{1366}\)

Two books

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<tr>
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<tbody>
<tr>
<td>18</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>'Again, if we inquire by what Rule he regulated the Diet of the Sick, we shall find that he strictly conformed to the <em>Hippocratic Plan</em>; and that his Intention was only to promote the Concoction of the mobific Matter, by keeping the Fever to the proper Standard*. Footnote says: ‘* Comment. 1. in Aphorism. 8, 9. De Ptissana Liber. De Arte Curativa ad GLAUCONEM. C. 10. 13.*'</td>
<td><em>Chapters 10 and 13</em></td>
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<tr>
<th>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</th>
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<td>Within the short section that Barker dedicates to Galen.</td>
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<td>‘Agreeably hereto, he thought the proper Time for purging was, either in the very beginning of a Fever, [...] or when Signs of <em>Concoction</em> appeared in the Urine ++, as they commonly do in the first Part of the State; or lastly, in the Decline of these Diseases, to prevent a Relapse, by carrying off the Remains of the offending Matter. And, as to the Use of <em>Sweating, diuretic,</em> and <em>expectorating Remedies</em>, his Rule was never to give them till the Humours became concocted, and then to make Use of one or other of these Means to carry off morbid Humours, according as Nature pointed out the Way, agreeably to the <em>Aphorism, Quæ enim ducere oportet, quo maxime natura Vergit, eò ducere oportet</em>.†</td>
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Footnotes say: †+ Thus in a Quartan, he says, “*Et si Coctionis Morbi indicia apparuerint, tunc purgare oportet, non semel tantum, sed sæpius, si fuert necessarim.*” De Art. Curat. ad GLAUCON. Cap. 11.‡

"† 1 Aph. 21. Hunc igitur cum ad Ventriculam repit, per Vomitum educere oportet; cum..."
| 20 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725) | ‘Stephen the Athenian or Alexandrian, called sometimes the one, and sometimes the other from the place either of his birth or his residence, wrote a commentary upon Galen’s first book to Glauco: a book writ with so much perspicuity, that it does not seem to want any comment to make it more intelligible. But there is reason to think, that the chief physical learning of his time, consisted in reading upon Galen: and Abi Osbeia, the Arabian Biographer, tells us of seven Alexandrian Physicians, among which Stephanus is one, who digested the Works of Galen into sixteen books; which again, according to the different matter, they divided into seven Classes: that these were the only books they studied; and that in their turn, they made it their whole business to comment upon them and explain them to their auditors.’


| 21 | J. Freind, *The history of physick; from the time of Galen, to the beginning of the sixteenth century*, Volume I (1725) | Follows immediately after the above quote: ‘And therefore it is not at all probable, that he lived in the third Century, as Mr. le Clerc, without any authority, supposes: and indeed | No specific reference provided – footnotes refer to Stephen and Alexander’s books respectively. |
it is plain from this very comment of Stephen, that he was much more modern; for he himself mentions very ancient expositors of this particular book of Galen. And upon considering what he says in Section I 40, concerning a Quartan, to me he seems to allude to a wrong interpretation, as he represents it, which Alexander had made of Galen’s sense in this place.\(^{1372}\)

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**De Compositione Medicamentorum secundum Locos, On the Composition of Drugs According to Places\(^{1373}\)**

Eleven books

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<tr>
<td>22</td>
<td>F. Clifton, <em>The state of physick, ancient and modern, briefly consider’d</em> (1732)</td>
<td>'Not but some of the Roman Physicians, and especially Pamphilus, found out a medicine afterward, that did as well(^{1374}); for which 'tis almost incredible to think what vast sums were given.'</td>
<td>Book 5, especially chapter 3</td>
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Footnote says: \(^{1374}\) See Galen’s fifth book of *the composition of medicines secundum locos*, i.e. according to places, and particularly that part of the third chapter.

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\(^{1374}\) F. Clifton, *The state of physick, ancient and modern, briefly consider’d: with a plan for the improvement of it* (London, 1732), p. 70.
<table>
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<tr>
<th>23</th>
<th>C. Wintringham, <em>Observations on Dr. Freind’s History of physick</em> (1726)</th>
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<td></td>
<td>Relevant paragraph introduced with the phrase: <em>‘Galen, writing about Medicines that ease Pain, are Anodyne, and that are good against the Colick, informs us, that [...].’</em></td>
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<td></td>
<td><em>We do not desire to impose upon credulous Men; so let the Question be determined by Galen himself, * who tells us, That Philo gave it in Greek Elegiacks; wherein the Medicine is first introduced, setting forth its own Virtues, and next adds its Composition.</em>&quot;</td>
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<td>Footnote says:</td>
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<td><em>Περι συνήθεις Φαινόμεν τῶν Κατὰ τῆς Βιβλ. Ὁ</em></td>
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<td><em>Figure 14</em></td>
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<td><em>Figure 14 translates as De Compositione Medicamentorum secundum Locos, Book 8.</em></td>
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<td>Book 8</td>
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<td>24</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
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<td>‘When Galen, therefore, advises Bleeding and Purging in an Arthritis *, we must conclude that he is speaking of the Inflammatory Rheumatism, which is attended with a Fever, not of the Chronical Rheumatism or, as it is sometimes called, the Gout +.’</td>
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<td>Book 10, chapter 2</td>
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1377 Ibid.


This follows the quote above, and is regarding the remedy *Philonium*.

‘The Unhappiness, if possible, is still greater in advancing that Philo never made his Medicine a Secret; for if our Historian had thought so, or that any One besides himself had been in that Secret, he never could have ventured to have proclaimed the Praisies of the divine Philonium for its not having been a Secret. And as the Composition is supposed to be so very plain, I will render it in English from Galen; because every Physician, and every Apothecary, who reads it, can easily explain the Mythology that concealed it for Two hundred Years, from common Eyes; as Men commonly believe.’

This is followed by the recipe, in English, and further comment regarding the remedy.

No specific reference provided – see also *De Methodo Medendi*, Book 12, chapter 1, which says:

‘All such medications are better when taken after they have been compounded for a year. The same applies to the medication of Philo which has no peer for soothing pains because it dulls sensation.’

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**De Praesagitione ex Pulsibus, Prognosis by Pulses**

Four books

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<tr>
<td>26</td>
<td>J. Freind, <em>The history of physick; from the time of Galen, to the beginning of the sixteenth century</em>, Volume I (1725)</td>
<td>‘The treatise concerning the Pulse, which we have translated under the name of Philaretus, is in the Manuscript there said to be written by Theophilus: and perhaps not without reason. For the structure of the human body is done much in the same manner; he says others had written upon this subject either too imperfectly, or too prolixly: by the last expression he seems to mean Galen, of whom indeed he gives us here only an Epitome, drawn out of his books of making a Prognostick from the Pulse.’</td>
<td>No specific reference provided</td>
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**De Crisibus, On Crises**

Three books

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<tr>
<td>27</td>
<td>J. Freind, <em>The history of physick; from the time of Galen, to the beginning of the sixteenth century</em>, Volume I (1725) Reference is within a passage addressing approaches to the treatment of 'a Causus' or 'a spurious burning Fever.'</td>
<td>‘For often this may be the most proper way of following, or assisting nature: Oribasius has a chapter (from Archigenes) upon this head', and <em>Galen</em> well observes, that one of the natural means of bringing this distemper to a crisis is by a <em>Looseness</em>.' Relevant footnote says: 'c De Cris. 3.3.'</td>
<td>Book 3, chapter 3</td>
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**In Hippocratis de Salubri Victus Ratione, On Hippocrates' ‘Regimen in Health’**

One book

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<td>28</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘To be a little more particular; if we inquire, with what Intention he bled in acute Distempers, we shall find, that it was either to lessen the Quantity of Blood, when the</td>
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1385 Ibid., p. 91.
See also, row 3, which is under *In Hippocratis Aphorismi*, and Appendix B, row 10

Constitution was *Plethoric*, and thereby to diminish the morbid Matter.¹³⁸⁷


### References to spurious Galenic texts

#### *Definitiones Medicae, Medical Definitions¹³⁸⁹*

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<td>29</td>
<td>J. Barker, <em>An essay on the agreement betwixt ancient and modern physicians</em> (1747)</td>
<td>‘But, on the other Hand, when Nature is said, as it is by some Philosophers, to be the Faculty which governs the Animal, that self-moving Power which is the Cause of the Formation, Production, and Perfection of the Animal, or when it is defined to be that <em>innate Fire</em>, or <em>Spirit</em> which actuates and preserves the Body, it must be taken in an active Sense, to signify in internal Principle of Motion in the Body.’</td>
<td>No specific reference provided</td>
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<td></td>
<td></td>
<td>Footnotes say: ‘* Finitiones Med. GALEN. adscript. * Ibid.’¹³⁹⁰</td>
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¹³⁸⁸ Ibid., p. 157.
<table>
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</table>
| J. Barker, *An essay on the agreement betwixt ancient and modern physicians* (1747) | Follows immediately after the above quote, partially overlapping: ‘[...] it must be taken in an active Sense, to signify in internal Principle of Motion in the Body. --- In this Sense likewise it is, that Nature is said by the Stoicks to be an artificial Fire *.

It is in this active Sense of the Word Nature, that the Terms of *Nature* and *Art* are thought to coincide, or that Nature is considered as Art; since in this Sense Nature as well as Art, may be defined to be an efficient Cause, which ends either in some Energy, or in some Work. Accordingly PLATO considers Nature as a divine Art, or as the highest kind of Art †, and GALEN defines it to be the principal of those Arts which administer to Health ‡.

Relevant footnotes say: * Πύρ τεχνικὸν Finitiones Med. GAL. adscript. † Ibid. ‡ Here, the Greek phrase corresponds to the ‘artificial Fire’ above. |

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## Introductio seu Medicus, Introduction

<table>
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<th>Early modern reference to text</th>
<th>English translation of Galenic text</th>
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</table>
| 31  | F. Clifton, *The state of physick, ancient and modern, briefly consider'd: with a plan for the improvement of it* (1732) | ‘Though indeed it must be confessed, that before *Pythagoras*’s time [...] there was a strange inclination in Physicians to Enthusiasm; and what they would not be at the pains to cure by dint of Observation and Experience, they were very ready to attempt by Charms and Amulets. These were common in the days of *Æsculapius*, who, as *Celsus* and *Galen* tell us, was the first that rescued Physick from the hands of the vulgar, and, rejecting the idle part, adhered to the solid.’
|     |   | Footnote says: ‘*a* See *Celsus*’s preface, and the first chapter of *Galen*’s book called *Medicus*.’ | Although this reference contains little detail, it is likely to refer to *Introductio seu Medicus*, the first chapter of which is entitled: ‘Comment fut inventée la médecine?’ [How was medicine invented?] and mentions Asclepios. |

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1392 See C.G. Kühn (ed.), *Galen* *Opera Omnia*, Volume XIV. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: [Int.]*.


1394 Ibid., p. 4.

Appendix D  
Galen as source – summary table of references and citations shown in Appendices B and C

These tables summarise the content of Appendices B and C, showing the Galenic texts referenced, alongside the authors mentioning them and brief additional information, including the specific books and chapters where this is provided. This Appendix is also arranged by the works most frequently mentioned, and then by their appearance in Kühn. Rows are numbered according to the numbering of the originating Appendix, denoted by a letter alongside the row number.

De Methodo Medendi, On the Therapeutic Method\textsuperscript{1396}

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\textsuperscript{1396} See C.G. Kühn (ed.), Galeni Opera Omnia (20 Volumes, in 22 books), Volume X (Leipzig, 1821-1833). Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: MM. See also Appendix B.
### In Hippocratis Aphorismi, On Hippocrates’ ‘Aphorisms’

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### De Locis Affectis, On the Affected Parts

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\(^{1398}\) See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume VIII. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Loc.Aff*. See also Appendix B.
### De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus, On the Powers [and Mixtures] of Simple Drugs

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### In Hippocratis Epidemiarum Libri (or, In Hippocratis de morbis vulgaribus), On Hippocrates’ ‘Epidemics’

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1399 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume XI-XII. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: SMT. See also Appendix C.

### De Usu Partium, On the Usefulness of the Parts of the Body

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### Ad Glaucjonem de Methodo Medendi, Therapeutics to Glaucjon

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1402 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume XI. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: MMG*. See also Appendix C.
### De Curandi Ratione per Venae Sectionem, On Treatment by Bloodletting

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### De Compositione Medicamentorum secundum Locos, On the Composition of Drugs According to Places

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### De Ptisana, On Barley Soup

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1405 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume VI. Abbreviation in R.J. Hankinson (ed.), The Cambridge companion to Galen: Ptis. See also Appendix B.
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<sup>1406</sup> See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume XIV. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Praen*. See also Appendix B.


**Quod Optimus Medicus sit quoque Philosophus, The Best Doctor is also a Philosopher**

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**De Temperamentis, On Mixtures**

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**De Naturalibus Facultatibus, On the Natural Faculties**

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**De Placitis Hippocratis et Platonis, On the Doctrines of Hippocrates and Plato**

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1410 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume I. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Temp*. See also Appendix B.  
1411 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume II. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Nat.Fac*. See also Appendix B.  
1412 See C.G. Kühn (ed.), Galeni Opera Omnia, Volume V. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: PHP*. See also Appendix B.
### De Sanitate Tuenda, On the Preservation of Health

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### De Praesagitione ex Pulsibus, Prognosis by Pulses

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### De Crisibus, On Crises

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### In Hippocratis de Salubri Victus Ratione, On Hippocrates’ ‘Regimen in Health’

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1413 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume VI. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: San.Tu*. See also Appendix B.
1415 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume IX. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: Cris*. See also Appendix C.
**De Ordine Librorum Propriorum, On the Order of my Own Books**

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*References to spurious Galenic texts*

**Definitiones Medicae, Medical Definitions**

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**Introductio seu Medicus, Introduction**

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1418 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume XIX. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: [Def.Med.]* See also Appendix C.

1419 See C.G. Kühn (ed.), *Galeni Opera Omnia*, Volume XIV. Abbreviation in R.J. Hankinson (ed.), *The Cambridge companion to Galen: [Int.]* See also Appendix C.
Appendix E

This reproduces the table within William Black’s *An historical sketch of medicine and surgery*, entitled ‘A CHRONOLOGICAL CHART OF MEDICAL AND SURGICAL AUTHORS’. It provides a great deal of information regarding the broad narrative of the history of medicine, and shows the relative dates of activity and general area of medicine of notable practitioners from 400 BC to 1800 AD.\footnote{W. Black, *An historical sketch of medicine and surgery, from their origin to the present time* (London, MDCCLXXXII [1782]), unnumbered page, following p. vi.}
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