

□Women, Science and Technology: the Genealogy of Women Writing Utopian Science Fiction□

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Abstract

For centuries utopian and science fiction has allowed women to engage with dominant discourses, especially those which have been defined as the “domain” of men. Feminist scholars have often characterized this genealogy as one which begins with the destabilization of Enlightenment ideals of the rational subject in the Romantic Revolution, with the publication of Mary Shelley’s *Frankenstein* (1818) in particular. This thesis demonstrates that there has in fact been an enduring history of women’s cognitive and rational attempts to explore key discourses such as science, technology and architecture through Reason, as opposed to rage. This is a genealogy of women writing utopian science fiction that is best illuminated through Darko Suvin’s of the novum. Chapter One reveals how the innovative utopian visions of Margaret Cavendish (1626-1673) proffer a highly rational and feminist critique of seventeenth-century experimental science. Chapter Two demonstrates how Sarah Scott’s *Millenium Hall* (1762) explored the socio-political significance of the monstrous-looking “human” body some fifty years before Shelley’s *Frankenstein*. Following this, Chapter Three re-reads *Frankenstein* in light of the early nineteenth century *zeitgeist* of *laissez-faire* economics, technological advancement and global imperialism and argues that these were also the concerns of other utopian science fiction works by women, such as Jane Loudon’s *The Mummy!* (1827). Chapter Four analyses how the function of the novum is integral to L.T. Meade’s (1854-1915)

depictions of male/female interaction in the scientific field. Chapter Five considers how important it is to acknowledge the materialist concern with popular science that informs texts such as Joanna Russ's *The Female Man* (1975) and Pat Cadigan's cyberpunk novel *Symers* (1991). This is the history of how women have used the form of utopian science fiction as a means with which to present a rational female voice. In addition to the historical works by women, it employs a range of utopian and science fiction theory from Suvin and Fredric Jameson to historical and contemporary feminism.

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Feminist Foundations: an Introduction to Utopian and Science Fiction.

Born in history and judged in history, the novum has an ineluctably historical character. So has the correlative fictional reality or possible world which, for all its displacements and disguises, always corresponds to the wish-dreams and nightmares of a specific socio-cultural class of implied addressees

(Darko Suvin, *Positions and Prepositions* 76).

the design of a genre is meant to serve a pragmatic end

(Regenia Gagnier, *Subjectivities* 5).

Christine de Pizan's *Le Livre de la Cité des Dames'* (1405), *The City of Ladies*, opens with the auto-biographical narrator Christine's distress at the criticism which was levied at women during the *querelle de femme*. Contemplating women's marginalised place in history and scholarly learning whilst studying, Christine falls asleep on her scripts only to be woken by the three muses: Reason, Justice and Rectitude. Subverting literary and ecclesiastical history's trope of the muse as demure, the lady called Reason proclaims: "I was commissioned [...] to supply you with durable and pure mortar to lay the sturdy foundations" that will enable the construction of a "far stronger edifice" than has ever been seen before (Richards 1.4.3). This edifice forms the foundations for "building the City of Ladies" (3.1.1), an allegorical refuge for the ghosts of women throughout history and myth that Christine is to construct with the aid of the muses' technical building tools. The muse Justice challenges the idea that discourses of

knowledge, such as architecture and construction, are merely a male domain, declaring that her “measuring vessel” for the mortar is truer and more accurate than any of “the men of the Earth”, and “nor can any man complain about [her] measure” (1.6.1). Similarly, Rectitude gives the semi-autobiographical narrator, Christine, her ruler so that she can “measure the edifice of the City” (1.5.1) and build an accurate and logical foundation for Reason’s building. Like Lèvi-Strauss’s “engineer” who “questions the universe”, de Pizan’s literary acknowledgement of women’s lives emphasises the need to recognise their lives and work, and revise the history that charts the “story” of woman (19).

What is also radical about *The City of Ladies* is that the muses instruct Christine to utilise technological forms in order to build their (albeit allegorical) feminist utopia, despite the fact that technology has been considered as anathema to female subjectivities within Western history. Aptly, the feminist project of edifying a utopian city for the virtuous women who have been recouped from male history and literary/oral tradition can only be completed with Justice’s help. Indeed, it is in creating this space that justice has, at last, been served for these maligned women. As Justice suggests:

[T]o perfect and complete your City, [...] my job will be to construct the high roofs and towers and the lofty mansions and inns [...] I will turn over the City to you, completed

with your help, fortified and closed off with strong gates
which I will search for. (1.6.1)

And so the allegorical names of the muses become even more poignant: Reason provides the logical foundation of the City of Ladies, Rectitude ensures that the revision of the story of women's lives from traditional narratives form an accurate edification, whilst Justice ensures that the ghosts of the women remain protected.

De Pizan therefore draws upon discourses of reason, justice and rectitude in order to demonstrate how women can be logical beings, capable of "reasoned" thought as the equals of men. Moreover, she explicitly and neatly conveys how writing is a form of social *building* too; when Rectitude instructs her to: "mix the mortar in your ink bottle" (2.1.1), the literal image of mixing mortar in an ink well is conflated with the metaphorical image of writing ink as a building material (since mortar, like ink, is a liquid material which then dries, and sets). The image of the mortar-ink, in turn, highlights the intertextual nature of history and literature, evoking the image of the writer as an "engineer" of social spaces. Like *The City of Ladies*, this project tells the story of some of those women who have made extraordinary contributions to a history which has not been recognised – and this happens to be a history in which de Pizan is herself a key figure. It is the history of how women have been social engineers and experimenters through utopian and science fiction; it is the attempt to understand and recognise how centuries of women have, albeit inadvertently, come to build upon what was perhaps the first explicitly feminist utopia in modern literature:

The City of Ladies, and how, even today, this is a chronology which has remained relatively unacknowledged.

De Pizan's *City of Ladies* is the most prominent example of the relative lack of scholarly attention paid to women's utopian and science fiction writing.¹ Written at the French courts a century earlier than Thomas More's *Utopia* (1516), it would nevertheless have been familiar to an English-speaking audience through its translation by Brian Anslay in 1521: *Boke of the Cytte of Ladyes* (Richards xix). The scholarly neglect of such a key text for the building of a chronology of women's utopian work may be due to the fact that utopian fiction is actually often defined as "beginning" with Thomas Moore's namesake text – *Utopia* (Jameson, *Archaeologies* 1). It is worth noting that whilst *Boke of the Cytte of Ladyes* was printed only a few years after More's *Utopia*, de Pizan's *Cité des Dames* was scribed a century earlier. What is the significance of this? Its significance lies in the fact that this date indicates that there was a correlation between the popular interest in More's *Utopia* and the perceived potential interest in *Cité des Dames*. Its translation was likely to have been provoked by the success of More's *Utopia* and the revival of interest in the Greek concept of "Eutopia" or ideal place.² In fact, *Cité des Dames* may have been known to some in England as a "eutopian" text prior to Moore's *Utopia*, the word "utopia" being unknown until Moore coined the term (Manuel and Manuel 1). *Cité des Dames*, then,

¹ See Nicole Pohl's Introduction to *Women, Space and Utopia* (2006).

² For a discussion of the distinction between eutopia and utopia, see *Manuel and Manuel Utopia Thought in the Western World* (1979) and John Carey *The Faber Book of Utopias* (1999).

may well have been known in England as a text describing the desire for an imaginary world for women.

Several factors indicate that Christine de Pizan was a name that either *preceded* or was part of a dialogue with More's *Utopia*. There had been an anonymous Flemish translation of *Cité des Dames* in 1475, Englishmen spoke French at court and de Pizan was already something of a well-known name after the 1470s translation of her *Morales Proverbes of Cristyne* (Richards xxiii). The actual events surrounding *The City of Ladies* first English translation are not my key concern here, however, neither is the direct relationship between male and female utopian science fiction writers such as More and de Pizan. Rather, the important point is to acknowledge is that the gendering of both the creation and criticism of genre fiction can sometimes be taken as infallible, as part of an unchallenged literary history, rather than being seen as forming a basis for further research, exploration and revision.

De Pizan's role as a writer is not merely significant because she wrote what is possibly the earliest explicitly feminist utopia, she also had a certain degree of agency for a fifteenth-century woman. She was not only perhaps the first professional female writer in the Western world, she was also one of the first vernacular authors to oversee the production and illuminating of her own books (Richards xxi). What is also yet to be recognised is that because the stories of the women which bring about the City of Ladies are de Pizan's *re-reading* of male authors and bards, she performs the same function in 1405 that Elaine Showalter and other feminist critics called for in the Anglo-American academy in the late 1970s – the *redemption* of such narratives as part

of that newly-acknowledged “body”: feminist history. Indeed, the introductory setting of Christine’s questioning of the lack of women’s achievements in history, as well as the social realities facing women, such as access to education, is also where we first glean the feminist importance of the muse Reason, and the significance of the most traditional tool of the muses: the mirror. A traditional *motif* within allegorical writing about women’s roles and for presenting re-readings of narratives by revising, *refracting* and reflecting upon them, the “mirror image” is also a well-established paradigm in utopian thought. It is perhaps no coincidence that it is the muse representing the notion of female/feminist rationale, Reason, who carries this most feminist and utopian of all the means of technology presented to Christine: in this female history, utopia is a reflection in *Reason’s* mirror.

The concept of utopia as a mirror and the exploration of what precisely signifies as “reason” for women are key concerns within this study. However, the role of the mirror as a utopian *motif* is not so much a concern with how utopian and science fiction is a mirror image of society as such, but an interrogation of what such uncanny “mirror images” (as alternative worlds) can reveal about the issues affecting the author’s cultural and socio-political concerns. A key idea for explicating how utopia functions as a mirror image of historicity is Darko Suvin’s *novum*, which he describes in *Metamorphoses of Utopia: on the Poetics and History of a Literary Genre* (1977) as a “totalizing phenomenon or relationship deviating from the author’s and implied reader’s norm of reality” (64). In other words, *novum* means the “new” in the sense

that it is a new *projection* of an idea.³ Certainly what is important about his definition of the historicity of the novum (see above) for the purposes of this feminist study is that it both acknowledges and posits the relative nature of both historical time and subjectivity. This is because Suvin argues that these literatures of estrangement function through the reader's, the author's and the protagonists' combined senses of cultural identity in place and time (whether this is real or imaginary), all of which contribute to the text's own identity as an account of all three of these as aspects of subjecthood as they emerge within specific moments.

In other words, the textual identity of utopian and science fiction recapitulates the effective practices of studying history. That is to say that the novum recapitulates historical study when it attempts to create "tableaus" of the human subject, or, rather, when it facilitates possibilities for imagining human subjectivity whilst remaining aware of temporal relations. To add to this sense of the importance of conceptualising change over time, utopian and science fiction can be seen as the presentation of more or less temporally/spatially "estranged" novas. Through positing a sense of historicity through its will to change history (by imagining alternatives and critiquing social conditions), the novum constructs a sense of "ahistoricity" by creating spatially and/or temporally alternative possibilities for "historical" subjectivities. Utopian and science fiction, then, can be seen as the writers' self-conscious attempts to conceptualise, as well as reform and in some senses – step outside of – history itself.

³ Suvin developed this term from Ernst Bloch *Spirit of Utopia* (1918) but it originally appeared in Shakespeare's *Love's Labours Lost* (1598), Act V., scene II, verse 547: "Abate throw at Novum, and the whole world againe, Cannot pricke out five such."

This is especially true for modern readers of utopian and science fiction, whose sense of the various viewpoints created by the text will nearly always be conflated with their awareness of its historicity even at the very moment in which the text might attempt to be “u-chronic” (by imagining an alternative, often futuristic, temporality).

The importance of recognising different subjectivities is also something which has been at the core of the majority of utopian and science fiction texts. We need only to look at how de Pizan’s *City of Ladies* forms an allegorical re-writing of women in history to see that history and its revision are integral building blocks for creating a specific picture, that of female subjectivity. By proffering of the new or novum, utopian and science fiction makes subjectivity its very focus because it is externalised as much as the social structures of the “present” are: by its very definition as that which is novel and *different*, the novum operates through the process of “othering”. The historicity of the novum is integral to the recuperation of utopian and science fictional visions of women, as revealed by *The City of Ladies*. It is crucial to realise the historicity of the space which is the “City of Ladies:” it is an allegorical place precisely because the muses have instructed Christine to build a utopia which *cannot* exist in real life society due to pervading patriarchal notions of women. Moreover, the lesson that Christine learns from the muses is that reading, writing, discussing and learning about women throughout history is important because an awareness of these dialogues facilitates the revision of the “construction” of patriarchal history. By corollary, the material text of the *City of Ladies* as a utopian manuscript comes to represent the “City

of Ladies" itself: it is a mortar-ink edification of the histories of women as they have been revised and materially "re-constructed" by a feminist writer.

What is really useful to our understanding of *The City of Ladies* is Suvin's novum, especially because he argues that it can only be successful if it can be seen as forming a metonymical, allegorical or metaphorical relationship between a base "cognitive" reality (usually that of the author) and the cognitive reality of a "mental experiment." How Suvin would deploy the axiomatic of subjectivity, however, does not provide an entirely foolproof methodology for reconstructing a feminist history of utopian science fiction. This is because Suvin's primary focus for the novum is that it is a device which works through estranging and defamiliarising its audience (an amalgamation of Ernst Bloch's novum from *Spirit of Utopia* (1918), Russian formalism's *ostranenie* and Bertolt Brecht's *Verfremdungseffekt* (*Metamorphoses* 13)), whilst oscillating back to its grounding in the historical familiarity of that which is new, which is usually defined as the recognition of the temporality of the author's present (Freedman 17). Ultimately, however, Suvin defines this unnerving novelty or estrangement as the genre's "*raison d'être*" ("On the Poetics" 71). Although Suvin defines this estrangement as operating in a similar way to the "V-effect", I am more interested in his definition of utopia and science fiction as the interplay between the initial defamiliarisation and the subsequent *familiarisation* of the new in comparison to the author's environment (Suvin 7-8). After all, the moral of the story in *The City of Ladies* is that learning and the importance of revising history ultimately enhance one's sense of selfhood, rather than create a sense of *Verfremdungseffekt* from which one can

never return. Given our consideration of de Pizan and how integral history and female subjectivity are to a feminist *history* of writing, it may be useful at this stage to consider how other definitions of utopian and science fiction might enrich Suvin's idea of the new.

Utopia and "other" science fictions

In 1890 Oscar Wilde proposed that Utopia is "the one country at which Humanity is always landing. And when Humanity lands there, it looks out, and, seeing a better country, sets sail. Progress is the realisation of Utopias" ("The Soul of the Man Under Socialism", 13). Like Wilde, the narrator of More's *Utopia* claims that we would not be able to find the real location of the island called Utopia. This is an ambiguity which is only heightened when we consider that "utopia" was in the first place a neologism created by More himself, and that More and Erasmus' working title for their book was the Latin word "Nusquam", meaning "no place." "Utopia" was coined from a transliteration of the Greek "ou" into the Latin "u" (Bloomfield 17). The Greek prefix "ou" expresses a negative, whilst retaining the Greek word for place ("topos") in order to create the neologism "utopia." But whereas the Greek term "eutopia" specifically means "good place" or ideal place, Utopia draws on the Greek negative "ou" more specifically: it is an island that can be found "nowhere:" it is "no place" (Carey xi). What is useful about More's sixteenth-century intervention into the Greek term eutopia is that it reveals how the utopian world cannot necessarily be considered

to be an ideal world; it is but an imaginary world which posits a sense of the ideal in some form.

In many ways science fiction emerged from utopian fiction (James *Utopias and Anti-Utopias* 210), and it too is seen as being “less a genre – a body of writing from which one can expect certain plot elements and specific tropes – than an ongoing discussion” (Mendelshon 1). Unlike the existence of the Greek “Eutopia” before More’s “utopia”, however, when we speak of science fiction, we are specifically referring to a term that, prior to 1929, science fiction writers themselves were almost certainly entirely unaware of; we are applying our own twentieth-century critical terminology to writing that was, historically speaking, not referred to as “science fiction.” Yet like More’s transliteration of eutopia, science fiction was indeed a term that had been plucked from history, when the US magazine *Science Fiction Wonder Stories* publicised William Wilson’s relatively unknown 1851 definition of this type of writing in 1929 (James 29). Wilson argues that it is “Science Fiction, in which the revealed truths of Science may be given” (qtd. in James 28). This is in some senses more helpful for defining the genre than the ubiquitous ou/eu anomaly becomes for utopia, since a clear definition of science fiction is apparent from the coining of the term in 1851, albeit the case that this term did not enter universal usage until at least a century later. Of course, science fiction could arguably be seen as having developed much earlier than this, with Johann Kepler’s *Somnium, sive Astronomia Lunaris* (A

Dream, or Lunar Astronomy), which was written in 1600 but not published until 1634.⁴ However, this text and the accounts of lunar voyages that followed it do not provide the explicit social or philosophical critique or innovation that readers have associated with later science fiction works, and which I associate with Margaret Cavendish's *The Blazing World* (1666) in Chapter One.

The vehicular nature of science fiction is often the key concern within the genre, such as the idea that it works as “a forum for speculations upon the nature of reality” or, as feminist writer Joanna Russ has famously described it, the “what if?” function (James 31). This means that both utopia and science fiction are inherently dynamic; they use the cognitive logic of the material realities and dialogic conditions in which they were written in order to posit a different world vision. Russ has also defined these genres as working through a “limbo” between the “not-possible, not-impossible”, between the “(what cannot happen)” temporality of fantasy fiction and the “(could happen)” of realistic fiction (*To Write Like a Woman* 21). But, as Derrida's “The Law of Genre” suggests: genre, just like law, needs constant revision. To a certain extent, we can never define these genres because they will never truly completely conform to typological or formalist qualities (Luckhurst 6). For the purposes of this study, however, it might be helpful for readers to think of utopian and science fiction as:

Any work of fiction that has a significant impact upon previous philosophical definitions of humanity, by employing a “what if?” scenario in order to present an imagined location, which is novel enough in

⁴ For a description of the various definitions of science fiction's history, see Adam Roberts *Science Fiction* (2006).

space and/or time to engender a social and cognitive comparison with the author's, narrator's or reader's present.

What is important about this definition is its recognition that knowledge is inevitably a system of interacting networks, as we see from writers and social scientists such as Bruno Latour. Therefore this definition is based upon the utopian aims of this project, to show how utopian and science fiction's most valuable quality is its ability to engage with the *familiar*. In this sense, my definition above draws upon Suvin's use of the relationship between the novum and the familiarity of the author's real world but relinquishes the need for to emphasise the textual "estrangement" process which underpins the formalist literary theory that the novum was born from. Nevertheless, I would define the presence of something new similarly to Suvin, that: its presence must create a distinct set of philosophical implications for human society in general, from either the point of view of the author/reader and/or from within the "story-world" itself. Be this a new idea, invention, object or life-form, it must always form the *motivational* factor of the story-plot. Hence a fictional tale in which a new species of plant is discovered might not have a direct impact upon how we conceptualise the world, but the discovery of a new species which throws into disarray philosophical beliefs about the status of human life would be.

In its emphasis on being applied to feminist studies of literary history, my definition above also echoes Adam Roberts' definition of science fiction (and I would argue that this applies to utopian fiction also) as literature that: by focussing its

representations of the world not through the *reproduction* of that world but instead by figuratively symbolising it, it is able to foreground precisely the ideological constructions of otherness – “Reason’s mirror” (19). Roberts goes on to say that the “taxonomies” dominating utopian and science fiction studies are, however, counterproductive. After all, when a fiction so dedicated to social critique and the exploration of otherness prescribes a way of defining science fiction and utopia “proper”, it recapitulates eugenics discourses and the imperative to define a “pure breed” (21). My open definition here is an attempt to overcome this limited critical position; following de Pizan, I define utopia as a reflection in Reason’s mirror – a vision based upon what is known (legal, education, religious structures, and so on) in order to catalyse social critique of the status quo. Engaging with the present does not mean that utopian fiction can never truly bring out a futuristic and “totalising” utopia, nor does it mean that it is not inherently dynamic, for it is the actual details of *what* is extrapolated (and how) that makes utopian science fiction an important signifier of cultural history.

Utopian and science fiction is, perhaps, more accurately thought of not as the visualising of alternative worlds, but as the *revision* of current society. Produced in specific historical times, the effect they produced in the author’s contemporary readers was that of a comparison with – and therefore a “perceived sense” of the author’s engagement with – the *zeitgeist*. What is of interest to this project in particular are the ways in which utopian and science fictions are counter-narratives – literary affirmations of the fact that women have endeavoured to suggest possibilities for

cultural changes. This is not an attempt to map a feminist scientific history but to open up, for further exploration, how empirical thought has been utilised and problematised by women's responses to emerging discourses, such as Christine's criticism of the misogyny of ecclesiastical history and myth or Cavendish's scepticism of the cruelty and irrationality of seventeenth-century "New Science." Utopian and science fiction is the focus of this project, rather than another genre form, precisely because these genres address cultural issues in ways which can be seen as ambiguous, controversial and imaginative, and they therefore provide valuable explorations for historians, literary scholars and sociologists alike. When they are at their most textually dynamic, they take aspects of social change (or indeed the fact that there may be a significant *lack* of social reform) and cognitively project them to create a new vision of social conditions. In doing so they create new ways of interpreting what I refer to as the "real-life present", which I would define here as our perceptions of the author's or narrator's cultural environment. Much like the measure, the mortar and the mirror, for Christine's City, these fictions have therefore provided a powerful tool for early women writers, who were able to make social critiques through the protected veil of a somewhat estranged social backdrop.

Feminists□Fictions

Utopian and science fiction is inextricable from the history of women's experiences and articulations, particularly in relation to dominant models of discourse. Yet besides

the totem contribution of Mary Shelley's *Frankenstein* (1818), women's writing is largely excluded from the most influential books on utopian and science fiction. Clearly feminist influences in science fiction have remained something of an afterthought to the comparatively richer genealogy of utopian and science fiction "proper." Texts such as Frederic Jameson's *Archaeologies of the Future: the Desire Called Utopia and Other Science Fictions* (2005) and Suvin's *The Metamorphoses of Science Fiction* illustrate this neglect of women's writing. Both studies exclude *pre-tuentieth* century feminist utopian fictions from their literature reviews, and Suvin even argues that *Frankenstein* is *not* science fiction (see Chapter Four). In *Archaeologies*, Jameson charts six approximately chronological stages of utopian and science fiction evolution: "Adventure" (or "space opera"); "Science"; "Sociology"; "Subjectivity, or in the 1960s"; "Aesthetics or, 'speculative fiction'" and "Cyberpunk." Feminist science fiction texts are the only texts which are not actually listed. He merely adds these as an afterthought which follows this main list, and even then the history of feminist utopian and science fiction is reduced further, as having occurred only after the 1960s, in response to the second wave of the feminist movement.

This unacknowledged history – even after the rise of the late twentieth-century feminist influences within both culture and the academy – has long been the tradition within utopian scholarship. Manuel and Manuel summed up this critical impetus fairly accurately by decreeing that the study of women in utopia, women reading utopia and women writing utopia "are not a major concern of serious utopian thought" (7). They have even described Margaret Cavendish's amusing and astutely feminist critiques of

new science in the mid-seventeenth century as a vision which is “so private that [it] border[s] on schizophrenia” (7). Moreover, those accounts which look at pre-twentieth century feminist utopian and science fiction tend to create genealogies in which there were no feminist texts prior to Mary Shelley’s science fiction, *Frankenstein* (1818), such as Carol Farley Kessler’s “Bibliography of Utopian Fiction by United States Women” and L. Timmel Duchamp’s “Science Fiction and Utopias by Women, 1818-1949: A Chronology”.⁵ Although Lucy Sargisson has discussed the political nature of the feminist utopian consciousness in fiction and Nicole Pohl has drawn parallels between feminism and space making in literature prior to *Frankenstein*, there is a current neglect of the fact that there have been some significant feminist voices in the history of this genre. If utopian and science fiction can be considered as being a literature that proffers social change, social comment and social dreaming, omitting women’s contributions to this genre is tantamount to an omission of women’s visions for imaging social change, as well as women’s voices. After all, utopian and science fiction is largely a play between subjectivity and the estrangement *from* one’s sense of subjectivity. If we define subjectivity and the construction of “the subject” as integral to these genres, to neglect women’s contribution is to impair how they can be seen as contributing to the understanding, development and exploration of, human *subjectivity* throughout history.

⁵ See Duchamp “Science Fiction and Utopias by Women, 1818-1949: A Chronology”
<<http://ltimmel.home.mindspring.com/chronology.html>>

In addition to encompassing the work of women throughout history, the title's term of "feminist utopian and science fiction" is also based upon a utopian desire to recognise the overlaying history between utopian texts and science fiction, as well as those described as both simultaneously. My definition draws upon the work of those utopian scholars who have been interested in addressing the link between utopian paradigms and science fiction literature, such as Tom Moylan, Darko Suvin, Jane Donawerth and Nicole Pohl. I attempt to "edify" the work of these scholars in order to create a more trans-historical overview of British literary production. My title of "utopian and science fiction" was inspired by that of Jane L. Donawerth's and Carol A. Kolmerton's edited collection of *Utopian and Science Fiction by Women* (1994), the only trans-historical collections of these genres. This term is important because it also reflect hows the operation of linguistic terms can create conceptual "spaces" through the politics of inclusion, as well as the fact that science fiction and utopia are hybrids of other literary forms, as well as their fairly complex history. For example, modern "science fiction" (from the nineteenth century onwards) can be seen as having evolved from utopian fiction. "Utopian science fiction" also reflects the phenomenal rise of the feminist depictions of utopias and dystopias in the science fiction of the late 1960s and onwards, when women's writing turned back to the form of the traditional utopia in order to imagine alternative worlds within which to explore the politics of equality between men and women.

Unfortunately, the rise and continued influence of the "women's writing" debate in the academia from the 1970s and 1980s onwards also appears to have

created its own somewhat ambiguously utopian paradigm – the late twentieth-century rise of “feminist science fiction” *criticism*.⁶ De Pizan’s “City of Ladies” is just one example of a utopia which has been excluded from this feminist literary history, for despite the fact that de Pizan is described as “striving to write a universal history of women in *The Book of the City of Ladies*” (Richards xxvii), neither of the historical surveys of women’s writing in Ellen Moers’ *Literary Women* (1977) or Elaine Showalter’s *A Literature of Their Own* (1978) mention de Pizan. Another drawback to the 1970s-1980s feminist impetus in the academy was how it reclaimed women’s writing; it tended to posit women as marginalised and seemingly pathological figures. The most influential example of this feminist approach is Sandra M. Gilbert and Susan Gubar’s *The Madwoman in the Attic* (1977), which argued that the female writing consciousness was a split self. More specifically, they suggested that Shelley’s Frankenstein and his monster were, in fact, two monstrous “Eves”, an idea which critics have drawn upon in order to identify women writers as Frankensteinian monsters, as “alien” to society (*Daughters of Frankenstein* xviii). Contrary to this definition of woman as irrational and monstrous “other”, this project is interested in what ways women’s writing can be seen as the product of *reason*. Just as de Pizan is inspired by the muse Reason, this project charts how women have explored the “cognitive” logic of novellas and utopian schemas to engage with discourses which have been historically defined as the domain of male rational/empirical thought, such as

⁶ This was catalysed by Marleen Barr’s *Future Females* (1981), as well as Joanna Russ’s numerous articles on the nature of science fiction and feminism.

science, technology and architecture. After all, within utopian and science fiction's male protagonist "explorers" themselves are also alien – a fact which has often been occluded from feminist criticism. Ironically, as the following chapters hope to reveal, the hegemonic subjectivities of "woman" have been, for centuries now, effectively challenged by women employing the logic of objectivity. Thinking along these lines, I would argue that "woman" is not necessarily "alien" simply because the notion of a coherent and unchallenged subjectivity is not always possible.

Another key example of how reactionary feminist criticism has impaired considerations of women's utopian reason is the feminist interpretation of historically male-dominated discourses, especially science, technology and architecture, as anathema to feminist rationalism. In contrast, this thesis does not aim to read utopian and science fiction in order to produce a "feminist" history of science as always counteracting a "masculine" history of science. Ultimately, both men's and women's dialogues with rational discourses are part of the same wider cultural history. In fact, given the centrality of *Frankenstein* to the post-1960s feminist considerations of science fiction, it is worth noting that one of the most influential rational feminists in Western history is Mary Shelley's mother, Mary Wollstonecraft. Ironically, the feminist interpretation of *Frankenstein* is therefore one which has been influenced by what followed Wollstonecraft's *Vindication on the Rights of Women* (1792) – the Romantic revolution's rejection of Enlightenment ideals such as equality, moral rationality and the common good. Yet contemporary models of utopian and science fiction can and indeed *must* be challenged by the fact that women throughout history have engaged

with, and challenged, epistemological discourses. Feminist thought is not merely the reserve of post-Wollstonecraftian generations of women but it is ultimately the Wollstonecraftian *rational subject* and its pursuit of the moral good in order to render the world utopian that this thesis is implicitly concerned with, as opposed to the post-1970s interpretation of Mary Shelley's *Frankenstein* as a figure of irrational feminist rage. This is especially important when we consider the fact that writing is said to have become "more urgent, angry and unpredictable" in the wake of the second wave of the feminist movement (Showalter 304).

This thesis therefore explores how women writers have followed Wollstonecraft's idea that "when Reason offers her sober light, if they [women] be really rational creatures, let them not be treated like slaves" for, as she goes on to say, "[t]hese may be termed Utopian dreams" (41). Identifying how women's explorations of "masculine"-identified narratives have also been excluded by feminist critics, of both the history of science and the history of utopian science fiction, is therefore integral to this project. I seek to challenge the value of defining science fiction as beginning only in 1818, especially by those scholars who negate the cultural influence of scientific discourses upon science fiction and utopian fiction by positing science fiction as merely the "offspring" of gothic fiction, such as in Brian Aldiss's *Billion Year Spree* (1973) and *Trillion Year Spree* (1986). As we have seen, science fiction did not spontaneously "begin" in 1818 in response to how the nineteenth-century wave of "new science" became professionalised, institutionalized and categorised (Willis *Monsters, Mesmerists and Madines* 9).

In order to begin to redress the lack of scholarly engagement between science fiction criticism and the historical conceptualisation of scientific discourses prior to the nineteenth century, my approach to the critical appreciation of utopian and science fiction texts is also grounded in the work of those theorists whose main concerns lie outside the field of utopian and science fiction studies. As stated earlier, this study is influenced by Bruno Latour's theory of social networks of scientific dialogue in *Science in Action* (1986), as well as the idea of cultural history advocated by works such as Catherine Belsey's "Reading Cultural History" and Mark Poster's acknowledgement of the challenges to cultural hegemony that marginalised writers have presented throughout history in *Cultural History and Postmodernity* (1997). These include the literary voices of women, the colonised, the poor and "anonymous" writers. As a pan-historical revision of the story of women writing utopian and science fiction in order to engage with, and comment upon, "masculine" discourses, it is categorically not an attempt to prescribe an infallible chronology. The influence of such flexible and revisionist discourses as cultural materialism and Latour's network theory should help us to keep in mind throughout that to replace the patriarchal silencing of women's voices with a totalising and definitive sense of a feminist history is equally contrary to the praxis of this work.

This is the story of women, science and technology as explored within women's utopian and science fiction writing. Just like de Pizan's reclamation of *mythical* as well as historically "real" women, all of the theorists who have influenced the approach of this study have worked to reveal and maintain the idea that neither

fiction, nor literatures of models of knowledge, are merely the material products and textual (im)prints of a “true” version of history as it really was (*uis es*). In using these references, my methodology is similar to Roger Luckhurst’s *Science Fiction* (2006) (although he does not discuss the idea of science fiction as existing prior to *Frankenstein*). This sense of reconstruction is perhaps due to the recognition that history and accounts of human experiences are inevitably constructed in part from *literary* products. In other words, because history itself is subject to revision (whether this is through texts or other means) so too are these “historical” texts subject to reconsideration. As Latour suggests, knowledge is ultimately only ever definable, at best, as a social interaction of vast networks.

We also know that these networks are not built with homogeneous material but, on the contrary, necessitate the weaving together of a multitude of different elements which renders the question of whether they are “scientific” or “technical” or “economic” or “political” or managerial meaningless. (232)

Latour’s description of heterogeneity here provides a useful contribution to the methodology of this study. More importantly, it is also a means of *defining* the texts as spatio-temporal locations, points which address scientific, economic, political and technical concepts in their presence as part of a given culturally discernible (and

negotiable) moment within literary history. Drawing upon this, this thesis will examine the ways in which women have used the vision of a utopian worlds or new inventions as metaphorical “social laboratories”. Although the social laboratory is a term which has been used by Geof Kozeny to refer to the real-life work of intentional communities, I define the social laboratory here more as an imagined site of *experimentation*. In order to reflect how the genre of utopian and science fictions facilitates more dynamic extrapolations of the present, my definition echoes Matthew Beaumont’s idea of how fin-de-siècle women’s fiction defined the present as a “heated laboratory” of social change (217, see Chapter Four).⁷

This study therefore aims to avoid those cumulative points which remain at the heart of scholarly debate by, for example, examining texts from very diverse time periods in the history of modern literary society. This is not to create a sense of a new “canon” but to begin opening up the very idea of canonicity as a revisionist process within the fields of utopian and science fiction studies. After all, before the eighteenth-century saw purity and sentiment from Adam Smith and Jacques Rousseau, and the rational feminism of Wollstonecraft, writers such as de Pizan and Margaret Cavendish had also voiced concerns about women’s unequal roles in society at large. That purity and sentiment were as much an inherent subtext in Enlightenment sentimental thought as its gothic backlash was the harbinger of abject bodily disgust is, however, an idea which all too often neglected. Inevitably, the

⁷ See Geof Kozeny Visions of Utopia: Experiments in Sustainable Culture, a video documentary at “Community Catalyst Project” <http://fic.ic.org/video/geoph@ic.org>.

“monstrous-feminine” has become anathema to rational discourses.⁸ This aesthetic eclipses the important fact that women writers have sought for centuries to pave a path towards a utopia called Equality, and that they have done so not merely for themselves but for the deformed or otherwise marginalised subjects within British history. It is therefore no coincidence that we can align our list of marginalised peoples in those texts studied as being also representative of those rendered as “non-subjects” under the momentum of British imperialism, such as: colonial slaves (and later subjects), the poor (those disabled or otherwise unable to work and those oppressed within work spaces, such as the Luddites), the deformed, the orphaned (of any social status), and, above all, those struggling to articulate a voice within these very machinations.

This thesis does not aim to be conclusive, however, but exemplary, to begin the thought-processes of conceptualising and situating how dialogues draw upon one another within various spheres of cultural influence. Furthermore, this should be a practice that is subject to continual re-examination, for just as cultural history can be seen to bring together the disciplines of empirical historical analysis and the more subjective and pluralist approaches of critical theory, science fiction signifies as the amalgamation of positivist science and the imaginative visualizations of the utopia.⁹ Ultimately, of course, the feminist foundations of this exploration of the history of women writing utopia and science fiction have been inspired by Christine de Pizan’s

⁸ See Barbara Creed’s *The monstrous-feminine: film, feminism, psychoanalysis* (1993).

⁹ For more details of how science fiction can be seen as the “fiction” of science, see Roger Luckhurst’s *Introduction to Science Fiction* (2005) and Martin Willis *Monsters, Mesmerists and Machines* (2006).

astute sense of edification as technical process of social engineering, which involves the latent technological forms of Reason and her companion muses. By corollary, I suggest that utopia and science fiction are highly materialist and correlative forms of literary edification, and ones which have, for many different reasons, been particularly suited to presenting feminist critiques of society. As we shall see, this has formed a rich genealogy, and one which dates back to at least as far as the fifteenth century with de Pizan, continuing throughout modern literary history until today's twenty-first century cyberpunk and ecotopias.

It would therefore be more appropriate in considering the historical engagements between women writers and these key areas of concern if we were to take a more trans-historical view of women's writing, as the simultaneous construction and revision of the feminist canon of women's writing. It is also important to examine science fiction texts which did, in fact, exist before *Frankenstein* (1818) and that, far from being "ur-texts" as Brian Aldiss suggests (*Billion Year* 9), early dialogues between women and science, such as those by Margaret Cavendish, provide a means with which to challenge many of the assumptions of both feminist and non-feminist critics. Chapter One reveals that whilst the "hermaphrodite" discourses of Margaret Cavendish have been critiqued for their apparent irrationality, upon closer examination, they emerge as highly functional feminist critiques and explorations of scientific praxis at a time in history when women were not accepted as the equals of men. Chapter Two explores whether Sarah Scott's *Millenium Hall* (1762) and its depiction of a female utopia, which includes social misfits such as the disabled

and circus freaks, is as conservative and “partial” as critics have suggested. Since *Frankenstein* has been very much as the heart of a feminist conceptualisation of genre writing, I re-read exactly how *Frankenstein* can be seen as positing the idea of “woman as alien” by looking at the discourses surrounding its emergence and popularity. Furthermore, I examine how Jane C. Loudon’s *The Mummy!* (1827) can ultimately prove as useful for discovering a history of feminist critiques of science as *Frankenstein* has been.

In Chapter Four I read L.T. Meade’s fin-de-siècle serials and novels alongside Suvin’s idea of the novum, demonstrating how these texts constitute a utopian and science fictional body of work which engages with the idea of women as *scientists*. Finally, in Chapter Five I explore the use value of rejecting contemporary feminist critiques of scientific narratives by demonstrating how integral popular scientific discourses are to texts such as Joanna Russ’s *The Female Man* (1975) and Pat Cadigan’s cyberpunk novel *Symers* (1991). Within this chapter I also ask how women’s writing by the late twentieth century can be seen as directly engaging with the ways in which popular and controversial scientific narratives attempt to construe the world and the body as a material entity.

The other model of thought that is considered throughout this study is how women writers engaged with those ideas that are usually associated with *Frankenstein*, both before and after its publication in 1818. Aptly, Shelley had herself suggested in a letter to John Murray in 1830 that she should write about “the Lives of Celebrated Women – or a history of Woman – her position in society and her influence upon it –

historically considered” (Behrendt 137). Shelley was never able to demonstrate such a history of woman, but she has, nevertheless, become a key part in how that history has been conceived of by others. Rather than seeing fiction produced before *Frankenstein* within a retrograde feminist projection that began with a 1960s concept of “feminist science fiction”, (and with Marleen Barr et al), its influence is seen as a crucial addition to these already *existing* debates. For example, Chapter Two reveals how Sarah Scott’s *Millenium Hall* (1762) had already depicted the roles of monstrous-looking humans at least half a century before *Frankenstein*. To a lesser extent, the same can be said of Margaret Cavendish’s animal/human hybrid scientists. Of course, one way in which the monstrous humans depicted in Scott’s *Millenium Hall* and Cavendish’s *Blazing World* differ from the depiction of the monster in *Frankenstein* is through the latter’s singularity as a symbol of *futurity* and production/reproduction. The monsters in Scott and Cavendish are not created by a scientist as Shelley’s creature is (in the *Blazing World* they are in fact the *scientists* themselves), they are “organic” or “naturally produced” beings. That the monster’s apparently singular artifice, which pre-empts the narratives of cyborgian feminist consciousness from writers such as C. L. Moore and Joanna Russ onwards, is exactly what Shelley *adds* to the feminist dialogues of experimental bodies cannot be denied. That said, the most important difference here is that, unlike Victor Frankenstein, the women in *The Blazing World* and *Millenium Hall* are depicted as *seeking a rational dialogue* with these “others.”

The purpose of this project is to demonstrate that research into the body of texts which comes to signify a utopian and science fiction “canon” by women should never be foreclosed and untouchable but always in the process of opening up, which is perhaps best described using the somewhat untranslatable German phrase of *entwerfen*. *Entwerfen* means to create a project – but specifically one in which ideas or schemas of thought are opened-up. The idea of a genealogy here is not to suggest, for example, that Shelley was necessarily aware of Cavendish’s work, merely that all these writers are both deploying utopian and science fiction as a critical tool for engaging with wider questions surrounding gender, materialism and subjectivity in their contemporary societies. This project also aims to examine those texts which have been canonised in particular ways for particular critical agendas. Perhaps more importantly, it aims to pave the way for the kind of research in which texts that had made useful cultural links between various scientific and technological discourses, but are still to be discovered in the archives, finally emerge from their obscurity.

**□In her Eyes, new Worlds, you there might see□:
Margaret Cavendish□s voyage towards □a World of
[her] own.□**

By this Poetical Description, you may perceive, that my ambition is not onely to be Emperess, but Authoress of a whole World; and that the Worlds I have made, both the *Blazing* and the other *Philosophical* World, mentioned in the latter part of this Description, are framed and composed of the most pure, that is, the rational parts of Matter

(*Observations Upon Experimental Philosophy, "Epilogue to the Reader"*)

by *Rational* I mean *Regular*, according to the vulgar way of expression, by which a Rational Opinion is call'd, That which is grounded upon regular sense and reason; and thus Rational is opposed to Irregular: Nevertheless, Irregular Fancies and Opinions are made by the rational parts of matter, as well as those that are regular

(*Observations Upon Experimental Philosophy, "To the Reader"*)

To begin to understand and examine feminist Reason through the history of English utopian and science fiction literature, we must consider the political climate of seventeenth-century English print culture. After all, this was an age in which the Rationalist aspect of utopian thought and its descendant, science fictional critique, emerged triumphant. The rise of civil humanism and Puritan thought that unfolded in the events of seventeenth-century English rule created a new state of rationalism: society itself looked towards Reason for meaning, as well as the Christian myth of

monarchical lineage.¹ This era of political dissent did not reach its climax in the events surrounding the English Civil War (1641-1651) and the overthrowing of monarchical rule in the Interregnum (1649-1660), however, for the Restoration was to soon follow in 1660. In this backdrop of immense social change and upheaval, the millenarian impulse of the seventeenth century paved the way for the resurgence of philosophical debate and the dawn of the “New Science.” The “New Science” was characterised by the *a posteriori* experimental method of laboratory research exemplified by Francis Bacon’s “Soloman’s House” in *The New Atlantis* (1627), and later became reality as that touchstone of all scientists, The Royal Society. These millennial, Puritan and scientific trajectories (or rather, their *post factum* historical canonisation) could be defined as the cultural products of their time – the rise of secularism and the momentum of political dissent. Aptly, it is here that we see the printing of the first explicitly feminist science fiction text within Anglo-European literary culture: Margaret Cavendish’s *The Blazing World* (1666), which was first published as *Observations Upon Experimental Philosophy, to which is added The Description of a New Blazing World* (1666).² This chapter considers the utopian visions of science and subjectivity forged by Cavendish, impoverished exiled aristocrat and Duchess of Newcastle (1626-1673), and whether they can be seen as extricable from the dialectical models of the

¹ For details of the impact of civil humanism on emerging seventeenth-century female writers, see Catherine Gallagher’s *Nobody’s Story* (1994).

² Unless stated, references to *The Blazing World* are taken from its original publication *Observations Upon Experimental Philosophy, to which is added The Description of a New Blazing World* (1666).

inward-looking *roi absolu* or monarchical self that had come to permeate seventeenth-century political thought.

Born Margaret Lucas into a royalist family, Cavendish, like many female aristocrats, left home to attend Queen Henrietta Maria's court. However, she was exiled to the court of King Louis XIV at the beginning of the civil war with Henrietta Maria, whereupon she became privy to some of the most heated debates of natural philosophy, that of the Parisian *salonists*.³ Literary evidence suggests that she was actually the first woman to write deliberately and solely for the publication and distribution of her writing (Pohl "Of Mixt Natures" 51), and whereas scholars are still uncertain as to whether Christine de Pizan had editorial input into the material production of her texts, Cavendish commissioned the printing, and explicitly proclaimed to be authoress, of some fourteen book editions, with no other patronage than that of her exiled loyalist husband William Cavendish (Blaydes 52). Cavendish published consistently between 1653 and 1673, including 24 *separate* editions between 1653 and 1668, yet Aphra Behn is often mistakenly thought to be the first professional writer, despite the fact that the majority of Behn's work was published later on, and included translations. Cavendish's corpus of utopian and science fiction addressed "To Natural Philosophers" therefore marks the first significant feminist challenge to scientific practices and narratives, a debate which is still very much alive

³ See Stephen Clucas' Introduction to *A Princely Brave Woman* (2003).

even today (*Poems and Fancies*, “To Natural Philosophers”).⁴ Moreover, as I shall go on to discuss later in this chapter, she encouraged other women to do the same.

As one of a few seventeenth-century feminist writers who were struggling to be heard in the masculinist *heteroglossia* of Early Modern English print culture (Bakhtin 263), Cavendish’s conjectures upon Natural Philosophy demonstrate her role as one of “Reason’s Disciples.”⁵ In fact, Cavendish was determined to create fame for herself as a logical thinker and *dilettante* by forging dialogues with other philosophical writers. She not only addressed her books: “To Natural Philosophers” and hoped that her theories of “*Atoms* [would] to the *Learned* go” (*Poems and Fancies*, “To Natural Philosophers”), her writing referred to theorists such as Robert Hooke, Cyrano de Bergerac, René Descartes and Henry More by name.⁶ She attempted to disseminate her work by sending her books to universities and libraries, addressing her work in print “To all the Universities in Europe” (*Grounds of Natural Philosophy*, for example). As Cavendish wrote in the 1666 edition of *Observations Upon Philosophy*, she was: “resolved to argue with none but those which have the renown of being famous and subtil Philosophers” (“The Preface” *Observations*) and she was indeed given a highly-publicised tour of the Royal Society. However, she was prohibited from becoming a member (in fact it is not until 1945 that we see any female members) and the

⁴ For example, see Susan G. Harding *Whose Science? Whose Knowledge?* (1991) and *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, and Philosophy of Science* (2003) and Carolyn Merchant’s *The Death of Nature* (1980).

⁵ For a description of seventeenth-century women as rational thinkers, see Hilda L. Smith’s *Reason’s Disciples: Seventeenth-Century English Feminists* (1982).

⁶ This is especially the case with Descartes’ theories. See Sophie B. Blaydes “Nature Is a Woman” in *Man, God and Enlightenment* (1988).

“Learned” that her theories were inevitably sent to did not, as Henry More states in a letter to his tutee Lady Anne Conway, return the favour by giving her “the trouble of a reply” (Rogers 190). Whilst Lady Anne Conway was fortunate enough to be a disciple and tutee of More, Cavendish struggled to break into this masculinist *milieu*. Therefore, although the New Science had meant that the newly “disciplinary” nature of “Natural Philosophy” was, potentially speaking, more open to women than other areas of study, in reality the assistance of a male tutor remained essential to avoid societal scorn (Hutton 231).⁷

In contrast to previous ideals or models of feminist subjectivity, Cavendish grounded her sense of identity in an engagement with discourses of Reason, rather than the traditional tropes of femininity and the female material body which had thus far dominated Anglo-European literary culture through the archetypes of “Virgin Queen”, Wife, Anchoress, Mother and, in women’s writing about the domestic sciences, the role of the Midwife. Her radical description of her writing as “the child of my Brain” (*Grounds of Natural Philosophy*, “To All the Universities in Europe”) and her earlier works as premature and under-developed because she had “forced them forth as soon as conceived, and this made the publishing of them so full of Imperfections” challenged the idea that only so-called “virtuous” women could have

⁷ See Linda Schreibinger *The Mind Has No Sex?* (1989) and John Rogers *The Matter of Revolution: Science, Poetry, and Politics in the Age of Milton* (1996) for more details of the gendering of the scientific *milieu*.

legitimate voices (*Philosophical Letters* 232).⁸ She instead sought to create a radical public persona in which she donned a mixture of both women's *and* men's fashionable attire, claiming that her writing was as "*Hermaphroditical*" as her public image (*Observations Upon Experimental Philosophy* "To the Reader", emphasis in original).⁹ Despite this infamous persona as the first publicly-recognised female writer in Britain, scholarly appreciation of her work remains nevertheless equivocal and her critics can be found throughout history, from Samuel Pepys to Virginia Woolf; Woolf even described her intellect rather unkindly as that of a "giant cucumber [which] had spread itself over all the roses [...] and choked them to death" (*A Room of One's Own* 80).¹⁰

For contemporary feminists, Cavendish's privileged status and imaginative style of writing render her a "troublesome ancestress" (Gallagher "Embracing the Absolute" 26). Cavendish's loyalist status in Paris with Queen Henrietta Maria in Paris was followed by her return to England after the Restoration as first Marchioness, and then, Duchess, of Newcastle, following her marriage to William Cavendish. Although they had experienced relative disenfranchisement during the Interregnum, they must have had enough funds for printing and distributing Margaret's writing.¹¹ Catherine Gallagher explains that the conservative tendencies of this lifestyle permeate

⁸ For details of the trope of the Virgin Queen, see Robin Headlam Wells *Spenser's Faerie Queen and the Cults of Elizabeth I* (1983). For a discussion of Cavendish writing as her "child", see Lisa T. Sarasohn *The Natural Philosophy of Margaret Cavendish: Reason and Fancy During the Scientific Revolution* (2010).

⁹ Chapter Five and the Conclusion explore how the image of the transgendered figure is a key motif in utopian science fiction.

¹⁰ In contrast, Stephen Clucas interprets Woolf's comments as admiration for Cavendish. See *A Princely Brave Woman* (2003).

¹¹ For more details of the Parisian exile of the Cavendish circle, see Sophia B. Blaydes.

Cavendish's texts, and that by attempting to create a female writing self through both the *roi absolute* and the *moi absolute*, Cavendish upholds an imperial individualism that is anathema to a nascent feminist sense of female equality, a *mise en abyme* which, ultimately, results in a vacuous writing self (Gallagher *Nobody's Story* 51). The deployment of the only rhetorical address in which women were permitted to have any form of relative autonomy – that of the female *monarch*, can therefore be seen as rendering *The Blazing World* (1666) an “imperial fantasy” and “empire of the mind”, which marginalises woman from society and places them within the *topos* of female desire, the limina of rationality.¹² Feminist scholars have therefore reduced Cavendish's radical voice to that of the inward-looking subjectivity of the *moi absolute* (27).

I will endeavour to be, *Margaret the First*: and, though I have neither Power, Time, nor Occasion, to be a great Conqueror, like *Alexander*, or *Cesar*; yet, rather than not be Mistress of a World, since Fortune and the Fates would give me none, I have made One of my own. (*The Description of a New World, called the Blazing World, “Epilogue to the Reader”,* (1668))

¹² This imperialistic role was influenced by the popular cults of Elizabeth I. See Headlam. As Marina Leslie notes, Frank and Fritzie Manuel's *Utopian Thought in the Western World* (1979) reads *The Blazing World* as revealing the same “schizophreni[c]” visions that are “conjured up every day, in and out of hospitals” (7).

Whilst Cavendish's attempt to lay claim to a literary space resonates with imperialism, it must be remembered that she clarifies for the reader that her "ambition is not onely to be Emperess, but *Authoress* of a whole World" ("Epilogue to the Reader", emphasis added). The key word here is "Authoress:" although Cavendish's corpus does indeed appear to make claims which evoke an imperial selfhood, this is motivated by the desire to write a particular ideology into the very fabric of the as-yet-unchartered world of "women's writing." In other words, as I shall go on to argue later in this chapter, Cavendish is motivated not by singularity but by an attempt to imbue every woman with authority.

To define Cavendish's attempt to claim a female voice as that which can only be conflated with the role of an *inward-turning* monarchical self is also problematic. In fact, readers of the first edition of *The Blazing World* would not have been privy to these claims, since her desire to be "*Margaret the First*" only appears in its later 1668 edition. The original 1666 edition posits a far more egalitarian praxis of imaginary space, one which instead emphasizes *every* individual's right to one's own utopian world:

[Y]et rather then not to be Mistress of one, since Fortune
and the Fates would give me none, I have made a World of
my own: for which no body, I hope, will blame me, since it

is in *every ones* power to do the like. (“To the Reader”

Observations, emphasis added)

Her main concern is not to forge imperial singularity but, rather, its antithesis: she had no dialogic recognition as an autonomous critical voice within the debates of natural philosophy. Indeed, in 1653 she had written in her address “To all Noble and Worthy Ladies” that: “I wish my *Book* may set a worke every *Tongue*. But I imagine I shall be censur’d by my owne *Sex*; and *Men* will cast a *smile* of *scorne* upon my *Book*” (*Poems and Fancies*). Cavendish’s writing is, from the offset, always the means for engaging with a scientific *milieu* by presenting a feminist self that is instead “grounded upon regular sense and reason” (*Observations Upon Experimental Philosophy* “To the Reader”).

The Rational Eye/□I□

The complexity of Cavendish’s rationality as a writing “I” and scientific thinking “eye” can be gleaned in the publication of *The Blazing World* as part of a twin-edition, entitled: *Observations Upon Experimental Philosophy, to which is added The Description of a New Blazing World*. Reflecting this idea of the eye/“I”, they were published under the remit that in describing “two worlds” whose function was to explore the nature of

science and subjecthood, they formed two inextricable facets of the same philosophical debates.¹³

[T]his is the reason, why I added this Piece of Fancy to my Philosophical Observations, and joined them as two Worlds at the ends of their Poles;[...]. But lest my Fancy should stray too much, I chose such a Fiction as would be agreeable to the subject I treated of in the former parts; it is a Description of a *New World*. (“To the Reader”)

We can see here that whilst *Observations Upon Natural Philosophy* presents science as “factual” according to Cavendish’s understanding of the cognitive laws of natural philosophy, *The Blazing World* proffers a fictional exploration the scientific debates in *Observations*, the edition’s “former parts”, by portraying an imaginary world. Moreover, by publishing a twin edition of “Philosophical Observations” and “Fiction”, Cavendish is emphasising how natural philosophy (through “Observations”) and imaginative fiction (“Fancy”) function interdependently.

¹³ This two-book formation reflects how More’s *Utopia* (1516) can be seen as two mirrored images of the same *topos* when Book I is compared with Book II, as well as Francis Bacon’s twin publication of *New Atlantis* with *Sylva Sylvarum*.

Indeed, *The Blazing World* presents a paradoxical world in which scientific ideas are both supported and subverted – the epitome of what she describes elsewhere as an “Irregular world” (*Grounds of Natural Philosophy* 254). *The Blazing World* follows the exploits of a woman after she is shipwrecked on the borders of a strange new world, of which she is then made Empress, and which is populated with half-animal and half-man beings who walk “in an upright shape” and are willing to listen to the philosophical opinions of their new female ruler (6). Critics have neglected to account for the political feminism underpinning the Empress’s rule, however. Amongst other acts, she lifts the prohibition of women and children from entering churches and state buildings, unites her people in protecting their country from invasion (recalling the cult of Elizabeth I), interrogates the usefulness of epistemological approaches to scientific research and, almost metatextually, employs a female scribe to write a philosophical treatise of her life as Empress at a time in history when the idea of a “female writer” was still a paradoxical concept. Rather than the pursuit of the largess of splendid isolation, then, Cavendish’s corpus can be characterised by its attempt to create an authorial persona in order to engage female readers and male writers alike.

The utopian isle does not escape the imperial delusion of grandeur however, for the Emperor’s palace at its centre is so ornately decorated that many critics have defined her utopia as the manifestation of Cavendish’s greed for the jewels and property that were confiscated from her husband during her exile in the Interregnum.

However, it is also possible to compare its crystal stables to the gold chamber pots in More's *Utopia*.

[T]he main Building was of Gold, lined with several sorts of precious Materials; the roof was Arched with Agats, the sides of the Walls were lined with Cornelian, the Floor was paved with Amber, the Mangers were Mother of Pearl, the Pillars, as also the middle Isle or Walk of the Stables, were of Crystal; the Front and Gate was of Turquois, most neatly cut and carved. (27-8)

Although such imperial images may at first appear to be problematic in the age of the East India Company's trading of gold and silver bullion, the vivid colours here also reflect the brightness of the multicultural skins of the humans who live alongside the hybrid animal-men scientists, whose ethnicities range from "Azure" to "Scarlet" (14).¹⁴ Yet such shiny trappings are not the main focal point of the text at all: it is her examination of the animal-men scientists known as "the societies of her Vertuosos" (19). This is because her presentation of rational arguments through the fictional backdrop of the *terra incognita* or strange "world of [her] own" that she creates (because "Fortune and the Fates would give [her] none") can be seen as a more

¹⁴ For details of the importance of gold and silver in the extension of English eastern imperialism, see Paul Kléber Monod *Imperial Island: a history of Britain and its empire: 1660-1837* (2009).

critically useful vision for its readers than scholars have previously argued (*Observations* "To the Reader").

Cavendish's concern with philosophically "useful" text is made clear by William Cavendish's "Dedication" to his wife, in which he distinguishes her "Blazing World" from both the real-life exploits of Christopher Columbus' "New World", as well as "the French man's World in the Moon" ("To the Reader"). William's reference to de Bergerac's *Histoire comique conterant les etats et empires de la lune* (1657) here not only reveals the text's critical engagement with contemporary paradigms of utopian voyages, it demonstrates the demarcation of a particular type of utopian journey as *ineffective*. Also referring to de Bergerac's moon world, Cavendish herself goes on to argue that the so-called New Science, along with the more traditional philosophies, such as alchemy, is yet another form of fancy in which men "conjecture."

[A] Man may suppose or imagine what the innate nature of such a Vegetable, or Mineral, or Element is; and may imagine or suppose the Moon to be another World, and that all the fixed Starrs are Sunns; which Suppositions, man names *Conjectures*. (*Grounds* 24, emphasis in original)

She therefore aligns fiction and science quite clearly, arguing that scientific "Conjectures" on the basis of organic life can be as fanciful as deliberately fictive

descriptions of lunar voyages. For Cavendish, the journey to the “World in the moon” simply cannot provide the nuanced philosophical critique that the journey to the imaginary “Blazing World” is able to, and by corollary, Cavendish is making an important argument for the nuances of the as yet nascent form of the science fiction text.

Cavendish’s distinction between useful fiction and scientific projection in contrast to the lunar voyage is also crucial for understanding why *The Blazing World* is an historically important feminist text. It helps us to understand that just as all discourses of Conjectures are based upon Fancy, so too do discourses of Fancy, such as *The Blazing World*, form a lens through which rational conjectures and arguments can be presented. This is ultimately because she believes that scientific thought (including her own) must never be imbued with an *unquestionable* authority because it too is a discourse composed of a mixture of supposition and “Fancy.” This is recapitulated by the Empress’s own rational and enlightened perspective: she clarifies the premise that all scientific discourses are based upon these “Conjectures” by stating that some conjectures are more *rational* than others. What distinguishes these conjectures from being as fantastical as more deliberately “fictive” forms of writing, however, is the gravitation towards a sense of logic. For example, the Empress’s prohibition of the magpie-, parrot- and jackdaw-men’s syllogistic contests (they are geometricians and logicians). She argues that syllogisms are that “art of logic, which consists only in contradicting each other, in making sophisms and obscuring truths,

instead of clearing it" (59) and "disorders men's understandings more than it rectifies them." (161) To base scientific reason on how *eloquently* scientific arguments can be articulated is therefore not the same as demonstrating use or substance, as Cavendish herself explains: "Words are but *Shadows*, [they] have no *Substance*" ("Assaulted and Pursued Chastity" 125). If science is fancy, then Cavendish is arguing that we must be careful that it is not also comprised of art or fancy *alone* and that it has some basis in Reason, so although *The Blazing World* is a fantastical world in which semi-precious jewels are used as flooring tiles, it is nevertheless one that clearly demarcates rational, from irrational, forms of reasoning.

If the reader was in any doubt as to whether Cavendish's own rhetorical address is an attempt to write plausible opinions in a plain style, the idea that she "write sense and reason" is clearly emphasised when the Empress is advised against asking "Galileo, Gassendus, Descartes, Helmont, Hobbes and H[enry]. More, etc" to act as scribes for the story of the Blazing World on the grounds that they are "self-conceited" (89). Metatextually, a guide advises her that "Margaret Cavendish" should instead become the Empress's scribe because "although she is not one of the most learned, eloquent, witty and ingenious, yet she is a plain and rational writer, for the principle of her writings, is sense and reason (89). Yet the reader's recognition of the fact that the Empress's pursuit of sense and reason is not merely for the sake of rational argument in and of itself is crucial to understanding *The Blazing World*. For example, when the Empress prohibits the ape-men's "fruitless attempts", at

experimentations with light, it is on the grounds that they should instead “be wiser hereafter, and busy [them]selves with such experiments as may be *beneficial* to the public” (48, emphasis added). It is perhaps no coincidence that the Emperess’s critique of the ape-men for conducting “fruitless” experiments on *sunlight* itself recalls the premise which lies at the very heart of the utopian science of Bacon’s Soloman’s House, that of: “*Experimenta Fructifera, and Experimenta Lucifera: Experiments of Vse, and Experiments of Light*” (“To the Reader”, *The New Atlantis*). In contrast to the experimental method, Cavendish is defining use value as the accumulation and dissemination of knowledge that is motivated by the desire to *enhance* human and animal life. For example, the Empress suggests that we need to understand phenomena such as how the flea works so that we can discover why beggars are plagued by flea bites (*Observations* 11). In doing so, Cavendish debunks the utopian viewpoint that *all* scientific work can be seen as either fruitful (*Fructifera*) and/or illuminating (*Lucifera*) by adding the caveat that even experiments with light itself can simply be *fruitless* as well as fruitful.

Cavendish’s vision of utopian science instead considers the ethical issues involved in experimental research practices. For example, the fish-men and worm-men scientists attempt to utterly refute the “vitalist” model of natural philosophy by claiming that blood cannot be the *essence* of living creatures (the central component of most vitalist arguments), since some creatures have no blood. The “vertuoses” assert that their use of “optick instrument[s]” proves that blood is not, therefore, the “seat”

of animal essences or souls (35). However, it quickly emerges that they cannot actually convincingly argue that this is the case because “as soon as they had dissected an animal creature to find out the truth thereof, the interior corporeal motions proper to that particular creature were altered” (35). In other words, when they dissected an animal and examined it under an optical instrument, the “circulation of blood in their veins and arteries” would stop (the creature having died). The ludicrous nature of such animal experimentation can also be associated with the popularity of Robert Hooke’s *Micrographia* (1665), published a year before *The Blazing World*. Cavendish’s critique of micrographia (drawings of magnified living matter), along with any other form of “fruitless” experimentation, was that dissecting live animals in order to draw them caused unnecessary harm.

[T]hey trouble themselves with poring and peeping through Telescopes, Microscopes, and the like Toyish Arts, which nether get Profit, nor improve their Understanding: for, all such Arts prove rather ignorant Follies, than wise considerations; [this] Art being so weak and defective, that it cannot so much assist, as it *doth hinder Nature*. (*Grounds of Philosophical and Physical Observations* 294, emphasis added)

As a wave of gentlemen began collecting optical apparatus for both leisure and study purposes (including Cavendish's own husband, William), the popularity of Hooke's *Micrographia* and its objectification of natural phenomena and Baconian experimental method became culturally inextricable. By corollary, so did the "hindr[ance] of nature" in the name of science.

Cavendish's critique of experimental science's disregard for "Nature" here also pre-empts Romantic critiques of the mistreatment of animals and slaves by centuries, so although feminist science fiction is often described as a legacy inherited from Mary Shelley's *Frankenstein* (1818) (see Introduction), Cavendish can be seen as interrogating the hubris-fuelled nature of experimental science long before the dissent from the Enlightenment's pursuit of Reason. Cavendish instead deploys the rationalism of her Parisian contemporary Descartes, in which: "it is better to make use only of those observation which present themselves of their own accord to our senses [...] rather than to search for unusual and contrived experiments" (Cress *Discourse on the Method* 36). This forms the basis of Cavendish's hypotheses, such as her idea that we can reject the vitalist argument that blood is the "seat" of living creatures because it can be *casually observed* that maggots – which are bloodless – can be seen to naturally "animate" from cheese (*Observations* 37-8). She therefore demarcates herself from those scientists who "wast[e] their Time and Estates, with Fire and Furnace, *cruelly torturing the Productions of Nature, to make their Experiments*" (*Grounds of Philosophical and Physical Observations* 294). In contrast, Cavendish's more utopian science upholds the

ancient *a priori* method of charting effects through causes by the process of casual observation. Cavendish even extends this critique of scientific methodology by contemplating the moral difficulties of imitating Nature through science some 150 years before the “reanimation” of living beings became the central theme of Shelley’s *Frankenstein*.

Whether it might not probably be, that the Bones or Carcase of a Human Creature, were the Root of Human Life? and if so, then if all the Parts were dissolved, and none were left undissolved, but the bare Carcase; they might be restored to life. [Yet] it was impossible they could be restored, by reason the Roots of Human Life, were those we name the Vital Parts; and those being divided from the Carcase, and dispersed, and united unto other Societies,¹⁵ could not meet and joyn into the former state of Life, or Society, so as to be the same Man. (299)

Pre-empting the failure of Shelley’s Victor Frankenstein, Cavendish predicts that scientists would be unable to successfully “return” matter into its proper form “so as to be the same Man” (229), since the matter would be changed by the systems it came into contact with, such as earth and air (“other Societies”). After all, in both

¹⁵ “Societies” here means microsystems, such as the atoms of a leaf or the workings of the human body.

Frankenstein and *Grounds of Philosophical and Physical Observations*, when the cadaver is reanimated, it does not know who – or what – it is.

Indeed, this question of matter and ethics is an issue which Cavendish reflects in the actual story of *The Blazing World* itself, since the debate surrounding the dissection of animals and the use of dioptical lens also serves to draw attention to the fact that the scientists are part animal *themselves*, which raises the question of the ethics of experimental observation through dissection, which is, in turn, also performed upon live animals. Cavendish is therefore drawing a parallel between humans and the live animals they are so keen to perform experiments on by depicting a world in which men are half-animal and half-scientist. Indeed, this is part of the larger critique of man's hubris; Cavendish's half-fish, half-bird and half-worm "natural philosophers" signify the fact that she believes human reason and intellect are *not*, in fact, superior to all natural creatures: fish "know" more about water, birds "know" more about flight and worms "know" more about what lies beneath the earth than the scientist can ever make claims to knowing (James 239). In the societies of the virtuoses we see that the figure of the scientist and the non-human creature share the same visual perspective; the power relation between the scientist and the object of study are *collapsed* because they are, after all, one and the same, both animal and scientist. More importantly, they are willing to listen to the rational conjectures of a female scientist. The hybrid animal scientists are thereby portrayed as far less monstrous than "human" scientists: unlike Baconian experimentalists, and Shelley's Victor Frankenstein, they are willing to listen

to reason concerning useless experiments, irrational arguments and the cruel torture of nature.

In addition to pre-empting the ethical concerns of Romanticism, Cavendish's critique of experimental science also pre-empts the work of contemporary feminist critics of scientific discourses, such as Sandra Harding, Carolyn Merchant and Evelyn Fox Keller. Today the "experimental" method is often referred to as modern science's antecedent: it is in Cavendish that we see the first signs of science fiction's simultaneous critique and negotiation of scientific models. Although Carolyn Merchant's *The Death of Nature* (1980) has addressed Cavendish's role to a certain extent, I have argued that there is a more integral link between science and fiction at play in Cavendish's corpus of "Fancy" and "Philosophy." However, perhaps unlike Merchant and Harding, Cavendish's main aim is not to critique science but to highlight the strengths and *uses* of these discourses. In contrast, Cavendish's corpus clearly demonstrates how women writers can utilize utopian and science fiction as a space for interrogating and exploring scientific discourses and social hegemonies. In *The Blazing World*, utopian *topos* and scientific debate together form a "plain[ly] writ" critical *dynamic* – one which stands in marked contrast to the somewhat ideologically-closed epistemologies of *The New Atlantis'* utopian science. Cavendish's is therefore an important case study for examining women's writing: it is both an astute precursor to Mary Shelley's *Frankenstein* (1818) and an integral part of the historical trajectory of the

feminist appraisal of science: Cavendish is perhaps less of a “troublesome ancestress” than feminist historians and early modern utopian scholars would suggest.

Cavendish’s heterogeneous approach to natural phenomena was, however, not a view that was upheld by the newly founded Royal Society (1660), England’s ultimate authority within the sciences. This is not surprising when we consider the fact that historians have described the Royal Society as a real-life manifestation of “Soloman’s House”, and that Soloman’s House itself formed a “lens” for perceiving the world in the most literal sense of the word: “*the Societie of Soloman’s House [...] is the verie eye of this kingdom*” (9). From the French mechanist’s definition of the text as a humanist-based treatise advocating epistemological classification, to its numerous sequels, *Soloman’s House* was upheld as the “Prophetik Scheam of the ROYAL SOCIETY.”¹⁶ Here the definition and segregation of the sciences was, therefore, primarily based upon the concern with “what” scientists observed; it was an object-orientated practice in which the subjectivity of the experimenter or observer is given precedent over the object. How practices which are based upon the Platonic split between “the body’s eye and the mind’s eye” created the “knowability and the objectability of nature” remains a familiar feminist debate even today (Keller and Grontkowski, “The Mind’s Eye” 209). Cavendish, however, resists the institutionalised objects-related definition of the eye’s “objectability” by firmly rooting it within a subjective, individual sense of seeing. She argues that we only ever see individually because each person’s eye is imprinted with

¹⁶ See Bronwen Price’s Introduction to *Francis Bacon’s New Atlantis* (2002).

the image of what they see in that moment, as “little figures in the sensitive organ, the Eye” (*Philosophical Letters* 170). Moreover, this definition of the eye could even be extended in order to consider how the concepts of vision and movement reflect some of the concerns within the fantastical voyage, the *terra incognita* and the idea of looking and journeying more generally.

It is apt, therefore, that Cavendish’s journey towards a “World of [her] own” begins with an address “To the Reader” in which the first word is “I” and the remainder of the text serves to call into account the “eye” of the scientist observer and the colonial utopian explorer, as well as the “I” of the authority of the scientist. Indeed, the letter “I” is not printed in ordinary type, but appears instead as a large “I” enclosed within the sail of a ship at sea, its journey already underway (see Appendix I). This may even have been a response to Francis Bacon’s *Instauratio Magna* (1620), which had also depicted a single ship at sea. Cavendish’s image of an “I” not only depicts the sea voyage which takes the protagonist to the Blazing World, it depicts the *allegorical* journey towards a more subjective, accessible, reflexive and, therefore, textually dynamic “I”/eye than other seventeenth-century writers had tended to proffer. Moreover, seventeenth-century culture also defined the look “inwards” as the rational use of the brain as autonomous, as part of Cartesian *agito*, which also happened to be one of the prevailing arguments in France during Cavendish’s exile with Henrietta Maria. Indeed, even Cavendish’s theory that *self-moving* matter is responsible for the formation of images within the eye links the concept of travel

(movement) to that of vision (the eye). It is after looking inward and studying natural philosophy that Margaret Cavendish's "I", allegorically speaking, *travels*: she looks and speaks outward, rather than inward." According to Cartesian cogito, "Reason" must be either deciphered or "seen" by the observer, the self being preserved as "present" through this idea of "Reason" alone. Cavendish's desire to transport her readers on a metaphorical utopian voyage, in which one can see for oneself the landscape, not only reflects the idea that self-moving matter constitutes what we see (since Descartes argues that reason must be "seen"), it means the "I"/eye takes on an almost metatextual presence in *The Blazing World*: it becomes the "I" that journeys. More importantly, its ultimate aim is to become an "I"/eye which transports others to an alternative, more feminist world of rational thought.

New Worlds

As a woman writing about science and society, Cavendish therefore presents the readers of *Observations Upon Philosophy/ The Blazing World* with a new "I" or eyes with which to see. Even the role of the "author" in *The Blazing World* – the "I", as it were, is informed by the both an anonymous narrator/scribe of the story, the character of the Empress and the "cameo" appearance of Margaret Cavendish as the Empress's scribe who is to tell the "story" of the "Blazing World." Yet although Cavendish describes her own writing as being "framed and composed of the most pure, that is,

the rational parts of Matter" (*Observations* "Epilogue"), critics have argued that the split sense of female subjectivity it presents posits Cavendish as a discombobulated "presence" in the text, the manifestations of a mad mind as it descends into hysteria, insanity and *jouissance* (Lilley xxii, Leslie 8). As I have so far demonstrated, Cavendish's writing is not a process in which the self is alienated from others and becomes mad; it is the explicit attempt to build a sense of feminist concern by including the voices of other scientists, other "I"/eyes to join this nascent dialogue. How this dialogue makes connections with women readers is even more important, and this begins with the fact that, meta-textually speaking, *The Blazing World* is the product of a feminist *collaboration* between the Empress and her scribe, Margaret Cavendish. The "mixt" praxis of Cavendish's oeuvre therefore makes a more solid foundation for the history of women's utopian and science fiction writing as the notion of building. This is referred to literally in *The Blazing World* when the scribe "Margaret Cavendish" begins to imagine how the Blazing World would be constructed according to the discourses of other philosophers, ranging from Plato to Descartes. Ultimately, those worlds prove to be too homogeneous and problematic for the scribe, and so: "when the Duchess saw that no patterns would do any good in the framing of her world; she resolved to make a world of her own invention" (101). As we can see, Cavendish's writing "I" is certainly one which she truly wished would be "understood by all, learned as well as unlearned" (*Observations* "To the Reader").

Cavendish's deployment of the rhetoric of monism is perhaps not as problematic, therefore, as it may at first appear. In fact, upon closer examination, we can see that she actually uses monism to describe how it is *writing* which is powerful, rather than the self. Writing "hath an absolute power over the Passions; for Poetry is like a powerful Monarch, can raise, rally, and imbattel them at his command" (*Natures Pictures* 629). It is not Cavendish who is posited as the fictional and metaphoric monarch here, then: it is the "I" in which the emotionally rallying nature of poetic writing comes to signify itself. As the character Travellia is described in Cavendish's 1668 stage play, "Assaulted and Pursued Chastity:" it is "[i]n her Eyes, new Worlds, you there might see" (Lilley 116). This is how Travellia's retinue describe her after she commanded them in battle disguised as a man, yet it could quite aptly be used to describe the real life Cavendish too, and certainly the Empress of the Blazing World. It is, after all, "through [Cavendish's] eyes" that we have indeed become privy to a critical voice that is both feminist and heterogeneous. It is therefore the operation of "Fancy" as an eye/"I" that is the key motif in Cavendish's corpus:

Fancy is the *Eye*, gives *Life* to all;

Words, the *Complexion*, as a *whited Wall*.

Fancy is the *Form*, *Flesh*, *Blood*, *Bone*, *Skin*;

Words are but *Shadowes*, have no *Substance* in.

("Assaulted and Pursued Chastity" 125)

Through *Travaillia*, Cavendish draws upon what she knows of female *solidarity* as opposed to monarchical singularity, both of which she was privy to in exile with Henrietta Maria. Putting this together with Cavendish's address to "All Noble, and Worthy Ladies", we can see that exile is not so much a concern with the lack of material wealth but the metaphorical estrangement from abstract knowledge women experience – the exile from knowledge and learning.

Long before Mary Shelley considered writing a "history of Woman" (Behrendt 137), Cavendish had tried to raise readers' awareness of a genealogy of "Writing Ladies" and how her female readers and contemporaries should aim to emulate the "many Heroick Women in some Ages" (qtd. in Chalmers 332). The address to "All Noble, and Worthy Ladies" in *Poems and Fancies* extends this even further by directly asking women readers to study and write of their own volition. In what I contend is an unequivocally feminist agenda, Cavendish addresses the censure of ladies learning as part of a "Battell." Directly appealing to women for their support, strength and respect in the wake of patriarchal society, she urges them to let:

[w] it be quick, and your Speech ready, and your Arguments so strong, as to beat them [men] out of the Feild of Dispute. So shall I get Honour, and Reputation by your Favours; otherwise I may chance to be cast into the Fire. But if I burn, I desire

to die your *Martyr*; if I live, to be *Your humble* Servant,
M.N.

It is worth noting the claim to martyrdom and humility here, which lie in direct contrast to her more public persona of a brazen, hermaphroditical and singular writing figure. When this is considered in light of the attempt to call women to a metaphorical feminist battle, the notion of monarchy as singular is entirely unravelled, for in making claims to a shared female experience, she is suggesting that women should not only look [in]to themselves alone in searching for a utopian space, they should *unite* in the general pursuit of their rights to learn, speak and write. Indeed, this is given further emphasis in *Poems and Fancies* (1653), where the entire anthology culminates in rhyming couplets which state: “*Thus I, that have no Garden of mine owne/ There gather Flowers that are newly blowne*” (214). This evokes the idea that women have been marginalised from philosophical and literary spaces, wherein the flowers blowing in the Garden amalgamates the image of the utopian space that was paradise/Eden with the conflation of the gendered nature of knowledge and original sin. If flowers represent the elusive nature of knowledge discourses for women, the image of a woman gathering discarded flowers in paradise therefore represents how women must seek to “gather” knowledge for themselves.

Conclusion

Cavendish was a truly radical being, for such a creature as the autonomous and publically-known “female writer” and critic simply did not exist before her lifetime. Even in the age of explicit secularism and the mechanism of the soul, we see that Utopia is a double-bind for women: it is to pursue autonomy when women’s knowledge itself is subject to both the patronage of men and the accessibility of print technology. Like science fiction itself, Cavendish was a figure who is neither entirely possible nor entirely impossible. Yet whilst feminist critics of science have been keen to demarcate the split between the “I” self and the sensorial “eye” in Cartesian dualism, Cavendish’s giant “I” on the sail reveals how we cannot trust the authorial “I” if we cannot also trust the scientist’s methods for seeing, their scientific “outer eye” (Keller “The Mind’s Eye” 217). The “I” of the first person authoress addresses the audience as those who will (metaphorically speaking) “sail” with her from one “pole” to another; to journey from the scientific theories of real life in *Observation Upon Philosophy*, into the scientific theories of the alternative world, that of utopian life in *The Blazing World*. The allegory here is as clear as the picture itself: with the dawn of Cartesian dualism, it is the “I” alone who sails the ship.

This is an important theme within the history of science and utopian fiction, wherein the “I” of the narrator has been traditionally a male voice, and usually a scientific explorer/discoverer of utopian worlds (and later, in Victorian fiction, it is to

become – much like the Empress in *The Blazing World* – the pedagogical classifier of strange species and their landscapes). The inner “I” of reason and self-presence is clearly looking outward here, and just as the textual differences between the twin books of *Observation Upon Experimental Philosophy* and *The Blazing World* appear to blur, so too does the distinction between exactly which eye/I is the outer lens and which one is the inner. Cavendish’s distinctive authorial persona and the numerous voices of female characters in her scientific utopia reveal that the “I” can be thematically conflated with the scientific “eye” of the philosophical observer, for it too is the “eye” of Reason and the soul. Margaret Cavendish’s voyage is not the manifestation of the desire to alienate herself from the society that marginalised her writings, *The Blazing World* instead provides a new perspective for its readers (especially female readers). Ultimately, it urges its readers to turn their looks *away* from hegemonic society, to set sail and do “Battel” by acquiring knowledge of rational discourse, or by creating dialogues of Reason with those negligible or “hybrid” figures who society would also seek to marginalise.

□My way of thinking□: Sarah Scott's Social Engineers and the Utopian Architecture of the Body

I let him into my way of thinking before he left this place, telling him that if a Brother behaved to me like a stranger, I shou'd never see him in any other light than that of a Stranger. I have not that regard to blood some good people have, [...] therefore I feel little from Relationship, my affection is proportioned to the merits & behaviour of my kindred.

(Sarah Scott, Letter to Lady Elizabeth Montagu, *Women Utopias of the Eighteenth Century* 94)

The eighteenth-century was the point in the history of utopian and science fiction that the myriad forms of the utopian imagination truly emerged in popular culture; from the Robinsonade and Guillianerian literary satires to the humanist principles of philanthropy, equality and sentiment that characterised philosophical thought, this was, indeed, the era of Utopia. Moreover, it was the idea of what is utopian that brought about those concepts most closely associated with eighteenth-century Enlightenment thinking (*Gender and Utopia* 5). In the previous chapter we saw how scientific endeavour had become expressed as the progress towards a utopian epoch in knowledge and discovery. In contrast, it is the emergence and proliferation of the utopian *novel* itself that characterises the utopian feeling of this century. It is worth noting, then, that although the emergence of the utopian novel is often associated with the concept of *satirical* utopias authored by men, such as Daniel Defoe's *Robinson Crusoe* (1719) and Jonathon Swift's *Gulliver's Travels* (1726), this stage in

history also played a significant role in the “rise of the women novelist.”¹ Yet it has often been reduced to the rise of the domestic utopia, one which has been labelled as less politically astute than the Gulliverian or Robinsade utopia. This chapter interrogates the contemporary feminist argument that the eighteenth-century domestic utopia was a conservative project. By examining the interwoven dialogues of architectural space, women’s writing and societal structure, I demonstrate how Sarah Scott’s (1723-1795) *Millenium Hall* (1762) can be seen as upholding a more revolutionary utopian paradigm than scholars have previously suggested.

Sarah Robinson Scott is a particularly interesting case in the history of women’s explorations of alternative spaces and times as “social laboratories”, since she is one of the few utopian writers in history who has actually been committed to founding and supporting real life alternative community projects. This is also ironic, given that her sister was the infamous Bluestocking leader, Elizabeth Montagu. Indeed, critics often label Scott as having been part of the Bluestockings, but this is simply not true of the reclusive writer, whose life was a far cry from the gambling habits of this somewhat bawdy fashionable group (Dunne 54).² She had, unusually, been granted separation from her husband due to his immense cruelty and she maintained a relative amount of financial independence due to the popularity of her writing, living as a spinster with her companion Barbara “Babs” Montagu (no

¹ See Jane Spencer: *The Rise of the Woman Novelist* (1993).

² Scott’s sister Elizabeth Montagu was a leading Bluestocking; for an interpretation of *Millenium Hall* as a “manifesto” of conservative Bluestocking feminism, see Gary Kelly’s “Women’s Provi(d)ence.” Nicole Pohl similarly argues that it is a conservative project in *Women, Space and Utopia* (2006).

relation) (Raftery 106).³ *Millenium Hall* (1762) was one of a number of popular works she produced, and it was also quite unusual for its time. Not only did it go against the grain of most women writers in its depiction of a male narrator, it was also one of the first texts to amalgamate the realist novel and the socio-political thematic concerns of the literary utopia. Of course, the community it portrays also very much reflects Scott's own attempts to form utopian communities.⁴ To date, scholars have never noted the fact that its publication was also likely to have been influenced by the failure surrounding the patrilineal and ultralineal inheritance of country houses (and hence parliamentary seats), which Lawrence Stone and Jeanne C. Fawtier Stone refer to as "the demographic crisis" in inheritance (100).⁵ This is because it is the description of how a group of wealthy women have pooled their resources together in order to provide for the disadvantaged in society by developing a utopian micro-economy. More importantly, they achieve this by re-structuring the architectural spaces of the country house – a space of marked significance because it was "commonly taken as a metaphor for the state at large" (Kelly "Women's Provi(de)nce" 175). From the well-educated (yet impoverished) orphan daughters of middle class gentleman and impoverished elderly, to the exploited dwarves and giants of eighteenth-century circus freak shows, all are included in a microcosm of what the anonymous narrator refers to as a "family so extraordinary" (12).

³ Also see Jane Spencer's Introduction to *Millenium Hall* (1986)

⁴ Again, see Spencer *Millenium Hall*.

⁵ *Millenium Hall* was re-printed in 1764, 1767 and 1778.

It is this extraordinary family model which reveals that reading the domestic female utopia as “partial” or “limited” neglects to account for the wider discourses it seeks to engage with, namely: medicine, architecture and a contemporary crisis in state-sanctified primogeniture. Furthermore, this anti-genealogical reading of the text presents a challenge to feminist readings of *Millenium Hall* as a gothic text. These gothic interpretations argue that by adopting giants, dwarves and other deformed people, the founding women (Miss Mancel, Mrs Morgan, Lady Mary Jones, Mrs Selvyn and Mrs Trentham) are figured as monstrous mothers who, following Foucault’s model of the performative and visual treatment of madness in the Enlightenment, lock themselves away from society’s gaze because they are unable to be adequate wives and mothers. In doing so, scholars have failed to acknowledge how *Millenium Hall* presents a clear challenge to the societal dominance of inheritance, family and blood-ties through its presentation of alternative and “extraordinary” family structures.

As we have seen in the Introduction, the relationship between feminism and architecture is an extremely important one: from Christine de Pizan’s allegorical *Citie des Dames*, women writing utopian and science fiction can be allegorised as the process of building a feminist space for women (in terms of both a literary history and in real life society) – a process of architecture, edification or, more precisely, of engineering in the fiction space of the “social laboratory”. Revising literary interpretations of this period is particularly important because the wives of wealthy

landowners had begun to have more authority in the structural development of the country house by managing the architects.⁶ At the same time, literary publications such as *Millenium Hall* paradoxically depicted fictive country house utopias which were *not* possible under this system of patrilinear inheritance. Indeed, one caveat to add to this increasingly autonomous role (for the more privileged women in society at least), was that it was inextricably bound within emerging models of women as domestic “managers.” The anxiety regarding women’s new domestic role was also very much part of the landed classes’ anxiety regarding patrilinear inheritance. In other words, managing the domestic space was synonymous with overseeing the prevention of infant mortality and an investment in the importance of the survival of male heirs to inherit these same country houses, rather than a reflection of a more feminist autonomy for women.⁷ In the backdrop of a renewed interest in Enlightenment social critique and architectural discourses, the allegory of “building” as the process of implementing social change had been given new weight. This becomes particularly significant when considered in view of the changes in women’s roles in the upkeep and *design* of the eighteenth-century domestic spaces. After all, the country house is a signifier of the system which saw men inherit the very same houses which represented parliamentary seats from their male relatives, along with the wealth, prestige, autonomy and industrial opportunity accompanying it. By re-

⁶ See Nicole Pohl and Brenda Tooley *Gender and Utopia in the Eighteenth Century* (2007).

⁷ The new female role as the manager of an increasingly nuclear family meant that women’s actions were more closely scrutinised, for more details see Nancy Armstrong *How Novels Think: the Limits of British Individualism from 1719-1900* (2006).

structuring the architecture of the traditional country house and its surrounding *milieu*, the women of *Millenium Hall* present a political statement about the power underpinning familial structures.

It must also be remembered that the beginning of the eighteenth century had also seen the birth of architecture as a *cultural* discourse. Indeed, as Nicole Pohl has pointed out, the frontispiece to the first edition foregrounds the neo-Palladian design of Millenium Hall, a style which had its roots in the *città felice* (utopian “happy city”) of renaissance Europe (see Appendix II).⁸ The “constructed” nature of utopia is revealed when the anonymous male narrator names the main house and its surrounding utopian community “Millennium Hall” declaring: “so I shall call the noble mansion of which I am speaking, as to an assured asylum against evil” (7); like most utopian enclaves, its real name is unknown. But the fact that the estate has no real name also highlights the difference between Millenium Hall and the usual country estate’s role as the signifier of a *family name*. In short, Millenium Hall is a model of economic and social sanctuary for the “afflicted” at a time when the landed estate takes on a renewed social importance. *Millenium Hall* can therefore be seen as the literal construction of Christine’s allegorical vision for a utopian polis, which houses virtuous women so that they may live freely, thereby presenting a

⁸ See Pohl’s “Sweet Place” and *Women, Space and Utopia* for more details on the significance of architecture and the utopian city. See Sally Jeffrey “Architecture” and Arthur Humphreys “The Arts in Eighteenth-Century Britain” in *Eighteenth-Century Britain: The Cambridge Cultural History* (1991).

radical yet realistic response to what Lawrence Stone and Jeanne C. Fawtier Stone have coined the “great demographic crisis” in seat inheritance.

Stone and Stone’s “great demographic crisis” refers to the fact that the direct transfer of inheritance to close blood relatives, male or female, had been decreasing since the turn of the century to reach an all time low between 1740 and 1780. This had then resulted in the marked effort to improve property inheritance through tactics such as ultrilinear inheritance (inheritance through women to a younger – and often distant – male relative), as well as a sense of generalised anxiety surrounding the distribution of power structures.⁹ Even the popularity of *Millenium Hall* can be seen as reflecting this particular generation’s genealogical concerns: it was published four times between 1762 and 1778 (Alliker Rabb 11, Spencer viii) – the exact decade in which inheritance was allegedly at its most critical, but it was subsequently not re-printed again until the 1980s. Likewise, the origin story of *Millenium Hall* reflects the problems of primogeniture: Mrs Morgan inherits the estate from her husband because it “fell to him” (138), and the story of the community’s expansion is that they have since gone on to rescue the “melancholy remains” of a house left to ruin by a younger male relative (221). In fact, because couples who inherited more than one estate would attempt to preserve the more powerful family name by inhabiting only one property, the deliberate neglect of the couple’s lesser estates’ properties saw acres of “melancholy remains.” This was often

⁹ In fact, the figures only improved to reach just above 65% again by as late as the end of the nineteenth century. See Stone and Stone’s *An Open Élite? England 1540-1880* (1986).

to enable a married couple to migrate to the larger of the couples' combined estates in order to upkeep the "family name" and coat of arms by associating it with the more prestigious estate. But as secondary properties were rarely passed on to other relatives, this was the futile concentration of economic resources in the hands of a privileged few *par excellence*. In other words, primogeniture perpetuated everything that was individualised and ineffective about the flow of wealth and power in the as-yet embryonic Industrial Revolution.

In contrast, *Millenium Hall* demonstrates a more productive, philanthropic and effective function for the real life land that is laid to waste as a result of this system. Hence since *none* of the women in *Millenium Hall* would have been entitled to hold parliamentary seats (women were not entitled to hold parliamentary seats – nor wealth – in their own name), Scott makes a silent, yet significant, protest. By inhabiting houses in which the occupants could not hold parliamentary seat, nor uphold the inheritance system, *Millenium Hall* disrupts the foundations of the nation's political, social and economic systems. Ultimately, as we shall go on to discuss, Scott reveals that when women possess the means of social power, they are indeed capable of acting with informed reason. Rather than seeing *Millenium Hall* as a challenge to the country house metonym, however, feminist scholars have posited the text as ideologically *colluding* with this system. Therefore, the stance the women make through the structure of the country house is one which is undermined by the fact that patriarchal nationalism could be seen to be upheld if the Millenium Hall

women “send weaker women into marital battles in their places” (Lamb 214). Yet *Millenium Hall*'s negotiation with the structures of wider society could also be seen as a way of bringing about *gradual* social change. In other words, it is important to remember that Scott is not against ideas such as marriage *per se* but against the injustices caused by those who are corrupt within it and, since no other adequate forms of support exist within society, they were keen to provide their own answers.

As the narrator is describing Millenium Hall after he has been taken on a tour of its estates, it has also been criticised for reflecting how the tourist attraction of the country house “openly ratified and justified the patrilineal power of the landed classes” (Lamb 204).¹⁰ When we dissect the English landscape as cultural and literary historians of space, we must take into account the difference between physical, as opposed to discursive, power dynamics (McRae 44). This means that there is a distinct difference between how Millenium Hall operates as a progressive utopian community and those mid-eighteenth-century discourses concerning spatial politics, subjectivity and (re)production that it is attempting to subvert (but, simultaneously, work *within* in order to affect social change). Millenium Hall presents possible alternatives for women and other marginalised peoples in the form of an alternative family community, rather than *subscribing* one for them. Its effectiveness may be precisely this: *Millenium Hall* does not present a radical and totally segregated (and also totally unobtainable) Amazonian society because it champions Scott's

¹⁰ For details on English countryside tourism, see Donna Landry *The Invention of the Countryside: Hunting, Walking and Ecology in English Literature, 1671-1831* (2001).

commitment to the notion of gradual and *real* social change. In doing so, *Millenium Hall* also resists falling into the utopian binaries as outlined by Barbara Goodwin and Keith Taylor in *The Politics of Utopia* (1981), since the utopian microcosm is neither socialist nor capitalist, neither a total rejection of marriage and normative family roles nor in support of them. It can therefore be seen as creating a resistive – rather than a prescriptive – space.

Dystopian Enclosure

In direct contrast to readings of *Millenium Hall* as the realisation of a conservative feminism are those interpretations of the text which argue that it operates as an asylum: “[t]yranny secretly persists among the confined in this lurid presence of unreason” (Foucault *Madness and Civilisation* 225).¹¹ If we consider Foucault’s description of the ideological function of the asylum/Retreat in *Madness and Civilisation* (1967) alongside theories of the ideological function of the country house as a rural retreat for travellers with poor health, *Millenium Hall* could be seen as a dystopian asylum, rather than a utopian retreat from society.¹² Critics have even argued that *Millenium Hall* pre-empt the aesthetics of the Romantic female gothic novels of Clara Reeve and Ann Radcliffe, in which the “monsters” or circus freaks

¹¹ In contrast, Roy Porter argues that asylums had become more *humane*. See Roy Porter “Shaping Psychiatric Knowledge: The Role of the Asylum.”

¹² For a comparison between the narratives of the Millenium Hall inhabitants to the prisoners tales in *Histories of Some of the Penitents* (1759), see Mary Peace “Epicures in Rural Pleasures: Revolution, Desire and Sentimental Economy in Sarah Scott’s *Millenium Hall*.”

that the women adopt (monster being the clinical term for someone with a deformed body), are “manifestations of a complex mix of social persecution, defiant identification and self-loathing, lurking within the text” (Dunne 72). Indeed, in re-appropriating the asylum-like space of the country house, the women could be seen as upholding the ideology of a culture of normalisation; Millenium Hall appears to be a space in which non-normative individuals voluntarily *confine* themselves within a “Retreat” which functions as “an instrument of segregation” (*Madness and Civilisation* 243). That is to say, it could be argued that it advocates the *intervalisation* of societal norms regarding difference. These interpretations have their roots in the critical considerations of women’s writing such as Gilbert and Gubar’s *Madwoman in the Attic* (1979). In particular, Gilbert and Gubar’s paradigm of how the writer’s frustration with society’s constraint of women’s bodies and voices is manifested in writing as a monstrous alter ego of rage and madness proffered new and exciting interpretative tools for analysing women’s writing (see the Introduction and Chapter Three). Furthermore, since it is the rescued circus freaks or “monsters” who reside at the spatial centre of the community, they can be seen as representative of the founding women’s repressed sexuality, and their inability to live as mothers, wives and daughters in normal society (Dunne 71), a process in which the women have “exteriorized the womb and its monstrous seed” (Acosta 117). In other words, it could be argued that rather than being Women of Reason, they are the arbiters of hysteria and Foucauldian “unreason.”

What is specific to the gothic, but which is not inherent within the bodies of the deformed monsters, however, is the idea that that which is hidden cannot be spoken about, and is therefore taboo. This is simply not the case when considering the nature of the enclosure in *Millenium Hall*: surprisingly, life within the enclosure is described as touching, humorous and utterly devoid of the aesthetics of abjection, drawing instead upon the cognitive aspects of Adam Smith's definitions of sympathy and empathy. As Smith's oft-quoted *Theory of Moral Sentiments* (1759) suggests: "by the imagination we place ourselves in his situation, we conceive ourselves enduring all the same torments" (2). As the narrator explains, the women felt much empathy for the monsters.

I learnt that when these people were first rescued out of their misery, their healths were much impaired, and their tempers more so; to restore the first, all medicinal care was taken, and air and exercise assisted greatly in their recovery; but to cure the malady of the mind, and conquer that internal source of unhappiness, was a work of longer time. (27)

In comparison to the confines of their dwellings with the "monster-mongers" they were rescued from, the enclosure within Millenium Hall that the monsters reside in is therefore more of a "good womb", a nurturing and protecting space in which the

monsters have been psychologically *rehabilitated*, which also corresponds to new trends in the management of eighteenth-century asylums.

Whilst Romantic gothic writing was an engagement with ideas such as the sublime, the beautiful, the abject and the picturesque that we find in works as early as Edmund Burke's *The Sublime and the Beautiful* (1757), when we examine the practical and political nature of the architecture depicted in *Millenium Hall* and how it permeates the lives of the utopians, what is striking is that there is a complete lack of engagement with gothic motifs. In fact, the notion of the picturesque within *Millenium Hall* has an antithetical function to that which we see in the female gothic: it is classical landscaping that attracts the travellers to Millennium Hall. Therefore its "remarkable verdure and *neatness* of the fields", which created a symmetrical space typical of early to mid-eighteenth century landscaping and arts in general, is far from the secrecy and dysfunctionality of the gothic story world (4). Millenium Hall even emphasises the composed and ordered nature of its architectural motifs by positing building and landscape as highly-constructed entities; the anonymous narrator's companion, Lamont, is even reminded of a famous landscaping artist, who the narrator alludes to as "the person at present most famous for that sort of improvement" (19). Whereas Lamont was probably referring to Lancelot "Capability" Brown or his mentor Horace Walpole (since both would have been practicing at this time), it is in fact revealed that the ladies themselves had designed the architecture of the landscape in which the "seats formed with such rustic

simplicity, as have more real grandeur in them, than can be found in the most expensive buildings” (20). This picturesque, rustic simplicity was typical of much earlier renditions of gothic architecture, but the fact that it is thought of so highly by such a ridiculous and comedic character as Lamont, and the fact that this “rustic simplicity” is highly artificial, renders this praise humorous and demystified, rather than a portent of the gothic nature of the text.

The women are not, therefore, depicted as the creators, authors or narrators of a gothic space – literary or physical – but possessors of practical architectural skills, as well as the knowledge of contemporary architecture needed in order to implement them. They are architectural and social “engineers” who “question the universe” and “go beyond the constraints imposed by a particular state of civilisation” (Lèvi-Strauss 19). The sense of “self” required in order to design *and* build the landscape is not the gothic self of repression and darkness: it is a highly rational and industrious self. As many readers will be aware, the revival of the pastoral through the notion of *asymmetry* and natural beauty did not come into fashion until the latter half of the eighteenth century, when this “natural” look became an ironically highly constructed and expensive form of horticultural fashion. Because of the chronology of the gothic, I would argue that *Millenium Hall* does not so much reflect the aesthetics and repression of sexuality associated with the *degeneration* of Augustan order that signalled the onset of European revolution, but speaks instead from more Augustan concerns with order, enlightenment and those

“Heights of Science and of Virtue [...] / Where all is calm and clear” evoked in James Thomson’s “Summer” in *The Seasons* (1726-1730) (qtd. in Humphreys 13).¹³ Simultaneously, of course, its address of where society is yet to fulfil this vision is strikingly apparent.

In order to understand how progressive and utopian Millenium Hall aims to be, it is important to understand that there are key reasons why *Millenium Hall's* architectural design reflects the shift from the Adam style to the functionalist concepts of *caractere* and *architecture parlante*, in which houses were seen as reflecting their owners’ bodies. More specifically, Millenium Hall epitomises the more general rise in the interest of Puritan ideals, and how houses should be *functional* for their owners (Pohl *Gender and Utopia* 85). Although Alexander Pope famously questioned the practicality of the Palladian style: “Shall wind thro’ long arcades to roar / Proud to catch cold at a Venetian door / Conscious they act a true Palladian part / And if they starve, they starve by rules of art” (qtd. in J. Alfred Gotch 237), of the five architectural styles to be established by 1750: Palladanism, rococo, Gothic, Chinese and neo-Classical, it was neo-Palladianism which was built for utilitarianism.¹⁴ The surrounding area of a country house had become that space in which “[t]he gardens were rearranged; stables were built; long walls of enclosure were raised:” (Gotch 241) as well as being a philanthropic move, the monsters’ quadrangular enclosure,

¹³ These aesthetics were to accumulate in gothic parody, such as Jane Austen’s *Northanger Abbey* (1818), as well as their complex utilisation and critique in Mary Shelley’s *Frankenstein* (1818). See Chapter Three.

¹⁴ See Geoffrey Beard “The Decorative and Useful Arts.”

itself divided into four sections, also reflects the utilisation of neo-classical ergonomics.¹⁵ If we judge Scott's intentions by how the inhabitants of the enclosure are treated, her futuristic and humanitarian principles cannot be defined as anything other than exemplars of how Enlightenment utopian thinking can be socially effective.

This is particularly true of the women's use of architectural design and space in order to care for the so-called "monsters." For example, the women re-construct the layout of the church so that those with deformed bodies who cannot fit comfortably into normal-sized pews are instead able to worship in comfort.

It occurred to me that their dislike to being seen by numbers must prevent their attendance on public worship, but my cousin informed me that was thus avoided. There was in the church an old gallery, which from disuse was grown out of repair; this the ladies caused to be mended, and the front of it so heightened, that these little folks when in it could not be seen. (29)

Not only does this reveal again the useful reusing of neglected spaces, it reflects discourses on the changing view of the landscape in a newly visually-aware England.

¹⁵ In fact, 3,602 acts of enclosure were passed between 1714 and 1820. See Simon Vary's *Space and the Eighteenth-Century Novel* (1990). Enclosure politics were also part of the 1750-1850 Parliamentary Enclosure Acts. See Donna Landry.

For example, the Claude Glass allowed the viewer to perceive a landscape without its deformities because it miniaturised a panoramic view, also known as the “Claudean Eye.”¹⁶ The church pews therefore offer the monsters the same kind of protection as that of a Claudean eye. However, contrary to interpreting Sarah Scott’s creation of a space of utility that is custom-built for the abnormal bodies of the circus freaks, discourses of spatial *limitation* have characterised scholars’ definitions of eighteenth-century cultural practice. Simon Varey encapsulates this view by claiming that: “anyone who builds *divides* space. To create a building is to create a space, or more precisely to *limit* a space and, by limiting, to define it” (9-13, emphasis added). Yet if the space surrounding the monsters is a process of limitation, it must be remembered that their enclosure had been built upon their request because, when they first came to Millenium Hall, “the horror they had conceived of being exhibited as public spectacles had fixed in them such a fear of being seen by any stranger, that the sound of a voice [...] would set them all a running behind the bushes to hide themselves” (28). These walls were not constructed out of condescending social philanthropy or a conservative desire to hide the non-normative bodies of the monsters: in direct contrast to Foucault’s madman who has to confront his own madness by looking in the mirror, the former circus exhibits request a temporary enclosure in a bid to overcome their *own* temptation to perceive themselves as mere bodily spectacles alone. The enclosure

¹⁶ See Landry *The Invention of the Countryside* (2001).

therefore ironically acts as a form of undoing – not solidifying – the socialisation of a wider society, one in which they have been treated as sub-human.

What emphasises the idea that the monsters are not defined as spectacles is how the women take great pains to help the inhabitants *feel* as if their abnormal bodies are “normal” by altering the structure of the church pews so that they have a clear view of the proceedings. This means that when they sit in church their heights are counterbalanced so that the dwarves and giants can all see as well as anyone else. Through the ergonomics of space, the monsters become the *spectators* rather than the spectacles, and the narrator is clear to point out that the so-called normalising function of the monsters’ church pews is the antithesis of the tortuous stretching rack of the “villain Procrustes” (24). In Greek mythology, Procrustes, Poseidon’s son, would offer a bed to travellers but he would stretch or shrink them on a torture rack in order to make their bodies fit the bed’s dimensions. Since Foucault’s descriptions of how eighteenth-century asylums’ attempts to rehabilitate its inhabitants are quite similar to Procrustes’ desire for a “normal-sized” guest (stretched to size on his rack), the architectural framing here resists both a “frame of monstrosity” and a “frame of normalcy.” Instead, it is the explicit attempt to create a frame of Reason and individual *comfort*. Moreover, it is one which is relatively successful, in which the inhabitants have begun to integrate with not just the members of the Millenium Hall community outside the enclosure but those strangers who live in the nearby village as well (from whom the monsters had

initially hidden). As opposed to upholding normalcy for normalcy's sake (like Procrustes, and wider eighteenth-century society), the women criticise those who act upon this desire, those who “torment by scorn those who fall short, or exceed, the usual standard” (24) “as if their deficiency in height deprived them of the natural right to air and sunshine” (25). They therefore highlight the fact that, to a certain extent: “is not almost every man a Procrustes?” (24). In this sense, Millenium Hall has clearly been as therapeutic for the so-called “monsters” as it has been for its other inhabitants and visitors.

The construction of their environment – custom-made for their physical bodies and based upon their psychological needs – has enabled the monsters to venture *outside* the enclosure, rather than remain within its confines; Millenium Hall cannot be seen as the enclosure of internalisation, for its look is *outward*. The reasons informing how space is re-appropriated so as to be of benefit to its inhabitants is therefore key to understanding *Millenium Hall's* rational feminism, and the church pews and enclosure are not the only form of utopian architecture. Not only is their enclosure the arcadian centre of the community, “filled with shrubs and flowers, which were cultivated with great delight by these once unfortunate, but now happy beings” (26), the women also construct uniform housing for spinsters, which they then customize and re-structure to meet the spinsters' needs once they have moved into them. Crucially, Scott's construction of supportive housing is in complete antithesis to how her contemporaries addressed the question of new housing for the

poor. Indeed, the “Hundred Houses” or “Houses of Industry” scheme involved the poor from several parishes being housed in one large mansion to alleviate the expense of housing them locally in separate labourers’ cottages and poorhouses (a somewhat Foucauldian move in its containment of deviancy). Scott was far ahead of her contemporaries for deploying architecture to make the lives of the poor and afflicted more comfortable: it was not until the late eighteenth-century that architectures such as John Plaw began to *design* functional buildings especially for labourers and the poor. Architects such as John Gwynn were still proposing that London areas housing the poor be demolished and replaced with housing for the socially affluent; Gwynn did not suggest where the inhabitants of these slums were expected to then live.¹⁷

Unlike *Millenium Hall* however, these schemes were specifically aimed at giving collective housing and employment to the “able”-bodied only; the novel’s description of the exclusion felt by its partially-disabled spinster women hence draws attention to the discriminatory conditions of such schemes.¹⁸ Their social exclusion prior to living in Millenium Hall is also poignant in terms of how the community forms a “family so extraordinary.” This is because the women had previously felt worthless because of their inability to have children and the social discrimination they experienced because of their various age-related disabilities (such as lameness,

¹⁷ See Simon Varey.

¹⁸ For a description of the “Hundred Houses”, see Dorothy Marshall’s *The English Poor in the Eighteenth Century: A Study in Social and Administrative History* (1926).

blindness and deafness). Yet Millenium Hall provides a form of integration for these women into a wider network of childcare, cloth production and non-familial community. Indeed, the spinster women become essential to Millenium Hall's structure of an "extraordinary" family. In turn, they not only become foster mothers to every fourth child born to parents who could not afford to support them, they also undertake part-time work and aid the basic education of the children. This makes them feel "useful" and like "mothers" again (14), until the children are provided with schooling at the expense of the community at aged five. The donations of the founding women from the main house pay for the children's schooling and have created a community amongst the spinster women as a social group, who claim that they used to row with each other when they first arrived at Millenium Hall. Reflecting Scott's own ambiguous relationship with her Bluestocking sister Elizabeth, the spinsters claim that: "We used to quarrel, to be sure, sometimes when we first came to these houses, but [...] now we love one another like sisters, or indeed better, for I often see sisters quarrel" (15). The women also describe how the weaver who is sent the foster mothers' spinning thread was previously untouched by other businessmen and "who before they came broke for want of work" (14). Hence the utopian community is built upon a network of aid, exchange and reciprocation: the poor children are fostered by the spinster foster mothers who work as part-time spinners and the yarn is sent to a weaver who is

unable to obtain work from anyone else, all as part of a co-operative that the spinsters define as the “power of friends” (14).

Indeed, the country house system itself was a spatial dynamic based upon the *relativity* of people and places. Where division (and enclosure) can be seen as a proactive movement towards custom-building for the individual body as part of a larger community network of re-enfranchised sub-communities, we can no longer say that the hierarchy of division is that of exclusion. From the varying height divisions of church pews, the division of the spinsters’ housing into more private apartments, the enclosure protecting the traumatised circus freaks, to the metaphorical bounds of the overall space we refer to as the “Millenium Hall” community itself, space is divided for humane reasons only. *Millenium Hall* is the product of discourses of sympathy and neo-Palladian architecture, which emphasised the idea that humans are *relational* – and not mere objects – in space, especially to their fellow beings. Therefore to critique *Millenium Hall* as a space of social division that manifests limitation in the very architectural splices and carves it makes into the landscape of a formerly misused mansion is to negate how the narrative explicates exactly *why* these divisions were created in the first place. One of the key reasons for its alternative spatial dynamic is, after all, to proffer an alternative to the family kinship web. The critical confusion surrounding the gothic readings of Sarah Scott’s *Millenium Hall* is therefore the question of how sentiments are being *manifested*. I suggest that Scott’s emphasis upon architecture and Reason, rather than affect and sublime terror or the

internalisation of normalcy, is indicative of how it forms an exploration of how discourses of sympathy can be related to the humanism of William Shaftesbury and John Locke; Locke had even referred to the body as the “house” of the soul (Locke, Essay II, xxvii).¹⁹ *Millenium Hall's* ergonomic re-structuring of the church seating, the enclosure and the foster-mothers' housing all evoke the idea that whilst current trends in architecture *arractere* had been to see buildings and landscapes as reflective of the human body and the household itself, it must not be forgotten that architectural change could have a great impact on *how* certain bodies are able to operate in society. Hence, the style of *arractere* is inversed, and architecture instead begins to radically alter how marginal bodies could be presented.

The birth of modern visual culture and the politics of “normalcy” were bound in the mid-eighteenth century as they had never been before. Science and spectatorship went hand in hand as people went to look at *arractuses* of other people looking at displays, such as Joseph Wright's famous *A Philosopher Giving A Lecture on the Orrery* (1766) and *An Experiment on a Bird in the Air Pump* (1768).²⁰ If the “monsters” are indeed to be figured in any way as monstrous seeds, this need not be a pejorative idea, for although disease and deformity (which was thought to be the direct result of the mother “looking” at something) were seen as essential to ideas of “inheritance”, this also meant that there was a new autonomy for *moulding* life

¹⁹ The most famous of these was Tobias Cohn's illustrations, which depicted the house as a human body. See Roy Porter *Bodies Politic Disease, Death and Doctors in Britain, 1650-1900* (2001).

²⁰ See Peter de Bolla *The Education of the Eye* (2003).

(Bouc  96). After all, the womb is an archetypal utopian space too. The womb-like monsters' enclosure also happens to reflect the contemporary feminist sociological claim that, rather than forming a dichotomy, the relationship between nature and nurture is instead more astutely considered as a reciprocal process also known as the "developmental niche" (362).²¹ Amid discourses of inheritance anxiety and the impact of Smithian sympathy upon the *development* of the foetus, then, Millenium Hall's claim to a right to perform the role of social "moulding" by engineering the environment in order to change the quality of life for its inhabitants means that even in the face of an emerging medical cartography of the grotesque, the human body is also the place in which ideas of order, genealogy and moral good are played out. Moreover, for Scott, this is a moral good which is utterly *extricable* from the idea of "nature" or biological "Kindred", as shall be clarified later on in this chapter.

The corollary of this revision of architectural space is that the female body in *Millenium Hall* becomes not so much a sexualised or de-sexualised product of domestic space but is re-structured – *architecturalised*, even – as a heterogeneous entity. This body of women, along with those who have been socially rejected as sexually non-reproductive (the spinsters and the monsters), could even be seen as a new and radical metonym for the country house itself. This is because, considering the culmination of Enlightenment discourses of sympathy, the moulding of life and

²¹ See Karla Stotz "The Ingredients for a Postgenomic Synthesis of Nature and Nature." Indeed, whether a pregnant woman's feelings of sympathy or revulsion could result in deformities in the unborn child had been a key eighteenth-century debate. See Paul-Gabriel Bouc 's "Imagination, Pregnant Women and Monsters."

architectural *arractere*, Millennium Hall becomes the pseudo-uterine space in which its inhabitants are *protected* from external forces, and from within which women nurture. Whether or not the monsters can be figured as the foster children of the founding women or as the women's symbolic monstrous offspring – disabled, and all are beyond childbearing age – the spinster women also reflect the founding women's biological deviancy. This is not tantamount to a collapse into late eighteenth-century medical aesthetics in which the female body was an abject form, however. Instead, it could be seen as a quite powerful feminist criticism of patriarchal order. The women of Millenium Hall are re-appropriating power relations by taking in those who, normatively speaking, would have no power in society because they do not function to support the grand narrative of linear inheritance – the main function of the highly metonymical mid-eighteenth-century country home. Scott's country house is not so much a Picturesque, Gothic or Arcadian utopia of affect, but the epitome of neo-Palladian utilitarianism – of arts segregated yet functioning as a well-ordered whole – the product of female Reason. What is of significance here, of course, is that the women do not mould the monsters as such, but the space *around* them in a process of nurturing and re-shaping nature (and the discomfort their “natural” biological deformities cause them). In other words, that utopian form of architecture most commonly associated with the building of the *città felice* is utilised to fit around those who are far from having the freedom of the polis.

A family so extraordinary

Although Scott has been criticised for retaining elements of social class exclusion, the overall positive regard, and subsequent treatment of, all who have been marginally “failed” by society undermines any attempt to define Scott’s philanthropy as inherently condescending. In fact, she felt the blow of society’s shortcomings almost as equally as any of the fictional inhabitants of *Millenium Hall*: she was not only facially deformed from small pox, she lived as a spinster after being allegedly poisoned and generally maltreated by her husband.²² She was also treated ambivalently by her famous sister and brother, and in the same year *Millenium Hall* was published, Scott relays to her sister their brother’s lack of respect for her in a letter:

I let him into my way of thinking before he left this place, telling him that if a Brother behaved to me like a stranger, I shou’d never see him in any other light than that of a Stranger. I have not that regard to blood some good people have, therefore I feel little from Relationship, my affection is

²² See Jane Spencer’s Introduction to *Millenium Hall* (1986).

proportioned to the merits & behaviour of my kindred. (qtd.
in Johns, *Women Utopias* 94)

Scott's distinction between "Kindred" and "blood" relation on the basis of behaviour alone is highly political; if blood kin who do not behave suitably, they cannot be deemed to be "Kindred". Hence the concept of "Kindred" takes on a non-biological meaning which is similar to Millenium Hall's ethos of the "power of friends" and the "family so extraordinary". Furthermore, this female autonomy in familial relations, a feminist "way of thinking", evokes the idea that the anonymous male narrator learns from his experience at Millenium Hall because, to use Scott's phrase (above): the founding women do indeed "let him into [their] way of thinking before he left this place."

Although the male first person narrator remains anonymous to the reader of *Millennium Hall*, he is soon revealed to be Sir George Ellison in her sequel, *The History of Sir George Ellison* (1766). By choosing to describe Millenium Hall through the eyes of the male narrator/explorer to educate *male* readers, Scott was in fact going against the trend in which women writers presented female narrators (Spencer *Millennium Hall* xi). Yet *Millennium Hall* has been criticized for upholding the traditional utopian role of the anonymous male narrator's first person narrative authority as explorer, scientist, factual writer and/or patriarch through the so-called eye/I of reason. But we must remember that the feminist trope of subverting the role of the

authoritative male in texts such as Mary Shelley's *Frankenstein* (1818) and Charlotte Perkins Gilman's *Herland* (1915) would not have been familiar to the mid-eighteenth-century reader. In contrast to this usual authority, "Sir George", as he is later known, came to Millenium Hall after being advised to by his Doctor to rest because the "twenty years" he had spent overseeing his Jamaican plantation had affected his health (11). *The History of Sir George Ellison* even sees him return to Jamaica to right the wrongs of slave labour and reject the parliamentary elitism of the seat system by *refusing* to run for parliament. In much the same way that the monsters are invited and made welcome into Millenium Hall as "Kindred", Sir George subsequently buys freedom for his slaves and provides them with as much paid employment as he can afford. In *Millenium Hall*, the bodies of the disfigured are freed by a group of women who have experienced the physical and moral vulnerability society can render, whilst in its sequel, on the other side of the Atlantic, black slaves are freed by a man who has learnt from these same women after becoming ill (and having therefore also experienced physical vulnerability himself).

The narrator's recognition of the true utopian nature of Millenium Hall lies in the fact that as he explores this alternative country house, pastoral idyll is exposed as being a false utopia. Sir George Ellison's initial utopian dream of refuge in Arcadia is undermined by its social realities when *Millenium Hall* instead presents "what is to be accomplished after the demolitions and the removals" of the brickwork of Scott's contemporary society (*Archaeologies* 12). Rather than being mere mirror images of the

women's state of abject self-awareness, its marginalised inhabitants are, paradoxically, at the heart of a social imperative to *free* imprisoned peoples. *The History* serves to demonstrate something of the impact that Millenium Hall could have had upon the impact of England's political, economic and social structure. Crucially, how this economy of positive discrimination, shared wealth, self-sufficiency, and nascent feminism develops into an expanding community project is largely based on various incidences in which people *learn* from one another. The importance of this learning dynamic means that *Millenium Hall* cannot be comfortably aligned with the static hegemony of Puritan philanthropy; similarly, the text is grounded in reality far more than the hyperbole of the novel of sentiment. In contrast to the novel of sentiment, *Millenium Hall* does not struggle to convincingly portray a neo-classical "man of feeling" or "woman of virtue" against a social backdrop that emphasises the new nature of non-reproductive production but encompasses these ideals of sentiment and virtue from within a realistic sense of economics and society at a time when the idea of production became markedly distinguishable from the idea of procreation (Johnson 34-48).

In fact, production and creation are intrinsic parts of everyday life at Millenium Hall: many of its inhabitants are producers but not excessive consumers, and none of them are procreators. Its alternative nature of production is emphasised from the moment that they are first introduced to the reader: the founding women are all engaged in creating different forms of *structures*; one woman is painting a

landscape, the other a Madonna, another is carving a picture frame and another is busy engraving. The fact that the ladies are described first by *what* they are doing rather than what they look like and the fact that these pieces can be seen as representing the women's individuality rather than their abstraction, problematises the assumption that they represent the new leisured classes' "abstraction of femininity" (*Gender and Utopia* 2). Miss Mancel, who is described as the most elegant ("the handsome lady"), was painting the Madonna (107). Miss Trentham, who was carving, is described as having been scarred by small pox, who – like Scott herself – has endured the "cruel ravages of that distemper", carved into her own face (9). Lady Mary Jones, employed in engraving when we first see her, is described as someone who has survived "sickness" with less physical scarring than Miss Trentham, but yet she is not as beautiful as Miss Mancel. The landscape piece – a work which could be described as depicting the same panoramic vision as the architectural eye, is revealed as the work of Mrs Morgan, the founder and principle benefactress of Millenium Hall. Therefore, the founding women are *differentiated*, rather than abstracted, by how their various life experiences have become represented within the very art that they produce, as each piece is symbolic of their individual contributions to the utopian story behind Millenium Hall's social project.

Far from being, as many critics have argued, typical of the "female Arcadia", a landscape of "abundant fertility and female sexuality" (Dunne 57), Millenium Hall presents an acute awareness of modern construction and *artificial* production. As

producers who are aware of how the roles of “woman” and “human” are themselves constructions, the women are the antithesis of the Bluestockings. Instead the women of Millenium Hall reject elaborate dress and frivolous past times and argue that to indulge them would be to “dress with so much expense that [they] could scarcely move under our apparel”, a habit which is famously demonstrated by Alexander Pope’s “Essay on Woman” engraving (203). By emphasising non-creative and non-reproductive forms of production, they subvert conventional definitions of who exactly the normative (re)producers are in dominant economic relations and, I suggest that in doing so *Millenium Hall* seeks to subvert normative (re)production itself. The important point to remember about the link between production, nationhood and family through Millenium Hall’s social network of non-normative bodies and non-familial relationships, such as “fostering”, is that it presents the idea that if societal structure is that which is produced, it is hence that which is also subject to re-structure – to change. The women of Millenium Hall reveal that when *different* producers/non-“reproducers” are in charge of material and maternal production, they are capable of beginning the edification of new social practices. *Millenium Hall* completely subverts the eighteenth-century grand narrative of blood relations and the production of normal bodies: if more communities such as Millenium Hall existed, more people could elect – in the literal sense – to be part of an alternative community to one which is dictated by blood ties. *Millenium Hall* does this by playing upon the idea of the “sentimental look” whilst asserting that

sentiment that is indulgent remains mere affect, and is therefore arbitrary unless Reasoned and then *acted* upon. *Millenium Hall* heads a different kind of reproduction to that of the state-sanctioned primogeniture; it presents the reproduction of *ideas*. In this sense, Millenium Hall is built upon variations on the idea of social inclusion, fostering and kinship circles that exist outside of blood ties as much as it is built upon the neoclassical and Palladian concepts of order and utility.

After centuries of the eroticism and comedy of the female utopian community, *Millenium Hall* is one of the first utopias to depict women-only communities in a positive sense. The female utopian vision of *Millennium Hall* is very much the product of its time – a much-needed space for women who lived in a Protestant England that did not provide the retreat of the convent (Spencer, *Millennium Hall* xiii). This is ironic, given that Scott is writing at a time in which female utopias (and perhaps attempts at female equality with men) are defined as failing. Earlier eighteenth-century utopias, such as Eliza Haywood's *The British Reduse* (1722) and Delariviere Manley's *The New Atalantis* (1709), had given way to the more Puritan utopian writing of Scot, Sarah Fielding, and Lady Mary Hamilton (Pohl *Women, Space and Utopia* 79). Whilst we can examine the feminist nuances of texts on a specific level, the fact that utopian writing by women depicts the intentional female community as inevitably failing: from the all-female secret group the New Cabal and the *coup d'etat* to overthrow the matriarchs of Utopia in *The New Atalantis*, to the failure of the utopia in Sarah Fielding's *David Simple: Volume the Last* (1753), female

utopian spaces were seen as failures. Alessa Johns suggests that the partial vision of the eighteenth-century women's utopia was not necessarily the failure of feminist utopia; these texts can also be defined as a "gradualist" approach to social change, a form of "utopian colonization" ("Thinking Globally" 169). Considered thus, *Millenium Hall* can be seen to "reproduce" only *itself* in terms of its plantation sequel, its new houses and its realisation as Scott's real-life country house community projects at Batheaston and Hitcham (Cullen Khanna 36). Indeed, many utopian scholars would argue that to define the literary utopia as a totalizing "blueprint" for a better society is to oversimplify the complexity of the genre's socio-political – and spatial-temporal – dynamics.

Frederic Jameson argued that ineffective utopian visions occur when "the effort to imagine utopia ends up betraying the *impossibility* of doing so" (*Archaeologies* 290, emphasis added). The more "unrealizable" and "unimaginable" the utopian world appears to be in comparison to the author's social context, the less of a plausible catalyst for social change utopia becomes (xv). Utopia – like science fiction – can therefore be defined as a *temporal* negotiation between what is possible and what is not by defining what is possible in terms of time itself: what may not be possible today, may be possible tomorrow instead. Crucially, what demarcates *Millenium Hall's* gradualist utopian endeavour from other eighteenth-century utopias is its inclusion of social "others" – from the women villagers surrounding the house, to the monsters at the community's centre. That its paradoxical disruption of

inheritance through the re-appropriation of the family and reproduction is not surprising, given the fact that many critics recognise the family as being the one system that utopian fiction has always sought to change (*Archaeologies* 207).

Conclusion

Millenium Hall is clearly rooted in the shifts in both the eighteenth-century understanding of the material body, and what happens when the social hegemony of the universal body – that of the “male body” of “Enlightened” man – comes under threat in an inheritance crisis. This may be one reason as to why utopian science fiction in which “monsters” form part of the kinship circle are nearly always characterised as part of the “post-human” movement in Anglo-American discourses (*Archaeologies* 207). Explicitly emerging in theoretical and fictional writing from the 1980s, the posthumanism debate questioned and disrupted the assumption that the human is a sentient and unique philosopher in the world, known as universal man, and has therefore contributed significantly to the feminist critique of this figure (see Chapter Five). *Millenium Hall's* inclusion of the “other” foregrounds recent arguments regarding the exclusivity of the family structure, how it is represented by the normative, reproducing body and, by corollary, it exposes the fact that the definition of what it means to be “human” is highly exclusionary.

Through its re-alignment of social structures, *Millenium Hall* can be seen as freeing women from the domestic role of their material bodies. Paradoxically, *Millenium Hall* does not include the usual female figures which would have been integral to eighteenth-century nationhood: mother, wife, daughter and so on, and yet it *does* house these figures, in two senses. Firstly, the women are wives and mothers disillusioned by how the family structure can act as an incubator of tragic events and immoral deeds and, secondly, the role of “mother”, “daughter” and other familial roles can be clearly gleaned in the fact that the women act as foster mothers to the wider Millenium Hall community. This is also extended by the spinster women’s fostering of the unwanted children of large, poor families. Scott therefore frees the domesticated female body from the chains of bourgeois notions of nationhood but not the notion of the familial itself. However, I would like to suggest a more radical reading of Scott’s “family so extraordinary” (*Millenium Hall* 12): Scott’s negation of resolving these states of female, as well as other, marginal subjectivities is akin to how contemporary queer theory has sought to sever the *futurism* of genealogical processes (Edelman 23). This must not be mistaken for an imperative to oppose all social phenomena which claims an identity for itself as a radical and political counterforce in the pursuit of achieving the “suturing” of identity however. Rather, as Lee Edelman suggests: “undo[ing] the identities through which we experience ourselves as subjects [...] undoes the paternal metaphor of the *name*” (24-5, emphasis added). This is exactly what we see in *Millenium Hall*: the metonym of society at large

is rendered socially formless in terms of patriarchy: no parliamentary seat, no inheriting family name, no core reproductive identities – no sense of a genealogical family future at all.

More important is for *whom* this metonym is seized: it is the much-maligned deformed, those beyond child-bearing age, those widowed young, those never married, those separated from their children and/or mothers, those scarred by illness, those, in fact, who, despite their apparent lack of social power, happen to constitute precise and direct threats to normative reproduction. The inhabitants are those in whom the nation as it was known could be seen as not having a future at all, and in doing so they simultaneously figure as the creation of a new legacy and genealogy of power relations. There may be “no future” for the inhabitants in a sense of patrilinear reproduction, but this is where we can see exactly how the overlap between queer and feminist praxes can be effective. Through the notion of a “family so extraordinary”, Scott presents a truly heterogeneous and nascent queer vision. It is one in which we can begin to glean how feminist utopian and science fiction operates as a legacy that stands, paradoxically, to challenge the concept of how genealogy always serves to uphold the *status quo*. For this reason, the “family so extraordinary” cannot be conflated with the “normal and natural” pseudo-familial institutional *milieu* of Foucault’s asylum (*Madness and Civilisation* 252). They present a truly different future, one in which non-reproductive production is the main

function: they craft an extraordinary family of utopian endeavour, one which is upheld by the “power of friends” (*Millenium Hall* 17).

Monstrous (Re)production: Women Writing Imperialist Technology

I have thought also of the Lives of Celebrated Women – or a history of Woman – her position in society and her influence upon it – historically considered.

(Mary Shelley, *Letter to John Murray III*, 1830)

The future is composed merely of images of the past, connected in new arrangements by analogy, and *modified by the circumstances and feelings of the moment*; our hopes are founded upon our experience; and in reasoning concerning what may be accomplished, we ought not only to consider the immense field of research yet unexplored, but likewise to examine the latest operations of the human mind.

(Sir Humphry Davy, *A Discourse, Introductory to a Course of Lectures on Chemistry, delivered in the Theatre Royal Institution, on the 21st January 1802*, emphasis added)

The first few decades of the nineteenth century represent a period in British literary history which has been defined as “transitional.” This is because literary canons often suggest that the popular novel had no dominant *form* during the onset of the Industrial Revolution. Neither that of Romanticism’s gothic, nor the Victorian *bildungsroman*, literature produced in the period 1810-1830 is defined as either post-Romantic or pre-Victorian, and rarely “Regency” (1811-1820). However, the early nineteenth-century is also an age which is entirely *singular* in terms of its scientific and technological advancements, when the technological and ideological drive of industry took a firm hold of both Britain and the popular imagination. As much as literary studies has

defined this period as an intangible one, it is this very sense of sociopolitical flux which is integral to an understanding of the genealogy of women writing utopian and science fiction.¹ It was, paradoxically, this literarily ambivalent era that utopian and science fiction scholars have earmarked as that which is able to boast an important canonical accolade, for Mary Shelley's *Frankenstein* (1818) is seen by many as the birth of a ground-breaking genre form, which was later coined "science fiction."²

Given the rise of industrial technology of this era and the publication of *Frankenstein* during the early nineteenth century, this period should surely be of particular interest for utopian and science fiction scholars; in reality this is not the case. Few scholars, for example, have considered the work of a similarly-themed and equally popular British text: Jane C. Loudon's *The Mummy!* (1827).³ This chapter attempts to redress this by charting the ways in which *Frankenstein* and *The Mummy!* explore science and technology, production and reproduction. Rather than being liminal within literary studies, this chapter demonstrates how, in terms of dialogic engagements, the period 1800-1832 is canonically central. Since Ellen Moers' *Literary Women* (1977), Elaine Showalter's *A Literature of Their Own* (1978) and Gilbert and Gubar's *The Madwoman in the Attic* (1979), numerous women's writing scholars have focused their attention on *Frankenstein* as the work of the daughter of controversial early feminist writer Mary Wollstonecraft and radical philosopher William Godwin,

¹ This sociopolitical unrest was partly due to the Napoleonic Wars (1799-1815), the War of Independence (1775-82) and numerous British workers' revolts (1811-1817).

² See Anne Mellor *Mary Shelley, Her Life, Her Fiction, Her Monsters* (1989).

³ See Alan Rauch *Useful Knowledge: the Victorians, Morality and the March of Intellect* (2001).

and wife of the Romantic poet Percy Bysshe Shelley. It has therefore been read as a Miltonic “birth myth” which explores the tragedies of Mary Shelley’s life experiences within the backdrop of medicine’s depiction of the material body – especially the female body – as abject. For example, not only did her own mother die shortly after giving birth to her, three of Mary’s own children died in infancy. More recently, critics argue that *Frankenstein* has inspired a generation of science fiction by women, as well as critical feminist writing produced by women working within scientific fields. Playing upon the concept of monstrous progeny, this body of writing is often referred to by critics as the feminist “legacy” of *Frankenstein*.⁴

Loudon’s *The Mummy!* is also part of this legacy, since it was a direct response to the themes within *Frankenstein*. Following this, *The Mummy!* should perhaps be seen as having initiated Shelley’s feminist legacy as *Frankenstein*’s first metaphorical “heir.” Not only is the plot closely related to that of *Frankenstein*, like Mary Shelley and Sarah Scott (see Chapter Two), Loudon’s familial circumstances meant that she was forced to financially support herself. Born Jane C. Webb (1807-1858), she moved to London following her father’s death when she was just seventeen. She would also have been privy to controversial fictions such as *Frankenstein* because she lived under the care of John Martin, a Romantic painter who entertained the likes of William Godwin. Whereas Shelley went on to write the apocalyptic fiction *The Last Man* (1826), after publishing *The Mummy!*, Loudon instead met future husband, the well-known

⁴ For example, see Debra Benita Shaw *Women, Science and Fiction: The Frankenstein Inheritance* (2000) and Jane Donawerth *Daughters of Frankenstein* (1996).

horticulturalist John Loudon and together they became the leading horticulturalists of their time, a turn of events which scholars have been extremely dismissive of.⁵ Despite *The Mummy!*'s depiction of a futuristic Europe founded on steam technology, few critics have considered it to be anything other than a conservative novel of utopian science.⁶ There has been no constructive recognition of the fact that the emergence of this new "science fiction" form of the novel is epitomised by the critical dialogue between *Frankenstein* and *The Mummy!* following the British excavations of the Pyramids and the discovery of electricity.

Loudon's relative neglect as a science fiction writer also raises a more general point regarding the nature of women's writing, since reading texts such as *The Mummy!* as too conservative to be included in a feminist literary canon ultimately means that their literary and cultural engagements remain unrecognised. Yet from the Frontispiece onwards, *The Mummy!* posits itself as an engagement with the 1818 edition of *Frankenstein*. Just as the title page of *Frankenstein* presents a quotation from "Paradise Lost" in which Adam questions being created, *The Mummy!* proffers a biblical source of this same question of creation, wherein the phrase: "bring me up" explicitly correlates with the word "promote":

⁵ See Lisa Hopkins "Jane C. Loudon's *The Mummy!*: Mary Shelley Meets George Orwell, and They Go in a Balloon to Egypt". For a critique of Loudon's career as a botanical writer, see *Useful Knowledge* (2001) and Paul Alkon *The Origins of Futuristic Fiction* (1987).

⁶ Only Silke Strickrodt's "On Mummies, Balloons and Moving Houses" approaches the text in anything resembling a positive light, compared to Lisa Hopkin's "Jane C. Loudon's *The Mummy!*: Mary Shelley Meets George Orwell, and They Go in a Balloon to Egypt" at http://www.cf.ac.uk/encap/romtext/articles/cc10_n01.html and Alan Rauch *Useful Knowledge* (2001).

Did I request thee, Maker, from my clay

To mould me man? Did I solicit thee

From darkness to promote me?

John Milton *Paradise Lost* (X.743–5) (*Frankenstein* 1818,
Frontispiece)

Why hast thou disquieted me, to bring me up?

(I Samuel 28. 15) (*The Mummy!* 1827 I, Frontispiece)

The former quotation reflects *Frankenstein's* story of how a late eighteenth-century Genevan scientist amalgamates and re-animates parts of several human corpses, whereas *The Mummy!* explores this theme by depicting a future world of 2126 in which a scientist re-animates the mummified corpse of the ancient Egyptian conquer Cheops. As many readers will be aware, *Frankenstein* is the tale of how the scientist Victor Frankenstein becomes drawn towards applying his knowledge and passion for the “modern” new science in order to cure the sick and bring back the dead, in order to rid “disease from the human frame, and render man invulnerable to any but a violent death” (23). This in turn leads to the desire to bring about the “creation of a new species [which] would bless [him] as its creator and source” (36). The utopian image we are presented with is that of Frankenstein’s view of the future of earth populated by a physically superior species – the reality, however, is somewhat different (Sternenberg 149).

Frankenstein's utopian dream becomes a dystopian endeavour as he isolates himself in a workshop and constructs an artificial man out of the corpses of the poor and the criminal, which he animates by some undisclosed means of scientific apparatus. Horrified that the realisation of his "utopian" man is an ugly, fleshy and monstrous being, Frankenstein flees his workshop. After being deserted by Frankenstein, the resulting monster's attempts to assimilate into the world are all thwarted by his gigantic and sutured form as his interactions with society are met only with horror. Upon discovering Frankenstein's notebooks describing "the whole detail of [...] the minutest description of [his] odious and loathsome" origins (as the product of numerous corpses), in despair and vengeance he murders several of Frankenstein's family and friends (105). His voice is therefore the one which most explicitly reflects Miltonian Adam's lament (see above). Frankenstein's efforts to destroy his monstrous creation lead to his own death from exertion, whereupon the monster claims that now Frankenstein is dead, he too will kill himself.

As many scholars have noted, *Frankenstein* itself is the inspiration behind Loudon's *The Mummy!*, which charts the impact of the reanimation of an Egyptian mummy after Frankenstein himself had observed of his own reanimated, monstrous invention: "A mummy again endued with animation could not be so hideous as that wretch" (40). *The Mummy!* both explores and ultimately supports his claim, for the reanimated mummy Palleic king Cheops is indeed not as monstrous as Frankenstein's creation

because his Shakespearian dissembling is eventually revealed as being motivated by his desire to put right his own imperialist history as the conquer of lands. But the popularity of both *Frankenstein* and *The Mummy!*, and their novae of science, technology and the possible future “evolution” of the human form, come as no surprise when we consider that the first few decades of the nineteenth century pay witness to a flurry of industrial, scientific and technological innovations. This is especially true for *The Mummy!*, whose depictions of futuristic engineering and steam power can be seen as having been influenced by the introduction of the first steam locomotive engines after George Robert Stephenson’s “Blucher” (1814), the first “towing” steam boat (1802), the first railway at Stockton and Darlington (1825), the development of the new “macadamized” road system, the innovation that was Thomas Telford’s Menair Suspension Bridge (1826) and the dissemination of industrial inventions such as the “steam loom” (Rauch 81-2). The developments in electrophysiology directly referred to in both *Frankenstein* and *The Mummy!* were based on a series of Luigi Galvani lectures when, following Alessandro Volta’s voltaic pile, the first electric battery (1800) and the subsequent use of galvanism in science, Humphry Davy had discovered that electrolysis caused electricity, and Michael Faraday had developed the “Electric Machine” (1821). Finally, much to the dismay of those advocating anti-Jacobin paradigms of religion and stability, Erasmus Darwin’s *Zoonomia, or the Laws of Organic Life* (1794-6) had controversially cast doubt on the

existence of the human soul, suggesting that humans were evolved from *lower*, rather than higher, forms of life.

Knowledge of these technological and scientific advancements were also all fairly available due to the rise of print culture due to the fact that printing techniques were dramatically aided by technological advancement (Tropp 25), catalysing that surge in textual production and reading cultures that Rauch has dubbed the “knowledge industry” (1). Scientific developments became disseminated widely in Davy’s extremely popular literary works and lectures from 1802 onwards. We come full circle when we consider that this then facilitated the dissemination and redistribution of texts such as *Frankenstein* and *The Mummy* in subsequent reprints and revised editions, which means that the “textual bodies” of these novels were very much those of popular material cultures.⁷ Many critics have noted how the theme of material cultural in *Frankenstein* is played out by demonstrating a blurring of the cultural boundaries between rich and poor, male and female, man and monster, master and slave and more importantly, Same and Other (Lee 171). The monster’s abhorrent fleshy and material nature no doubt demarcates him as evil, reminding us that our own biological bodies are also monstrous.⁸ I suggest that a further, more crucial, dialectic is at play within *Frankenstein*: the monster, even as sentient and

⁷ See Alan Rauch for a reading of *Frankenstein* as a direct comment upon the epistemologies of early nineteenth-century knowledge: the body of the monster is an allegory of the actuality of an (otherwise merely metaphorical) discursive “body” of monstrous knowledge.

⁸ See Colin McGinn *Evil, Ethics and Fiction* (1997).

abhorrently fleshy as he is, blurs the boundary between production and reproduction, specifically in the blurring of the idea of man and *machine*.

One way in which *Frankenstein* achieves this is by blurring the boundaries between procreation/reproduction on the one hand and scientific/technological *production* on the other. By manufacturing a being which is in the image of man, Frankenstein usurps the role of Nature in bestowing biological life and the role of the female body as the vessel in which this human life is created. As discussed in Chapter One, the Newtonian/Baconian language describing the scientific pursuit of Nature has been critiqued by feminist writers from Margaret Cavendish onwards. Rauch even goes as far as to align Frankenstein's endeavours with Francis Bacon's seventeenth-century ideal of utopian New Science, whilst simultaneously classifying *The Mummy!* as a nineteenth-century version of Bacon's *The New Atlantis* (1627) (81). Indeed, *Frankenstein* has been one of the key focal points of this trajectory of feminist critique, for Frankenstein's actions have often been interpreted as constituting – both metaphorically and literally speaking: “a rape of nature” (Mellor 124).⁹ Whereas Rauch argues that *Frankenstein's* “approach to knowledge, inclusive and revisionary, *anticipates*, as we will see, feminist critiques of science” (98, emphasis added), it must be remembered that, as demonstrated in Chapter One, feminist critiques of science actually existed prior to *Frankenstein*. It is therefore more accurate to describe

⁹ Mellor's *Mary Shelley: Her Life, Her Fiction, Her Monsters* is the exception to this trend.

Frankenstein as having become a “touchstone” for feminist critiques of science: as a manifestation of irresponsible approaches to scientific praxis, the monster has come to be seen as symbolising the feminist revolt against Newtonian/Baconian discourse.

To read *Frankenstein* as merely a critique of seventeenth-century science is to oversimplify its inherently intertextual form, however. A more enriching approach is to consider the scientific *milieu* surrounding Mary Shelley informing the relationship between science and *Frankenstein*. For example, Shelley had been reading Davy’s work, whose lectures were printed due to their popularity (Mellor 93-5).¹⁰ Davy’s premise that “science has for its objects all the substances found upon our globe” is key to a more nuanced understanding of Shelley’s text as an exploration of the structures of imperialism and *industry* (*A Discourse* 1). This is because Frankenstein’s monster can be seen as playing out the concept of man as industrial machine in several ways: the idea of the automaton, the revival of neo-Cartesian philosophy in response to the work of John Locke, such as Julien Offray de la Mettrie’s *Man A Machine* (1748), and the socio-political status of working men and women in Britain. It is Davy’s *A Discourse* that links the ideas of “monster”, “machine” and the moulding of the industrial landscape, providing useful insights into how the automaton may have been seen in the early nineteenth century.

¹⁰ Whereas Rauch puts forward Humphry Davy as the philanthropic *antithesis* of Victor Frankenstein in his desire to *disseminate* knowledge and relinquish its economic profit for the common good, Mellor instead examines *A Discourse* (1802) in order to demonstrate that Davy’s work was instead the plausible inspiration for Shelley’s portrayal of Frankenstein’s ambitious ego.

The working of metal is a branch of technical chemistry, and it would be a sublime though a difficult task to ascertain the effects of this art upon the progress of the human mind. [...] it has enabled him to cultivate the ground, to build houses, cities, and ships, and to model much of the surface of the earth in his *own imaginations of beauty* [...] it has enabled him to oppress and destroy, to conquer and protect. (316, emphasis added)

What is of particular interest here is the idea that metal working and building have all been conducted in order to realise men's "own imaginations of beauty", just as the monster is Frankenstein's "utopian" man and the automaton is the image of man "work[ed]" in metal. It is precisely this imperialist industrial view of the globe as a wholly material entity that Shelley engages with, and ultimately critiques, in *Frankenstein*.

Davy's references to the structures of capital imply that the working man is a machine employed to build the houses that the "thinking" man has designed, and as such is subject to the manipulation of science in the imperial praxes upheld within the oxymoron of: "oppress and destroy, to conquer and protect" (*A Discourse* 316). Davy's application of scientific knowledge to industrial contexts may have been life-

saving but his ethical views of the working man are that he should be placed firmly in subjugation to the thinking man, whose work produced scientific theory and phenomena; ultimately it was scientific knowledge which separated the “uncultivated savage from the being of science and civilisation” (318). Describing *Frankenstein* as a text which blurs the distinction between machine and man may seem to be anachronistic: the idea of man as an “automaton” in science fiction studies is not generally recognised as appearing in literature until the 1920s play “R.U.R” by Karel Capel (Small 300).¹¹ It must not be forgotten, however, that the “automaton” had become a key figure in the late eighteenth and early nineteenth centuries, within both technology *and* literature.¹² Perhaps more significantly, philosophers such as La Mettrie had suggested that “Man is fram’d of materials” (41) and that because “[t]he human body is a machine that winds up its own springs; it is a living image of the perpetual motion” (11). La Mettrie’s idea here is important because *Frankenstein’s* monster is in many senses not a “creation” but an industrial *product*, reflecting the scientific interest in automata.

By reviving the Cartesian image of the human frame, Mettrie’s automaton human reified the realisation that the Enlightenment myth of liberal humanism (that through the future progress of knowledge and feeling, the human will eventually reach a utopian state of being) has *failed* (Montag 303). In other words, if man’s existence is

¹¹ Small also notes that the Czech word for servitude is *robota*.

¹² Whereas Baron Wolfgang Kempelini’s chess-playing robot from c.1769 had been added to by Pierre and Henri Jacquet-Droz’s, the automaton emerged in literature slightly later, with E.T.A. Hoffman’s “Automatons” (1812) and “The Sandman” (1814) (53-4). See Martin Tropp *Mary Shelley’s Monster: The Story of Frankenstein* (1976).

to function only as a machine (biologically speaking, but also in terms of the Industrial Revolution's ability to increasingly define the human as an unskilled labourer), then the human body becomes, like the automaton: "dead matter; in a way in which a natural object, organic or inorganic, is not" (Small 310). It is this concept of man as machine which is represented in totality in *Frankenstein*: the monster is stitched together from an *amalgamation* of material bodies and these are also the bodies of the very same group who were at the heart of industrial and political unrest: the poor. Hence the monster does not function merely as a metaphor for the "plight" of the marginalised poor in Britain, he is a *literal* representation of the sutured bodies of the dead and dying who have been marginalised by the gathering forces of industry and technology.

Technology and Imperialism

Gayatri Chakravorty Spivak argues that nineteenth-century British fiction must be understood in the context of imperialism (243). Technology too must be understood within the context of imperialism simply because technology is *inextricable* from the economics of the globalisation of capital which – when considered in the context of the nascent (pre-Victorian) Empire we are examining here – must inevitably go hand in hand with imperialism. The impact of imperialism on *Frankenstein's* production is inescapable: Shelley even began writing in 1816 – the exact year that anti-slavery

debates re-emerged in Britain. Although human trafficking had allegedly been abolished in the Slave Trade Act of 1807, plantation slavery had continued. In 1816 this debate took a more directly colonial turn as Britain began to consider the moral question of the economic gain made by the continuation of plantation slavery (Lee 171). Co-incidentally for our consideration of production and reproduction here, 1816 was also the year of the height of the Luddite revolts. The “Luddites” consisted of various mill worker groups in the Midlands and the North of England, whose working conditions were threatened by the invention and/or attempted introduction of technology in the workshop, as well as the move to more centralised “factory-style” premises. Although there are many regional variations and the use of the word “Luddite” was not often accurate, 1812-1816 could be somewhat crudely described as the period in which men sought to smash the machines that had replaced them.¹³ Targeting the gig-mill, the shearing frame and the new steam loom, insurrectionists revolted against being cast as a machine which could be *replaced* when technology became more advanced (50-3). Furthermore, because protestors were shot dead during these uprisings, their status as a surplus economic resource became all the more explicit.¹⁴

When Mary and Percy Shelley had returned to England to work on the final manuscript of *Frankenstein*, the effects of social revolt was all too evident: the last of the scores of Luddites were being publicly hanged and their close companion Byron

¹³ See Malcolm I. Thomis *The Luddites: Machine Breaking in Regency England* (1970).

¹⁴ See also Paul O’Flinn “Production and Reproduction: The Case of *Frankenstein*.”

had even spoken out against Luddite mistreatment in parliament (O'Flinn 196). Indeed, this maltreatment is implicitly revealed in Davy's suggestion that the textile industry labourer "who merely labours with his hands" should be "*obliged*" to, and thankful for, the "means of human inventions" (*A Discourse* 316-7). These events meant that men could be segregated into two distinct groups: the "uncultivated" beings and "beings of scientific knowledge", a gap which was further exacerbated by rebellions of plantation slaves in Barbados. Just as textile technology in the Midlands and the North of England had been ravaged by the Luddite revolts, some 70 West Indian plantations became the targets of revolution. Slaves revolted on Easter Sunday in Barbados and marched to nearby towns in the same way that Luddites had marched to Nottingham (although the Barbados uprising was much bloodier).¹⁵ It might be too obvious to emphasize the parallels between these two movements, that: pro-slavery factions tended to view slaves as literal machines, morally suitable only for production, in whom "reproduction" was only sanctified in order to expand workforce numbers. Indeed, even Frankenstein notes that his scientific progress was not so much that of "an artist occupied by his favourite employment" (as Davy thinks a textile worker might be) but, in reality, feels akin to those who are "doomed by slavery to toil in the mines, or any other unwholesome trade" (38).

This clash between personal freedom and industrial production was, of course, not a new debate but a residual one. The Napoleonic Wars (1799-1815) and the failure

¹⁵ See Michael Craton *Testing the Chains: Resistance to Slavery in the British West Indies* (1992).

of Republicanism may have been apparent since 1815, but the radical liberal (and hence Wollstonecraftian) doctrine of “liberty, fraternity and equality” was a premise which was still very much upheld in the light of how abolition debates and Luddite revolts provoked questions about the nature of the human body. Mary Shelley was acutely aware of the enormous amount of media interest in these events; she even supported abolition by boycotting sugar (Lee 173). Indeed, the year of the 1823 Demerara sugar uprising was also the same year that a unified abolitionist agenda was established under the new aegis of: “The Anti-Slavery Society” and its publication the *Anti-Slavery Reporter* (Lee 173). Meanwhile in London and Paris, the Richard Brinsley Peake stage adaptation of *Frankenstein’s* sell-out success could perhaps be attributed to the fact that people were keen to watch the depiction of man’s “weird and villainous” unfree “Other” in the figure of the unnamed creature, since it had often double-billed with plays such as *The West Indian* (31-3). Such was the success of Peake’s portrayal of the creature that the second edition of Shelley’s *Frankenstein* was released in the same year.

In fact, if there was any doubt as to whether or not the dialectic surrounding *Frankenstein* was inextricably bound within the cultural politics of plantation slavery and the figure of the poor, uneducated British worker, it is worth noting the numerous popular references to the text in the decades to come. Politician and editor of the *Anti-Jacobin* and Foreign Secretary George Canning even based his 1824 House of Commons speech opposing the motion to free the children of West Indian

slaves when they reached adulthood on the plot of *Frankenstein*. More precisely, his speech was based upon his own interpretation of it, in which he conjectured that Frankenstein and the monster were analogous to the social juxtaposition of white men and “negroes” (Malchow 33). He argued that because “negroes” have “all the corporeal capabilities of a man” but with “a more than mortal power for doing mischief”, setting young slaves free would be comparable to how Frankenstein frees his – subsequently murderous – creature. Like Victor Frankenstein, Canning urged England to also “recoil from the monster which he has made” by not *freeing* the monstrous children of West Indian slaves in fear of a future world dominated by freed slaves (Canning qtd. in Lee 174).

I do not wish to dwell here on the moral questions informing abolition and trade unionism during the dawn of the Western British Empire; the main point to note from Canning’s speech is how readily politicians would draw upon *Frankenstein* as a well-known point of reference in 1824 or, more precisely, how easily the monster was conflated with real-life “others” within society, and in a way which negated the explicit empathy for the creature that Shelley’s narrative unequivocally evokes. For those intolerant to the intrinsic rights of men to own their own bodies, the nature of the “other” was inherently disposed to “mischief” and must therefore be protected from their selves by the wielding of social power. For nearly a century after, the figure of the monster (often mistakenly referred to as Frankenstein) remained in the cultural imagination as a figure of racial and ethnic discrepancy. *Punch*’s depiction of an “Irish

Frankenstein" in 1843 is just one example of the continuity of the monster's ethnic otherness.¹⁶ We come full circle again when we consider how Elizabeth Gaskell's *Mary Barton* (1848) plays out the correlation between Frankenstein and the monster as a conflation of the role of master and slave in her description of the complex power relation between the educated classes and the working classes in Britain.

The actions of the uneducated seem to me typified in those of Frankenstein, that monster of many human qualities, ungifted with a soul, a knowledge of the difference between good and evil.

The people rise up to life; they irritate us, they terrify us, and we become their enemies. Then, in the sorrowful moment of our triumphant power, their eyes gaze on us with mute reproach. Why have we made them what they are; a powerful monster, yet without the inner means for peace and happiness? (qtd. in Mellor *Mary Shelley* 112)

It is worth noting here how Gaskell describes the working classes as "made" by the educated and as metaphorically inanimate until those in power notice their deviances.

¹⁶ See Deborah Lee's *Slavery and the Romantic Imagination* (2002) for a full list of political "racial Frankensteins" in the nineteenth-century British press.

In fact, the link between the monster and real-life rebellion was made in western cultures even up to the mid-to late twentieth century in apartheid South Africa: from 1955 onwards, anyone possessing a *Frankenstein* book in South Africa could be fined £1000 or sentenced to five years imprisonment (Vaspolos 133). The many figures of “Frankenstein the monster” reveal that the monster has not been merely historically comparable to the colonial slave, the British rebels rallying against the dawn of machine production/introduction or the artificial figure of the automaton, the monster is a cultural signifier for material *otherness* in a more generalised sense.

It is worth noting that another debate which corresponds to those ideas is how *Frankenstein* could also be seen as recapitulating the early nineteenth-century British desire to consume – everything from knowledge to food. Deborah Lee suggests that the new British desire to consume is reflected by the cultural obsession with travel narratives by writers such as Joseph Banks and Mungo Parks, in which cannibals were the most prevalent subject of anthropological enquiry (176-90). Aided by the rise of print culture, the exploits of writers/explorers such as Banks and Parks became public knowledge (Tropp 25). Such anthropological travel narratives also represented the imperial desire to journey to the *terra incognita* or strange land of an “uncivilised” lost world of alien primitive beings, whilst remaining somehow civil and superior to the “other.” Here the aesthetics of the more traditional fiction of the seventeenth-century utopian voyage become more specific in nineteenth-century narratives: the focus becomes exclusively that of *civilising* the cannibal figure. In other words, the concept

of consumption in a newly-improved industrial politic was reflected by the popular interest in the figure of the “cannibal” – *that most abhorrent and excessive of consumers*. Moreover, both Victor Frankenstein and the monster reflect the cannibal. Just as Frankenstein’s desire to consume knowledge takes him to the charnel houses in order to *cannibalize* the bodies of the dead, the monster claims that he will “glut the maw of death” with the blood of Frankenstein’s friends and family. However, here “cannibalize” does not mean to consume but to disassemble and reassemble parts of flesh (aptly, the term was later applied to machinery). In its collapse of the distinction between master and slave, then, *Frankenstein* aligns the anthropological with the figure of the cannibal through the desire to pursue and consume knowledge – or flesh – respectively (Lee 189-90).

In the wake of the politics of otherness and production, the fact that Frankenstein and the monster use similar terminology in order to refer to their selves takes on new significance. Claiming in one moment to be the other one’s slave and the next to be his master interchangeably, they blur the boundaries between man and monster, self and other through both their actions and their speech. Just as Frankenstein claimed that he did not want to toil in the mines, the monster also asserts that: “[his] shall not be the submission of abject slavery” (119). As the popular references to *Frankenstein* by Elizabeth Gaskell and George Canning reveal when they attempt to separate the monster from his creator, *Frankenstein’s* popularity was perhaps motivated by the fear of, and resistance to, the possibility that the “other” will speak

back. But this is not really a fear of insurrection; it is the fear that in the moment in which a dialogue is created between the “self” and its “other”, they would, paradoxically, become confused and conflated with one another. But whereas the “female gothic” has been seen as an Enlightenment backlash to the master/slave dialectic, which highlighted the ironic juxtaposition between philosophical ideals and the social *realities* of Europe’s ecclesiastical and political corruption through the concept of Otherness,¹⁷ the social realism and nascent modernist solipsism of the “Victorian” individual in the *bildungsroman* has been read as the subsequent moral journey of the nineteenth-century “Self” back from this corruption. This raises the question, then, of how we are to define texts between these periods which do not adhere so explicitly to either of those models of selfhood and society? This question is perhaps best answered by beginning to think about the ideas which are at play when we conceptualise these literatures, more or less, as the gothic concern with the “Other” and the *bildungsroman* concern with the “Self.”

Otherness as *Terra/Terror Incognita*

The cultural anxiety evoked within discourses such as abolitionist narratives and controversial texts such as *Frankenstein* can be traced back to the simultaneous conflation and resistance of the binaries which operate within more general,

¹⁷ See Terry Castle *The Female Thermometer: Eighteenth-century Culture and the Invention of the Uncanny* (1995).

anthropological dialectics. In fact, the similarities between each socially “powerless” party within these dialectics become more explicit. In other words, concepts such as “monstrous”, “poor”, female, “slave” and “other” can be seen as converging as the social power inherent within concepts such as “rich”, “male”, “master” and “self” are called into question. In being materially-created against its own will and excluded from the rights of men for only resembling man in part, the monster represents several figures: the nineteenth-century female (who is without equal rights); a disenfranchised plantation slave within Frankenstein’s purpose-built “workshop” of production (for plantations are also sites of production) and finally, a marginalised textile worker (since the monster is stitched together from the bodies of the poor). Having previously outlined the correlation between the figure of the monster, the automaton, the plantation slave and the British textile worker, I shall now account for how the monster demarcates women’s complex position within this economic and imperialist dynamic. The conflation between woman and the monster would perhaps account for the critical propensity to interpret the (predominantly nineteenth-century) female writing subject as “monstrous” – yet powerless – in their frustrations against patriarchy and their resistance to becoming the “Other” of hegemonic male culture. This paradigm was most famously outlined in Gilbert and Gubar’s *Madwoman in the Attic’s* reading of *Jane Eyre* (1847) as the textual conflation of Bertha/Jane/Brönte, as well as the inextricable nature of the identities of the monster/Frankenstein/Mary and Percy Shelley/Eve/Adam which permeate *Frankenstein*.

In contrast, Spivak's focus upon British Imperialism in the nineteenth-century text leads her to assert that, whereas *Jane Eyre* "does not deploy the axiomatic of imperialism" (254), *Frankenstein* functions as a deconstructive *counter-narrative* to the (white) female protagonist of the *bildungsroman*, of which *Jane Eyre* is one of the paragons. The protagonist's struggle for subjectivity in novels such as *Jane Eyre* have come to define the "high" feminist norm, an integral moment in the history of Western feminism. The struggle that typifies the journey of subjectivity and independence of the female *bildungsroman* (and, I would add, serves as a *metaphor* for the feminist struggle or "journey" throughout modern Western history) is destabilized through the even more "marginal" experiences of the women in *Frankenstein*, especially Safie and the monster (244).¹⁸ In fact, the social marginalization of the monster and Safie serves to *critique* this exact Anglo-American/European sense of the high feminist norm. The "nascent feminism" Spivak gleans in *Frankenstein* is therefore not synonymous with, but *tangential* to, the beginning of what Gubar and Gilbert have defined as the dual emerging consciousness of the writer through their female protagonist (or in the case of *Frankenstein*, the monster). Safie and the monster come to represent Ariel and Caliban respectively through both their access to (and alienation from) the Western education model of the "self" and their role as marginalized "Others" within British Imperialism (257).

¹⁸ See Johanna M. Smith "'Cooped Up': Feminine Domesticity in *Frankenstein*" and Anne K. Mellor's *Mary Shelley: Her Life, Her Monsters* on the domestic role of women in *Frankenstein*.

It is with Spivak's prerequisite inclusion of British imperialism that I would like to summarise my cultural materialist reading of *Frankenstein*. Since the monster has no name, his subordination and lack of identity is always evident: he is a being who is as dehumanised as the slaves in British plantations were, whose names were taken from them (Malchow 29). If the slave trade had provided the capital for Britain that was necessary for its industrial expansion and revolution, the bodies of plantation workers – even after the abolition of the infamous slave trade passage – are rendered the same as the experimental metal automatons which were being produced in Europe, as well as the machines which were being produced to replace working men and women in Britain. Whilst this reveals *Frankenstein* to be an astute social critique, the problem is that its plot is actually situated far away from any reference to technological material reality in Britain or Europe. Its depictions of technology are only ever *implied*, such as the methods that produced the monster, or are merely *metaphorical*, such as the figure of the monster itself. The reason is metatextual: Victor Frankenstein/Mary Shelley does not want to inform Walton/the reader of these galvanic discoveries, lest someone were to repeat the process. The technological extrapolation which is, in essence, the pivotal feature of the novel, is therefore referred to merely as involving “instruments of life” (38), and the threads of imperialist technological (re)production I have read as informing *Frankenstein* are ultimately only inferred.

In contrast, Loudon's *The Mummy!* explicitly depicts the technology involved in reanimation for the reader, describing the use of galvanism in some detail and,

furthermore, this is by no means the only way in which *The Mummy!* extends the debates put forward in the 1818 and 1823 editions of *Frankenstein*. *The Mummy!* begins with Loudon's somewhat metatextual first person account to the reader of how she came to write her "*Tale of the Twenty-second Century*" and her desire to "give you [the reader] a hero totally different from any hero that ever appeared before" (vi). When we compare this perspective of voice to the first-person narration of *Jane Eyre* and other female *bildungsroman* texts, *The Mummy!* can be read as a type of counter-narrative to the high feminist norm of the developing white female "voice" of the nineteenth century, as well as the submissive females populating the gothic novel.¹⁹ In *The Mummy!* women are monarchs, wear "loose trousers" for practicality and comfort and work alongside men as their equals in order to overcome social unrest (I, 258). Moreover, this feminist agency is set within a backdrop of weird and wonderful inventions, giving the impression that the overall technological interest of Loudon's *The Mummy!* is far more explicit than that of Shelley's more metaphorical explorations.

The Mummy!'s numerous technological speculations of future technology include: the use of "stage-balloons" as opposed to travel by horse and stage coach (I, 117);²⁰ the use of "asbestos paper" instead of "rag paper" (117); steel rendered "perfectly flexible", for moulding whenever needed (272); "moving houses", which allow their owners to holiday because they can "fit on the iron railways and as they are

¹⁹ According to Alkon, *The Mummy!* may have been drawing upon the beginning of John Banim's *Revelations of the Dead-Alice* (1824).

²⁰ The record for balloon travel in 1804 was Briot and Gey-Lussac's height of 7,000 metres. See Silke Strickrodt.

propelled by steam, slide on without much trouble" (141), the use of "apparatus for making and collecting inflammable air" and for "making and concentrating quicksilver vapour [...] in the place of steam" in order to power high-speed air balloons (177). Moreover, there is further speculation regarding possible *future* advancements in technology, such as the idea that "the whole materia medica might be carried in a ring, and that all the instruments of surgery might be compressed into a walking stick" (176), "aerial bridges to convey heavy weights", "a machine for stamping shoes and boots at one blow", "a steam engine for milking cows" and "an elastic summer house that might be folded up so as to be put into a man's pocket" (III, 51).²¹ The most important description of technology in comparison to *Frankenstein*, however, is its detailed description of the animation of an Egyptian mummy using an "electrical machine", which, theoretically speaking, enables the resuscitation of the living *and* the reanimation of the dead (201). As the story develops, this key main theme of technology and progress is explicitly considered *and* critiqued.

Another way in which *The Mummy!* extends the key themes we see in *Frankenstein* is geographically, through its treatment of technology in a *global* – and hence *imperial* – content. Loudon's vision of an age in which steam boats swarm the Nile was fairly astute, contemporaneously speaking. Not only was steam-power beginning to emerge in Britain, the image of Egypt was still very much in the public eye, due to both the Napoleonic campaigns there and because of the popular interest

²¹ It may be worth noting that the name Dr. Entwerfen may be a play on the fact the German "to open up", hence reflecting the action of collapsible technology. See the Introduction for how this thesis is informed by *Entwerfen*.

in Egyptian artefacts which had been recently brought to Britain. The poem “Lines Addressed to a Mummy at Belzoni’s Exhibition” by Horace Smith was part of a collection published by Henry Colburn in 1825 following the “strongman” Giovanni Belzoni’s exploits in real-life in Egypt, which were a favourite story for the British popular press (Rauch 64-5). Furthermore, it was purported that Giovanni himself discovered that the sarcophagus in the “First Pyramid” – which later became known as the great pyramid of Cheops – was, in fact, *empty* (64). The missing referent in colonial exploitation then, had folded back upon itself: the desired object was missing, eluding its inevitable possession in imperial hands. Loudon’s narrative therefore begins where the real-life, much-publicized story of Cheops ends, by providing one explanation as to what could have happened to the mummy. The word play between Mother Nature and the missing “Mummy” subsequently emerges as being concerned with both imperial production and reproduction in the face of Nature. Rather than being an accomplice to a proto-“Victorian New World Order” as some critics have suggested, however, Loudon is attempting to complicate Britain’s relationship with these Egyptian material artefacts.²² Through the presence of the reanimated Cheops, Loudon allows Egypt to speak back.

Spivak’s term for those aspects of a novel in which an image of the third world is created during the nineteenth century is its “worlding”, the worlding of *Jane Eyre*

²² See Paul Young *Globalization and the Great Exhibition: The Victorian New World Order* (2009) for more details of the relationship between the naturalisation of imperial endeavour and material cultures, including how the Great Exhibition can be read as Frankenstein’s monster.

would be the depiction of Bertha as a foreign, monstrous “other” and the worlding of Jane Austen’s *Mansfield Park* (1814) would be the ambiguous hiatus in the text created by the brief reference to its counterpoint West Indian plantations.²³ I would like to extend Spivak’s very specific meaning here in order to apply the idea of “worlding” to a more general “global” picture instead, in which worlding refers to any geographical images which serve a socio-political, comparative function. Loudon’s depiction of the bumbling scientist, for example, subtly undermines the feminist depiction of the male patriarchal scientist/explorer of masculinist discourses such as colonial travel – real or imagined, as well as proffering a potent critique of the Romantic egoism inherent within the depiction of Victor Frankenstein. It is interesting to note here that *Frankenstein* is further emphasised as a text which negates the concrete images of technology when we extend Spivak’s idea of worlding. In other words, *Frankenstein* inherently negates the “worlding” of industrial Britain, since there are *no* references to any early signs of either the Industrial or the French Revolution to contrast with the picturesque images of nature untainted in Europe, or the hereto unexplored icy plains of Antarctica, which Captain Walton, the epistolary narrator, is poignantly attempting to explore and *chart*. As Paul O’Flinn observes, *Frankenstein’s* negation of both revolutions is even more peculiar when we consider the fact that Frankenstein travels through key industrial areas, such as Edinburgh, London and Paris (200).

²³ See Edward Said *Orientalism* (1978) for an analysis of *Mansfield Park’s* “sideways” look towards the West Indies.

The Mummy!, in contrast to *Frankenstein*, places “worlding” at the forefront of the narrative by describing in detail the potential future Egyptian colonisation and its subsequent problems, even highlighting Egypt’s indigenous “Mizraim” race. By depicting the *terra incognita* of the “Other” worlds within the novels of her contemporaries, Loudon depicts the mirror image of the *bildungsroman*’s high feminist norm, the attempt to cover strange grounds. The usual path of exploration, perhaps more helpfully conceived here as the *terra cognita* or “familiar ground” of nineteenth-century novels by women, is essentially that of the metaphorical *journey* – the female protagonist’s journey towards a fully developed sense of subjecthood. Loudon’s reference in the Preface to a “new type of hero” is more usefully considered as the act of rejecting the figure of the hero and its simultaneous resistance of the usual models of “selfhood” or “Self-ness.” In fact, nineteenth-century futuristic fiction’s deliberately meta-fictional style could be seen as being motivated by the desire to differentiate itself from the more psychological novels of *realism* (Alkon 193). By presenting complex and multiple plotlines Loudon’s rejection of the *terra cognita* (or the protagonists’ journey towards the “self”) draws the reader’s attention instead to a different theme, that of the communal responsibility required in order to avoid the industrial (read: colonial) future of her 2126 world vision.

One of the ways in which Loudon shifts the emphasis from individual responsibility to that of community is through her depiction of the scientist. Whereas Shelley recapitulates Margaret Cavendish’s seventeenth-century feminist critique of

experimental new science in order to critique its contemporaries, Loudon depicts the scientist as a less dominating individual. Blame for the “rack[ing]” of the earth’s resources is not directed at the “House of Soloman” but rather, society in its entirety. In place of the Frankensteinian scientist, we are presented with an alternative future in which there are “numerous” *industrialists* who, through their “wild schemes and gigantic speculations”, have scarred the landscape and “racked the globe to its centre” with their use of advanced technology (2-3). Loudon sees the future as a place in which monstrous technology has devastated the globe, and, aptly, at the forefront of this critique is the literal “level[ing]” of the world landscape into a Western model of agriculture and commerce (2-3). Looking from the vantage point of their high-speed balloon, Edric and Dr. Entwerfen (and the reader) gain a clear view of the Anglo-American colony that of twenty-second century Egypt.

[H]ow different from the Egypt of the nineteenth century, was the fertile country which now lay like a map beneath their feet. Improvement had turned her gigantic steps towards its once deserted plains; commerce had waved her magic wand; and towns and cities, manufactories and canals, spread in all directions. (188)

This may, at first glance, seem like a positive description of the effects of “civilisation” and the progress of commerce and industry as beneficial to all, that “gigantic” merely has a positive meaning. However, the description of modern Egypt continues in a slightly different tone:

Colonies of English and Americans peopled the country, and produced a population that *swarmed like bees* over the land, and surpassed in numbers even the wondrous throngs of the ancient Mizraim race; whilst industry and science [...] had converted barren plains into fertile kingdoms. (189, emphasis added)

This additional description of the historical changes that have brought about the landscape “map” of Egypt in 2126 renders the description of “positivist” progress as somewhat equivocal – and the “magic wand” of “commerce” becomes a slightly more sardonic comment on the march of industrialization, for ultimately in a subtle play on the nature of creation, its “barren plains” are developed only at the expense of their “swarm[ing]” overpopulation. In “gigantic steps”, Egypt has been “map[ped]” out by the installation of Anglo-European agricultural farming systems, and a populace which has overcome the once natural Egyptian landscape.

Indeed, when we consider Loudon's choice of the word "gigantic steps" when describing the processes of "improvement" here, progress has not merely improved Egypt but in a sense *dominated* it in much the same way as a giant might.

Amidst all these revolutions, however, the Pyramids still raised their gigantic forms, towering to the sky; unchanged, unchangeable, grand, simple, and immovable [...] seeming to look down with contempt upon the ephemeral structures with which they were surrounded [...] Indestructible, however, as they had proved themselves, even their granite sides had not been able to entirely resist the corroding influence of the smoke with which they were now surrounded, and a slight crumbling announced the first outwards symptoms of decay. (189-190)

Loudon's description of the Pyramids as "simple" and "immovable" architectural forms, even in the face of the two hundred years of scientific, technological and social revolutions, is such that new improvements seem "ephemeral", in other words: newer forms of industrial technology are transient and insubstantial compared to the imperialism which created the Pyramids. Yet even the Pyramids cannot escape the effects of these new forms of commercial colonisation: as "indestructible" as they are,

they have nevertheless been “blackened and disfigured” by the steam industry (190). After all, decay is the antithesis of progression and advancement, when structures not only remain still but collapse in upon themselves and reflect processes of degeneration, as opposed to a utopian epoch of progression.²⁴

To emphasise further how steam power has been integral to global migration and pollution, Edric and Entwerfen escape Egypt on one of the few remaining sail boats left, with the more usual steam-powered boats over-taking them on all sides. Travelling from Egypt to Spain, they reverse the path through which Loudon’s Africa had been allegedly colonised by the character Spanish Don Alfonso (II, 193) in order to pave the way for the seat of an “Imperial Queen of Africa” (II, 208). If Edric and Entwerfen’s journey into Africa proffered a cartographic aerial survey of the current state of its colonised, mapped and agriculturally-dissected landscape, their journey out of Africa again marks the reversing of this imperial and industrial progress. The use of steam power here is crucial, given that steam-powered boats were still really ineffective in the late 1820s: Percy Bysshe Shelley himself had lost money when a steam-boat development had failed (Bieri 158). Loudon’s depiction of steam power can therefore be seen as an extrapolation of the nascent developments in steam after the Stockton and Darlington steam Railway and their possible impacts. As Edric and Entwerfen sail back to Africa’s seat of imperial power on a sail boat as steam-powered

²⁴ Loudon’s idea of degeneration here is not to be confused with later Victorian narratives of degeneration, race and physiognomy, in which undead Mummies and vampires became signifiers of the ancient global figures of threat to the modern/imperial self. See David Glover *Vampires, Mummies and Liberals: Bram Stoker and the Politics of Popular Fiction* (1996).

engines surround and overtake them, the image of the sail boat signifies Loudon's 1820s present, being swiftly overtaken by its blackening and destructive steam-powered, imperial future. Yet they also signify as a laboratory of social change, for the fact that they are sailing in a non-steam-powered boat reveals the imperative to begin to undo and unlearn such damaging technological developments.

Loudon's exploration of the effect of colonisation and industrial development on the landscape of non-Western civilisations is further emphasised when Loudon tells the reader that the Pyramids were constructed as symbols of Nature itself, since "under all the variant forms in which she presents herself [...] it was Nature that was typified in the Pyramids" (192). By portraying the Pyramids as the ultimate symbols of Nature for the past civilisations of Egypt, Loudon's critique here is an explicit juxtaposition of Nature on the one hand and the pollution caused by steam-powered industrial progress on the other. This is a more explicit trajectory of *Frankenstein's* critique of Newtonian science, for it is one which also looks forward to the possible future in order to pre-empt the very realistic possibilities of colonial industrial technology and its effects upon precious natural resources. Indeed, *The Mummy's* depictions of the somewhat anthropomorphic "gigantic steps" of Anglo-American "improvement" as that which has, in effect, trampled over the landscape, history and peoples of indigenous Egypt can be read as an early feminist *ecological* critique of the machinations of both colonisation and industrialisation. However, rather than seeing Loudon as raising important questions regarding the effects of technology upon

ecology, critics such as Alan Rauch have argued that Loudon's subsequent interest in botany was merely due to "an accident of marriage", her husband being the renowned botanist John Loudon (62).²⁵ Yet to read Loudon's work in this way would be to forget just how important ecology and botany were within early nineteenth-century scientific discourses.

It must not be forgotten that the discussion surrounding Charles Darwin's *The Origin of the Species* (1859) can be traced back to Erasmus Darwin's evolutionary and genetic interests, which have their roots, so to speak, in his *Botanic Garden* (1789, 1791), as well as the later influence of the discovery of Gregor Mendel's genetic experiments with bean plants. Though the term "ecology" was not coined until several decades after *The Mummy!* in 1869, ecological issues were very much at the forefront of scientific progress. What is significant for a more thorough understanding of critical utopian visions of the future, such as we see in *The Mummy!*, is the fact that ecology's etymological roots are inextricable from utopia-related concepts of edification and *space*. The word ecology has, in fact, been historically linked more to the concept of civilisation and structure than to the abstract concept of Nature, deriving as it does from the Greek word for "home": *oikos*, which became the English word for housekeeping, "oeconomy", by at least 1530.²⁶ Loudon's shift from writing an ecological critical utopia such as *The Mummy!* to writing about the science of

²⁵ See also Alkon.

²⁶ For more details on the history of ecology and botany, see Derek Wall *Green History: a reader in environmental literature, history and politics* (1994).

flower-growing is not as farcical a career move as contemporary critics have assumed: as a subject in which many scientific principles must be taken into account, botany was not the stereotype of “ladies growing flowers” that some scholars have assumed it to be.

If there were any doubt as to *The Mummy!*'s presentation of the march of progress and imperial economic domination in the future as potentially dystopian, Loudon clearly asserts that the devastation that this would cause to the ecological balance of the earth would be significant even if it meant that *wealth* were to be distributed evenly.

Thus it was with the people of England. Not satisfied with being rich and prosperous, they longed for something more. Abundance of wealth caused wild schemes and gigantic speculations [...] New countries were discovered and civilized; the whole earth was brought to the highest pitch of civilization; every corner of it was explored; mountains were leveled [sic.], mines were excavated, and *the globe racked to its centre*. Nay, the air and sea did not escape, and all of nature was compelled to submit to the supremacy of Man. (2-3, emphasis added)

The combination of the technological means to create an economically productive planet by levelling its structural anomalies, such as mountains, and the globally widespread wealth to do so, means that the earth becomes overrun – every square mile is subject to the machinations of colonisation. That this colonization is inextricable from the concepts of nineteenth-century infrastructural improvement is made explicit by the fact that “macadamized, turnpike roads” replace the desert (188): the path of progress is one of tarmac. Loudon’s critique of imperialism and “civilization” (emphasised in the quotation above by the repeated use of this word), as that which inevitably “racks” earth’s resources, is inescapably explicit here. It is therefore apt that the novel ends in Egypt again when Edric returns there once again to clarify exactly how the mummy Cheops was reanimated, as well as to contemplate the moral use of science in general.

As Edric enters into dialogue with the reanimated mummy and is reminded of what he has learnt (that the monster is not, after all, evil, nor inhumane), there is a sense in which *The Mummy!* resolves the dialogue which started by Frankenstein and his monster in the village of Chamounix – this time one in which the scientist learns from his hubris and takes full responsibility for the monster’s misdeeds. This is because Loudon’s protagonist is more self-reflective of his actions, asking himself:

What right have I to renew the struggles, the pains, the cares, and
the anxieties of mortal life? How can I tell the fearful effects that

may be produced by the gratification of my unearthly longing? (I,
202-3)

Narratively speaking, *The Mummy!* offers a more complete resolution of the trajectory begun by the science fictional novum of reanimation in *Frankenstein*, which was rendered “incomplete” through both his lack of understanding for the monster’s murderous actions and his inability to learn from his hubris by hoping that “yet another may succeed” (Suvin 136, see also Chapter Four).

What can be gleaned also when we compare *The Mummy!* with *Frankenstein* is the historical shift in which the exploitation of the body of the (formerly African) slave instead becomes the exploitation of the *landscape body* of Africa itself. Loudon’s futuristic concern with the globalisation of technology and the economy become even more astute when we consider the fact that *The Mummy!* depicts a scenario which is not altogether different from Britain’s *actual* historical future following the book’s publication in 1827. After all, Victorian Imperialism gathers momentum only decades after *The Mummy!* is published, in which the economic interest in the slavery of the colonial plantations only truly ended when the explorations of Africa itself began. This is not to suggest, however, that the terminology used in *The Mummy!* is pre-emptive of the types of misogynistic descriptions we find in later works such as H. Rider Haggard’s *She* (1886) and *King Solomon’s Mines* (1885). Crucially, Loudon’s descriptions of nature and knowledge never portray exploitative applications of

science and technology as an essentially “masculine” domain. Indeed, both Nature *and* “progress” are described with feminine pronouns, for *The Mummy!* is neither a realisation, nor a critique, of the patriarchal endeavour to create a “scientific utopia” that we see in Bacon’s Soloman’s House (see Chapter One). Indeed, this is where the strength of her feminist criticism ultimately lies: *The Mummy!* depicts the misuse of technology and the colonial imperative as an issue for which *everyone* should take responsibility for. Furthermore, this reflects that most useful campaign idiom in the abolition of plantation slavery: we are all responsible because when we consume the exports of the plantations, we are all metaphorically “cannibalising” the bodies of the West Indian slaves. What Loudon adds to this is the sense in which we should not also seek to “colonise” the indigenous lands of the West Indian slaves: Africa, which is why Loudon chooses to reanimate that not so “hideous” mummy, the conqueror Cheops (*Frankenstein* 40).

The Missing □ Mummy □

Historically noted as a great conquer of lands, Cheops was upheld by the Romantics as a symbol of the inherent folly that was imperial/colonial endeavour. Perhaps due to the intense media interest which surrounded the British exploration of the pyramids, both Byron and Shelley engaged with the symbol of the mummy as a figure of fallibility, and the mortal folly of warfare. Byron’s *Don Juan* (1819) cites Cheops’

disappearance as the subject of a whole stanza and Percy Bysshe Shelley's "Ozymandias" (1817) cites Cheop's disappearance as an act of justice for his tyrannical deeds (Rauch 67). Shelley's reference to Frankenstein's monster as more hideous-looking than an Egyptian mummy at the same time as the real-life missing mummy Cheops features heavily in both the British press and her closest companions, Byron and Percy Shelley, published poetry about Cheops, suggests that her own monster is also based upon the figure of Cheops. After all, the monster goes missing from Frankenstein's workshop after being reanimated in the same way that Cheops is missing from his sarcophagus (both in real life and after his reanimation in *The Mummy!*). Man's confrontation (or displaced confrontation) with the monster and the mummy therefore signifies as the place at which coloniser and colonial subject meet, in which master and slave, and good and evil, become equivocal constructs. It is in this paradoxically liminal era in literature that we see such useful explorations of how *technology* can be defined as no more than the projections of our sense of self merging with our self-image (Tropp 55).

As stated previously in the chapter, the way in which *The Mummy!* portrays technology as "self-image" is slightly different to the definition of Frankenstein's monster as a gothic *doppelgänger*. Rather than uncanny doubling, this is the idea that technology is a trajectory of the human image because technology is ultimately the *extrapolation* of human experience. This is explicitly emphasized by the scientific interest in creating human-like automatons, but, paradoxically, the subjective

definition of the machine has never been signified more aptly than through Frankenstein's production of the fleshy figure of the monster (Tropp 65). Similarly, the productive fertility of the newly agricultural Egypt in *The Mummy!* is comparable to those *real life* colonies: the fertile lands of the West Indian plantations. Just as the Egyptian agriculture of the future is overshadowed by the blackened Pyramids – the Blakeian “dark satanic mills” (to use an anachronism), so too are the plantations of Loudon's present threatened by the darkness of inhumanity, in which black bodies are consumed within the paths of global industry. Yet *The Mummy!* is slightly more explicit in making the connections between the figure of the monster and the fact that technology itself is often our monstrous projections of ourselves. Here we see that, like the monster, the British Industrial Revolution has inescapably grotesque origins; it too is the product of numerous corpses, of both the corpses of African plantation slaves and the later deaths of more British workers. Ultimately, these bodies become the monster that “revolts” in *both* senses of the word: abhorrent in form because they are feared by those in power, the dispossessed rise up and rebel year upon year in spite of their numerous deaths.

Together then, *Frankenstein* and *The Mummy!* can be seen as having formed a dynamic critical dialogue for reading audiences in Regency and early-Victorian Britain. In fact, *The Mummy!* is one of the only books which has ever attempted to make any sense of the political unrest that was the transition from Regency turmoil to Victorian Imperialism in England (Rauch 62), yet critics have often overlooked the cynical

political impetus informing this literary *zeitgeist* of the gothic parody. 1818 was the year that the gothic text became the subject of satire in Jane Austen's *Northanger Abbey* and Thomas Love Peacock's *Nightmare Abbey*, *Frankenstein's* rejection of the usual plot formulations of the gothic also marked its demise. Loudon's *The Mummy!* even explicitly parodies the genius of the Romantic ego (and in one sense, the figure of Victor Frankenstein himself) through the figure of the bumbling, ineffectual and self-pitying scientist Dr. Entwerfen, who comes "rushing down-stairs to meet them, his sleeves tucked up, and his wig thrown back, in a very experimental-philosophic manner" (I, 299).

The Mummy! adds to this satire of the Romantic ego by making a comical figure out of the formerly uncanny automaton that we see in E.T.A. Hoffman's *The Sandman* (1816), and by depicting the "automaton judges" that preside over Edric and Entwerfen's indictment in Republican Spain as malfunctioning, the ineffective and unjust nature of the British judiciary in handling the social unrest of the workers revolts (1811-17) are simultaneously parodied. Reflecting judicial corruption, the automaton judges are pre-programmed with the verdict *before* the trial commences, and one of the robot judges even begins the trial in French and has to be re-set again (II, 338 qtd. in Alkon). Again, whereas *Frankenstein* keeps these dialogues at a metaphorical level, Loudon's setting of the future allows her to manifest these concepts and engage with them more explicitly. *The Mummy!*'s automaton judges clearly demonstrate the idea that "[w]hether conceived as a mechanical imitation of

man or as an actual man reduced to pure mechanism, [the robot] is wholly under domination” (Small 310). Pre-programmed with knowledge of the judicial, the automata form just one example of Loudon’s commentary upon the real use value of education as a means for liberating society. This is seen most strikingly by the ridiculously verbose development of language when education renders everyone highly articulate – but without practical knowledge. In depicting how automata could replace even highly educated judges (however ineffectively), Loudon reveals that men and machines are reciprocal processes of one another.

Just as the automaton is inextricable from the human, science fiction has often been defined as literature that explores social and philosophical problems by juxtaposing and/or drawing similarities between an alternative world and the material conditions of the reader’s or writer’s contemporary ones. In this last section, I would like to return again to the main argument of the thesis, that of the centrality of Frankenstein in science fiction studies, particularly within feminist criticism. After all, *Frankenstein’s* iconographical impact in creating the figures of both “Frankenstein” and “the monster” are inextricable from feminist definitions of the science fictional. As discussed previously, the monster has, historically speaking, represented ethnicity, class and political values, but since the 1980s, the monster has somewhat “evolved” to also figure as cyborg, transsexual and the idea that women in general are marginalised

figures within scientific discourses and practices (Clayton 84-5).²⁷ However, this twentieth-century focus upon gender and science has been more within the late eighteenth-century Romantic gothic tradition than that of its successor, that time of imperial hegemony, political turmoil and industrial change within which *Frankenstein* was actually written and re-written. *Frankenstein* can indeed be seen as fulfilling many functions within women's literature, but it must be acknowledged that whilst it is useful to deploy the monster as a symbol for many feminist concerns, from trans-feminism and cyborg studies to the figure of the "alien" in science fiction in general (Donawerth, *Daughters of Frankenstein* xviii), there are also other ways in which Shelley's writing can be canonised as a legacy for "feminist" science fiction.

In fact, the depiction of the monster as a feminine figure of the "other" or the hybrid is not the only way in which writers have referred to *Frankenstein* as a template text for exploring feminism and science, and neither is it the most politically astute in light of the socio-politics of the period. Although science fiction can be quite usefully considered as the "hideous progeny" of *Frankenstein*, the product of *annihilized* (disassembled) texts, it must be remembered that the term "hideous progeny" did not even appear until the 1831 "Author's Introduction" to *Frankenstein* (ix), and it was not until Mary Poovey's essay on its *motifs* of reproduction: "My Hideous Progeny" (1980), that it became a term for science fiction. Those critics who conceptualise science fiction as *Frankenstein's* "hideous progeny" do indeed go some way towards

²⁷ See Laura Kranzler "Frankenstein and the Technological Future" on the transgendered body and the body of the monster.

highlighting the genre's intrinsically hybrid nature; just as the monster is made of many bodies, science fiction's hybridity relies upon the intertextual nature of key *motifs*, of which "Frankenstein the monster" is one of the most prominent (sic.). Nevertheless the fact remains that it is nothing short of utterly *implausible* to describe *Frankenstein* as the first science fiction text. Science fiction's roots, imbedded within many genres – most notably, that of the utopia and the fantastic voyage – stretch much further back than the year 1818. The amalgamation of genres into that which we call "science fiction" span literature from at least as far back in history as Margaret Cavendish's *The Blazing World* (1666), if not earlier (see Introduction).

The *motif* of reproduction could be extended even more at this stage, for it could be argued that if *Frankenstein* is a "hideous progeny" it cannot simultaneously be a child that is, to use Mellor's term, also wholly "legitimate." It must be remembered that the Preface to *The Mummy!* describes Loudon's search for a "new type of hero", whereas the presentation of *Frankenstein* is not that of a self-consciously new form of genre. In fact, by the revised 1831 edition, Shelley's new "Author's Introduction" reinstalls the text within a gothic aesthetic – that of ghost stories and nightmarish visions of reviving baby corpses in the European landscapes of the Romantic gothic. It is important to remember that many critics have argued that the 1818 edition of *Frankenstein* is nearer to the aesthetics of science fiction than its much-revised yet oft-

quoted 1831 version.²⁸ Given this, *The Mummy!* can be seen as responding to the more “science fictional” editions of *Frankenstein*. After all, it was in the final 1831 edition that Mary Shelley famously contextualized *Frankenstein* as the result of a ghost-story competition, the content of which was inspired by a dream she had, which placed *Frankenstein* finally within the landscape of the Romantic gothic text. To complicate this debate, Brian Aldiss’ defines science fiction as the descendant of the gothic novel alone: “[w]e look at the dream world of the Gothic novel, from which science fiction springs; we identify the author whose work marks her [Shelley] out as the first science fiction writer” (*Billion Year Spree* 8). Aldiss’ definition is odd, given that 1818 was also the year of gothic parody. By focusing on the debates within *Frankenstein* which demarcate the text as *humanist* rather than merely feminist, such as the rejection of all scientific practices as masculinist, this chapter runs slightly against the grain of many feminist science fiction treatises regarding the “legacy” of *Frankenstein*. By corollary, re-reading *Frankenstein* in terms of its implicit contemporary technological concerns, such as the Luddite revolts and the abolition debate, serves to emphasise how the ideas crystallised within this text were also the concerns of previous feminist/proto-feminist writers examined within this thesis.

²⁸ See Jay Clayton “Frankenstein’s Futurity” and David Ketterer’s “Frankenstein’s “Conversion” from Natural Magic to Modern Science—and a *Shiftal* (and Converted) Last Draft Insert.”

Conclusion

In this chapter I have explored the idea that *Frankenstein* is more culturally entrenched in the imperial and industrial politics of the other and the revolutionary imperative than feminist science fiction scholars have been willing to account for. Moreover, that these ideas so aptly recapitulate the fact that the era between Romantic and Victorian literature in Britain can be seen as “liminal” in a political, rather than historical, sense. In other words, that this era is liminal in a more positive sense of the word; texts such as *Frankenstein* and *The Mummy!* had constituted something of a new *horizon* in literature. Challenging the present scholarly neglect of *The Mummy!*, I have revealed how *Frankenstein* and *The Mummy!* are both philosophically astute in differing ways. Reading these texts in dialogue with contemporary debates also functions as an effective means for contextualizing women’s writing and those debates which, historically speaking, individual women have attempted to engage with. Whilst feminist utopian and science fiction scholars may not have been keen to place *Frankenstein* within a specific trajectory of women engaging with science and technology *prior* to the nineteenth century, Shelley herself was nevertheless interested in the wider acknowledgement of the *historical* trajectory of women’s achievements. As stated in the Introduction, she had outlined a desire to produce a book to be preliminarily entitled “the Lives of Celebrated Women – or a history of Woman – her

position in society and her influence upon it – historically considered.”²⁹ In focussing more explicitly upon how *Frankenstein* can be seen as directly attempting to articulate some of the cultural concerns of its time, this chapter takes a step towards seeing the genealogy of the utopian and science fiction genres as a process which has not only evolved over time, but whose identity is *continually* evolving. In other words, if today we re-read “canonised” texts such as *Frankenstein* and explore relatively neglected texts, such as *The Mummy!*, in order to understand the historical uses of genres, so too should these interpretations today be subject to revision tomorrow.

If science fiction is defined as the extrapolation of, and engagement with, the author’s contemporary scientific, technological and social phenomena, then in order to consider how the utopia has been historically conceptualized within the emergent formula of its descendant – “science fiction” – it is vital that the scientific and technological history of the early nineteenth century must not be neglected. Both Loudon and Shelley can be seen as outlining the idea of technology as a powerful social entity in and of itself, just as G.C. Burrows was to say shortly after the publication of both *Frankenstein* and *The Mummy!*: “Machinery is the hydra of the present day [...] mankind are slaves to things inanimate” (qtd in Wall 144). Significantly, the context of Burrows speech is the 1832 elections, a year which is often mistakenly referred to as “Victorian”, despite the fact that Victoria herself was not on the throne until five years later.

²⁹ This was probably in response to the condescending account of women’s achievements in Herman’s *Records of Woman* (1828) (137-143). See Stephen Behrendt “Mary Shelley, *Frankenstein* and the Woman Writer’s Fate.”

What Burrows meant by comparing the nature of technology to the many-headed monster “hydra” is that technology is *self-reproducing*: if you cut off one of the monstrous heads – or paths – of technological progress, another will just as quickly grow to replace it (as the machine-smashing Luddites were to become painfully aware). Burrows’ comparison here between the figure of a *female* monster and technology is something which science fiction is all too familiar with, as it has continued to draw upon the mid-nineteenth-century Marxist articulation of the monstrosity of urban development and the consolidation of capitalism. It is worth remembering, then, how both Loudon and Shelley can clearly be read as pre-empting the cultural anxiety surrounding the metaphor of social machinery that Karl Marx, and later, Matthew Arnold, were to render more explicit.³⁰ This chapter has argued that this is, in fact, *not* the case. Reading “monsters” as tropes for women and/or technology alone is inevitably counter-productive to a feminist praxis. Ultimately, technology can only be developed through humankind’s image of itself, so the metaphor of the hydra is only useful if we invert it: technology is not *self-reproducing*; rather: it is an attempt to reproduce the “Self”, not the “Other.”

³⁰ See Marx’s “Fragment on Machines” in *Grundrisse* (1858) and for Arnold’s definition of self perfection as the desire to disentangle the self from social “machinery”, see *Culture and Anarchy: An Essay in Political and Social Criticism* (1869).

□Where we men of science would have been afraid to tread□: L.T. Meade's fin-de-siecle Eye/I of Reason

She dared to enter where we men of science would have been afraid to tread; and just because she did venture to lift the curtain behind which we would not have attempted to penetrate, she had helped forward her husband's immature discovery in a marvellous manner.

(Meade, *The Medicine Lady* 171)

The *fin-de-siècle* was undoubtedly one of the key turning points in the evolution of utopian and science fiction writing. By the end of the nineteenth century, science fiction had emerged as one of the most prominent literary templates for imagining socio-political change, and proffering socio-political critique. Science fiction was therefore one of the most dynamic “literary responses” to the scientific discourses and material technologies of the late nineteenth century (Cranny-Francis 39).¹ Developments in electromagnetism and optics not only meant that we could now see “through” objects with the Röntgen ray (x-ray), basic scientific and philosophical models were subverted – including simple chemistry, Newtonian mechanics and “Descartes’ mechanical god” (Taton 3). For example, the impact of the discovery of the Röntgen ray (x-ray) meant that we could now see *through* material, and the

¹ The others are detective fiction and gothic fiction. See Cranny-Francis *Feminist Fiction: Feminist Uses of Generic Fiction* (1990).

boundaries of what constitutes an “object” were utterly disrupted.² This meant that models of Rationality, in which cognitive thought was seen as the corollary of objective observation, were called into question. In other words, the very nature of mechanical space itself was challenged, which problematises current feminist definitions of Western scientific discourses as that which has always sexually objectified and sought to “unveil” natural phenomenon à la Newton and Bacon.³ This chapter demonstrates how British fin-de-siècle writer L.T. Meade (Elizabeth Thomasina Meade Smith, 1854-1915) also challenges current feminist critiques of science in its portrayal of a model of scientific *collaboration* and the presentation of an ethical duty of care between men and women of science despite the fact that she is writing in an era in which feminism has been historically characterised as engaging with eugenics and other problematic models of “Reason.” By applying Suvin’s formula of the “cognitive” novum, I suggest that we can glean how Meade’s science fiction can be seen as upholding a “scientific” sense of feminist Reason which is more astute than contemporary critics have allowed for.

L.T. Meade wrote and co-authored some two hundred works of fiction after coming from Ireland to London to pursue journalism (Kestner 246). An extremely successful and popular writer of this period, her oeuvre represents an endeavour to

² See James Mussell *Science, Time and Space in the Late-Nineteenth Century Periodical Press* (2007) for the counter-argument to this.

³ Most notable are the discussions of science explored by Sandra Harding, Carolyn Merchant and Evelyn Fox Keller. This is a viewpoint perhaps best exemplified by Harding’s claim that: “the best scientific activity and philosophical thinking about science are to be modelled on men’s misogynistic relationships to women-rape” (112). See *The Science Question in Feminism* (1986).

make key links between science, gender and society.⁴ Joint editor of popular girls' journal *Atlanta* 1887-92, Meade was a prestigious figure in terms of woman's writing and she was also an unusual figure, in that she had a lot of support from the popular press. She was one of the few women writers who were able to vocalise her belief in women's right to "equality with men", without losing the popularity of those publications which were critical of the "New Woman", such as *Punch* (58).⁵ Such was her celebrity status as a writer that she continued to publish under her maiden name even after marrying, and she used this fortunate status to make waves into the public acceptance of other women writers.⁶ Sally Mitchell and Mavis Reimer have argued that Meade's writing was integral to the creation of a "mainstream Victorian feminism by depicting strong female heroines" (311). Yet whilst scholars have recently begun to acknowledge the importance of Meade's feminist responses to issues such as consumerism, racism, eugenics, the anti-vivisection debate and the contentious role of the so-called "New Woman" (Mitchell 9-23), to date there are no considerations of those texts which reflect Meade's rich engagement with science and scientific debate in general.⁷ In particular, her work addresses two questions that have remained at the heart of feminist considerations of the historical development of scientific reason:

⁴ This included the development of two key new subgenres: the "medical mystery" and "New Girl" fiction. See Lorena Laura Stookey, *Robin Cook: a critical companion* (1996) and Julie Simons "Angela Brazil and the Making of the Girls' School Story."

⁵ For more details, see Chris Willis, as well as Linda Hughes "A Club of Their Own: the "Literary Ladies", New Women Writers, and *Fin-de-Siècle* Authorship" and Elizabeth Miller "'Shrewd Women of Business": Madame Rachel, Victorian Consumerism, and L.T. Meade's *The Sorceress of the Strand*."

⁶ See Chris Willis "Crime, Class and Gender in the 1890s *Strand Magazine*."
<http://www.chriswillis.freeserve.co.uk/strand.htm>

⁷ In contrast, some scholars define her feminism as ambivalent, due to her "New Woman" and female criminal protagonists. See Chris Pittard "Purity and Genre: Late Victorian Detective Fiction."

what are women's relationships with "science" and what are the potential social impacts of the development of scientific knowledge?⁸

In order to begin to consider how L.T. Meade's fiction can be both rational and dynamic, it is useful to consider Suvin's seminal argument in *The Metamorphosis of Science Fiction* (1979) that *Frankenstein* should not actually be considered as science fiction at all because it is a "flawed hybrid" of both this genre and the aesthetics of Romantic gothic fiction (127). Of course, his rejection of *Frankenstein* as a non-pure, "flawed hybrid" initially appears flawed itself when considered in light of the main theme of *Frankenstein*: Victor Frankenstein rejects a being or "creature" – created from a number of different bodies – on the basis that it does not appear to be "human" enough, in spite of the monster's consistent attempts to assert his humanity. If we compare the initially humane behaviour of the monster to the nature of the "function" of science fiction, Shelley's critique of Frankenstein's hegemonic view of humanity (that which regards aesthetics as tantamount to an *internal* Rosseauian virtue) is reflected in Suvin's rejection of *Frankenstein* as a "flawed hybrid." Upon closer reading, however, Suvin is *not* actually presenting the same argument as Frankenstein; he is, instead, rejecting the premise that the mere *appearance* of science fiction motifs are enough to constitute a text as a work of science fiction, which is, in fact, in antithesis to Frankenstein's rejection of his monstrous creature due to its inhumane

⁸ Sam Moskowitz briefly referenced her "Where the Air Quivered" (1898) in *Science Fiction by Gaslight* (1968), as has L. Timmel Duchamp in "Science Fiction and Utopias by Women, 1818-1949: A Chronology" and Eric Leif Davin in *Partners in Wonder: Women and the Birth of Science Fiction 1926-1965* (2006).

appearance. Indeed, he clarifies this further by outlining which functions science fiction texts should fulfil and why *Frankenstein* falls short of these.

In the Introduction I briefly described how, according to Suvin, the “novum” is one of the most important functions of science fiction proper. I would like to elaborate on the idea of the novum further at this point, in order to demonstrate that it is perhaps more compatible with the feminist concerns of cultural historicity, and that it therefore provides a much richer basis for the consideration of women’s writing, than the feminist model in which the “Frankensteinian scientist” or explorer is juxtaposed to the “woman as alien.” According to Suvin, the novum is a “totalizing phenomenon or relationship deviating from the author’s and implied reader’s norm of reality” (64). The mere *appearance* of this so-called “novum”, however, is not enough: it must also fulfil several other functions. In particular, the novum must not be presented within the text as “the interposition of anti-cognitive laws” (8). In other words, concepts such as the paranormal or supernatural cannot form the basis of the novum. Unlike those feminist critics who argue that certain tropes in science fiction, telekinesis, for example, provide a useful basis for critical scholarship, Suvin argues that even when the workings of the novum may not be explained as scientific, technological or – at the very least – “cognitive”, the inherent function of the novum

must *never* have recognisable roots in the highly structured and inherently conservative genres of folk lore or fairy tale.⁹

It is possible to distinguish various dimensions of the novum. Quantitatively, the postulated innovation can be of quite different degrees of magnitude, running from the minimum of one discrete new “invention” (gadget, technique, phenomenon, relationship) [...] to the maximum [...] new and unknown in the author’s environment. (64)

For Suvin, one of the most important aspects of the novum is that it must bring about a dramatic shift in the thought processes of the protagonist. Therefore, Suvin does not dismiss *Frankenstein’s* creature as a novum on the basis that to interpret this figure as a Miltonic “demon” would be to allude to an *anti-cognitive* symbol of Christian mythology, however; it is because Frankenstein himself fails to learn from his mistake.

The novum must also be cognitively “complete” or have brought about a satisfactory resolution within the text, since the protagonist must have been wholly changed by its existence, yet Frankenstein’s claim that “yet another may succeed” in the usurpation of life itself (in making that which is living out of that which is dead)

⁹ For a full description of the formalism of these genres, see Vladimir Propp *Morphology of the Folktale* (1968). For a discussion of telekinesis in feminist science fiction, see Jane Donawerth *Daughters of Frankenstein*.

renders him “an improper Prometheus or bearer of the novum” (136). Similarly, false or incomplete novums amount to mere “scientific vulgarization or even technological prognostication” and are hence devices that do not function to reflect *critically* upon society, nor do they present a change in the narrator’s contemporary reality (9). But while Verne and Wells were locked in dispute about whether science fiction should consist of explicative and/or plausible descriptions of science and technology (such as in Verne’s work) or exist as a basis to enable the exploration of socio-political ideology in general (as Wells does), Shelley had already cut straight to philosophical questions about the nature of scientific knowledge, gender and hubris.¹⁰ The fiction of Meade is an interesting case to consider in light of Suvin’s definition of the novum. Reading Meade alongside Suvin can also be seen as a means with which to challenge contemporary critical models of what constitutes a “feminist” science fiction. After all, it must not be forgotten that like those “genre-writers” throughout history who are familiar to us as the avatars of modern science fiction, such as Mary Shelley, H.G. Wells and Jules Verne, L.T. Meade was not conscious of such genre models. Although Suvin and John Sutherland refer to the late nineteenth century as “the evolution of SF from a satirical device to a genre” (*Victorian Science Fiction in the UK* 123), the generic topologies which such works are often argued to have “invented” are inevitably only *post factum* epistemologies. The formation of genre, of course, is as much the work of critics and editors as it is the work of authors; as stated in the Introduction, genre

¹⁰ See Anne Cranny-Francis.

label of “science fiction” was very much a phenomenon of the 1920s. Moreover, it was pulp editors’ refusal to publish fiction that did not reflect the Wells and Verne extracts that they reprinted which truly brought about what feminists have termed the “traditional” science fiction canon (that which is populated predominantly with the work of male authors) (Donawerth, *Daughters of Frankenstein* xviii, see Introduction).

The fact that Meade’s work simply did not feature in this 1920s (re)printing project does not explain, however, why contemporary feminists have not already recouped Meade’s utopian science fiction as “feminist” in the same way that they have acknowledged the likes of Charlotte Perkins Gilman, Mary Shelley, Marie Corelli and Lady Florence Dixie. One reason for this may be because, following the 1980s rise of feminism in the academy, feminist utopian and science fiction critics had themselves attempted to formulate a “feminist” version of Hugh Gernsback et al’s traditionally male-dominated science fiction canon, tracing a history from Mary Shelley onwards. As discussed previously, this literary model is often seen as synonymous with the highly limited definition of *Frankenstein* as the critique of all scientific endeavour on the grounds that it was the product of misogynistic practices (Clayton, “*Frankenstein’s* Futurity” 88). Frankenstein’s feminist “inheritance” is often reduced to the idea that, as a scientist, Frankenstein epitomises the idea that:

the scientist is male and nature is female; science is the
domination of nature. The domination of nature is erotic: the

scientist pursues nature, uncovers her and unveils her,
penetrates her, and rejoices in his mastery. (Donawerth xix)

These contemporary feminist debates become extremely important when considering the era in which Meade is writing. Before the pulps reprinted Wells and Verne, it was late nineteenth century developments of cheap print culture which had made their writing accessible in the first place. This was due to both the emergence of cheap “penny” publications, as well as the marketing success of well-established titles such as *The Strand Magazine*, which continuously published Meade’s serial short stories.¹¹

Significantly, this era can also be defined as the historical moment in which there were marked attempts to consolidate the sciences as disciplines and to define the modern role of that newly-coined being: the professional “scientist.” It was around the time that Meade’s writing was at its most popular that the terms “man of science” and “scientist” were coined; in 1901 Meade even named one of her *Strand* science fiction serials “The Adventure of a Man of Science.” These new terms were part of the British’s government’s move to imbue the sciences with epistemology, as they became institutionalised and segregated into separate disciplines in a way which had not been seen since Margaret Cavendish’s contemporaries’ founded the Royal Society (Willis *Monsters, Mesmerists and Machines* 210). Significantly, the epistemology of

¹¹ Whilst the sheer volume of Wells’ science fiction oeuvre is impressive, I disagree with the critical over-emphasis Nicholas Ruddick and others have tended to place upon Wells’ role in amalgamating science with utopian projections and social critique. See Ruddick *British Science Fiction* (1992) for more details of the so-called “Wellsian synthesis”.

segregated, disciplinary thinking is a form of rational modelling which feminists have often defined as anathema to historical definitions of women as a more emotionally-orientated creature, and which permeate our conceptualisations of literary movements. For example, the “Female Gothic” is often seen as an inherently “female” response to the late-eighteenth century failure in realising (“masculine”) Enlightenment ideals. This antagonism between “masculine” concepts of Rational thought as opposed to feminine concepts of Romantic-influenced “feeling” become all too obvious when examining the recent scholarly neglect of fiction such as Meade’s: the late Romantic elements of *Frankenstein* are, conceptually speaking, far more compatible with contemporary feminist models of the critique of scientific discourses than their fin-de-siècle counterparts. The outcome of this has been a critical impasse in which feminist models can no longer be informed by scientific reason.

Far from being merely the domain of decadence and masculinity in crisis, however, critics such as Matthew Beaumont have already demonstrated how the *fin de siècle* constitutes a particular period in women’s writing that ought to be recognised as one of excitement in terms of feminism and utopian imaginings. As he observes of fin-de-siècle utopian fiction, “[i]n the 1880s and 90s, “advanced” middle-class women perceived the present as a vital site of social experimentation, the *heated laboratory* of some more liberated society” (217, emphasis added). Beaumont’s description highlights precisely how literary criticism has canonised late nineteenth-century

women's writing as a comparatively more rational female subjectivity than the destabilised female agency of its earlier literary counterparts, such as the "Female gothic" and "novels of manners" that influenced Mary Shelley, for example. As stated in the Introduction, his metaphor of the "heated laboratory" of society evokes the idea that utopian and science fiction allows writers to conceive alternative presents/near futures which are "social experiments" of how problems within the writer's contemporary society could be addressed. In other words, that *writing* is itself the heated laboratory for creating a more utopian society. Moreover, fictional depictions of actual heated laboratories such as Meade's go even further to suggest that the social laboratory of utopian science fiction can be created in real-life society after all. This emphasises the concept of woman as a rational, ethical, scientific and social thinker, as opposed to being the antithesis of Reason. Rather than positing the site of the laboratory as a space of hubris and contempt for knowledge (one which excludes women only to produce horrific Frankensteinian births), by the end of the nineteenth century the laboratory – in fiction at least – can be seen as yielding a more empowering form of agency for women.

Indeed, it is a fact often neglected by scholars (and certainly the editors of the 1920s science fiction pulps) that although Wells has been upheld as the paragon of the somewhat male-dominated origins of turn of the century science fiction, he was both adamant about the importance of cognitive fictional writing, such as detective fiction and science fiction, and keen to support the idea of *female* scientists, such as we see in

Ann Veronica: A Modern Love Story (1909).¹² Challenging the neglect of fiction which does not correspond to the science as “rape” trope allows us to see how women have also depicted themselves as having greater agency within the laboratory; women are not merely experimented-upon and alienated beings: they are also laboratory collaborators. Meade’s fiction does indeed address the same questions that Shelley raised but she is answering them in an entirely different way. That is to say, Meade’s central focus is defining how women and men collaborated as rational, feeling humans, rather than perpetuating the model of an allegedly alienated, marginalised and perhaps even non-human “creature”: the woman writer. Utopian and science fictions are, after all, best defined as those cultural spaces in which we should be able to make such socio-historical leaps.

Daring to Tread

This is not to say that *Frankenstein* is not integral to this project however: Meade can be seen as continuing Shelley’s interrogation of scientific responsibility and ethical practice by updating the icon of the male scientist who chooses to take “life” forces – such as death and disease – into his own hands. This can be clearly gleaned in Meade’s various depictions of male *and* female scientists, who can be seen as being both ethically responsible and ethically irresponsible. That said, upon first reading her utopian science fiction does not proffer an altogether explicitly feminist writing in the

¹² See Mussell for more details of Well’s model of the ideal scientific fiction writer.

light of contemporary feminist criticism's definition that masculine scientific rationality is signified by the authority of the phallic eye/"I" of the male scientist/narrator. Whilst feminist considerations of the Platonic eye/I are too numerous to note here,¹³ I would like to instead present how Meade's depictions of men *and* women "of science" – working both together and in opposition to one another – posit a clear moral code of cognitive reason and humanity over the hubris of the "I". It is worth noting at this point that whilst Shelley was the woman in the text behind the voice of three male protagonists: Victor Frankenstein, Captain Walton and the monster (who is purported to be "biologically" male); seventy years later Meade is able to begin exploring scientific ethics in no less a role than that of *The Medicine Lady* (1892).

The Medicine Lady explores women's role in relation to scientific knowledge, makeshift laboratory research and the question of responsibility of this knowledge in terms of society in general. In addition to Shelley's nascent feminist concerns, Meade's *The Medicine Lady* was co-written with a male doctor and forms a voice of male/female equality that is signified by her use of the pronoun "we." This was initially described as an anonymous collaboration, but Clifford Halifax M.D. was later named as co-writer.¹⁴ It imagines what might happen if a cure for tuberculosis was developed, one which resulted in a full recovery for some patients, but which made others fatally ill. It

¹³ See Evelyn Fox Keller *Discovering Reality* (2003).

¹⁴ For more details, see Chris Willis.

may appear to today's readers to be more of a "medical drama", yet the average late nineteenth-century reader would have viewed this as a tale of the future possibilities of medicine and their ambiguous results: in short, a science fiction story. The protagonist, Cecilia Digby, develops her husband's research after he dies before its completion. When she then contracts tuberculosis, she continues his work by injecting herself – becoming her first test subject, and begins to work on the inoculation compound alone. Administering the cure to the wider community, she becomes a local hero because she is willing to help those who are impoverished, unlike "the men of science, who were afraid to help poor, suffering humanity" (253).

Historically-speaking, we know that a cure for tuberculosis is a new innovation or novum for readers in 1892 because the modern-day BCG (Bacille Calmette Guérin) vaccine was not developed until the 1920s. Even if readers did not already know that Dr. Koch had only just identified the fact that tuberculosis was an organism named *Mycobacterium tuberculosis*, his pursuit of a cure is clearly stated in the Preface as the inspiration behind the story. The ambiguity surrounding Cecilia's attempt to develop the cure – against her late husband's wishes – is clearly demonstrated to the reader by the public's reaction to its effects: a mob gathers outside Cecilia's house, half of whom are in favour of the cure and demanding more, and half of whom want to stop her because its use has resulted in several deaths. Shortly after, the reader learns that her motivations were, however, based upon humanity, not hubris, when she claims that: "It was wicked of me to use that medicine, but I did not do it with a wicked

motive. I used the medicine in perfect faith in its power to save you. I believed in it” (251). Unlike Victor Frankenstein’s inability to “bear” the novum, Cecilia instead concedes that her attentions were not those of pride but social philanthropy.

Rather than depicting women of science as morally superior to “the men of science” (253), however, *The Medicine Lady* emphasises the positive *collaboration* between men and women. The second edition of book, published in 1901, included an epilogue written by another character, Dr. Dickinson, who claims that Cecilia:

dared to enter where we men of science would have been *afraid* to tread; and just because she did venture to lift the curtain behind which we would not have attempted to penetrate, she had helped forward her husband’s immature discovery in a marvellous manner. (171, emphasis added)

It is clear to see how Meade debunks the idea that the Baconian pursuit of science is a metaphorical act to unveil and “rape” nature; here the gendered associations with this style of scientific language and its associations with the irresponsibility of “men of science” are subverted because it is a *woman* instead who has “dared” to “penetrate” and “lift the veil” of discovery when male scientists had not dared to. Crucially, such a daring pursuit of knowledge ultimately has a positive impact upon the future of society: Cecilia alone is responsible for the fact that a cure for

tuberculosis lies in the very near future. Meade also acknowledges the collaboration between her own work and that of a doctor in much the same way as Cecilia acknowledges her husband's work. Referring to her co-writer, Dr. Clifford Halifax, she states in the Preface that: "[o]wing to the severe laws of Medical etiquette I am obliged to let this story appear before the public without mentioning the name of the clever Doctor who so largely helped me in this formation." Meade is therefore presenting both the positive developments in science and women's role within it in order to show that, by the end of the nineteenth century, women writers are instead able to use science fiction as a more direct means of engaging with important questions surrounding humanity and contemporary science than Shelley.

More importantly, both the Preface and the Epilogue demonstrate that what can be defined as new (the novum) will always inevitably be a temporal/spatial projection from an ever-shifting horizon of discourses, that which Mikhail Bakhtin would have described as the "dialogic."¹⁵ Indeed, the reason underlying this definition is perhaps more complex, since the historically specific nature of the novum is based upon whether it can be distinguished as "cognitive" as opposed to "anti-cognitive" and that this is, in turn, reliant upon an understanding of the *evolving* nature of rational discourses. It is for this reason that Meade's thematic interest in hypnotism, or mesmerism, as it was also known, provides an excellent demonstration of the

¹⁵ Here I refer simply to the "dialogic" as a state of any given contemporary society and culture as defined by its "knowledge" discourses. For a more precise definition, see Mikhail M. Bakhtin *The Dialogic Imagination: Four Essays* (1982).

historical specificity of cognitive rationale; hypnotism may have been seen as an anti-cognitive discourse by today's scientists but it was not considered to be anti-cognitive in 1890s Britain. The last two decades of the nineteenth century have even been referred to as the "golden age" of the "diniacal" practice of hypnotism (Gauld 577-8). After all, as Carl Freedman has noted, Suvin's definition of science and utopian fiction relies upon the idea that it is the *play* between cognitive reasoning and estrangement of the novum which proffers such an astute engagement with the author's present (17). For Meade, hypnotism has a cognitive basis, being "[t]he little understood *science* of mesmerism" ("The Panelled Bedroom" 675, emphasis added). The reason why we can define hypnotism as a novum, even though it was not a concept which was "invented" anew for the purposes of the plot, then, is because its treatment by Meade is new in "My Hypnotic Patient" (1893) and *The Desire of Men: An Impossibility* (1899). Indeed, in "My Hypnotic Patient", Meade even suggests that because it is a "science which is yet in its infancy" encompassing "one of the most dangerous productions of modern times", that its increased use could cause very serious problems for society at large (172). Although hypnotism could be thought of as having no science fictional relevance because it can be defined as neither new (since it was an existing concept in 1890s Britain), nor anti-cognitive, Meade describes it as a cognitive discourse, a novum through which the rest of the narrative is conceptualised. What I want to examine in particular here is how Meade depicts hypnotism as a fatal practice for

society, due to its alleged ability to control the “mind” and mental health, two obviously “cognitive” concepts.

When the semi-autobiographical character Dr Halifax (after Dr. Clifford Halifax, the co-author) meets a patient who has been hypnotised into committing murder on behalf of an alleged “doctor” who claims to be “a hypnotist by profession”, the patient nearly dies from the resulting mental trauma (“My Hypnotic Patient” 173). This short story theme is then extended in *The Desire of Men*, a novel exploring the possible side-effects of hypnotism when used alongside intra-venous drugs. What is significant about the combination of intra-venous drug usage and hypnotism is the *interchangeable* nature of these practices; they are part of a process that is described by the elderly narrator as “a force which I could not in the very least resist, [...] pushing me the way it wished me to go” (199). The novel predominantly follows the point of view of Philip Rochester, who is offered youth at the expense, unbeknown to him, of his own granddaughter’s health by his landlord, Jellyband. Jellyband is revealed as a scientist who has set-up a boarding house in order to experiment upon his tenants, indeed “the whole [house] is but an experiment” (79). Therefore, the “desire of men” of the title is not the desire to be a man of heroism but that of Victor Frankenstein: the medical and utopian desire to fulfil humankind’s wish to live longer, free from the diseases of old age. As is the case with the majority of Meade’s fiction, *The Desire of Men* is therefore structured in a format which emphasises the ethics of experimenting on other human beings, and the power

relations at play between a hypnotist and their subject, reflecting current feminist concerns with the role of women as the subjects of scientific discourses. It is important to note, however, that unlike many feminist reactions to the gender-bias language of science throughout history, Meade is not relegating women to the position of objectified-victim-of-male-scientist: after all, the experimental subject, Phillip Rochester, is a man.

The cognitive projection of the theme of hypnotism in *The Desire of Men* helps us to understand that we cannot – and must not – conceive of what is anti-cognitive without considering the historical evolution of logical discourse. The evolution of scientific rationale can even be defined as *post factum* interpretations of the cultural dialogic surrounding historical definitions of the “cognitive”; never is it merely the reflection of the ahistorical, essential “truth” of the material world. If the novum must not function as an anti-cognitive phenomenon, then that which is “cognitive” must be clearly defined. This is a key point in any discussion regarding science fiction, one which is especially true of pre-twentieth century literature: what is possible – and therefore, what is *impossible* – can only be judged in comparison with the scientific and technological developments that are contemporaneous to its publication/writing. In other words, in addition to being complete in the sense of a shift in the protagonist’s mode of thinking, the novum’s cognitive function must be one which is a cognitive projection of what was contemporaneous to the author’s present.

Having considered Suvin's idea of the historically specific novum, I shall return again to the feminist science fiction paradigm of "Frankenstein's inheritance", in order to reconsider the extent to which Meade is engaging with the questions that *Frankenstein* raised earlier on in the nineteenth century. The allusions to Promethean overreaching are obvious even given the stories' titles, for example, how *The Desire of Men* and *The Medicine Lady* evoke a sense of the gendered nature and agency involved in scientific aspiration. *The Desire of Men* is reminiscent of the sub-title of Shelley's *Frankenstein* of: "the Modern Prometheus" (Butler, Title page). References to Prometheus from Greek mythology indicate a thematic concern with desiring the knowledge of something in order to overreach our roles as humans, the desire to displace the function of the gods (since Prometheus was the first human to obtain the use of the gods' fire). However, the legacy of *Frankenstein* cannot be simply reduced to the positing of science as the "other;" this is to merely turn inside out the anti-feminist idea of nature – and hence woman – as the other, and hence to posit "man" as "scientist" in a spurious dichotomy in which woman is "not-scientist." Meade's short story entitled "Spangle-Winged" (1901) is the most explicit example of her engagement with the *Frankensteinian* theme of the responsibility of the male scientist. "Spangle-Winged" is Dr Matchen's first-person *apologia* in recognition of his hubris, and as such it closely recalls Victor Frankenstein's confession to Captain Robert Walton in his claims that: "I was a scientist of no mean attainments, a medical man for whom one of the laurel wreaths of the profession may have been a possibility."

Nevertheless, I fell. *I plead no excuse*' ("Spangle-Winged" 201, emphasis added). But whereas Matchen here pleads "no excuse", the narrative structure of *Frankenstein* can be described as Frankenstein's attempt to present Walton/the reader with numerous excuses.

Matchen goes on to reveal in his apologia that his experimental research into a cure for malignant malaria becomes the means by which he and his accomplice attempt to murder Rachel, a woman he is in love with, and her soon-to-be husband Captain Channing. Matchen's liminal position in relation to the couple therefore makes him comparable with the jealousy, otherness and rage of Frankenstein's creature as he observes Victor and his new wife Elizabeth on their wedding night. This is important, since Matchen's alienation destabilises the "woman as alien" motif of feminist science fiction, wherein the alienated being signifies as "woman" by default.¹⁶ However, because the protagonist decides to save their lives with the antidote that he has been developing, Meade's concern is more plausibly defined as an exploration of the humane way in which we should interact with scientific knowledge. Matchen's pursuit of knowledge has been motivated not by the totalizing *control* of life and death, as Victor Frankenstein is, but by an altruistic desire to create a cure for a disease which is the indiscriminating and arbitrary killer of millions of innocent (often impoverished) lives. Having infected his two victims through a malignant malaria

¹⁶ For an account of the inherent masculine identity of the "other" in Victorian scientific narratives and gothic fiction, see Andrew Smith *Victorian Demons: medicine, masculinity and the gothic at the fin-de-siècle* (2004).

sample taken from the namesake “spangle-winged” mosquito of the title, Matchen attempts to make amends for his malice, by nursing Rachel and Channing back to health. As a result of this, like Frankenstein’s mother, he too becomes infected – further subverting the trope of the irresponsible scientist as an inherently masculine-identified figure, since illness and degeneration are often defined as feminine attributes. After deliberately infecting them, Matchen decides to *not* save his own life by self-administering the antidote drug and so the story ends – quite literally – *mid-sentence* because the narrator has allegedly died whilst attempting to document both his confession and his scientific findings. To add a sense of the “what if” to his account, there is an epilogue stating that he was indeed found dead with his pen in his hand because he was trying to document the details of his discovery. In doing so, the plot also performs the literary function that Suvin terms the “lost invention” device (*Metamorphoses* 72). As clichéd as the lost invention trope may seem, in one sense, it functions to complete the novum in terms of the concept of the question “what if?": instead of becoming the “when” in terms of the microcosm of the story world, it creates a sense of speculation – “what if he had documented the malaria antidote?”

In contrast to Matchen and his apologia, Meade’s oeuvre also includes two of the earliest popular fiction examples of professional female criminals, Madame Sara and her reincarnation as Madame Koluchy in *The Stand* serials “The Brotherhood of

the Seven Kings” and “The Sorceress of the Strand.”¹⁷ Indeed, although critics have insisted that the following description is more comparable with that of a witch’s den, I argue that Meade’s depiction of Madame Sara’s laboratory as a space in which highly-technological treatments are performed instead recapitulates the conflation of the gothic and the scientific that scholars often associate with a crisis in *masculinity* at the *fin de siècle*, the so-called “Jekyll and Hyde” paradigm.¹⁸ In the following quotation, Madame Sara plays out the subversion of this *motif* when a male narrator describes her laboratory.

Above the chair hung electric lights in powerful reflectors, and lenses like bull’s-eyes lanterns. [...] There were dry-cell batteries for the continuous current and conduction coils for the Faradic currents [...] Madame took me from this room into another, where a still more formidable array of instruments were to be found. Here were a wooden operating table and chloroform and ether apparatus.

(“Madame Sara” 392)

It must be stated that Madame Koluchy and Madame Sara do not prove to be unproblematic feminist figures for readers: their use of scientific knowledge is far

¹⁷ These were co-written with Dr Eustace Robert Barton, rather than Clifford Halifax. See Chris Willis.

¹⁸ See Andrew Smith.

from utopian. Paradoxically, it is precisely this depiction of Madame Sara and Madame Koluchy as female scientists who *misuse* scientific discoveries which lies at the heart of Meade's feminism. Whilst the crisis in eugenics, xenophobia and femininity that is arguably played out in the role of the multi-talented surgeon, "beautifier", scientist, and dentist: "Madame Sara", have all been well documented by critics (*The Sorceress of the Strand* 166), what I am concerned with here is Meade's emphasis upon Madame Sara's undisputed talent.¹⁹

In "Talk of the Town" (1903), Madame Sara even outsmarts Professor Piozzi, a man who is described as none other than "a phenomenon, a genius, probably the most brilliant of our time" (68). Piozzi has produced "artificial light", which would replace the need for both the electrical light that was still fairly new in 1903 and its gas counterpart. Madame Sara also quickly comprehends the potential of both this and Piozzi's new synthetic food enzyme, which could rid the world of starvation and poverty, and attempts to patent the discovery as her own work for economic gain. She has therefore been able to interpret Piozzi's findings in a way in which he has not been able to, desiring world domination over curing world poverty. Although Madame Koluchy and Madam Sara have chosen to use their scientific knowledge to gain economic success, they are nevertheless radical characters because they are depicted as women who are proficient enough to out-wit other men of great scientific

¹⁹ See Elizabeth Carolyn Miller "Shrewd Women of Business" for a description of Madame Sara and Madame Koluchy as a modern appropriation of witch-craft and the racism of eugenics.

intellect. Yet this is not the main focus of Meade's feminism; it is in depicting women as *monstrous scientists* that Meade's texts help to subvert definitions of *Frankenstein's* inheritance as that which inextricably bound the male Romantic ego to the more pan-historical figure of the irresponsible (male) scientist.

The idea of the ethical and gendered nature of scientific knowledge is extended in Meade's short story "Twenty Degrees" (1898). It describes how Madame Koluchy nearly kills a man through the radiation poisoning emitted by an x-ray machine of fantastical size, built so that its rays would be able to penetrate the wall of the house next door. Radiation poisoning is a theme that *Strand* readers would have been familiar with, since it extended an earlier story about the Röntgen ray in Meade and Clifford Halifax's "The Adventures of a Man of Science", which had run alongside a *Strand Magazine* article presenting the x-ray machine, entitled "The New Photography" (1896).²⁰ "The New Photography" depicted x-ray pictures of objects, animals and people's limbs and revealed how this so-called "new photography" was an entirely new way of thinking about the natural world, since rendering the solid merely "opaque" has deep philosophical resonances. By highlighting the possible dangers of the new x-ray, "Twenty Degrees" was drawing upon the contemporary interest in how the Röntgen ray functioned as an "eye." Meade's extrapolation of the x-ray therefore explores the idea of seeing and speaking through the "eye" of science and the "I" of

²⁰ "The New Photography" is a *Strand* article of note for many Victorian scholars. See Mussell and Pittard.

the narrator respectively, and how new and/or possible technologies allow us to “see” much more than we could before.

By the end of the nineteenth-century, science has therefore transported society to a place in which its application was not so much a desire to “unveil nature” as much as it was the idea of being able to see *through* material matter. This new transparency must not simply be reduced to a metaphorical “penetration” of nature; there are more complex issues at play here when we define technology as enabling us to see matter in – quite literally – an entirely different light. After all, when objects are translucent, observation and knowledge do not so easily fall into the remit of the Baconian definition of knowledge (in which truth is tantamount to a divine light or the process of “enlightenment”).²¹ Rather, the identity of scientific knowledge as divine light is problematised by the glow or spark of those electromagnetic currents, which destabilises the boundaries of matter for the viewer. Ultimately this undermines, rather than supports, the definition of the history of science as a space in which the Platonic divide between matter and mind is at its most poignant.

If the so-called “new photography” therefore constituted an entirely new way of thinking about the natural world, it was one which did not as easily support conceptualising the human through the highly gendered dichotomy of “bodily woman” and “thinking man.” Meade’s “The Horror of Studley Grange” (1894) plays

²¹ The eye, the sun and the light are all used in Plato to establish intelligibility. See Evelyn Fox Keller and Christine Grontkowski’s “The Mind’s Eye.”

out this very idea. The narrator Doctor Halifax tries to discover the circumstances that have brought about Lord Studley's "malady of the mind", a condition which is causing him so much trauma that it is predicted his physical body will also inevitably "give way under the strain" (4). It is revealed that his mental strain has been caused by an optical illusion, the non-material nature of which affects both his sense of temporality and reality, since he cannot cognitively explain what the apparition is (see Appendix III): "I know by a faint ticking sound in the darkness that the Thing for I can clothe it with no name, is about to visit me [...] a preternaturally *large eye*, which looks fixedly at me with a diabolical expression" (8, emphasis added). Lord Studley's malady can be therefore seen as signifying the philosophical destabilisation of the observer's scientific eye. In other words, "the Thing" which eludes definition brings about his loss of selfhood, and, thereby, the unknown origin of the "Thing" comes to represent society's inability to understand the world.

The "Thing" is eventually revealed to be yet another example of how women can be seen as possessing technical prowess; Dr Halifax reveals that the giant eye is the result of scientific apparatus used by Lady Studley (13). Although "The Horror of Studley Grange" could not be described as science fiction *per se* (since the technology enabling the apparition of a giant eye is revealed to be entirely possible in the present), it nevertheless provides an important "lens" through which we can consider Meade's other short stories. The fact that the gender of the "eye" which has been scrutinising Lord Studley and his doctor – the narrator, Dr Halifax – is revealed to be *female*

creates yet another inversion of the gendered roles of irresponsible or morally “criminal” scientists. The usual narrative “I” of the male scientist/explorer is instead enacted by a responsible and caring male scientist (Dr. Halifax), the “victim” is a male in power (Lord Studley) and the scientifically proficient criminal scrutinising them *both* is Lady Studley and her scientifically-enlarged phallic eye. Yet again, this undermines the feminist stereotype of the male explorer/scientist who, like Victor Frankenstein, “uncovers” and objectifies nature in order to gain knowledge. Moreover, what is crucial to a more nuanced understanding of the cultural importance of Meade’s popular writing is the cognition of the fact that the uncanny and penetrating gaze of Lady Studley’s projected, enlarged and scientifically-constructed “eye” serves as a symbol of the collaborative eye/“I” of Meade’s Reason. After all, in scrutinising Dr Halifax, the giant female “eye” can be seen as scrutinising the political meaning of the “I” of the first-person narrator. The importance of Lady Studley’s “eye” within Meade’s thematic concerns is emphasised even further by the fact that it is this image which forms the Frontispiece to the book collection of *Stories from the Diary of a Doctor: First Series* (1894).

Lady Studley’s giant eye is just one of many examples of “eyes” and “I”s that become integral to Meade’s engagement with the heated laboratories in which woman can be the bearer of technological knowledge, and, likewise, men can figure as the exploited subject of a gaze motivated by scientific epistemologies. Lady Studley’s projected eye, the “Bull’s eye” surgical lights in Madame Sara’s high-tech laboratory

and the giant, wall-penetrating x-ray eye of Madame Koluchy can all clearly be seen as proffering a feminist – yet rational – disruption of the gender stereotypes which are often at play in scientific discourses and spaces. Meade does not simply present societal inversions of empowered women scientists at the expense of the “man of science”, however, in addition to these more problematic feminist figures, she extends this premise of the feminist subversion of the “I”/eye even further in her anthology *Silenced* (1904); here she explores the roles of female agency through the power of *wia*.

Scientific Sanctuary

Contrary to the recent lack of engagement with her work, Meade’s *Strand* serials were so successful that they were reprinted in book collections. One of these short stories – “Silenced” holds particular significance for considerations of a feminist voice in Meade’s writing because, unlike many of her other *Strand* stories, the narrator of the co-authored “Silenced” story was a woman. Written with Robert Eustace between their “Adventures of a Man of Science” and “Brotherhood of the Seven Kings” serials in 1897, the importance of this story to the thematic concerns of the later book is explicit from the outset. “Silenced” is both the first story of the collection and its namesake, and its feminist implications are also clearly gleaned in the plot, in which the protagonist Nurse Petrie is “silenced” from betraying the fact that her mentor plans to neurologically damage his fiancé’s long lost love during surgery. The surgeon

achieves this by operating on Nurse Petrie, leaving her with an “external opening” in her skull, one which is positioned “just over the centre which controls the powers of speech” (39, emphasis added).

The feminist implications of *Silenced*, in which a first-person narrator is deliberately disempowered when their voice is usurped, form just one example of how the interplay between silence and agency become central to the *Silenced* corpus. Indeed, rather than forming a collection of individual stories, both *Silenced* and *The Sanctuary Club* are contextualised under one umbrella story: that of a doctor who has used new-found wealth in order to create a utopian space within which to nurse psychologically-troubled patients. Furthermore, the introductions to these two books both seek to situate the short stories within the same loci: that of a scientific utopia – even the title words “sanctuary” and “silenced” convey a sense of how utopian spaces are simultaneously defined and destroyed by the power of voice. Indeed, the “Sanctuary Club” is just that: it is a segregated space in which individuals are able to find *sanctuary*. Likewise, how the stories’ protagonists are “silenced” is actually revealed to be part of a process in which the exclusion and silencing of voices within scientific spaces is challenged. This is because each individual narrator is given a first-person narrative voice, whatever their gender or social position. This means that *Silenced* can be seen as a literary space wherein what has been silenced about the abuse of scientific discourses can now be *wiaed*.

The narrator is also keen to emphasise that the utopian space of sanctuary has been created as a new scientific environment. Rather than portraying an anti-scientific attitude, the “victims” of scientific criminals recuperate through the means of an innovative scientific atmosphere. Similarly to the ethos of Millenium Hall (see Chapter Two), in both the Sanctuary Club and of Sherwood Towers “[e]very appliance that art or science could suggest for the alleviation of suffering humanity would be worked” (*The Sanctuary Club* 9). This is especially true for the Sanctuary Club, in which climatic control and the manufacture of mineral water form the basis of the infrastructure of the sanctuary.

This great institution, of which I had dreamed of for so long, was for the treatment of all sorts of disease on a hitherto unattempted scale. Here my friend Chatwynd and I could put into execution the boldest and most recent theories that other medical men, either from lack of means or courage, could not carry out. One of the chief features of the place was to be a special department where the latest and most up-to-date scientific theories could be realized, one in especial being an attempt at the production of artificial climates [...]

At the Sanctuary Club, we had, by virtue of our modern scientific knowledge, the means of producing such

conditions artificially. Mineral waters of the exact composition of those at the springs of Continental spas could be reproduced in our laboratory. (9)

To add to this ethos of a scientific – yet nurturing – utopian space (two ideas which are often seen as anathema to one another), each individual’s story has its own introduction by the first-person narrator who introduces the book. The affect of this encompassing narrative is that we automatically contrast the individual narrators’ pejorative experiences with the backdrop of the utopian sanctuary from which it is “voiced.”

After the initial introduction by the narrator, the short stories all continue from the perspective of the “patient”, who has also been a “scientist” or expert of scientific knowledge of some form, such as the “silenced” neurosurgical attendee, Nurse Petrie. Just as the narrators are often extraordinarily talented women in terms of their scientific know-how and propensity for voicing their ethical concerns regarding the use and abuse of knowledge (the latter being a role which is traditionally associated with men), the role of nurturer (a role traditionally associated with women), is performed by the narrator doctors. In the same way that Lady Studley subverted the role of the doctor/detective Halifax, the testimony of the “I” of the patient and the “eye” of the scientist is blurred because the idea that the role of the “Doctor” is the only legitimate scientist to possess an “I”/eye of authority is refuted.

How the complex narrative shifts subvert the gendered nature of authority is most clearly seen in the short story "The Blue Laboratory." The narrator introduces the story in the first person and then shifts to speak in the *third person*, whereupon this omniscience is interrupted by the phrase "TOLD BY MADELINE" and the narrative perspective then changes completely to that of Madeline's *first-person* account of her experiences (*Silenced* 267). More significantly, this particular story destabilises the usual motifs of women as the object or victims of science and not its authors. "The Blue Laboratory" is set in 1895 in St. Petersburg, and describes the experiences of an English tutor who has recently been employed by a prolific Russian scientist, Dr. Chance. Whilst the depiction of a Russian optical scientist during a period in which there was competition between Britain and Russia in this field is of significance, the story is mainly concerned with the gendering of scientific knowledge. When she informs him that she has "studied chemistry a good deal for a girl, and [that she] took science *tripos* at Girton", he asks her to help him write his new experiment in English for submission to the *Science Gazette*, a journal that Madeline has also "studied for many years" (270). Like Nurse Petrie's description of the neurosurgeon, Madeline describes Dr. Chance's attitude to his work as "a scientist who had not a scrap of soul about him" (284). This, of course, reflects the attempt to distinguish the irresponsible scientist from the responsible one, which can be gleaned in Shelley's juxtaposition of the caring Clerval as he nurses the irresponsible Frankenstein.

When Madeline challenges Dr Chance's negligent attitude, they begin a dialogue about the gendered nature of scientific knowledge, in which Chance tells Madeline that she is: "full of curiosity. That which ruined your mother Eve is also your bane" (292). When he asked her: "What has a young uninformed creature like you to do with science?", Madeline replies: "I love science [...] I respect her; her secrets are so precious" (292), inverting the idea that nature is female by describing *science* as female as well, just as Loudon genders progress as female in *The Mummy!* (see Chapter Three). Increasingly worried by Chance's inhumane and misogynistic attitude towards scientific endeavour, Madeline formulates a plan to uncover *his* experimental secrets. She discovers that Chance himself has made a ground-breaking discovery, that: thought can be photographed, wherein "[s]ubjective impressions of thought cause molecular changes in the cells of the brain [which] then give a distinct impression on a negative" (313). Furthermore, he has even imprisoned a man as a test subject. "[F]asten[ing] back his eyes with a specula", Dr Chance induces vivid visions with the use of drugs in order to capture the "visual purple" of the test subject's thoughts (312-3). The denouement of the story is that by using great scientific canniness and courage, Madeline is able to "rescue" herself *and* the experimental subject (who is, significantly, another example of a male test subject), and she escapes to the scientific sanctuary of Sherwood Towers.

Scientific Fiction

The photography of thought described in “The Blue Laboratory” draws heavily upon theories which we term today as the photoelectric effect, and which were discovered by Heinrich Hertz (1857-1894) around the same time that Meade was compiling *Silenced*. Hertz had written an account of this effect in 1887, detailing his accidental discovery of the influence of ultra-violet light on electrical discharge (Taton 216). Hertz’s account became influential in the study of the relationship between optics and electricity, and it is therefore likely to have been the source of Meade’s inspiration too. What complicates reading Meade’s fiction as utopian and science fiction in this way, however, is the correlation between science fiction and detective fiction. Lorena Laura Stookey cites *The Medicine Lady* as one of the first texts to amalgamate the detective plot with the concerns of science fiction, an antecedent of twentieth-century “medical mystery” writers such as Robin Cook (18-19). More importantly, from the beginning of the second series of “Stories from the Diary of a Doctor” in 1895, the serials were printed with the authors’ names and a “disclaimer” announcing that any implausible elements found in the stories were to be considered as being rooted in scientific *fact*. Complexly, the disclaimer was therefore intended as an attempt to pre-empt any readers’ tendency to classify the stories as science “fiction” rather than science “fact.”

These stories were written in collaboration with a medical man of large experience. Many are founded on fact, and all are within the region of practical medical science. Those stories which may convey an idea of the *impossible* are only a *forecast* of an early realization. ("Creating a Mind" 33, emphasis added)

Chris Pittard and others have argued that this disclaimer is the result of the *Strand's* resistance to criticism from the medical *milieu* regarding the scientific basis of Meade's stories.²² In other words, it is the magazine's attempt to play down the classification of any and all *non-realistic* elements of her work, particularly in terms of futurism or of any sense of projection. This anxiety regarding the non-realist elements of her stories is only emphasised by the fact that Meade's fictional engagement with scientific discourses became not more naturalistic but *less* naturalistic after the introduction of the disclaimer.

This parameter set it apart from *Strand Magazine's* other, more fantastical projections (such as translations of Jules Verne) on the basis that each of her short stories effectively contained a reminder to the reader to not consider this writing in terms of *speculative* fiction, and that it must be thought of as *detective* fiction instead. The sudden appearance of claims to realism about the near future/alternative present of Meade's scientific fiction indicates that there was just as much anxiety surrounding

²² See Pittard for a close examination of this disclaimer in relation to ideas of the detective genre.

the resolution of the definition of this type of “liminal” fiction for its contemporary readers as there is within scholarship today. Not “fantasy” like Wells and Verne, and not “horror” like Shelley, it was instead labelled as “realistic” in order to be categorised within and alongside the *Strand's* Arthur Conan Doyle’s Sherlock Holmes series, which it had run beside. Yet Meade’s work constitutes not so much the praxis of “revealing” and solving but rather that of troubling and purporting to the “what if?” After all, the need to clarify Meade’s work as “real” and Verne’s as “fantasy” within *Strand Magazine* simply cannot be understood purely within the constructions inherent in twentieth century science fiction scholarship. However, it must be remembered that the statement: “[t]hose stories which may convey an idea of the *impossible* are only a *forecast* of an early realization” makes a claim for realism which is not based not upon real life but upon an ever-shifting possible *future* of real life (“Creating a Mind” 33, emphasis added). The crucial point about its basis for realism is the contemporaneous nature of what constitutes scientific fact itself, through a temporal projection of what scientific fact *could* be in the future. In this sense, the disclaimer clearly draws attention to that which it is trying to *cover*: the futuristic element of so-called scientific facts in Meade’s writing. Hence, what it attempts to cover (but then subsequently draws attention to) is that which is integral to the utopian and science fiction text.

It is not my intention here to displace one genre topology as superior to – or indeed, distinctive from – the other, I wish to demonstrate that Meade’s concerns lie

outside the function of “mystery” and revelation *per se*. I instead assert that the majority of her serial short stories and books should be considered as being contingent upon the praxis of projection, the definitive process within science and utopian fiction. This also means that one of the key issues to consider when examining genre formation and evolution is also the issue of *historical alterity* (Suvin 80). Texts which project from a present or starting point that the reader is not entirely familiar with, such as writing from an historical period, are harder to define as “futuristic” or “alternative” to the author’s present. This problem becomes particularly apparent when trying to map texts which may be projecting into futures/alternative presents which vary only slightly from the author’s contemporary society because it becomes harder to then follow the path of trajectory. This is why historical alterity becomes especially evident when looking at texts which may have been received by their contemporary society as exploring a near future/alternative present paradigm, such as Meade’s. If cognitive “othering” is less explicitly marked by temporal and/or spatial signifiers, it is more likely that scholars will have overlooked the value of the text’s actual cognitive projection.

Before we insert Meade within a genealogy of science fiction which neatly adheres to Suvin’s temporally specific *novum*, it must be stated, however, that he would argue that, like *Frankenstein*, fiction such as Meade’s is not science fiction proper but that of the “science novel, which is specific to murder mysteries, not to a mature SF [science fiction]” and is, like Meade’s writing: “better suited to the short

story" (10).²³ He goes on to explain that this is because *rationality* cannot exist in a plot which "pretends to explain away the supernatural by reassigning it to natural science and noble scientists" (23, emphasis added). He also insists that the function of the novum "entails a change of the whole universe of the tale", as well as correlating with a post-Cartesian and post-Baconian scientific praxis. Simultaneously, however, he concedes that this is, in actual fact, not possible, since something new which is *not* based upon present scientific knowledge would be impossible (63-4).

In contrast to Suvin, however, I have argued for a definition of utopian and science fiction as the critical exploration of the present and/or future of scientific, technological or ideological knowledge, which involves the function of the novum as that which is – most importantly – not entirely totalizing. Far from being immature science fiction, texts such as Meade's provoke important questions regarding social practice and ideology without having to make great leaps in space, time and cognitive understanding. Therefore, the equivocal nature of the disclaimer that was introduced at the beginning of the second series of Meade's *Strand* magazine serial "Diaries of a Doctor" can, therefore, be seen as facilitating the consideration of her work with a view to a more *encompassing* genealogy of science and utopian fiction by women. This is because, in contrast to Suvin's dismissal of the "science novel" on the basis that it is an immature version of science fiction proper, pan-historical utopian and science

²³ See Suvin *Victorian Science Fiction in the UK* (1983) for a dismissal of Meade's oeuvre as a significant work of science fiction in comparison to his treatment of writers such as Marie Corelli.

fiction, critic Jane Donawerth argues that science fiction must entail “the satisfaction of scientific problem-solving” (1, emphasis added). This is perhaps why Meade’s amalgamation of science fiction and detective fiction work so well together: they both involve the use of a visionary eye which disseminates and scrutinises.

Conclusion

Frankenstein is a text which is more often than not described as a late-Romantic response to the “emerging scientific discourses” of the Industrial Revolution (Cranny-Francis 44). Yet contemporary feminist science fiction critics have lost sight of the fact that it was not only in the last few decades that writers have returned to the questions that Shelley raised. Writing by women at the *fin de siècle* has been somewhat excluded from pan-historical considerations of *Frankenstein’s* feminist heritage. The alienation of writers like Meade from the feminist inheritances of “daughters of *Frankenstein*/Frankenstein” can perhaps be seen as being based, at least in part, upon their non-compliance with the idea that science is a singular concept with a singular story in which women writers should seek to subvert the inevitable singularity of its discursive practices. However, this *reactionary* feminist stance becomes moot if we can reveal – rather than deny – the negotiations between these positions, which have already existed throughout history. What is particularly important to recognise, of course, are the negotiations between men and women of science.

In contrast to Wells and Verne, Meade's work has been side-lined in considerations of fin-de-siècle science fiction, perhaps because its original appearance in popular fiction within *Strand Magazine* set an ironic *perimeter* around the nature of the futurity of its references to possible future scientific inventions. Even in Meade's most realist detective fiction work (which I would define here as those which deploy little or no scientific/technological innovation), the implicit concern with, and troubling of, the "what if" notion of science fiction can still be gleaned. I have referred to this as the visionary "eye" of science fiction, that which is simultaneously concerned with both the present, the alternative present and the possible futures of both of these presents. However, much feminist criticism has been concerned with the idea of the forward-looking "eye" of science fiction in terms of male hegemony. For many feminist critics, then, the "eye" of science fiction has for the most part served as the "I" of the male explorer; the "I" of a scientist whose aim is to objectify (Donawerth xx). Co-writing with two different real-life medical doctors, Meade is clearly not an obvious figure for feminist science fiction scholars. It could be argued that Meade is nothing more than the ventriloquist puppet of her two co-writers, thereby reflecting the premise of Hilary Rose and others that women in science have traditionally only had a voice by "speaking *through* men" (qtd. in Donawerth 9). However, Meade retained the copyright for all of her written work and established a popular identity as a writer which would suggest that she can be defined as a truly feminist author.

Meade's fiction may indeed be addressing the same questions that Shelley raised, but she is, nevertheless, answering them in an entirely different way. The feminist insistence upon a genealogy of science fiction which begins with Mary Shelley is therefore merely counterproductive to an understanding of the historical progression of genre formation *vis es* or "as it was." Torodov argues that genre is "a socio-historical as well as a formal entity", in which transformations "must be considered in relation to social changes" (80). In light of this, we should perhaps reconsider the historical position of writers, especially women writers who have deviated from twentieth-century models of Shelley's male scientist, as being a rich *and* necessary part of mapping new genealogies within women's science fiction. Indeed, it is harder to think of a better example of Beaumont's allegorical laboratory for a feminist future than a popular fin-de-siècle woman writer, exploring and commenting upon society through science and scientific spaces, for a largely male readership.²⁴ Although Meade could arguably be seen as creating what Donawerth has termed a feminist, "utopian science", what is particularly feminist about Meade's writing is that she achieves this in collaboration with real-life men of science and the scientific imagination, such as Clifford Halifax and Robert Eustace. In light of this, I conclude that the praxis of women writers such as Meade entirely disrupts the critical

²⁴ This is in contrast to writers such as Marie Corelli, who Suvin claims were writing for female middle-class readers. See *Victorian Science Fiction in the UK*.

antagonism involved with perpetuating the dialectic of woman as nature/alien: man as eye/explorer.

Science in the Fiction of Pat Cadigan's *Synners* and Joanna Russ's *The Female Man*

Unlike the hopes of Frankenstein's monster, the cyborg does not expect its father to save it through a restoration of the garden, that is, through the fabrication of a heterosexual mate, through its completion in a finished whole, a city and cosmos. The cyborg does not dream of community on the model of the organic family, this time without the Oedipal project. The cyborg would not recognise the Garden of Eden; it is not made of mud and cannot dream of returning to dust. (151)

Science has been utopian and visionary from the start; that is why "we" need it. (192)

(Donna Haraway, *Simians, Cyborgs and Women* (1991))

How could we ever begin to describe the cultural conditions of twentieth-century utopian and science fiction by women? For it would be misleading to suggest that one mode of feeling or historical moment above all others could ever sum up the proliferation of discourses representing even the vaguest account of "the twentieth century." One model of thought that has had an immense impact upon both popular culture and how recent female subjectivities have been re-defined, however, is cybernetics and the idea of the cyborg. Pioneered by Norbert Wiener after World War II, cybernetics theories defined all systems as the flow of "information", including the human body, forming the basis of concepts such as the personal computer and "cyberspace."¹ The term "cyborg" (cyb[er]netic-org[an]ism) was coined in a 1960 military paper entitled: "Drugs, Space and Cybernetics: the Evolution of Cyborgs",

¹ See Wiener *The Human Use of Human Beings: Cybernetics and Society* (1950).

which explored the concept of pilots as machine-men because they processed flight information in both a “cybernetic” and an “organic” way (Orr 161). Together with the development of advanced technologies, this post-war definition of the human as an “information processor” made manifest the fears and dreams of women’s literary explorations of “hybrid” human bodies since the 1600s (see Chapters One, Two and Three). In this chapter I examine how Joanna Russ’s *The Female Man* (1975) and Pat Cadigan’s *Symers* (1991) conceptualise the impact of the scientific discourses of the so-called “Information Age” through the human body. I demonstrate how these texts engage with ideas surrounding what it means to be a “cyborg” by focussing particularly on the posthumanism of Donna Haraway’s “Cyborg Manifesto.” I suggest that *Symers*, *The Female Man* and, by corollary, late twentieth-century utopian and science fiction by women in general, all form a useful approach for understanding and negotiating theories of the possible technological future, as well as the present.

In order to explore a historical overview of feminist subjectivities in utopian and science fiction, it must be remembered that the technologies, sciences and “discursively-aware” nature of postmodernity means that defining female subjectivities of “Reason” are somewhat problematic. To negotiate this complexity, therefore, it might be useful to return to Survin’s basic definition of utopian and science fiction as the “literature of cognitive estrangement” (*Metamorphoses of Science Fiction* 4). After all, this seminal definition served to highlight the fact that cognitive estrangement – like the human body itself – can be manifested in many *forms*. This can

be the estrangement to arise from the presentation of a new development within technology or science (known as extrapolation), as well as the presentation of a space, place or time of alterity. One example of this is the notion of “cyberspace” and virtual reality technologies. Cyberspace is depicted in both fictional and factual writing as the hypothetical “space” for storing, and “interacting” with, electronic information. The questions the concept of “cyberspace” raised even became the central focus of an entire wave of utopian and science fiction; following the critical acclaim of William Gibson’s novel *Neuromancer* (1984), such fictions were referred to as “cyberpunk”.²

Cyberpunk writing combines the futuristic settings and technologically-orientated plots of science fiction (“cyber-”) with the narrative exposition of the maverick detective figure of early twentieth-century urban detective pulp novels, and the late-twentieth century countercultural “punk” aesthetic. It is predominantly concerned with exploring the human interaction with electronic information, the possible evolution of electronic information into an autonomous Artificial Intelligence and the socio-economic divide between “hackers” or “punks” and large corporate organisations. With its focus on how technological interaction brings about the protagonists’ states of “virtual” and “material” reality (“real life”), cyberpunk interrogates what it means to be human in the (inter)face of advanced technologies. Cyberpunk therefore functions in the same way as the most socio-politically “useful” science fiction, that is: through the exploration and depiction of the new or the

² It is also used to describe works of art, literature and music influenced by postmodern punk See Larry McCaffrey *Storming the Reality Studio* (1991).

novum, it operates as a means for social dreaming and thinking, for social critique, and for social change. In doing so, it can be seen as a development of the philosophical and material concerns of “feminist science fiction”, despite the fact that critics such as Andrew Ross have defined it as merely a reflection of “the urban fantasies of white male folklore” (*Strange Weather* 145). Describing cyberpunk as “white folklore” undermines its role as a political genre; after all, Suvin’s *Metamorphoses* distinguishes these socio-politically useful genres from the hegemonic functions of formulaic folklore. This critical divide is somewhat exacerbated by Donna Haraway’s claim in her seminal article “Manifesto for cyborgs: science, technology, and socialist feminism in the 1980s” (1985) that “feminist science fiction” was the form of theorising and writing the cyborg *tout force*, which she refers to as “cyborg writing” (*Simians* 175).³ Yet, as Samuel Delaney has noted, cyberpunk developed out of the aesthetics and politics of some of the very same 1970s-influenced feminist science fiction texts that it has been described as anathema to (Hollinger 210). Likewise, my examination of “feminist science fiction” text *The Female Man* alongside “cyberpunk” novel *Synners* aims to reveal that “feminist science fiction” and “cyberpunk” are inevitably concerned with the same issues of the impact of technology upon the human body.

By utilising the fictional cyborgs of feminist science fiction as a means for theorising women’s relationship with real-world technology, Haraway’s “Cyborg

³ In this chapter, references are taken from its reprinting in *Simians, Cyborgs and Women* (1990), rather than the original article.

Manifesto” became one of the most influential critical applications of utopian and science fiction to date. Published in the *Socialist Review* specifically to demonstrate an innovative leftist feminist approach, the “Cyborg Manifesto” suggested that whilst all women are cyborgs (150), only some women in the world epitomise what is needed in order to fully understand the newly-technical post-humanist world (*Simians* 177). In deliberate opposition to historical, “white” humanisms, “it is this chimeric monster, without claim to an original language before violation, that crafts the erotic, competent, potent identities of women of colour” (174-5).

Haraway argues that her paradigm of the socially-marginal-woman-as-cyborg is “indebted to” the 1970’s utopian science fiction of writers such as Joanna Russ and Octavia Butler (196) because their revolutionary way of writing the self – “cyborg writing” (175) – demonstrates how “the boundary between science fiction and social reality is an optical illusion” (149). When considered in the light of previous chapters, Haraway’s “woman as cyborg” may appear upon first reading to be simply yet another manifestation of “Woman” as Frankenstein’s Monster (see Chapter Three). But, as Jay Clayton has noted, Haraway’s cyborg is “*not Frankenstein*” because, crucially, its purpose is to *reject* the illusions of the completed “Self” (*Charles Dickens* 136-7, emphasis added). More specifically, “unlike Frankenstein”, Haraway’s cyborg can never be “whole” because it can never be represented by – nor *representative* of – the

creation of a utopian family and a *città felice* (happy city), utopia manifested as “a city and cosmos” (151).⁴

As discussed in previous chapters, defining utopian and science fiction by women as the irrational act of one who occupies, and argues from, the position of a “monstrous” or “alien” being is ultimately limiting. Haraway’s “Cyborg Manifesto” seeks to interrogate the “deepened dualisms of mind and body, animal and machine, idealism and materialism” (154). This is important for our discussions so far because it is the perpetuation of these dualisms that I have sought to challenge throughout this thesis, such as Carolyn Merchant’s *The Death of Nature*. Indeed, Haraway’s cyborg appears to resist defining feminist engagements with science and technology through the concept of woman as other (or “others”),⁵ especially in relation to scientific discourses. Haraway’s cyborg is “not-Frankenstein” because it does not expect “its father to save it through a restoration of the Garden” or Eden. Therefore it resists the patriarchal history of epistemological thinking (in which language has been used to define “Reason” through logocentric paradigms of law and morality alike). Whether these paragons are defined through a Judeo-Christian notion of “God”, *althea* or truth, then, they are inevitably symbolised by the figure of a patriarchal “Father”, the Imago or some other form in which the cultural “Same” becomes reified.⁶ Haraway’s

⁴ See Nicole Pohl’s “Sweet Place” and *Women, Space and Utopia* for more details on the significance of architecture and the utopian city.

⁵ Here I am using Freud’s basic definition of “other” as inextricable from “otherness” (*der Andere* and *das Andere*). For the critique of this as the positive (same) and a “posited” (other) pole, see Luce Irigaray *This Sex Which Is Not One* (1977).

⁶ For a definition of the “Law of the Father”, wherein language is both patriarchal and representative of social machinations, see Jacques Lacan *The Seminar of Jacques Lacan, Book III: the Psychoses* (1973).

feminist-orientated definition of the cyborg as woman – yet categorically *not* Frankenstein – could therefore contribute significantly to challenging the fallacy that because the reasoned human has been seen historically as synonymous with the figure of “universal man”, reason itself can never form a contingent part of neither historical, contemporary, nor future models of female subjectivities. In doing so, the cyborg simultaneously might rebuke the idea that the prerequisite for feminist challenges to dominant discourses is to define Woman’s subjectivity as external to, and alienated from, those same discourses.

Rather than merely examining the role of the “Other” as a signifier of late-twentieth-century forms of interaction with technologies and sciences, however, I am concerned here with examining the role of the human body more holistically. Whilst Haraway’s “Cyborg Manifesto” may assert that “feminist science fiction” made possible the idea of a feminist science, few critics have acknowledged the actual *scientific* concerns of these writers. Therefore, rational feminist subjectivities are stifled by the fact that feminist engagements with discourses such as cybernetics have been defined as criticising or negating scientific rationale. This is strange when we consider the fact that Haraway’s cyborg comes to us as the direct result of scientific theory, rational models of thought and her critique of the “dualisms” deployed when feminists such as Carolyn Merchant depict women as “nature”, as anathema to technology (154). This leads us to ask the question: if debating the notion of selfhood through the cyborg self involves interrogating depictions of human interaction with

advanced technologies and sciences, where is the feminist analysis of “science” in these so-called feminist *science*-fictions? In the remainder of this chapter, I address this question by accounting for some of the ways in which Joanna Russ’s “feminist science fiction” novel *The Female Man* (1975) and Cadigan’s “cyberpunk” novel *Synners* (1991) explore the feminist potential of scientific narratives. More importantly perhaps, I examine how these texts can be read as positing rational feminist subjectivities.

The Whileawayan flowers

Unlike some of the writers explored in the previous chapters, Pat Cadigan’s and Joanna Russ’s contributions to the genre have been recognised by their numerous science fiction awards, and their writing is the subject of much feminist science fiction criticism. Yet their uses of science have often been neglected in feminist readings of their work. For example, exploring the “Many-Worlds Theory” of quantum physics through the depiction of several cyborgian subjectivities, Russ’s *The Female Man* quite explicitly draws upon cybernetics and quantum mechanics paradigms. As I shall go on to discuss, Hugh Everett’s “Many-Worlds Theory” was a response to the problems of observing phenomena raised by Erwin Schrödinger’s 1935 thought experiment, coined “Schrödinger’s cat.”⁷ In fact, when Russ was writing the novel, Many-Worlds

⁷ For a definition of cybernetics as the attempt to define the world in a more positivist light after Quantum Physics see David Porush “Cybernetic Fiction and Postmodern Science.”

Theory was actually being revived by Bryce S. DeWitt.⁸ This theory suggested that there could be many outcomes to experiments and that if they are all observed, they are all existent and all part of a many-branched tree of events (“Quantum Mechanics” 161), referred to sometimes as the “multiverse” (James 43), a concept which is similar to Gilles Deleuze and Félix Guattari’s “rhizome.”⁹ The “Schrödinger’s cat” thought experiment had imagined what would happen if a cat was placed inside a sealed box with radioactive material and a phial containing poison. This imaginary experiment revealed the continuity problem of transferring quantum physics from the *micro* to the *macro* level – from the particles that may or may not decay to the cat in the box. The observer’s paradox, then, is that the cat cannot be, empirically speaking, both alive and dead at once. Many Worlds theory suggested that one way in which to resolve this paradox was to suggest that *both* events could occur, creating another two of the infinite realities of “outcomes” existing in parallel universes. In one outcome the cat lives: in the other outcome, the cat dies. If both outcomes are recorded, then each event must “exist” in its particular universe. Russ’s *The Female Man* plays upon the idea that we can in fact expand the usual quantum level of Many-Worlds Theory in order to consider the concept of “history” itself as a single linear outcome, revealing how history can be conceptualised as a many-branched tree, in which all the events that *could* occur *did* occur.

⁸ DeWitt’s article was so popular that it was reprinted, alongside Everett’s original research in a book edited by DeWitt: *The Many-Worlds Interpretation of Quantum Mechanics* (1973). For a brief history of “Many-Worlds Theory”, see Elizabeth Kraus “Real Lives Complicate Matters in Schrödinger’s World: Pat Cadigan’s Alternative Cyberpunk Vision”.

⁹ See *Rhizome: an Introduction* (1976).

The Female Man explores the multi-verse as a way of viewing the historical development of Western society by describing how four genetically-identical “selves” from different universes (known as “genotypes”) meet one another. These genotypes: Jael, Janet, Joanna and Jeannine, can be therefore seen as representing four “realities” of feminist history and how these “versions” of a human might engage with each other’s existing world-views when they meet in person. Indeed, the text’s main loci of concern are the juxtaposing historical contexts that have given rise to the genotypes’ various “genealogies” of feminist politics. Following this rational *a posteriori* evolution of feminisms, the text in particular examines how gendered bodies are constructed by – and through – engagements with technologies and sciences. Russ therefore uses the Many-Worlds concept in order to explore various visions of feminist consciousnesses in their different “historical” contexts. This may have been exactly what Haraway’s Cyborg Manifesto referred to when she asserted that Joanna Russ was one of the feminist science fiction writers who enabled the emergence of feminist ideas of scientific praxis. Yet the Cyborg Manifesto actually *rejects* the exploration of “[p]op physics books [...] on the consequences of quantum theory and the indeterminacy principle”, on the basis that they are the “scientific equivalent to Harlequin romances as a marker of radical change in American white heterosexuality: they get it wrong.” Haraway does argue that there is indeed a clear dialogue between “pop[ular] science” and writing about cyborgs, but it is one which is based upon feminists’ fictional critiques of these sciences (153). Russ’s interrogation of feminism, history and

subjectivity is, nevertheless, entirely dependent upon the Many Worlds' Theory as a means for demonstrating that the cyborgian subjectivities of the genotypes are all part of a rhizomatic premise of "multi-verse" history.

This "multi-versal" sense of history is conveyed by the continual shifts in the narrative point of view, which moves between first and third person descriptions of no less than four multiple "selves" from alternative universes. Jael is from "Womanland", a separatist female utopia/dystopia at war with the men of "Manland;" Janet is from a separatist "utopia" in which men no longer exist, Joanna is from a depiction of "our" world in 1969; and Jeannine is from a world that resembles a "dystopian" vision of our world, one which never recovered from 1930s economic depression. Jeannine and Joanna are therefore from the same time (the year 1969), but they are also from entirely different realities. Likewise, Jael and Janet both hail from more technological advanced universes than the others, but they will never be part of Jeannine's, nor Joanna's, future. As Jael explains to them when they all meet:

Genetic patterns sometimes repeat themselves from possible present universe to possible present universe [...] Here is Janet from the far future, but not my future or yours; here are the two of you [Jeannine and Joanna] from almost the same moment of time (but not as you see it), both of those moments only a little

behind mine; yet *I* won't happen in the world of either of you.

(161)

Therefore, what motivates the narrative is how ideas of quantum "indeterminism" and the rhizomatic uncertainty of (historical) outcomes can be a powerful means for negotiating discourse itself, especially in terms of developing an effective feminist consciousness.

If we extend this idea, *The Female Man* can also be seen as applying the Many World's Theory to the formulation of a rational feminist praxis. This is because the "genotype" selves can be seen as Joanna Russ's semi-autobiographical narrator, the character who is referred to as "Joanna", and who has been split into the various forms of her gendered consciousnesses. These range from political apathy (represented by Jeannine) to an aggressive feminist consciousness (represented by Jael). Russ's use here of the Many-Worlds structure for thinking through the minefield that was the proliferation of feminist identities in the 1970s is captured by Jael's introduction of the so-called "selves" to each other: "welcome yourselves; look at me and make me welcome: welcome myself, welcome me, welcome I" (158-9). This pre-empted Haraway's definition of the cyborg as a figure of "irony." If "the cyborg is also the awful apocalyptic *telos* of the "West's" escalating dominations of abstract individuation" (*Simians* 150-1), there surely can be no more of an ironic depiction of the postmodern hyper-individuated self than a narrative voice figuratively *split* into

four gendered identities and histories? More importantly, this allows Russ to demonstrate how important technology is to the construction of one's feminist consciousness, since the "J's", as they are called in the text, are clearly distinguishable through their differing solipsistic relationships and interactions with science and technology (Yaszek 158). For example, in Jael's more technologically advanced world there is a violent activist *resistance* to patriarchy; Jael herself is an aggressive assassin, an embodiment of feminist rage. In Janet's matriarchal world, there is no need for feminist resistance; equality is absolute because a plague wiped out the entire male population. By corollary, Jeannine is the most "oppressed" and apathetic woman of the four in terms of a feminist consciousness; her 1969 world is the realisation of an alternative version of our world history, one in which the women's movement never started and post-war cybernetic technologies (amongst others) never developed. Joanna, however, lives in a realistic depiction of "our" world as it was in 1969. The narrative therefore presents a "sliding scale" of the relationship between technology and patriarchy: feminist resistance and equality is portrayed as that which is made *possible* by the individual's increased access to technological and scientific narratives.

The genotypes' differing feminist consciousnesses are, however, all juxtaposed to *male* subjectivity. In this sense, all four "selves" can be described as "female men;" Janet, for example, is a "female man" because she dresses androgynously and behaves in a more masculine manner than the women described in Joanna's (our) world in 1969. Her surname is also somewhat ambivalent; "Janet Evason" (1) can be read as

either Ev[er]-son (“ever”-a-son) or “Ev[e]”-a-son. Janet is neither “ever-a-son” nor “eve’s son”, however, because the concepts of men and women have not existed in “Whileaway” for centuries (5). Likewise, the narrator describes Joanna as “turning into a man” and as being a “female man” due to her need to posit male characteristics in the workplace in order to be accepted as the equal of her male co-workers (20). In antithesis to Joanna and Janet’s masculine posturing, Jeannine’s describes feeling a sense of “sisterliness” between herself and the hyper-feminine Manlander “female man” Anna. Anna is described as a “female man” because she is one of many transvestite/transsexual prostitutes who work for the misogynistic “men” in the all-male separatist colony of Manland (173). Constantly aligned with male *constructions* of beauty, Jeannine and Anna epitomise Joan Riviere’s idea of the “travesty” that is the “mask of womanliness” (Heath 45-9). At this point, however, I would like to focus more specifically on Jael’s body and biography, which not only raises the most complex questions regarding the relationship between feminism and science for the reader, it can be seen as demonstrating Russ’s idea of the disillusionment surrounding women’s increased interactions with technology, particularly in relation to Jael and the creation of a “feminist” body.

Formerly known as the girl called “Alice Reasoner” (212), Jael is described as a “creatrix” because her body is the result of many surgical procedures (166). Jael is described as being “as skinny as a beanpole” underneath her “grafted muscle” (19, 181). In fact, her job is highly significant in terms of how she can be seen as an

embodiment of masculinised feminist rage: Jael is an assassin, but she only kills men. Furthermore, in order to undertake assassinations, she often has to impersonate men, a role which ranges from “impersonating one of the Manlanders’ police (for ten minutes)” to “taking the place of a Manlander diplomat for eighteen months” (187-8). Indeed, the physical alterations to her body that have made these impersonations possible reflect the concerns surrounding sex re-assignment surgery, which had only recently become available to the public during *The Female Man’s* composition.¹⁰ For example, the “Adrenaline” that Jael injects herself with in order to induce aggression can be seen as reflecting pre- and post-operative transsexual medical hormone therapy (180). Jael also drinks a foul-tasting “super-bouillon”, the taste of which “nobody could stand” (163), which suggests that it is medicinal and, given the numerous descriptions of her body as rejecting her synthetic implants, it also signifies as an anti-organ rejection drug (181).

Jael’s “hairpin-shaped scars under her ears” from her “new face”, which has been “laid over the old [face] in strips of plastic” (19), also recall the feminist concern with how the proliferation of plastic surgery procedures during the 1970s tended to perpetuate mainstream models of female beauty. The deadly, retractable metallic “silver”, knife-like “Claws” imbedded in her hand, which she poignantly refers to as her “erection”, also evoke the image of surgical knives (159). Indeed, Jael’s claws are reflected later in the deadly prosthetic razor nails of another infamous female assassin,

¹⁰ See Billings and Urban “The Socio-Medical Construction of Transsexualism: An Interpretation and Critique.”

Neuromancer's Molly Millions. Rather than being a sex object herself (as one could argue *Neuromancer's* Molly is), Jael has her own male cyborg sex object, called Davy, who's body has an "eerie malleability" because he is part-chimpanzee "germ plasm" and part-"machine" (198-200). Davy's identity as that which has an "outside soul" could be aligned with Haraway's premise that the cyborg epitomises the end of Western ideas surrounding the metaphysically sacred, were he not also Jael's sex slave, an algorithm with no autonomous function, consciousness or political identity of his own (199).

Davy's relationship with Jael is therefore based upon his objectification, an oppression which, complexly, can only be considered negligible if Davy can be defined as a *madine* and not a man or any other being with a sense of consciousness. This, in turn, raises further questions about the nature of human and non-human definitions of subjectivity, recapitulating how the feminist struggle for equality historically began with the counter-argument that women are not equal to men and are, somehow, not quite as "human" as men either. Yet he is just one of many cyborgian bodies portrayed in *The Female Man* that can be defined as *failing* to uphold the ironic dream of cyborgian potentiality and/or feminist idealisms. Arguably, the Manlander trans-woman Anna, the feminine male cyborg Davy, and the Womanlander male impersonator Jael are not figures that Russ foregrounds as politically useful cyborgs. She instead portrays these "female men" as simultaneously tragic and monstrous – literally splitting at their surgical seams, Frankensteinian

monsters for whom the desire to even attempt to claim a liberated selfhood is lost. This is especially true for Jael, who, like the monster, begins life as a “Reasoner” but becomes murderous and gives in to a rage that is ultimately counter-productive. Simultaneously Russ is rejecting the cyborgian potential of the surgical body, whilst still pre-empting the idea that the transgendered/transsexual body is a key motif for advanced technology.¹¹ Since Haraway rejects this notion of the cyborg as Frankenstein’s monster, it is therefore difficult to align *The Female Man* as either indebted to, or as an accurate *pre-cursor* for, the post-gender bodies of the Manifesto’s ironic “utopian dream” (Haraway 181). This is because, for Russ, it is not their post-gender consciousness which renders them monstrous but their *physical* gender ambiguities as female men.

When Jael asks the genotypes to “Look at yourselves again”, she is also asking us too to: “look at [ourselves] again.” Whilst Haraway’s notion of the “woman as cyborg writing” is seemingly heterogeneous in nature, a disruption of the dialectics at play in apparent binaries, such as man/woman, human/machine, cybernetic/organic, white/coloured, Western origin/non-Western origin, it is ultimately more reflective of the *materialist* concerns of feminists. These are materialist concerns that can be seen, in part, as the attempt to recoup the Cartesian dialectic in which women are posited as the “material” half of the mind/body severance. After all, the idea that the history of

¹¹ See Germaine Greer *The Female Eunuch* (1970) and *The Whole Woman* (1999) for a critique of the figure of the trans woman (male to female transsexual). For a discussion of the transgendered body as Frankenstein see Laura Kranzler, “Frankenstein and the Technological Future” and Mary Daly, “Boundary Violation and the Frankenstein Phenomena.”

attempting to define the human subject has been inevitably characterised by highly gendered language is a key axiomatic within Western discourses.¹² As Rosi Braidotti's "Cyberfeminism" suggests:

it is more adequate to speak of our body in terms of embodiment, that is to say of multiple bodies or sets of embodied *positions*. Embodiment means that we are situated subjects, capable of performing sets of (inter)actions which are discontinuous in space and time. Embodied subjectivity is thus a paradox that rests simultaneously on the historical decline of mind/body distinctions and the proliferation of discourses about the body.¹³

What must not be forgotten is that it is Jael's surgical alterations which allow her to become a transgendered, trans-universal traveller and that this is the very means through which she has been able to connect with her three "other" genotypes or selves. Jael's role as a trans-universal traveller (as opposed to a transgendered cyborg) is particularly important when we consider the fact that it is she who voices how the concept of the "genotype" links feminism, history and science. *The Female Man*

¹² See Phyllis Rooney's "Gendered Reason: Sex Metaphor and Conceptions of Reason."

¹³ http://www.let.uu.nl/womens_studies/rosi/cyberfem.htm

therefore operates as a complex “thinking project” itself, a fictional case study reflecting some of the questions surrounding the plurality surrounding the historical realities of the nature of selfhood given the increasingly hybrid nature of technologies of the body.

The denouement of the narrative is when Jael announces that utopian Whileaway *is*, in fact, the historical outcome of an androcidal war lead by time-travellers such as herself. In doing so, Jael destabilises our understanding of Whileaway as an unequivocally ideal feminist separatist world because she reveals how history has the power to re-define the *present* (and vice versa) by exposing Whileaway as the outcome of dystopian endeavour.

The world-lines around you [Janet] are not so different from yours or mine or theirs and there is no plague in any of them, not any of them. Whileaway's plague is a big lie. Your ancestors lied about it. It is I who gave you your “plague”, [...]; I, I, I, I am the plague, Janet Evason. I and the war I fought built your world for you, I and those like me, we gave you a thousand years of peace and love and the Whileawayan flowers nourish themselves on the bones of the men we have slain. (211)

Jael therefore posits the utopian symbol of the “Whileawayan flower” as allegorically carnivorous: it is a monstrously feminist flower, which feeds upon men's bones. This

not only alludes to the “Garden of Eden” as the utopia of Christian Western *telos*, it renders new our understanding that “the cyborg would not recognise the Garden of Eden; it is not made of mud and cannot dream of returning to dust” (Haraway 151). Instead it is the Whileawayan men who have “returned to dust”, forming a tragic and irreversible parody of Haraway’s truly “post-gender world” (150). If prior to this knowledge Whileawayans could supposedly live “outside” of such “sacred” narratives – able to (literally) construct an ironically post-gendered world because the concept of “men” did not exist there – history, causation and rational logic have now rendered this impossible.

The paradigm of separatist feminism (contemporary to Russ’s writing of *The Female Man*) is here revealed as inevitably failing, since it creates worlds which are built upon the mistaken pursuit of inequality in an attempt to find Equality. This same failure of post-genderism is also represented by the separatism of the “Womanland” and “Manland” colonies in Jael’s world. All-female Whileaway thereby becomes ambiguously utopian: a women-only world is *not* a post-gendered world, in the same sense that feminist praxis should never be exclusively “for women” and rational, scientific discourses the privilege of men alone. This, after all, contradicts the foundation of the Cyborg Manifesto, that: “dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and women, primitive and civilised are all in question ideologically” (163). Gendering language and culture on the basis of separation and binary can therefore

only ever lead to the creation of a no-where land of historical accounts – “utopia” through transliteration (see Introduction). Therefore the allegory which can be gleaned here is that it is Jael’s *trans-gendered* voice which ultimately reveals the gendered nature of how feminism and rationality (or non-feminist paradigms) have been accounted for throughout history. Jael highlights how endeavouring to uphold separation myths antagonises the progression of feminist thought because, like Whileaway’s *faux* history, it is to believe in “big lie[s]” (211).

It is both through the abject body of Jael and Jael’s voice that *The Female Man* foregrounds the concerns of critics such as Haraway and Lisa Yazsek. They posit the cyborg as a way of articulating ideas of *socially* hybrid subjectivities in which the real “utopian dream” (Haraway 181) is of a future in which we “both build and destroy machines, identities, categories, relationships, [and] space stories” (189) in the process of a Deleuzian “becoming” (Deleuze, *Essays* xxx). This emphasis upon the proliferation, instability and translation of identities and subjectivities here all relate to Russ’s exploration of the Many-Worlds interpretation, rather than Haraway’s own definition of “cyborg writing.” Yazsek’s assertion that *The Female Man* presents the idea that “utopic high-tech futures can *only* develop through this messy or impure engagement with technology” underestimates its astute and accurate dialogue with scientific discourses (158). After all, Russ’s gendered subjectivities are not “messy” simply because the *bodies* she depicts are messy, grotesque, self-made “Frankenstein Monsters”, who instead of hoping to be saved by a transcendental “God” or truth,

uncover feminists “truths” of their own in an attempt to save themselves as free subjects.

Unfortunately one of these so-called “feminist” truths is the nature of feminist violence – a violence ironically enacted in order to oppose patriarchy. As terrified of the assassin Jael as the other genotypes are, they are nevertheless persuaded that the best feminist approach is to make the same mistakes as have been made in Whileaway’s history. In other words, they plan to continue to fight patriarchy in the physical sense of the word: they continue to argue that identifying as a man and advocating violence in the name of feminism is the best way of addressing social patriarchy. Formerly pacifist Joanna of “our world” in 1969 has a “Frankensteinian rebirth” by being the conduit for a circuit, only to emerge with a reanimated masculine consciousness (Yaszek 74), asserting: “*I am a man*” and “you will think of me as a Man [...], if you don’t, by God and all the saints, *I’ll break your neck*” (140). Instead of Russ’s cyborgs critiquing the universal “Man”, they realign themselves in a humorous (but ultimately serious, rather than ironic) manner with the worst historical qualities of Western masculinity: violence, hostility, dominance and subjective singularity.

One question remains unanswered, therefore: when exactly is “cyborgian” subjectivity *post*-humanist enough to advocate a potentially utopian figure, when it cannot even be clearly gleaned in the exact texts which have, according to Haraway, inspired its creation? For Russ demonstrates only the *failure* of the cyborgian body, in

and of itself, as a means for the utopian progress of our future selves. Just as Whileaway's utopian history has fallen apart, it is in Jael's decaying and dilapidated body that *The Female Man* presents the usefulness of cyborgian subjectivities as problematic. What is useful about *The Female Man*, however, is that it ultimately demonstrates that the cyborgian body can never be, as Haraway suggests, a figure of "post-history" for women: like the novum, the cyborg must always *know and understand* the history of its subjectivities in order to conceptualise its future. In this sense it must be like and *not* "unlike" Shelley's monster in *Frankenstein*: it must learn its "Western origins" after all, in order to find – like Shelley's monster does – its own voice and its own sense of Reason. Like Jael, the Harawayian cyborg represents a failure to grasp the power of Reason over the power of death. It is here that *The Female Man* ends – at the beginning of a collectivist project, fraught with the difficulty of accounting for everyone's experiences and histories in order to move forward at last. *The Female Man* teaches us that the cyborg can neither effectively constitute, nor practice, the negation of history, nor historical discourses – scientific discourses, for example. The cyborg and the cyborgian, must instead recoup and re-work them in order to articulate both its rights to a utopia of its own and claim a means with which to uncover a concept of utopia in the first place, especially if it has forgotten the Garden and exactly how the Whileawayan flowers grew in the first place.

Schrödinger's World

Like *The Female Man*, the title of Pat Cadigan's cyberpunk novel *Synners* demonstrates its concern with embodiment and technology from the offset. Set in a near-future or "alternative present" world, *Synners* explores the embodiments of the "synners" in much the same way that Russ's *The Female Man* presents its many "female men:" like the "female men", Synners (short for synthesizers) are also humans exploring the socio-historical impact of interfacing with technology. Written more than a decade after *The Female Man*, however, *Synners* is particularly concerned with the dissemination of cybernetics technology since the 1980s, known as the "Information Age", and what would happen in the dawn of an "Instant Information revolution" (269).¹⁴ What would happen, for example, if humans could connect their brains directly into cybernetic systems through the means of skull sockets? Would it "all be happening at the speed of thought, before it could actually happen, so that nothing would ever have to happen again" (228)? The term synners is key here, and the fact that the synners refer to themselves as "original synners" because "[e]very technology has its original sin" (435) reveals the novel's explicit engagement with Haraway's definition of the cyborg as that which represents the death of all that is "sacred" about Western society whilst paradoxically encompassing its hierarchical structures of power (*Simians* 150-1).

¹⁴ For a description of implant technology see Jeremy Strangroom "Cybernetics and a Post-Human Future: in Conversation with Kevin Warwick."

The main storyline of the novel is how the synner Visual Mark begins to reject real life experiences in the body, such as sex with fellow synner Gina, in favour of creating non-physical “connections” with cybernetic hardware through his newly-acquired brain sockets. This reveals how *Synners* is not simply concerned with resisting, subverting and recapitulating Western *telos* as the Harawayian cyborg does but also inverting it. Whereas Gina defines life as a state of “being” that is inextricable from that sacred object, the human body, Visual Mark’s disgust for “carnal sin” (in other words, original sin in the biblical sense) is encapsulated when he likens life “in the flesh” (in the human body) to two gutted sides of beef brushing against each other on their way through a processing plant (331). He desires electronic transcendence – a state in which “he wasn’t going to need [his body] anymore” (233). In doing so, Visual Mark can be seen as representing postmodernist theories of the metaphorically “disappearing body”, which suggest that “the mind is on its way to being exteriorized” (Kroker and Kroker 20-1). Body “obsoletism” (the desire to transcend the body) can be seen particularly from the 1980s onwards, in Stelarc’s futurist robotics and body artwork such as “The Obsolete Body”, as well as online forum debates as early in the rise of internet culture as 1988 (Terranova 270). Drawing upon Anne Balsamo’s *Tednologies of the Gendered Body* (1996), critics such as Elizabeth Kraus have suggested that Visual Mark represents patriarchal ideology’s inability to understand the inscribed nature of the human body in late twentieth century culture, the male anxiety

surrounding the corporeal inscription of the body within postmodern culture.¹⁵ Because Visual Mark succeeds in “uploading” his consciousness into the city’s cybernetic systems in order to escape a stroke, however, his actions also reflect the “transhumanist” theory that humans will evolve out of the limitations of their biological bodies and become “post-human” by transferring their consciousnesses into machines (Baofu 2). Cyberpunk’s images of social disconnectedness are part of late twentieth-century concerns of the vulnerability of the human body as a material entity and are therefore inextricable from the linguistic strategies at play within the discovery of AIDS and the moral panic surrounding the first computer “viruses.”¹⁶ *Synners* can therefore be seen as exploring to the extreme the dialectics of Descartes’ *Deus ex machina*, the Greek idea that the human consciousness or soul is a soul or spirit in the “machine” that is the human body, “god in the machine” from his *Discourse on the Method* (1637). In the 1990s, transhumanism came to mean a realisation of the neo-Cartesian dualism when More founded the Extropy Institute, wherein Extropy refers to system *expansion*, the antithesis of entropy as system breakdown following the Second Law of Thermodynamics in cybernetics.¹⁷ What is important about the connection between cybernetics and neo-Cartesian theory is that it reveals how it is ultimately liberal humanism which informs the late twentieth and early twentieth

¹⁵ See Kraus.

¹⁶ See Andrew Ross “Hacking Away at the Counter Culture” and Thomas Foster’s “Meat Puppets or Robopaths? Cyberpunk and the Question of Embodiment.”

¹⁷ See Weiner’s *The Human Use* (1950). For further reading, see Hans Moravec’s *Mind Children* (1988) and *Robot: Mere Machine to Transcendent Mind* (2000), Peter Baofu’s *The Future of Post-Human Consciousness* (2004) and Max More’s “Self-transformation: Expanding personal extropy.” For information regarding “Transhumanism’s Extropy Institute”, see <http://www.extropy.org/>.

century transhumanist desire to escape the body. In contrast, Haraway's *Cyborg Manifesto* exemplifies how "posthumanism" is defined as the attempt to *subvert* the humanist project's concept of the individual as "One."¹⁸

Visual Mark's desire to transcend the flesh defines the body as the problematic site of mortal vulnerability and permeability, in which the need to be whole or "One" is simultaneously a drive to *transcend* the material body, exposes the humanism at play in transhumanist debates. Although transhumanism purports to being part of posthumanist discourses, posthumanism is often defined instead as a debate about the rejection of Western *telos*. In other words, posthumanist discourses often critique the way in which logocentrism valorises the role of *agito* at the expense of theorising the relative conditions of the material world (Weinstone 15). Theorising the material, however, is often reduced to the allegorical within abstract principles – the Aristotlean shadows on the cave wall. The paradox here is that if we follow transhumanist theory's definition of the post-human as the human consciousness freed, at last, from the constraints of the mortal and vulnerable human body, such posthumanist theories actually undermine what it means to be "post"-human after all. Rather than "post"-humanism proffering the transgression of humanist ideals, the use of cybernetic technology here can be seen as fulfilling that very *humanist* desire to transcend the body. As Roy Ascott has noted:

¹⁸ It must be noted that Ihab Hassan also addressed this a decade earlier in a keynote address. See Anne Weinstone's *Azatar Bodies: A Tantra for Posthumanism* (2004).

computer networking responds to our deep psychological desire for transcendence – to reach the immaterial, the spiritual – the wish to be *out of body*, out of mind, to exceed the limitations of time and space, a kind of bio-technological theology. (86, emphasis added)

If the extreme point of the humanist project is what Haraway describes as “an ultimate self untied at last from all dependency, *a man in space*” (*Simians* 150-1, emphasis added), the figure of the “post-human” paradoxically represents the failure to resolve the humanist project (that of learning to live in the human body) at the same time as it becomes its apt *signifier*. In the very moment that we see the desire to escape from the body as a posthumanist endeavour, we paradoxically reify the human(ist) endeavour after all.

As the plot of *Symers* continues, Gina and Visual Mark begin to reflect the antithetical concerns of posthumanist materialist feminisms, such as Haraway's, and transhumanism respectively. Even their physical appearances are representative of this contrast: muscular and physically aggressive – rather than verbally articulate – Gina privileges the physical body in her definition of human connectedness, whereas Visual Mark becomes increasingly emaciated because eating means having to “unplug” his mind from the corporate informatics systems at Diversification, Inc. In contrast to the transhumanist endeavours of Visual Mark, Gina views her forced employment as a

synner for the conglomerate Diversification Inc., as an opportunity for activist and collectivist ventures. Rather than seeking to amalgamate with the information systems as Visual Mark does, Gina uses cybernetic technology as a means of pursuing visceral experiences with “real” people and physical activities, such as bungee-jumping off a building. Even the first music video Gina makes with a group of musicians, who also have sockets in their skulls, depicts Gina’s point of view as she runs along a beach. Her creative endeavours therefore always involve people and physical experiences through the idea that: “You can. We can” (229). This approach is extremely similar to how productive group activity and social activity (or activism) is often based upon the balance between individual subjectivities and the collective. Connected to hardware through their skull sockets, Gina and the musicians therefore signify as both an apt metaphor for, and a more literal manifestation of, the collective utopian consciousness. Visual Mark and Gina therefore play out how technological interaction can serve the juxtaposing desires for a connection with humans *or* machines alike. In doing so, they recapitulate the difference between transhumanist projects and those feminisms that are concerned with the real material conditions (including technologies) of equality.¹⁹

In contrast, the posthumanism of the “Cyborg Manifesto” defines transhumanism’s attempt to escape the body as a “*deadly fantasy*” (Ross and Penley

¹⁹ For further details on how equal rights and social awareness movements use Computer Mediated Communications in order to raise social awareness see Anna Everett “On Cyberfeminism and Cyberwomanism: High Tech Mediations of Feminisms Discontents.” For a detailed reading of Visual Mark and Gina as representing the difference between patriarchal body obsolescence and materialist feminist activism, see Kraus.

20) because it is based on the myth that the human body was ever “whole” to begin with (*Simians* 177). As Dunning and Woodrow observe:

We think of ourselves as separate to the world – our skin as the limit of ourselves. This is the ego boundary – the point at which here is not there. Yet, the body is pierced with myriad openings. Each opening admits the world – stardust gathers in our lungs, gases exchange, viruses move through our blood vessels. [...] We project our bodies into the world – we speak, we breathe, we write, we leave a trail of cells and absorb the trails of others. The body enfolds the world and the world enfolds the body – the notion of the skin as boundary falls apart. (qtd. in Kennedy 331, emphasis added)

Feminists have argued that, for centuries now, women’s bodies have instead been “written” upon, and have never been defined as the pure, whole human in the same way that the male body has been. Feminists have therefore interpreted dualistic models, such as the Cartesian self, as positing women as the flawed and corruptible “body” in society, and therefore as the antithesis of the true signifier of the human (*cogito*, for example). According to this logic, if being of “whole” (mind and body) is an illusion, this is also an “illusion” that women have *never* had the privilege of

entertaining in the first place. If the female body has also been subjected to having meaning metaphorically (and sometimes literally) “inscribed” upon it, it can be seen as more contingent with negotiating the complexities of postmodern subjectivity. According to Russ: “[y]ou can’t unite woman and human any more than you can unite matter and anti-matter (*The Female Man* 151); positing woman as “matter” and the human (read: universal man) as “anti-matter”, Russ voices the feminist concern with defining women as human against a history that sees women merely as bodies. One approach to this has been for feminisms to focus instead upon all that is “material” in order to recoup women as the “material body” part of this dialectic, through the argument that materialist concepts are a more politically astute approach to cultures and texts. Although this means that the material “body” of woman in this dialectic might be temporarily more empowered, however, this is ultimately at the expense of remaining bound within a dualism that has been defined in the first instance as one which never deemed women to be part of culture and humanity.²⁰

Symers initially appears to present a similar materialist feminist critique of transhumanism to Russ’s, with Gina and Visual Mark signifying these two oppositional discourses. For example, the hacker Sam uses her body as a battery to fuel a computer, which enables Gina and Gabe (Sam’s father) to enter cyberspace and prevent the world from descending into life-threatening chaos after a computer virus called the “spike” infects all online technology. Yet despite the fact that this type of

²⁰ I suggest that Michel Foucault’s various accounts of the body as spectacle challenges this, regardless of the fact that it could be argued that the bodies of deviant men can also be read as having been “feminised.”

battery power as a life-saving device is an interesting twist on the more usual dystopic depictions of bodily battery power in science fiction, critics have often interpreted this to be a signifier of woman's role as the "matter" half of the Cartesian dualism, the biological body which nurtures but never *innocates* within technological revolutions. However, just as Haraway's contemporary version of the Pythagorean Table argues for feminism through materiality, to argue that *Symers* is feminist simply because it privileges matter over mind is to merely recapitulate the binary language of Cartesian dualisms and reductive logic. Understanding the permeable nature of the body as revealed by Sam's "battery" role – that it *enfolds and is enfolded by the world* – is particularly important to a nuanced understanding of the usefulness of *Symers*. In this sense, the novel can be seen as a critical commentary of twentieth-century discourses of embodiment, one which provides a useful tool for negotiating their more dichotomous imperatives.

In fact, at no point in the text is Visual Mark's uploading of his consciousness portrayed as being directly responsible for the deaths, it is merely the catalyst of the "spike" virus' inevitable expansion. To the contrary, the narrative clearly states that he tries to send a message of warning to the synner Kerry in order to save everyone before the spike reaches him. Since Kerry is one of many synners being held prisoner by Diversifications Inc, a more accurate interpretation of the text is that *Symers* highlights the irresponsibility involved with the capitalist control of new technology, not the dangers of attempting to escape the material conditions of the world through

this technology. Indeed, the novel posits independent and physically strong women alongside men, machines, Artificial Intelligences, “synthesized” human and “synthesizing” human alike as part of an underground, marginalised collective, who work *together* to rescue the technological infrastructure of the world from destroying what little civilisation is left in their dystopian cityscape. In doing so, the synners inevitably subvert the way in which feminists have argued that woman is matter, whilst interrogating the utopian escapism of the “transcended” universal human without rejecting the need to consider non-human subjectivities. Gina may be physically strong and aggressive, for example, but her sense of group consciousness and caring disposition stand in marked contrast to Jael’s explicitly androcidal feminism – the murderous impulses of the shunned Frankensteinian monster.

The material signifiers of the body in *Synners* remain, however, as integral to the narrative as the depictions of Jael’s decaying body are within *The Female Man*. Whereas many feminist critics have argued that Cadigan is only concerned with aspects of material and “person-related” feminisms, what is important about her fiction is how she challenges the critical assumption that cybernetic (dis)embodiment, as opposed to the material body, is synonymous with the mind half of the mind/matter dichotomy. Yet as the play on words emphasises, the material “visual *marks*” on the synners’ bodies are key to interpreting the text as an encompassing dialogue of reason that also challenges the usefulness of the cyborgian body (407). Visual marks in the form of “encrypted tattoos” even come to form a cognitive map of the formal developments

in the A.I. Art Fish – a schematic of the development of its so-called “subjectivity” (347). This is because Art’s role as a floating, non-material body, whose subjectivity is reflected in his interactions with humans, is in turn a reflection of how human subjectivity is not merely an inscribed site but a site of dialogic *relation*. The breakdown of the virtual and the material in *Synners* therefore demarcates the very process of this interaction. For example, it is the remembrance of the physical pain of a punch from Gina that stops the cybernetic “spike” virus from killing Gabe’s “physical” body when he is lost in cyberspace. Subsequently, when he remembers Gina’s punch, a swelling appears on his face at the same time as a welt appears on the clenched fist of Gina’s otherwise inert body. Monitoring their statuses, Keely refers to these spontaneously emerging marks as “the best case of stigmata [he had] ever seen” (407). The marks signify the fact that Gina and Gabe have *remembered* a real life argument at the same time; they have connected with one another in cyberspace. Cadigan emphasises the fact that it is the human body in its material form (male or female), which ultimately *allows* access to electronic technology and that, moreover, different individuals will utilise technologies in idiosyncratic ways.

Synners demonstrates that to place the idea of mind and matter in dichotomy with one another is a misleading way to understand how discourses such as cybernetics could operate outside of historically binary terms. Similarly, the main theory opposing Schrödinger was “von Neumann mechanics”, which was based upon “a Cartesian dualism dividing mind and body”, which argued that “we must always

divide the world into two parts, the one being the observed system, the other the observer” (Cooper and Van Vechten 219). In fact, this is precisely what DeWitt argued the Many-Worlds interpretation of Heisenbergian indeterminism brought to our concepts of reality:

No longer, says Everett, are we to be bamboozled into believing that the chief issues of interpretation are epistemological rather than ontological and that the quantum realm must be viewed as a kind of ghost world whose mathematical symbols represent potentiality rather than reality.

(De Witt “The Many-Universes Interpretation” 168)

Both *Synners* and *The Female Man* therefore seek to draw attention to the fact that we have not, as yet, sufficiently challenged the use of binary thinking in order to understand the world around us. Although my comparison of Keely’s “observation” of Gabe and Gina’s “stigmata” and the negotiation of quantum problematics through observation is purely metaphorical, it is useful for highlighting how cyberspace is far from being a “ghost world” that can do no harm. The cyberworld has instead had a very real impact upon “reality”, and certainly upon Gabe’s face.

Initially *Synners*’ depiction of a world in which there are “two species of human now, synthesizing human and synthesized human” (386) appears to play out the

mind/matter dialectic through the idea of “doing” synning as opposed to “being” synthesized (386). Yet the concept of “synthesized”/“synthesizing” human is soon revealed as encompassing a myriad of both human and non-human subjectivities, all of which are interdependent. For example, the A.I. Virtual Mark “amalgamates” with is called Art Fish, whose attempts to recapitulate human subjectivities reveal the constructed nature of social interaction when he appears as electronic copies of real people, such as the hacker Fez. He even highlights the ambiguity of differentiating between sentient beings and objects of technological artifice; his nickname is “Artie”: “you get it faster if you say Artie Fish” or artifice (173). In observing the quasi-familial social group of the synners, Artie Fish is like Frankenstein’s monster watching the Delacey/s: he is not quite outside, nor inside, *oikos*. This comparison is emphasised by Sam when she remarks: “*Art Fish?* What’s wrong with the good old names, like Frankenstein?” (173). But as an autonomous, androgynous entity with no knowable origin, Art Fish is more representative of Haraway’s ironic cyborg dream, for there are not two binaried species now but at least “three species” (386), and “Visual Markt” is described as the “bastard offspring of both” the “spike” virus and the A.I. Artie Fish (387).

Ultimately Visual Mark is not therefore the neat signifier of transhumanist disembodiment that he would at first appear to be. Describing Visual Markt as the “offspring” of cybernetic entities emphasises how he has experienced a form of rebirth: “[C]urled up in the fetal position” in a pit-shaped workshop that Gina

describes as a “tomb”, Visual Mark epitomises the conflation of the desire for a non-sentient form of being as simultaneously signifying the death of the physical body and the *rebirth* of the mind.

He lost all awareness of the meat that had been his prison for close to fifty years, and the relief he felt at having laid his burden down was as great as himself. His *self*. And his *self* was getting greater all the time, both ways, greater as in more wonderful and greater as in bigger.

The sense of having so much space to spread out in – a baby emerging from the womb after nine months must have felt the same thing, he thought. (232)

His definition of synthesising as a means for *escaping* his loneliness, despite this rejection of human contact also resists the assumption that posthumanism is synonymous with the loss of wholeness and a “Cartesian” split self. This is emphasised further when he endeavours to aid the other synners as they attempt to eradicate the spike virus from inside the city’s I.T. systems. Hence Visual Mark is not merely uploaded and “freed” in a utopian sense, nor “trapped” in cyberspace in a dystopian sense: his experience is merely different, and one which allows him to highlight how “none of them in their physical world was capable of rapid shifts in pov

[points of view]" (382). Like the gender ambiguities exposed by Russ's "female men", Cadigan seeks to highlight the need to rethink the boundaries between human and hardware and, more importantly, how each might learn from the other.

As the synners struggle to form effective subjectivities within the march of technology, philosophical considerations of self-determinism come to replace Cartesian dualisms, and the paradigm that there is "a multitude of lifetimes in an instant" (381). Returning to the same questions that the quantum mechanic Erwin Schrödinger asked in 1935, *Synners* charts how synners can "determine" the world (or not) through their respective scientific principles. As discussed earlier on in the chapter, Schrödinger had developed his "cat in the box" paradigm in order to demonstrate his scepticism of the idea that the world was entirely indeterminable and that things could never be half alive/half dead simultaneously. The characters even refer to their lives as increasingly that of the "Schrödinger's World" (211, 322). An example of how the synners use quantum principles to clarify or make "determined" the ambiguities of life in their "Schrödinger's World" is when the tattoo artist Gator finds her friend Jones apparently dead after he has had cranial "death implants", which allow him to commit suicide time and time again after experiencing a brief comatose state.

Jones was dead. No, Jones wasn't dead. No, Jones was dead,
but only sometimes. Schrödinger's Jones. What was

Schrödinger's Jones? Putting cats in boxes with vials of poison gas; strange habit. No stranger than Schrödinger's video, though, the one that [Visual Mark] kept making over and over because he couldn't get it right, [...] we are not in a natural habitat anymore. We've become denizens of the net. *Homo datum*. (386)

This reference to Schrödinger's thought experiment explores how technological advancements render ambiguous both a classically-determined view of the world and an "indetermined" view of the world. Continually moving away from binary dialectics, the narrative seeks to focus upon the one which underpins them all: that of the *dialogic* relationship between material reality and virtual reality.

As a highly ambiguous utopian state in which virtual reality can be moulded by the individual because "you can make it into what you want it to be, instead of the disappointment it turned out to be" (410), cyberspace is perhaps the most indeterminable state of being. Its utopian/dystopian realities could even be seen as a manifestation of the infinite possibilities of the "multi-verse." However, there is one important exception to this multi-verse theory in *Symers*, that is: when two people are online, they are not observed as occupying the same "place" in cyberspace together. Hence the denouement of the novel is that Gabe and Gina have to "locate" each other in cyberspace in order to contain the spike virus and restore the city's systems.

In other words, they have to attempt to find each other within the space of an infinite number of hyper-individuated and separate worlds within cyberspace: they have to overcome the pull of hyper-individuation itself and utilize Gina's feminist "You can. We can" approach to teamwork. Crucially, they must do this through their consciousnesses, rather than their material bodies. In other words, they must *amalgamate* the principles of transhumanist discourses and material feminist movements.

The conclusion of the novel is that: if it is "only a damned Schrödinger world when you were meat" (in other words, when one is bound within a world of classical determinism), we cannot always approach cyber-technologies using the determined principles of a classical, positivist reality (254). This sentiment is reflected in the narrative when Keely questions the term Schrödinger's world by asking: "Schrödinger or Heisenberg? [...] To be or not to be, you are or aren't you – can't be sure of either one till somebody opens your box" (271). In other words, one's sense of self and subjectivity is a struggle to recognise until somebody else confirms this for you, just as the cat is confirmed as alive or dead only *after* someone opens the box. Yet human conscious is much more than thinking alone: it is also about *feeling*; feeling as in the philosophical, cognitive and emotional, as well as the sensory and visceral experiences of the material body in the material world.²¹ In fact, it is "being" through "feeling" that links body and the mind together above any other concept in Cadigan's novel,

²¹ Martin Heidegger famously referred to this as the *weltlichkeit* of Dasein – the "Being-in-the-worldliness" of Dasein. See *Being and Time* (1978).

which may be the reason why, according to Anne Weinstone, theorists who posit the figure of the “post-human” as the key utopian state of being often neglect to “speak of care, of responsibility” (16).

Like Schrödinger’s “grounded” indeterminacy, *Symers* negotiates the issue of technological interaction in a way that Cadigan herself describes as: “neither dystopian nor utopian”, “the middle-ground”, “the cautionary but plausible line of thinking” (qtd. in Kraus 130). In other words, *Symers* demonstrates neither a determined, nor “indetermined”, approach to epistemological thinking. The characters also demonstrate that “feeling” can be defined as a *rational* approach towards understanding the world. Cadigan’s position therefore clearly reflects Schrödinger’s rejection of both Heisenberg’s extremely indeterminist reality principle and the totally determined materialism of some scientific praxes. By corollary, this plays out a rejection of both the indeterminate nature of reality associated with the Extropian post-human vision of the future and the feminist recuperation of women as the “matter” half of a binary, as that half of the human which transhumanists, allegorically speaking, are so keen to transcend, to *leave behind*, evolutionarily speaking.

Haraway states in the “Cyborg Manifesto” that: “[s]cience has been utopian and visionary from the start; that is why “we” need it” (192). Because the “we” in this sentence is qualified by printed quotation marks, it suggests that, for Haraway, science is not for “us” (women) after all. She argues that feminist science fiction has allowed women to see that there is a feminist science that is “for women”, whereas

traditionally all science has been “for men” only. Complexly, then, although Haraway criticises the feminist rejection of science’s rational “objectivity” (as I too have done throughout this thesis), she also regards scientific discourses as those which conform to a determined, “reality” principle (197). In contrast, *Synners* does not dismiss quantum theories as a non-radical popular science. Far from not being “radical” enough, then, quantum praxes do actually provide useful metaphors for contemporary discussions of advanced technologies, such as sex re-assignment surgery or the emergence of cyberspace. This is because they enable us to call into question the very nature of determined meaning and axiomatic thinking. Whether or not the continuation of binary assumptions has feminist associations, the rhizomatic paradigms of quantum physics can, as Cadigan has demonstrated, help us to think through some very real problems on the *macro* – or social – level of the world. We create only impoverished understandings when we are not judicious enough to take into account the fact that not all scientific discourses are based upon the same world-model. After all, rational thought does not have to follow the exact same models of conceptualising the world in order to be logical if we define processes of Reason as relational practices.

Conclusion

Many critics have argued that “a viable this-worldly collective and public utopianism simply is not within the horizon of the cyberpunk structure of feeling” (Suvin “On Gibson” 358). I have demonstrated that *Symers* continues the feminist project of *The Female Man* in a more rational and negotiating way, answering the question of how feminist thought progresses in the aftermath of the postmodern proliferation of subjectivities, without the need to resort to a feminist rage. By interrogating the hybrid and cyborgian nature of *The Female Man* and *Symers*, I have demonstrated that these genres are not only feminist when they are simply critiquing technological and scientific progress. The novels’ numerous depictions of the cyborgian subjectivity demonstrate that the cyborg is, after all, as Haraway suggests: the loss of the sacred in which “[n]o objects, spaces, or bodies are sacred in themselves” anymore (163). But if cyborgian subjectivity is definitively the loss of the sacred, we have to accept that we cannot talk of writing “the cyborg” either, or rather, no more than we can talk of theorising “the human”, for to articulate the cyborg as a singular concept is merely to re-create yet another “sacred” body. For cyberfeminists this would be an electronic self, free from societal constraints when communicating via the internet; for Peter Baofu this would be a non-sentient existence; the Extropians would instead see the cyborg as an evolved human, a trans-human, integrated entirely with technology and, for Haraway, cyborgs are ultimately women of colour working with machinery and

technology in a global economy. Feminist utopian and science fictions may have been seen as the main source for Haraway's definition of the cyborg but they have nevertheless been a useful means for interrogating why we label bodies as "cyborgian" in the first place.

In literary engagements with technology or, in earlier literatures, such as mythical narratives, the heterogeneity of human *bodies*, as opposed to "the human body", is also that which can be "monstrous" in terms of its material nature. It is only in examining and comparing the similarities across literary history that women's endeavours to highlight the many heterogeneous visions of how we define what is "human" in contrast to what has been deemed to be, or simply treated as, "non-human", can fully emerge. To put this in terms of Haraway's theory: Frankenstein's monster, the animal scientists of Margaret Cavendish's *Blazing World* (1666) and the circus monsters in Scott's *Millenium Hall* (1762) are still *cyborgian* even if they long to be accepted in a society that represents the "Garden of Eden", a utopian place that Haraway's definition of the cyborg – "unlike Frankenstein" – rejects (151). After all, the idea that the cyborgian monster would not "recognise" Eden means that it would not recognise this as arcadia. Ultimately, can we define the cyborg as "cyborgian" simply because it *cannot* recognise a classical, albeit Western, utopia? This is a problematic manifesto for social change, for it negates the fact that the history of "cyborg writing," from the detective novel to the ergonomics of architecture, is a patchwork of utopian paradigms and women's engagements with, and subversions of,

models of Reason throughout history. Far from being an ironic dream that negates Eden, “cyborg writing” is a fundamental part of the tradition of women’s role in the critique of societal issues by re-imagining utopia (Eden) over and over through the extrapolation of technological and scientific discourses.

The danger of attempting to define and represent Haraway’s cyborg is that this inevitably comes to represent a perpetuation of the conditions of woman as the Other after all. Its prerequisite of the relevance of non-Western origin stories and heterogeneous bodies unwittingly recapitulates the dialectics of Same and Other through its exclusion of two key concerns: the articulation of white (especially female) voices and the fact that *all* bodies are heterogeneous and permeable. Non-Western origin stories cannot provide an all-encompassing means for considering how Western literatures, cultures and histories help us to continue to work through the gendered language of those feminist histories, for these are the histories that we have assumed that we understand but which we are yet to learn from. To re-open how and why women writers and practitioners sought to contribute to male-dominated scientific discourses and other narratives of “Reason”, and to celebrate further those women writers who have attempted to deploy the politics of rational discourse for feminist means, might all proffer a more fulfilling project. To commit to a process of merely “dissolving Western selves” – and no other selves at the same time – is simply a perpetuation of binary logic (157). It is important to note that, in contrast to Haraway’s cyborg, the depictions of hybrid bodies (both textual and biological) that

have characterised utopian and science fiction by women were all more or less astutely aware of the importance of models of empathy and feeling. Considering this, I conclude that, in spite of its attempts to “suggest a way out of the dualisms in which we have explained our bodies and our tools to ourselves”, Haraway’s concept of the cyborgian is not as illuminating or useful for a rejection of the “woman as alien” paradigm as it would at first appear to be (181).²²

Joanna Russ’s “Whileawayan” flowers in *The Female Man*, therefore, can be seen as an apt allegory for us here; they represent the fact that the eco-feminist rejection of scientific praxis can be problematic. Perhaps even more useful to us here is Pat Cadigan’s negotiating, empathetic and reasoned approach to utopian subjectivities in late twentieth-century culture. *Symers* does not end with the disavowal of online life or the technology that has caused disaster. Nor are we, as readers, left with technology-free spaces and paradoxically-utopian “Whileawayan” flowers: the use of skull sockets in *Symers* may have caused damage but they also “open up all new possibilities for healing brain damage” and mental disorders (434). Technology is recuperated for a socially-responsible utopian means after all, and it is this responsible use of technology which becomes the utopian paradigm itself. This is epitomised by Gabe, who, like the cyborg that does not dream of Eden, finds his own utopia by defining his own acceptable level of appropriate technological interaction.

²² See Weinstone for a consideration of the avatar self as opposed to the cyborg, since “*Avatar*” has roots in Eastern concepts of the processes *between* polar meanings.

[H]e had an unobstructed view of the ocean. Someone was operating an underwater farm a few hundred yards out; with binoculars he could watch the dolphins popping up and down, hard at work at whatever dolphins did on underwater farms. On some days he did nothing else but watch them. (429-430)

The message of the synners is clear: we have to think about the philosophical questions that will emerge, as well as those which are currently *emerging* from the dissemination of scientific advancement in non-dualist terms. For while it is inevitable that technology will increasingly destabilise and make our understanding of the world “indeterminable”, that we will only be able to swim with the dolphins on a dolphin farm should not be a dystopian future, merely a different one in which we will have to rethink our principles, of both reason and reality alike.

Daughters of Reason: Women Writing as Rational Subjects

I find a deep affinity between myself as a transsexual woman and the monster in Mary Shelley's *Frankenstein*. Like the monster, I am too often perceived as less than fully human due to the means of my embodiment; like the monster's as well, my exclusion from human community fuels a deep and abiding rage in me that I, like the monster, direct against the conditions in which I must struggle to exist.

(Susan Stryker "My Words to Victor Frankenstein Above the Village of Chamounix -- Performing Transgender Rage." *States of Rage* 196.)

It can perhaps be taken as read that the image of Shelley's monster has facilitated the claim to a "utopian subjecthood" for centuries and that it has had an immense impact upon the scholarly consideration of marginalised voices within history – inspiring transgendered writers, queer writers, black writers and women writers alike. In the previous chapters, I have revealed how some of the associations with women and the cyborgian and/or monstrous body are not necessarily helpful, whereas others are more useful. In Chapter Five I explored the possibility that Joanna Russ's depictions of the transgendered body demonstrated how Donna Haraway's cyborg could be seen as a more useful image for women writing utopian science fiction than that of Frankenstein's monster. I would like to begin my conclusion by considering Laura Kranzler's argument that late twentieth-century technology is reflected by the

hybridity of the male to female transsexual's material body more explicitly and that this, in turn, is a recapitulation of the body of Frankenstein's monster.

Drawing on Kranzler's argument that the male to female transsexual represents the technological origins of Shelley's monster, transgender theorist and activist Susan Stryker interrogates the question of woman and female subjectivities in the aptly titled first person performative monologue: "My Words to Victor Frankenstein."¹

Shelley's text is informed by -- and critiques from a woman's point of view -- the contemporary reordering of knowledge brought about by the increasingly compelling truth claims of Enlightenment science. The monster problematizes gender partly through its failure as a viable subject in the visual field; though referred to as "he", it thus offers a feminine, and potentially feminist, resistance to definition by a phallicized scopophilia. The monster accomplishes this resistance by mastering language in order to claim a position as a speaking subject and enact verbally the very subjectivity denied it in the specular realm. ("My Words" 200)

¹ This was performed at the "Rage Across the Disciplines" conference at California State University, San Marcos, 10th-12th June in 1993.

Like the work of Susan Stryker, this study has sought to open-up and interrogate the ideas surrounding how women have posited various senses of subjectivity, within both social structures and structured discourse. It has especially considered female subjectivities, and how women writers have endeavoured to “enact verbally the very subjectivity” that they have been “denied” through extrapolative visions of alternative worlds (200). However, as can be seen in the above quotation, Stryker’s identification with the monster is based upon her interpretation of its resistance through the cadences of “the dark, watery images of Romanticism” (211). In contrast, the writers considered within this study have created an alternative visual field of ideal female subjectivities through fiction by charting – not negating – the impact of innovative discoveries, discourses and technologies. In other words, like Frankenstein’s monster, they have laid claim to a *rational* subjectivity through narrative voice.

What is interesting about Stryker’s position here is that the feminist, queer and transgendered rage presented in Stryker’s “words to Victor Frankenstein” uses a first-person monologue structure in order to articulate the alienation *from* female subjectivity on the grounds that she cannot claim a female or feminist subjectivity as part of “womanhood.” Her isolation signifies a lack of identification too; like Shelley’s monster, Stryker identifies herself as an “artificial” being but more poignantly, as a woman who has been created by the very scientific discourses which feminists rile against: that of an apparently patriarchal medical science. From this we could conclude that “rational” thought processes should be subject to criticism for

recapitulating the discourses of universal man. Which raises the question: can “rational” feminisms ever truly escape the patriarchal processes which have themselves been justified by, and have, in turn, served to justify, so-called “rational” discourse? The identification with an idea of “womanhood” is inaccessible for Stryker precisely because it is deemed to be a homogenous subjecthood and, furthermore, one whose gendered history can be seen as inextricable arising out of Enlightenment models of humanity and the purity of the “natural.” Stryker’s voice is yet another example of laying claim to a female subjectivity by positing all empirical discourses as inherently problematic in order to negate the social use value of science. Indeed, this paradigm becomes even more ironic when we consider the fact that it is the application of scientific knowledge (in this case: medicine) which has ultimately allowed Stryker’s transgendered subjectivity to become visually-realised in her material body.

As discussed in the Introduction, because rage is said to have characterised the wave of “feminist science fiction” from the 1960s onwards,² this study has sought to challenge the idea of women writing utopian and science fiction as the “daughters of Frankenstein.” By corollary it questions why the “history” of women should be defined through the irrational aspects of Frankenstein’s monstrous creation. Stryker’s concern with the alienation from the natural definition of woman therefore reflects L.J. Swingle oxymoron that the monster is an ““artificial” natural man” because he is

² See Elaine Showalter *Literary Women* (1977).

like Rousseau's Noble Savage, an innocent *tabula rasa* of a child at one with Nature (51). In contrast, how I would define the monster as an artificial "natural man" would be in the sense that he is a natural man because is able to *speak from the position of a human* and thereby to claim his status as having the subjectivity of a natural, wholly human being. This distinction is important: if women are like the monster this is not because of their liminal position or the post-Enlightenment concept of women as "abject." What, in fact, makes *Frankenstein's* monster unique is that in spite of his outward appearance – that which is *antithetical* to "Enlightenment", "universal" or "capitalist" man (or Same) – he is able to make plausible claims for his status as a creature of rationality, compassion and articulation. Women are not Frankenstein's daughters: they are the daughters of the monster's unique position, and as such they are able to use Enlightenment Reason in order to critique the notion of purity and the "universal man."

This is all very well, but what exactly does it mean to write and speak as a "rational" subject? After all, as Phyllis Rooney notes, the inescapably gendered nature of reasoned discourse – from antiquity onwards – has meant that language is imbued with the gendered tropes of the our philosophical forbearers (94). But this is not necessarily the case, after all, the feminist rejection of science is based upon the seventeenth-century tendency to align Greek philosophy with Christianity.³ Feminist readings of the scientific appropriation of Greek metaphor have therefore been based

³ For more details, see Phyllis Rooney "Gendered Reason: Sex Metaphor and Conceptions of Reason".

upon *seventeenth-century* interpretations of it. On a similar note, feminists often treat even the *absence* of gendered metaphors or the marked break from Greek metaphysics (as in Descartes), as the very *signifier* of the permeation of patriarchal imperative. Because linguistic theories such as we see in Roland Barthes' *Mythologies* (1957) have suggested that the disappearance of the metaphor signifies its capitulation into societal norms, feminists have argued that the point at which Greek metaphysics seems to "disappear" in European discourses is actually when their dominance is, finally, utterly beyond question. In other words, that if the sexual, material bodies of women are no longer evoked when speaking of the "soul" after the emergence of Descartes and La Mettrie's mechanical souls and the colonial conquering of "land" in the Western gaze to the West, then this is simply because the metaphor has been subsumed so much that it need no longer be explicitly *stated*.

The body of woman, metaphorically speaking, does indeed seem to "disappear" from natural philosophical writing in the latter half of the seventeenth-century and, indeed, it is no longer prevalent in the earlier vitalist-mechanic debates of the nature of the soul and the mechanical order of the universe either, such as we see in the work of Descartes and his contemporaries. Hence contemporary feminist critics posit Descartes as presenting a "gendered" sense of reason through the infamous mind/body split, in which the gendered sense of male "reason" is synonymous with that of public "mind:" in contrast, female "matter" and the "reason" of women is confined to that of the private "body", and, later, the enclosure of the private writing

cabinet and the epistolary novel (Rooney 82-3). In doing so, they forget that Cartesian materialism was the one seventeenth-century discourse in which women were extremely *wal*. In Paris, the discussion of Cartesian philosophy was so prevalent that feminist historians have had to rename these spaces *Salonistes* when referring to these women-only spaces.⁴ Indeed, Descartes' materialist challenge of the bipartite Aristotelean soul into its morally-weaker/"female" half and its morally-stronger/"male" half would also seem to purport to a more egalitarian definition of the human. It is not my intention here to argue that Descartes was a proto-feminist, nor am I arguing that his works have not been seen as the very basis of that mind/body split recapitulated by a male/female split, which can be seen, somewhat spuriously, as the definitive essence of the very nature of the human being as a complex living entity (see Chapter Five). I cite the scholarly interpretation of Descartes merely as an example of how thinking about philosophy and science always in gendered terms will impoverish our understanding of other, perhaps more pertinent, debates. For example, the question of what the human being will be like in the future is not, ultimately, progressed by only debating whether or not Descartes mind/body magnum is tantamount to a male/female split of gendered aspects of humanity.

Throughout the history of utopian and science fiction, women have also been using the "tools of the Master" in order to build their own "houses", rather than to

⁴ For general information on what Hunter and Hutton term the "*Salonistes*", see *Women, Science and Medicine 1500-1700* (1997).

react with rage against, or, indeed, to “deconstruct”, patriarchal discourses.⁵ It might be useful to build again upon what these fictional engagements have unearthed and to examine more closely the ideas of reason upon which they are founded more generally, by examining non-fictional feminist dialogues with science throughout history. Scholarly work into comparing the rational discourse of Descartes and Margaret Cavendish in more detail or by examining historical definitions of the mind/body dialectic other than that of the dichotomy of man/woman, for example, would go some towards this project. We must also not forget, of course, the fact that one of the main reasons why *Frankenstein* remains popular today is precisely because of the discrepancy between how the monster is treated because of his outward appearance (“his” body) and his more formidable qualities (“his” mind) – a Cartesian dialectic.

This study has attempted to draw upon cultural history in order to interrogate the binary of feminist and so-called anti-feminist tropes in women’s writing in order to *invert* the binary of the history of woman as having been, on the one hand, hysterical (as the monster or Bertha Mason) and, on the other, as a conservative, Enlightened woman (that which Stryker is rejecting above). I hope to have demonstrated that we can extract an idea of non-gendered rationality and reason from the history of women’s utopian and science fiction. Indeed, it must not be forgotten that what is deemed to be the origins of modern feminism is inextricable from the

⁵ See Audre Lourde “The Master’s Tools Will Never Dismantle the Master’s House” (1984) for a description of how woman’s own “voice” cannot consist of the Master’s tools (patriarchal language and structural epistemologies).

inescapable rationality of that infamous feminist critique of Rousseau: Mary Wollstonecraft's *Vindication of the Rights of Woman*. Yet these fictional histories do more than corroborate Wollstonecraftian reason: they are dialogues based upon the relationship between reason and *empathy*. As Rooney suggested:

We have been able to talk about the power of reason but not about the power of empathy. We can talk about the insight and understanding that rational knowledge brings, but we cannot talk about the understanding a deepening sense of compassion brings. Just as we have at best a caricature of reason, we also are left with a caricature of feeling, feeling robbed of any claim to rationality and understanding. [...] And yet we get the clear sense that the most creative insights in the history of thought emerge in part out of a special and rare ability to go *beyond* the caricatures of such enforced divisions. (Rooney 97-8, emphasis added)

In foregrounding the responsibility of “Same” to “Other”, these writers have rendered “empathy” a *rational* logic of feminism, a reason to write.⁶ I would argue that what is at play within all the texts examined within this study is the operation of a rational logic of social inclusion and empathy whose basis deploys and problematises the idea of the language of the “Same” as *spoken by the “Other.”*

The point at which this thesis ends is therefore ironically at the beginning, that is to say, the beginning of hopefully new dialogues in which feminist rationality is explored as a discourse of Enlightenment utopian good by asking the question anew: what were those moments in history in which women have not reacted against, but engaged with, discourses of science, technology, architecture and philosophy in order to improve the world and its *terra incognita*? Such discourses are central to the progress of ideals, much like *Frankenstein's* concentric epistolary narrative forms the centre of this thesis. And, furthermore, at its centre is not Frankenstein's testimony, his claim on the outskirts of the Village of Chamounix, but rather the question of whether or not the *monster's* testimony is rational, highlighting the inevitably dialogic nature of knowledge dialectics. Like this thesis, and the project of forming a “history of Woman” in the same way that Shelley had once thought to, *Frankenstein* is written in the form of a letter addressed to his sister, Margaret Saville, by Captain Walton, or, more precisely, what he can *recall* of it from Victor Frankenstein's “re-telling” his story. Like the reader of the letter, ultimately we are distanced from the historical

⁶ See also Lucy Sargisson on the feminist consciousness of rational feminine emotion.

reality of what actually happened (and hence what the real motivations and intentions of these women writers were). The history of woman is also like *Frankenstein's* multi-layered and highly-artifice narrative because its sense of "retelling", and hence its historical distance, only adds to the sense of engineering involved in its attempt to revise, re-assess and re-build narratives of knowledge. Similarly, *Frankenstein's* continued centrality within any revision of women's writing demonstrates that responsible scholarship should always attempt, like Christine de Pizan had, to build upon and acknowledge the foundations it seeks to revise. It should never simply endeavour to tear them down or negate them altogether, nor blindly recapitulate their historical trajectories. As I suggested earlier in the Introduction, this study is, after all, the story of how women writers have built upon one another, however knowingly or unknowingly, in a process of feminist edification that begins, for now at least, with *The City of Ladies* (1405).

Appendix I



Appendix II



Appendix III



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