
Caricatures, Myths & White Lies

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Abstract

Pedagogical situations require white lies: in teaching philosophy we make decisions about what to omit, what to emphasise, and what to distort. We are interested in when it is permissible to distort the historical record, arguing for a tempered respect for the historical facts. We focus on the rationalist/empiricist distinction, which still frames most undergraduate early modern courses despite failing to capture the intellectual history of that period. We draw an analogy with Michael Strevens' view on idealisation in causal explanation to distinguish between *myths* and *caricatures*. The former are distortions of the historical record which undermine students' understanding of the past, despite having other pedagogical benefits (being illuminative of some other period, or helping uptake of philosophical skills and methods). The latter are distortions which either increase, or are indifferent to, understanding of the past. Myth-making, we argue, is unjustified.

Keywords

Pedagogy, early modern philosophy, rationalism, empiricism, experimental philosophy

1 Introduction

A lie-to-children is a statement that is false, but which nevertheless leads the child's mind towards a more accurate explanation, one that the child will only be able to appreciate if it has been primed with the lie (Pratchett, Stewart, and Cohen 2002, 43).

No teacher can escape white lies while chasing their pedagogical goals. But, in a philosophical context, which distortions are acceptable and which should be avoided? Our aim is to provide an abstract analysis of this issue, and to argue for a tempered respect for history. In brief, we argue that teachers may distort many details of the actual history of the early moderns and other periods, even when those distortions are to benefit understanding something other than that period (to help illustrate a distinction in contemporary epistemology, for instance). However, such distortions are beholden to history: if the misrepresentations cause students to misunderstand the nature of the period, they ought to be avoided.

The ‘Otago School’ has argued that the epistemological distinction between rationalism and empiricism (hereafter RED) ought to be replaced by a methodological distinction. Their position provides an opportunity to reflect on the role of truth-telling in philosophical pedagogy. There is good reason to think that understanding early modern philosophy as a dispute between British Empiricists, the canonical bunch being Locke, Berkeley and Hume, and the Continental Rationalists—Descartes, Leibniz and Spinoza—is an error. However, reading the empiricists and the rationalists *as* empiricists and rationalists is how many of us were taught, and still teach. So, ought we abandon the RED in pedagogical contexts, or should it be kept? This, we think, depends in part on our pedagogical aims. Teachers of early modern philosophy are interested in instilling a passion for, and knowledge of, the early moderns—but they also have other goals, such as passing on philosophical skills and using the early moderns as a way into contemporary epistemology. Tensions may arise between these aims: the teacher more concerned with contemporary philosophy might be more willing to play fast and loose with the past than one interested in the history of ideas. Our purpose here is to show how this tension should be navigated: how much truth ought be sacrificed for pedagogical success? Certainly, some white lies are necessary: teaching the history of

philosophy in all its detailed glory would undermine pedagogical goals. But we argue that some distortions—*caricatures*—are licenced, while others—*myths*—are not.

We begin by summarising the case against the RED, and characterising why this matters for our understanding of the early modern period. With this background in place we then focus on an ‘instrumentalist’ position: the teacher interested in using the RED to teach about contemporary philosophy. We argue that the instrumentalist position should be rejected both because of its lack of respect for the truth, and due to its reliance on an unlikely, or at least unsupported, empirical claim. The instrumentalist is tempted to teach myths and we think they should resist this temptation. We then draw an analogy with Michael Strevens’ account of causal explanation to distinguish between myths and caricatures. We argue that because every philosopher has reason to respect the truth of history to at least some extent, a set of ‘core truths’ should emerge, which are essential for understanding that period and its influence. A caricature retains core truths, while a myth distorts them.

This distinction exonerates the caricaturist and vilifies the myth-maker. But it is also constructive: it provides guidance to the teacher. By identifying the core we discover what can be simplified and what cannot. Moreover, this shows how teaching and research can proceed in lock-step. Identifying ‘core truths’ of a historical episode or period is undoubtedly a matter of cutting-edge philosophical and historical research, yet this feeds directly into pedagogical concerns. Moreover, the act of teaching itself can be read as the expression of a hypothesis about what those core truths are. Cutting-edge research and teaching, then, are not independent.

Before we begin, two caveats are in order. Firstly, while we use the language of ‘truth’ and ‘falsity’ with respect to historiographical frameworks, we are not committed to the idea of frameworks being ‘true’ or ‘false’ of historical periods or episodes. We use

this language for simplicity's sake. We could cash out our concerns by talking instead about illumination, historical sensitivity and nuance. Moreover, we are happy to admit *truths* (in the plural) about history. That is, depending on our explanatory interest, there may be several equally legitimate ways of carving up historical landscapes. However, we do not think that *all* historical claims or frameworks are equal: some are false or not illuminative. Secondly, while we provide several cases to support our argument, we are interested in making an abstract point. Our examples are intended to be illustrative. Thus, in this paper, we are not especially committed to the superiority of other frameworks over the RED, nor to the acceptability of teaching Descartes' *cogito* in a particular way. These caveats should alert our readers to the fact that we provide little in the way of practical advice to philosophy teachers. We are not dismissing the practical issues as unimportant—indeed, recent discussion on blogs like *The Mod Squad*¹ and in journals such as *Teaching Philosophy*² has convinced us that these issues are important. Our abstract project underpins this practical one.

2 Against the RED

Traditionally, the study of early modern philosophy has been carried out within the framework of the RED. *Rationalism* is the doctrine that knowledge about the external world can be acquired *a priori*, and that this knowledge is superior to any provided by experience. It is characterised by an acceptance of the doctrine of innate ideas, that is, the doctrine that the mind contains ideas, or knowledge of some kind, prior to any experience. It follows from this doctrine that since innate ideas are born in everyone, they must be universal (Markie 2012). *Empiricism* is the doctrine that external world truths can be known only *a posteriori*, and that this knowledge is dependent on sense experience. It is characterised by a rejection of the doctrine of innate ideas. The RED typically divides early modern philosophers into two opposing camps: the British

empiricists, including Locke, Berkeley and Hume; and the Continental rationalists, including Descartes, Spinoza and Leibniz.

According to the traditional story, successive figures in each camp developed the epistemological assumptions of their aligned predecessors (e.g. Cushman 1911, Carruthers 1992, Lennon and Dea 2014). Moreover, each rejected the central claims of the opposing camp. And so, the early modern period can be characterised as two separate, dialectically opposed, progressions. This back-and-forth ended when Kant combined the insights of both rationalism and empiricism in his new Critical Philosophy. David Fate Norton has summarised this traditional narrative in the following parody:

It came to pass that the earth was without form, and void, and darkness covered the face of the earth. And the creator saw that the darkness was evil, and he spoke out in the darkness, saying 'Let there be light' and there was light, and he called the light 'Renaissance'. But still the creator was not pleased, for there remained darkness, and hence he took from Renaissance a rib, with which to fashion greater light. But the strain of his power broke the rib, and there did grow up two false lights, one Bacon, whose name meaneth 'Father of the British Empiricists', and one Descartes, whose name meaneth 'Father of the Continental Rationalists'.

And because the creator saw that these were false lights, and that they should war with one another, he set them apart and divided them by a great gulf, and said unto them, 'Thus shall you labor apart until there shall grow up out of the East, yea, even out of Koenigsberg, a great philosopher who shall be neither of you and yet like unto both of you, and he shall bring true light and unite you'.

And thus it was that Bacon begat Hobbes, and Hobbes begat Locke, and Locke begat Berkeley, and Berkeley begat Hume. And thus it was that Descartes begat Spinoza, and Spinoza begat Leibniz, and Leibniz begat Wolff. And then it was that there arose the great sage of Koenigsberg, the great Immanuel, Immanuel Kant, who, though neither empiricist nor rationalist, was like unto both. He it was who combined the eye of the scientist with the mind of the mathematician. And

this too the creator saw, and he saw that it was good, and he sent goodly men and scholars true to tell the story wherever men should henceforth gather to speak of sages past (Norton 1981, 331).

This view of seventeenth- and eighteenth-century Western philosophy has dominated study of the early modern period.³ Since the late twentieth century, however, it has increasingly come under attack.⁴ Alberto Vanzo (Vanzo 2013) has argued recently that critics of the RED typically hold that the distinction introduces three biases into early modern scholarship:

- 1) The *epistemological bias*. Histories of early modern philosophy based on the RED tend to overemphasise the role of epistemological commitment in the central doctrines, developments and disputes of early modern philosophers.
- 2) The *Kantian bias*. Histories of early modern philosophy based on the RED tend to overemphasise the lack of common ground between the two camps and Kant's role in drawing the early modern period to a close.
- 3) The *classificatory bias*. Histories of early modern philosophy tend to overemphasise the extent to which all or most early modern philosophers can be classified as either empiricists or rationalists. This has led to some unconvincing, shoehorned classifications, and a failure to recognise the extent to which 'rationalists' were influenced by 'empiricists' and vice versa.

The Otago School, led by Peter Anstey (Anstey 2005), argue that there is a better way to interpret many developments in seventeenth- and eighteenth-century philosophy: in light of the distinction between *experimental* and *speculative* philosophy (hereafter ESD). Where the RED is an epistemological distinction focusing on knowledge's ultimate source and justification, the ESD is methodological and explanatory: it asks how we go about generating knowledge, and explaining natural phenomena and, for a number of eighteenth-century philosophers, moral phenomena (e.g. Demeter 2014, Gomez 2012a).

Speculative philosophy states that natural phenomena can be explained without recourse to systematic observation and experiment. To characterise it broadly, speculative philosophy encourages the use of hypotheses and conjectures in the construction of speculative metaphysical systems, without recourse⁵ to observation and experiment. In contrast, experimental philosophy states that natural phenomena can only be explained after observations have been collected and ordered. Thus, observations form the basis of explanation.

We introduce the ESD to make the point that there are alternative frameworks to the RED;⁶ we needn't settle for a distinction that no longer earns its keep. As this will matter when we discuss whether the RED should be taught despite its falsity, it is worth showing how the ESD avoids the RED's pitfalls.

2.1 The ESD Avoids the Epistemological Bias

The ESD does not introduce the epistemological bias, because it is broader in scope and more modest than the RED. Firstly, while the RED is an epistemological distinction, concerned with the origins of ideas and sources of knowledge, the ESD is a methodological distinction, concerned with the process of acquiring knowledge.

Although the ESD is epistemological insofar as it addresses issues about the sources of knowledge, it also addresses the nature of hypotheses, principles, mathematics, experiment and natural history. This allows it to present a more comprehensive picture of natural philosophy and to provide a more nuanced understanding of individual philosophical positions and debates. An interesting upshot of this picture, deserving of further investigation, is that it promotes a view where philosophical progress is driven by *scientific achievement*, *technological development* and *methodological innovation*. This stands in stark contrast to the view at least implied by the RED, in which philosophical progress is driven by *epistemology*, that is, discourse on the nature of justification and foundationalist

accounts of knowledge. These are two very different narratives about the history of ideas.⁷

Secondly, the RED only addresses sources of knowledge about the natural world, so the distinction only applies to natural philosophy. In contrast, while the ESD emerged from natural philosophy, it was eventually applied to other areas of philosophy, including moral philosophy, political philosophy and aesthetics. For example, Turnbull applied the experimental philosophy to art in his *Treatise on Ancient Painting* (1740) and to moral philosophy in his religious texts, the *Philosophical Enquiry Concerning the Connexion between the Doctrines and Miracles of Jesus Christ* (1731) and the *Principles of Christian Philosophy* (1749).⁸ So the ESD not only has a broader explanatory range than the RED, but it allows us to understand common and unifying features of early modern philosophy, thus providing a better understanding of the development of modern thought.

Finally, the RED is typically presented as the fundamental source of division amongst the philosophical community. It is taken as the explanation for the most salient disputes, developments and doctrines in early modern philosophy. In contrast, while the ESD was an important distinction, and one on which many early modern philosophers took a side, there were other sides to be taken about other issues concurrently. It was possible for philosophers to find themselves on the same side of the ESD, and yet on opposing sides of debates about, say, the nature of light, the permissibility of the mechanical hypothesis, or the use of technology such as microscopes or mathematics. Many of these debates took place either independently of the ESD, or on one side or the other of the distinction. So the ESD does not introduce the epistemological bias, because it leaves room for the philosophical doctrines, developments and disputes of the early modern period to be influenced by other factors.

2.2 The ESD Avoids the Kantian Bias

The ESD does not introduce the Kantian bias. Histories of early modern philosophy based on the RED tend to portray Kant as the crucial figure. It is said that he discovered the limitations of both empiricism and rationalism, rejected their failures, and incorporated their successes into his own Critical Philosophy. Moreover, Kant's Critical Philosophy is held up as a superior alternative to both rationalism and empiricism, rather than simply a superior form of either rationalism or empiricism (Vanzo 2013, 54).

Even *mutatis mutandis*, we cannot tell a similar story about experimental and speculative philosophy. Speculative philosophy does not rule out the use of experiment or observation, but rather, assigns it a secondary role in natural philosophy. And experimental philosophy, while emphasising the importance of experiment and observation, does not rule out speculation. In experimental philosophy, the speculative step ought only to be carried out after the experimental step has been completed. Thus, these two approaches are not opposites in the same way that rationalism and empiricism are. Moreover, the experimental philosophy was very much a work in progress: there was a lot of variation in how it was practised, and so there was room for improvement. The modification and development of experimental philosophy occurred via a process of technological improvement and is closely related to scientific success. The experimental philosophy became increasingly dominant, sophisticated and successful, and the speculative philosophy fell by the wayside (Anstey and Vanzo 2012, 501).

2.3 The ESD Avoids the Classificatory Bias

The ESD does not introduce the classificatory bias, because it does not make the same assumptions about classification as the RED. Firstly, it does not assume that all individuals or disciplines can be classified as either experimental or speculative. While individuals often aligned themselves with one side or the other of the ESD (for example,

the early Fellows of the Royal Society identified themselves as experimental philosophers), the distinction classifies neither people nor disciplines. Rather, the distinction between experimental and speculative philosophy is primarily a distinction between approaches or methodologies. It is conceivable that an individual could practise experimental philosophy at one time and practise speculative philosophy at another. An example of such an individual might be Locke, who favoured experimental natural philosophy, while thinking that it was possible to establish a system of moral philosophy *a priori* (e.g. Anstey 2011). Various figures, then, will at some points in their lives, and when considering particular questions, adopt an experimentalist stance—and at others adopt a speculative stance. Moreover, the ESD is independent of disciplinary boundaries, since it may be possible to approach a given discipline both experimentally and speculatively. So the ESD does not attempt to force people or disciplines into one category or the other.⁹

Secondly, the ESD does not attempt to impose an anachronistic framework on early modern philosophy, and so it does not face the same issues with interpreting positions and drawing boundaries. While the RED was introduced in the late eighteenth century by Kantian scholars to make sense of the early modern period, the ESD was in use during the early modern period. That is, the philosophers in question framed their own work in terms of the distinction between experimental and speculative philosophy. So, while Boyle, Locke and Newton (for example) would have been very familiar with the ESD, they would not have recognised the RED. The terms ‘rationalism’, ‘empiricism’ and their variants were used during the period, but these had very different meanings to the ones eventually assigned to them by the RED (Gomez 2012b). The ESD, then, allows us to meet early modern philosophers on their own terms. We can address their concepts and practices according to the methodological terms and distinctions that they

drew themselves. It is possible to be guided by their declarations, leaving less room for misinterpretation.¹⁰

Finally, because the ESD avoids the classificatory bias, it also avoids a related difficulty: how to define the categories so that they can be applied in every case. On the RED, it is difficult to settle exactly what the terms ‘rationalism’ and ‘empiricism’ mean. Scholars have been forced to make more fine-grained distinctions between different types of empiricism. For example, Charles Wolfe distinguishes between three types of empiricism (Wolfe 2010), while Eric Schliesser distinguishes between four (Schliesser 2010). This leads to, what Anstey and Vanzo have called, a ‘proliferation of empiricisms’ (Anstey 2010, Vanzo forthcoming). But on the ESD, while the terms of reference are vague, it is possible to work out where the sympathies of particular philosophers lie, since they presented their positions in precisely these terms. Moreover, the proliferation of empiricisms leaves the RED demarcation line (or lines) open to debate: if scholars cannot agree on what empiricism and rationalism amount to—or how many kinds of empiricism there are—then they cannot use these terms to classify the individuals involved in any straightforward way. In contrast, the ESD provides a far more natural line of demarcation: the individuals in question drew the line and took up explicit positions themselves.

This has been, of course, only a brief tour of the advantages of the ESD over the RED and should not be taken as the final word; our purpose here is to provide enough information to underwrite the forthcoming discussion. The point is this: *qua* the early modern period, the RED is mistaken and there are plausible alternatives (the ESD being just one). Suffice to say, there is very good reason to think the RED is a misleading way of understanding the early moderns *as they saw themselves* and, we think, fairly good reason to think that the RED misinforms us about the early modern period *in general*.

Understanding the RED is, of course, very important for understanding what Biener and Schliesser have called ‘philosophy’s self-constructed narrative’ (Biener and Schliesser 2014, 5)—that is, to understand why epistemology progressed as it did post-Kant. However, it is folly to think that we get a better understanding of *Hume* (as opposed to a better understanding of how much later philosophers understood Hume) by casting him as an empiricist.

3 Myth-making

Some philosophers teach the RED as a way into contemporary epistemology. They might be tempted to keep the distinction—despite its inaccuracy—for its effectiveness towards that purpose. Such teachers are ‘myth-makers’: they distort the truth about the past on the justification that those distortions help us better to understand the present. In this section we consider someone who takes a completely instrumentalist stance on the historical content of her teaching—she aims only to maximise her students’ uptake of *contemporary* epistemology or general philosophical skills.

On what basis would such a pedagogue continue to teach the RED—and moreover to set readings from Descartes, Hume and friends? As we see it, there are two potential arguments. The first argument claims that teaching contemporary epistemology through the RED is more *effective*. The second argument claims that the RED is *necessary* for understanding contemporary epistemology or some philosophical skills. Both of these fail.

Reading the primary sources in an RED context may be a very effective way of instilling the essential notions, approaches and concerns of contemporary epistemology. One reason for this might be that connecting the discussion to figures such as Hume and Descartes lends a certain *gravitas* in the eyes of students. Or perhaps the readings themselves provide particularly stark, clear or convincing examples of epistemology—

indeed, one reason for the *Meditations*' popularity is surely its style, as the reader is led step-by-step through the reasoning process behind attempts to establish certain foundations in the face of scepticism. In short, teaching contemporary epistemology in this way *might just work*.

The above argument turns on the following empirical claim:

- C1. Teaching contemporary epistemology by drawing on the early modern period with an RED gloss is the most, or at least a very, effective manner of instilling new knowledge and skills in undergraduate students.

What reason, if any, do we have to *believe* C1? There are certainly no studies (at least that we can find) testing the efficacy of such a method. Moreover, as we were introduced to epistemology through the RED, we lack the right contrasts to be able to judge which is more effective. Thus, we should be even more distrustful of anecdotal evidence than usual. Having said this, we agree that *if* this empirical claim were plausible, then the teacher who is *only* concerned with the past for imparting contemporary philosophical knowledge would be justified. Our position is simply that, in lieu of actual evidence—and in light of our possible biases in favour of the RED—the empirical claim, C1, is suspect.

The second argument makes the following claim:

- C2. The RED is necessary for understanding contemporary epistemology.

Let's assume this claim is true—after all, this was the backdrop against which epistemologists worked throughout the twentieth century. The problem is that it doesn't follow from C2 that it is *necessary* for the distinction to be connected to early modern philosophy. The distinction could be taught without telling myths about Spinoza. Moreover, recall that, according to the Otago School the RED was created by Kantian philosophers trying to make sense of Kant's 'synthesis' (Vanzo forthcoming). Why not

teach it in that context? This approach does not even forgo exposing students to, say, the *Meditations*. One could teach the *Meditations* while explicitly explaining that the Kantian gloss influenced twentieth-century epistemology, but it is not true of the early moderns. In short, one could teach the myth *as a myth*.

And so both arguments for myth-making fail. Moreover, there are also two negative arguments to be made against teaching the RED. Firstly, quite simply, the truth should be given weight in pedagogical contexts (surely it should at least be our starting point!) and this lends *pro tanto* support to avoiding myth-making. Secondly, the philosopher *only* concerned with contemporary epistemology, who nonetheless covers the early moderns, is surely herself a myth. More realistically, we have both historical and ahistorical aims when we introduce students to these authors. In this context, *even if* we are partly convinced by arguments in favour of myth-making, these need to be balanced against the damage done to the past.

And so, myth-making in the service of teaching contemporary epistemology is a mistake. Firstly, it is doubtful that it is more effective. Secondly, the concerns of contemporary epistemology need not be connected to the early moderns. And thirdly, damage is done to both truth and the aim of instilling knowledge about the history of ideas. This, however, is not the whole story of white lies in philosophical pedagogy. Indeed, if we argued for an outright ban on simplifying or distorting past truths this would cripple teaching. Let's turn to the philosopher who has at least some concern for the history of ideas. She must balance the needs of pedagogy with the demands of historical accuracy. She must be a careful *caricaturist*.

4 Caricatures

The truth, the whole truth, and nothing but the truth is no teacher's maxim. Even if we are interested in teaching the early modern period both for its own sake, and to instil a

general understanding of, and passion for, the history of ideas, we cannot be expected to expose students to all of the complex glory of the past. Indeed, even if this were possible, students would drown in the details. No. Simplifications and white lies are necessary. The challenge, then, is to distinguish vicious from virtuous lies.

In this part of the discussion, we begin with an example of what we take to be a ubiquitous virtuous lie: presentations of Descartes' *cogito*. We then cash out the distinction between 'caricatures' and 'myths', drawing an analogy with Strevens' account of scientific explanation. We treat caricatures as idealisations serving pedagogical purposes.

4.1 *White lies and Descartes' cogito*

In any pedagogical context, omissions are necessary—as are certain changes in emphasis. We cannot include every important figure, paper, book or argument. Some themes must be foregrounded while others are backgrounded. We are not concerned with such *omissions*, rather we are interested in outright *distortions*. When, if ever, is it permissible to present false information about philosophical views and arguments in the philosophical classroom?

Let's begin with a common case of distortion: the pedagogical treatment of Descartes' *cogito* argument. The *cogito* is usually presented as arising *ex nihilo* from Descartes (it didn't), that it is a simple, single argument (it isn't), and that the *cogito* formulation appears in the *Meditations* (it doesn't)¹¹. However, these distortions strike us as suitable given the pedagogical aim of getting students on-board with the foundationalist project of the *Meditations*. Retaining these distortions does not strike us as irretrievably harmful to students' understanding of Descartes, or doing too much violence to their understanding of his predecessors. Moreover, it is plausible that correcting such distortions would block pedagogy by muddying the cognitive waters.

It seems to us, then, that the difference between unlicensed myth-making such as presenting the early moderns in terms of the RED, and licenced caricature in the case of the *cogito*, turns on two main factors: our pedagogical goals and the nature of the truths in question. With regard to our pedagogical goals, we need to consider just what it is that we are trying to teach. If our aim in teaching Descartes is to link him with prior influences (rather than epistemic foundationalism), then presenting the *cogito* as though it originated with Descartes would be impermissible. With regard to the kinds of truth in question, unless we are purely instrumental in our treatment of the past, we must respect the facts. But some facts deserve more reverence than others. Distorting the subtleties of the *cogito* appears less disastrous an affront than inflicting the RED on the early moderns. The reason seems to be, that the former gets what *matters* about the truth right—and for some pedagogical benefit—while the latter does not.

We take the term ‘caricature’ from Sorell’s (Sorell 2010) discussion of distortions in philosophical understandings of major figures. He points out the tension between ‘two cultures’ in philosophy: the specialists who focus on discovering truths, or at least rational reconstructions, of past figures, and the more general philosophers who tend to use canonical figures to situate and motivate their work. Sorell stops short of providing any specific guidance here:

I do not know if there is a solution to this problem. Philosophers who have tried to produce philosophically relevant specialist commentary on Descartes often get disowned or ignored by one part or the other—the caricature-mongering philosophers or the specialist commentators (Sorell 2010, 160).

The distinction we draw between myth-maker and caricaturist in a pedagogical context can be of service to Sorell’s worries. We shall provide a framework wherein some truths about the philosophical canon are sacrosanct—the *core* facts—while others

are not. As we shall see, determining what the ‘core’ facts are is the task of Sorell’s ‘specialist commentators’. So long as the core is respected, the commentators should be happy with caricature in pedagogy and in general philosophy.

4.2 Drawing an analogy: Strevens’ account of scientific explanation

So, how do we distinguish between myths and caricatures? A parallel question plays out in the philosophy of science, from which we think an account can be drawn. The question is this: which of the world’s swarming and intricate causal relations are relevant for explaining some particular event? Here, unless an unworkable *all of them* (similar to the unworkable ‘never distort’ in teaching) is arrived at, we require a distinction between the *explanatorily relevant* parts of the case and those which are irrelevant. Indeed, causal explanations sometimes involve *idealisations*—outright falsehoods.

Consider, for example, Newton’s argument for universal gravitation. The argument proceeds step-by-step from the motion of the moon with respect to the Earth, the motions of the moons of Jupiter and Saturn with respect to Jupiter and Saturn and the motions of the planets with respect to the Sun, to the forces producing those motions (namely, gravity). Newton’s argument rests on observational evidence: the observed motions of celestial bodies (he lists them as ‘Phenomena’ at the start of the *Principia* book 3). In order for the argument to work, he idealises this evidence in several ways. Firstly, they describe continuing patterns of motion, rather than particular observations or measurements. So, while the phenomena are detected and supported by astronomical observations, they are not observed or perceived *directly*. Secondly, they describe *relative* motions of bodies: in each case, the orbit is described around a fixed point. For example, phenomenon 1 takes Jupiter as a stationary body for the purposes of the proposition. In phenomena 4 and 5, Jupiter is taken to be in motion around a stationary sun. Thirdly, they do not prioritise the observer. Rather, each motion is described from

the *ideal standpoint* of the centre of the relevant system: the satellites of Jupiter and Saturn are described from the standpoints of Jupiter and Saturn respectively, the primary planets are described from the standpoint of the Sun, and the moon is described from the standpoint of the Earth.

These idealisations play an important role in Newton's argument: in order for it to get off the ground he must show that the Earth-Moon system is explained by the law of gravitation, and to do this he must idealise in two senses. The first, as we have seen, is in characterising data. The second involves imagining the Earth and the moon as a two-body system, which it manifestly is not. Newton's disregard for the effects of the sun, meteors, and other planets is presumably explained by their irrelevance in that context. And so, both in characterising and explaining his target, Newton idealises. It is possible that such idealisations are necessary for the explanation to succeed (Weisberg 2007); that demanding a higher standard of precision would actually undermine Newton's explanatory work. That is to say, Newton captures the essential dynamics of celestial systems in part in virtue of these idealisations.

Let's imagine that the story we've given is true: why would it be so? Like in the pedagogical case, this depends on two factors: explanatory aims and the relevant facts. This makes for a relatively clean analogy and gives us licence to co-opt some machinery. We want to know which idealisations are acceptable and which are not, and Michael Strevens' *Depth* (Strevens 2008) gives us such a story. We are not here concerned about its applicability to causal explanation, but in how it can be utilised for the task at hand.

Strevens is concerned with causal explanations of conditional generalisations. He argues that, in using such explanations, distortions or idealisations are typically required. For example, Newton's statement of the area rule (*Principia* book 1 propositions 2 and 3) can be paraphrased as the following biconditional generalisation: *A body around a point*

obeys the area rule in relation to that point iff the motion of that body is maintained by a centripetal force directed towards that point. This rule can only be obeyed exactly in a one-body system, where a body, say a moon, orbits a (mathematical) point. If there is more than one body in the system, say the moon orbits a planet instead of a point, then, by Newton's third law, the mutual attraction between the moon and the planet interferes with the moon's ability to obey the area rule in relation to that planet. The truth is distorted and various perturbations are swept under the rug. When are such distortions licenced?

For Strevens, causal explanations have two ingredients. The first, he calls the *causal mechanism*: all the parts of world which, when taken together, *causally entail* the event. Causal mechanisms are complex and contain much information which, explanatorily speaking, seems irrelevant. For instance, the Newtonian explanation of the apparent retrograde motion of Mars appeals to Newton's laws of motion and the relative positions of the Earth and Mars with respect to the Sun. It does not include all that is required to causally entail retrograde effects in real-world systems, such as facts about geometrical or physical optics—even though these factors do make a difference to how the effect occurs.

The second ingredient, Strevens calls *explanatory relevance*. To be relevant, a force must both be part of the causal mechanism (that is, it must, in combination with the rest of the mechanism, causally entail the event) and changes in its value must make a difference to the occurrence of the event. To take a simple example, for Strevens a match's lighting under normal conditions on Earth *is* caused by the match being struck, as if it were not struck, or struck differently, the match would not light. Moreover, the presence of oxygen *does not* make a difference, as for all relevant variation on oxygen levels the match would still light when struck. The best explanation of a causal event, then, represents the explanatorily relevant parts of the causal mechanism in question;

factors which are not explanatorily relevant may be idealised. Celestial bodies in orbit would still approximately follow the area rule, even with variation in the positions and masses of other bodies in the system. Newton's explanation of why such objects approximate the rule, then, can license distortions like presenting the objects as a two-body system—the other objects *do not matter* for the phenomenon at hand. Crucially, Strevens not only argues that distortions and idealisations are permissible for the irrelevant parts of the causal mechanism; they can actually make for a better explanation, since they help focus attention on the explanatorily relevant factors.

4.3 Distinguishing Myths from Caricatures

To return to the issue at hand, pedagogical distortions, let's draw out the analogue.

We can leave Strevens' concept of a 'causal mechanism' relatively unscathed: this will include whatever details in fact influenced the development of, say, Descartes' thought in the *Meditations*. This might include factors about his psychological development, chance events, which influences from classical philosophy survived, and so on. We can adapt Strevens' 'explanatory relevance' to pedagogy. *Pedagogical relevance* depends on the teacher's goal and the intended audience. Changes in some aspect of the causal mechanism might, upon presentation, increase or decrease the chance of students' uptake of the intended lesson. In place of difference-making across relevant contrasts, then, we want difference-making across audiences and knowledge-uptake. Presenting some piece of information is a *pedagogical difference maker* just in case it increases (or decreases) uptake of some fact or skill for some audience. Pedagogical relevance also differs from explanatory relevance insofar as things relevant to pedagogy need not be part of the causal mechanism. For instance, how we present the early moderns could be pedagogically relevant to contemporary epistemology, but contemporary epistemology is not part of the causal mechanism relevant to the early modern period. If we are right

about the *cogito*, then presenting the argument as being from the *Meditations*, arising *ex nihilo* from Descartes, and being simple and single, is justified if it increases uptake (1) of Descartes' foundationalist project (2) in undergraduate students. That is, in pedagogical contexts, distortions to some historical episode are justified given the aim of the pedagogy, and the intended audience. The distinction between 'myths' and 'caricatures' is, then, somewhat relative. However, we shall now argue that this account lends more deference to history than it may appear.

This adaptation of Strevens may seem to insufficiently respect history. As we have seen, the philosopher who is an instrumentalist about teaching the early modern period could defend teaching the RED if the empirical claim (C1) that the distinction aids students' uptake of twentieth-century epistemology is true. Although we doubt the empirical claim, it seems that *even if* it is true, a teacher who teaches the myth is making a mistake—and our account does not appear to protect against this. The problem is due to a disanalogy between pedagogy and causal explanation. Where causal explanation is centred on events in the world, pedagogy can centre on uptake of skills or events that are profoundly different to those presented—as in the case of using the early moderns as an inroad to twentieth-century epistemology. It could be that, for instance, an RED-based presentation of Locke is an excellent way of making certain aspects of philosophical argumentation salient. Pedagogical aims, then, are wider-ranging than causal explanations. It might be thought, then, that restricting distortions only by pedagogical relevance does not do enough to protect the truth.

Recall that our aim is to give an account of how to navigate the tension between pedagogical aims and the truth. By our account so far, permissible pedagogical distortions look a lot like permissible idealisations in scientific explanation. By analogy with Strevens' account, we should not distort details of the past when (1) those details

are *part of the mechanism* relevant to the case at hand and (2) they are *pedagogically relevant* in that changes increase uptake of the relevant knowledge in the relevant audience. But this does not stop enormous distortions of truth in cases where the mechanisms are different—that is, when we use the case as something like an analogy. If one is using the early moderns, not to teach about that period of history, but to illustrate some kind of reasoning or to teach, via analogy, some *other* period of history (for instance, twentieth-century epistemology), what restricts one's capacity to tell falsehoods?

As we have already discussed, in *pure* cases, the answer is: *nothing*. If it is truly the case that our only interest in drawing on historical detail is to either impart a philosophical skill, or to frame some other discussion, then our account does not protect the past from violence. However, as we pointed out earlier, pure cases are rare; possibly non-existent. Firstly, most teachers care, at least to some extent, about the past. Secondly, even if the teacher herself does not care, typically her students and her institution do. It seems reasonable to think that the interests of students and universities matter. Thirdly, undergraduate-level teaching shouldn't be too specialised. Students may wish to learn about the same historical period from different pedagogical perspectives, and misinformation may lead them astray. The interesting cases have *mixed pedagogical aims*.

In mixed cases the teacher must balance more than one pedagogical aim. This is, we think, one of the centrally challenging aspects of philosophical teaching. We are interested in both imparting philosophical skills and the nature of episodes in philosophical history. For this reason, we think it is reasonable to *prioritise* history. That is, distortions to historical cases are allowable only if such distortions do not foil the pedagogical aim of explaining that historical episode. And this is the case *even when our main pedagogical interest is ahistorical*.

There are two relevant sets of historical distortions required to make our position clear:

1. Distortions which *decrease* uptake of *understanding an historical episode*; and
2. Distortions which *increase* uptake of either *philosophical skills* or *understanding of some other episode*.

Distortions which belong to both sets are myth-making, despite their apparent pedagogical benefit. The justification for this lies in the pedagogue's commitment to the interests of her students and her institution: *even if* she herself couldn't care less about early modern philosophy, her students might—and so she is not justified in potentially undermining a future pedagogical aim in favour of the current one. It is in deference to our students' future research interests that we ought to defer to historical fact.

Recall our discussion of contemporary criticisms of the RED. These charged the distinction with over-emphasising the role of epistemology, the importance of Kant, and shoehorning a disparate and heterogeneous group of thinkers into two stark, over-simplified categories. If these criticisms are correct, then it seems likely that teaching the RED would fall into the first set: they actively decrease students' understanding of the historical episodes in question. By our account, even if the RED has an enormous pedagogical payoff in some other area, it is myth-making and should be abandoned.

And so, *caricatures*, which either (1) distort some past philosophy in aid of understanding that philosophy, or (2) distort some past philosophy in aid of a different pedagogical goal *but* don't undermine understanding that past philosophy, are licensed. However, *myths*, which distort some past philosophy, but *decrease* uptake of knowledge about that historical period, are not.

We have suggested that some distortions to the past in philosophical pedagogy are justified, while others are not. Even if it turns out that teaching the early moderns in

terms of the RED increases uptake of philosophical skills, or provides a stronger basis for understanding contemporary epistemology (which we doubt), this is not justified. It is not justified because, if the Otago School is right, teaching the RED will in fact *decrease* students' understanding of the historical episode itself. If our hunch about the *cogito* is correct, then presenting it as a single argument from the *Meditations* is kosher in some contexts. This is either because it helps understand the *Meditations*, or because it helps with some other pedagogical task—perhaps understanding philosophical reasoning—without doing damage to students' understanding of the *Meditations*.

5 Conclusion: pedagogy & research

We have argued, in effect, that history, or at least pedagogical aims targeting history, ought to take precedence over other pedagogical aims. The set of causally relevant facts and distortions which either boost, or are indifferent to, students' understanding of the historical episode in question, represent the *core* of that historical episode. Ideally, they should be treated as sacrosanct in almost all pedagogical contexts.

Our reasoning is that if in distorting history we undermine students' capacity to understand it, we undermine our own aims, those of the students, and even those of the institution to which we belong. There may be some cases where myth-making is justified (where, for instance, the pedagogue does not care about history and has very good reasons to think that neither her students nor her institution will either)—but in such cases, it seems to us, teaching the myths *as myths* is probably as effective as teaching them as history. After all, if the truth of a history doesn't matter to you or your students, why not simply be overt about the parable?

We have presented the situation as though there are two kinds of lies-to-children—caricatures and myths—and it is possible to tell the difference. Among those who teach early modern philosophy, it is frequently recognised that the situation is more

complicated than this. What you view as the ‘core truths’ will largely depend on your interpretation of the relevant texts. And so, when you’re teaching Hume, say, whether you present Hume as a sceptic or as a naturalist will depend on your interpretation of the relationship between the critical and constructive phases of his project. Teachers, then, have to make active judgments about history in order to avoid myth-making. It is somewhat common for what is taught in the philosophical classroom to lag behind the views of the ‘specialist commentators’ which Sorell discusses. This is understandable: when teaching, philosophers are constrained by their resources and their interests. Reworking a class from one based on the RED to a whole different framework represents an enormous cost. However, in some circumstances, the cost should be paid. These circumstances are when, as we see in the case of the RED, the specialist commentators agree that the framework itself in fact *hurts* our understanding of the historical episodes. This paints a close relationship between active research and teaching. In effect, the output of specialist commentators sets which distortions of the past are allowable in pedagogical contexts. In the other direction, what we choose to include in our undergraduate courses could be seen as expressions of our view about what is important about the historical episodes we discuss.

This is, of course, an ideal claim: in reality philosophy is frequently taught under enormous time constraints, by philosophers whose active research is in areas other than those taught. How much deference such teachers can pay to the past, when their courses are already written, the readings already set, and a mountain of administration must be climbed (to say nothing of the urgency of their own research!), will always be a difficult balancing act.

Philosophical pedagogues, nonetheless, should pause before painting the town RED, even if this shade is more likely to pass on the philosophical skills and contemporary

epistemological disputes they are interested in. They owe it to both their own and their students' interests to get what's important about the past right: to avoid myth-making and focus instead on careful, historically informed caricature. Those less interested in history, of course, could instead *teach the myth*, that is, present the past as a parable. Or, of course, they could just leave the past alone.

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6 References

- Adamson, Robert. 1903. *The Development of Modern Philosophy*. Edinburg: Blackwood.
- Anstey, Peter. 2005. "Experimental Versus Speculative Natural Philosophy." In *The science of Nature in the Seventeenth Century*, edited by Peter Anstey and J A Schuster, 215-242. Netherlands: Springer.
- Anstey, Peter. 2010. "On the Proliferation of Empiricisms". In *Early Modern Experimental Philosophy*. Accessed: 9 June 2013.
<https://blogs.otago.ac.nz/emxphi/2010/11/on-the-proliferation-of-empiricisms/>.
- Anstey, Peter. 2011. *John Locke and Natural Philosophy*. Oxford: Oxford University Press.
- Anstey, Peter. 2014. "Experimental Pedagogy and the Eclipse of Robert Boyle in England." *Intellectual History Review* no. Special Issue: Robert Boyle:1-17.

- Anstey, Peter, and Alberto Vanzo. 2012. "The Origins of Early Modern Experimental Philosophy." *Intellectual History Review* no. 22 (4):499-518.
- Ayer, A. J. 1953. "Cogito, ergo sum." *Analysis* no. 14 (2):27-31.
- Ayers, Michael. 2004. "Popkin's Revised Scepticism." *British Journal for the History of Philosophy* no. 12:319-332.
- Biener, Zvi, and Eric Schliesser. 2014. "Introduction." In *Newton and Empiricism*, edited by Zvi Biener and Eric Schliesser, 1-11. Oxford University Press.
- Boshiero, Luciano. 2009. "Networking and Experimental Rhetoric in Florence, Bologna and London during the 1660s." In *The Accademia del Cimento and its European Context*, edited by M. Beretta, A. Clericuzio and L. M. Principe, 195-210. Sagamore Beach: Watson Publishing International LLC.
- Buckle, Stephen. 1999. "British Sceptical Realism: A fresh look at the British Tradition." *European Journal of Philosophy* no. 7:1-29.
- Carruthers, Peter. 1992. *Human Knowledge and Human Nature*. Oxford: Oxford University Press.
- Copleston, Frederick C. 1946-1974. *A History of Philosophy, 11 Volumes*. London: Burns and Oats & Washbourne.
- Cushman, H. E. 1911. *A Beginner's History of Philosophy, Volume 2*. Boston: Houghton Mifflin.
- Demeter, Tamás. 2014. "Enlarging the Bounds of Moral Philosophy: Newton's method and Hume's science of man." In *Newton and Empiricism*, edited by Zvi Biener and Eric Schliesser, 171-204. Oxford University Press.
- Gaukroger, S. 2010. *The Collapse of Mechanism and the Rise of Sensibility*. Oxford: Clarendon Press.
- Gomez, Juan. 2010. "Turnbull and the 'spirit' of the experimental method". In *Early Modern Experimental Philosophy*. Accessed: 2010.

- <https://blogs.otago.ac.nz/emxphi/2010/10/turnbull-and-the-%E2%80%98spirit%E2%80%99-of-the-experimental-method/>.
- Gomez, Juan. 2011a. "Miracles and 'Experimental Theism'". In *Early Modern Experimental Philosophy*. Accessed: 2013. <https://blogs.otago.ac.nz/emxphi/2011/11/miracles-and-experimental-theism/>.
- Gomez, Juan. 2011b. "Turnbull's Treatise on Ancient Painting and the Experimental/Speculative Distinction". In *Early Modern Experimental Philosophy*. Accessed: 2011. <https://blogs.otago.ac.nz/emxphi/2011/01/turnbulls-treatise-on-ancient-painting-and-esp/>.
- Gomez, Juan. 2012a. "Experiments in Early Modern Moral Philosophy". In *Early Modern Experimental Philosophy*. Accessed: 2012. <https://blogs.otago.ac.nz/emxphi/2012/03/experiments-in-early-modern-moral-philosophy/>.
- Gomez, Juan. 2012b. "Tracking Terms in the Encyclopaedia Britannica - Part II". In *Early Modern Experimental Philosophy*. Accessed: 2013. <https://blogs.otago.ac.nz/emxphi/2012/08/tracking-terms-in-the-encyclopaedia-britannica-part-ii/>.
- Haakonssen, Knud. 2006. "The History of Eighteenth-Century Philosophy." In *The Cambridge History of Eighteenth-Century Philosophy, Volume I*, edited by Knud Haakonssen, 3-25. Cambridge: Cambridge University Press.
- Hintikka, J. 1962. "Cogito, ergo sum: Inference or Performance?" *The Philosophical Review*:3-32.
- Lennon, Thomas M, and Shannon Dea. 2014. "Continental Rationalism." In *The Stanford Encyclopedia of Philosophy (Spring 2014 Edition)*, ed Edward N Zalta. <http://plato.stanford.edu/archives/spr2014/entries/continental-rationalism/> (accessed 2 December 2014).

- Loeb, Louis E. 1981. *From Descartes to Hume: Continental Metaphysics and the Development of Modern Philosophy*. Ithaca, NY: Cornell University Press.
- Markie, Peter. 2012. "Rationalism vs. Empiricism." In *The Stanford Encyclopedia of Philosophy (Summer 2013 Edition)*, ed Edward N Zalta.
<http://plato.stanford.edu/archives/sum2013/entries/rationalism-empiricism/>
 (accessed 16 November 2013).
- Marshall, Eugene. 2014. "How to Teach Modern Philosophy." *Teaching Philosophy* no. 37 (1):73-90.
- Newman, Lex. 2010. "Descartes' Epistemology." In *The Stanford Encyclopedia of Philosophy (Fall 2010 Edition)*, ed Edward N Zalta.
<http://plato.stanford.edu/archives/fall2010/entries/descartes-epistemology/>
 (accessed 27 September 2014).
- Norton, David Fate. 1981. "The Myth of British Empiricism." *History of European Ideas* no. 1:331-344.
- Popkin, Richard H. 2003. *The History of Scepticism: From Savonarola to Bayle (Revised and Expanded Edition)*. New York: Oxford University Press.
- Pratchett, Terry, Ian Stewart, and Jack Cohen. 2002. *The Science of Discworld*. Ebury Publishing.
- Russell, Bertrand. 1945. *The Problems of Philosophy*: Oxford University Press.
- Russell, Bertrand. 2012. *A History of Western Philosophy*. Hoboken: Taylor and Francis.
- Schliesser, Eric. 2010. "Four kinds of 18th century Empiricisms...". In *New APPS: Art, Politics, Philosophy, Science*. Accessed: 2010.
<http://www.newappsblog.com/2010/11/four-kinds-of-18th-century-empiricisms.html>.
- Shand, John. 1993. *Philosophy and Philosophers*. London: UCL Press.

- Sorell, Tom. 2010. "Excusable Caricature and Philosophical Relevance: the case of Descartes." In *Insiders and Outsiders in Seventeenth-Century Philosophy*, edited by G. A. J. Rogers, Tom Sorell and Jill Kraye, 153-163. New York: Routledge.
- Strevens, Michael. 2008. *Depth: An account of scientific explanation*. Cambridge, M.A.: Harvard University Press.
- Tubbs, Nigel. 2009. *History of Western Philosophy*. Basingstoke: Palgrave Macmillan.
- Vanzo, Alberto. 2013. "Kant on Empiricism and Rationalism." *History of Philosophy Quarterly* no. 30 (1):53-74.
- Vanzo, Alberto. forthcoming. From Empirics to Empiricism. In *Intellectual History Review*.
- Waldow, Anik. 2010. "The Pretense of Skepticism and its Nonepistemological Relevance in Early Modern Philosophy." *History of Philosophy Quarterly* no. 21:35-55.
- Weisberg, Michael. 2007. "Three Kinds of Idealization." *Journal of Philosophy* no. 104 (12):639-659.
- Wolfe, Charles. 2010. "Empiricist Heresies in Early Modern Medical Thought." In *The Body as Object and Instrument of Knowledge: Embodied Empiricism in Early Modern Science*, edited by Charles Wolfe and Ofer Gal, 333-344. Springer.

Notes

¹ <http://philosophymodsquad.wordpress.com/>

² For example, (Marshall 2014).

³ See for example (Russell 2012, Shand 1993, Tubbs 2009, Adamson 1903, Copleston 1946-1974, Vols. 4, 5 & 6).

⁴ See for example (Loeb 1981, Norton 1981, Buckle 1999, Haakonssen 2006, Gaukroger 2010, 155-157).

⁵ Or only as an afterthought!

⁶ Indeed, in his classic work *The History of Scepticism*, Richard Popkin presents a different view again. While often using the labels ‘rationalist’ and ‘empiricist’, he pushes the RED to one side, arguing that it was the *crise pyrrhonienne* (the pyrrhonian crisis) that lay at the heart of early modern philosophy (Popkin 2003). For two very different criticisms of this position, see (Ayers 2004) and (Waldow 2010).

⁷ This raises another, more contentious, point. Reading the early moderns, and thus to an extent modern Western Philosophy in general, in terms of the RED loads the dice in favor of foundationalist epistemology. That is, the *first question* of epistemology regards the fundamental source of knowledge. If one is skeptical of the utility of that question, one might worry that the RED serves to reinforce the ‘foundationalist bias’ in epistemology nowadays.

⁸ For discussion of these points, see (Gomez 2010, 2011b, a).

⁹ Anstey has noted that, as the experimental philosophy grew in popularity, it became a ‘movement’. Individuals began to identify themselves as experimental philosophers. But, in the first instance, the ESD demarcates methodological approaches, not individuals (Anstey 2014).

¹⁰ One may object that such declarations cannot be always taken at face-value: a philosopher may aim to conceal her true views for various reasons, for example, her desire to be associated with a certain ‘in’ group (e.g. Boshiero 2009). We agree that it is not always wise to take philosophers *at their word*. However, we think that such declarations provide a useful starting point. Moreover, identifying discrepancies between a philosopher’s declaration of experimental philosophy and his philosophical practice is

illuminative of the political nature of the experimental philosophy. To discuss this point further is beyond the scope of this paper.

¹¹ Discussion of the actual argumentative form of the *cogito* has been a frequent feature of twentieth-century philosophy, for example (Russell 1945, Ayer 1953, Hintikka 1962). See (Newman 2010) for an overview.