

**The Conspicuous Body: Science and Fashion in Early Modern England**

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## **DECLARATION**

I, Sadie Harrison, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Date:

## **Abstract**

This thesis examines the relationship between science and fashion in the early modern period. It brings together the disciplines of fashion history and the history of science to understand the complicated role that proper appearances played in the signalling of credit in seventeenth and eighteenth-century England and France. In the Renaissance, clothing was an ornament used to display virtue and signal learning, often through textiles and accessories showing natural objects from flowers to sea-monsters. In the seventeenth century, this culture of fashion was challenged when members of the Royal Society were complicit in the introduction of the three-piece suit and a new notion that men should dress in a sober style. The Society was complicit in positioning ornament and fashion in opposition to this sobriety associated with proper masculinity and proper knowledge-making,

The thesis argues that this opposition between ‘fashion’ and science became a commonplace in the eighteenth century. Various authors attacked those who engaged in fashionable dress as improper or unreliable thinkers. Many accusations were levelled against women. However, women resisted these changes and asserted their status as knowers of nature. They used textile design to express their natural knowledge. For example, Anna Maria Garthwaite’s silks were part of a feminine language of showing: one that rejected the opposition of science and fashion advocated by men. Women also manipulated their dress to cultivate credit in philosophical networks, for example in the Bluestocking circle in England and the French salons. Even if female dress was demoted from the same level of credibility as male costume in the eighteenth century, women still worked to use it as a means to secure credit and express their knowledge of nature.

## **Impact Statement**

This thesis reveals the history behind some of the assumptions and issues that continue to affect the making of knowledge today. How do we identify people as credible in the sciences, and have we always used the same assumptions to establish credit? It is widely acknowledged that diversity is scarce in the sciences (and indeed other areas of academia). People of non-white races, women, LGBT+ people, and more struggle to be perceived as credible. This thesis offers a historical context for these issues, with a specific focus on the case of women.

This thesis seeks to understand how the prejudices around women in knowledge-making that prevail today came to be established. The study argues that the establishment of epistemic science as the primary way to know nature converged with reformulations of masculine credibility. The consequences of this convergence privileged white, heterosexual, able bodied males. Men were able to signal credibility through sartorial signals but women's credibility as knowers of knowledge was not widely accepted. To make this argument, the thesis focuses on bodies, adornment, and credibility in seventeenth and eighteenth-century England. The thesis brings together two disparate disciplines of history. History of science and costume history have rarely interacted, but this thesis demonstrates that new perspectives can be gained by bringing these historical traditions into dialogue.

This thesis brings new sources to bear on the history of science. Few histories of science incorporate clothing in any form. This history uses extant textiles, museum objects, portraiture, and textual descriptions of clothing to understand the role that appearance had in the lives of those who sought credibility in knowledge-making circles. Likewise, cultural histories of clothing have rarely focused on the consequences of fashion on epistemic practices.

The research within this thesis has already informed my role as a communicator of science history and a practitioner of public outreach. Recently, I have appeared on a podcast produced by the BBC three times, bringing my perspective on credibility and prejudices within society to a global public audience.

The project of raising awareness of the issues revealed in this thesis continues. I will be incorporating my studies into a publication on diversifying science history curriculums, currently in preparation.

This thesis explores issues of identity and credibility, which can be applied to case studies beyond the scope of the chapters that follow. It is my hope that other historians may find my conclusions useful for understanding credibility in identity in the sciences and beyond.

For Chris, my husband

And for our Minerva

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This thesis is about credibility and the need to be credible in knowledge-making practices. I would like to thank those who saw me as credible and trusted me as a maker of knowledge.

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## Introduction

In 1997, physicists Alan Sokal and Jean Bricmont published a critique of post-modernism entitled *Fashionable Nonsense*, an attack on new “constructivist” views in the history and sociology of science (among other things).<sup>1</sup> The book’s title supposes a common opposition of sense and fashion: while reasonable and rational ideas are not subject to fashion, because they are true, other ideas are picked up merely because they are fashionable, perhaps exotic or exciting, but not because they are true. Where does this opposition come from? Why are science and fashion opposites? This thesis explores these questions from an historical perspective and argues that this contrast emerged with the rise of a “masculine” experimental philosophy in the seventeenth and eighteenth centuries. The thesis considers the consequences of this for women, and the ways women resisted it.

Masculinity and femininity have been construed as opposites for many hundreds of years. In the seventeenth and eighteenth centuries, this opposition developed specific consequences for the new experimental science. This thesis seeks to understand how women came to be excluded from knowledge-making through the lens of fashion, fashionability, and clothing. How did fashion itself become severed from science? Today, it is taken for granted that a spectrum exists which separates, on the one side, science, seriousness, and masculinity, from fashion, frivolity, and femininity. This thesis rejects this spectrum: it is not a natural division. It investigates how this currently ubiquitous cultural norm came to be.

This is a history about who may know and what they are able to know. The thesis explores the role of fashion in English natural philosophical circles in this period and traces the ways clothing was connected to issues of credibility among men and women of the time. In the seventeenth and eighteenth centuries in England, male natural philosophers came to view a Baconian method of experiment and observation as the principal means to produce scientific knowledge. Simultaneously

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<sup>1</sup> Alan D. Sokal, *Fashionable Nonsense: Postmodern Intellectuals’ Abuse of Science* (New York: Picador, 1998).

there were major debates over social and gender norms, particularly relating to appearance, behaviour and fashion. Until now, these two historical developments have not been considered together. Using a range of texts and extant examples of early modern clothing, this thesis proposes that these were interwoven developments that established social expectations that have continued to be relevant ever since. The argument is that clothing was a factor in establishing the credibility of individuals as makers of natural knowledge. Men's clothing took on a form that presented men as more legitimate in this regard than women. Nevertheless women resisted this change and cultivated their own ways of using dress to make and disseminate knowledge.

### *Fashion in the History of Science*

The history of experimental knowledge and the history of fashion have been the subject of a diverse array of work by historians of science and costume historians in recent decades which this thesis draws upon to make its argument. Social and cultural historians of science have explored the social history of trust and credibility in early modern science. Beginning with Steven Shapin and Simon Schaffer's *Leviathan and the Air-Pump* (1985) and then in Shapin's *Social History of Truth* (1994), early modern science was represented as dependent on the credibility of its makers, and not simply its capacity to mirror nature. Since the credibility of new experimental methods could not be taken as self-evident the social character of those who practiced it served as a basis for establishing this credit. For Shapin, this meant the "gentlemanly" character of men such as the fellows of the early Royal Society. As Shapin puts it, "Gentility was a massively powerful instrument in the recognition, constitution, and protection of truth."<sup>2</sup> Shapin went on to identify features by which gentility might be recognized, and drawing on the work of sociologist Ervin Goffman, he includes in this list the "physiognomy, costume, gesture, posture, patterns of speech and facial expression" of a person, and this might include the wearing of the

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<sup>2</sup> Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England*, Science and Its Conceptual Foundations (Chicago ; London: University of Chicago Press, 1994); 42.

wig and one's own hair, the manner and matter of eating and drinking, the exact form of a bow, the fabric out of which stockings were made, and the colour of coats... The physical body was a text on which basic social identity might be inscribed.<sup>3</sup>

Shapin himself went on to explore the health of the body and dietetics as key elements in this gentlemanly identity, particularly in relation to the seventeenth-century chymist Robert Boyle. Boyle's ill health and "physical frailty" were identified with spirituality and melancholy with scholarly credit.<sup>4</sup> In the collection of essays *Science Incarnate* (1998) Shapin and Christopher Lawrence examined the relationship between the body and credibility in detail. Shapin, and several contributors, paid much attention to dietetics and health in this regard. Shapin for example, discusses anecdotes about Newton in which he appeared not to eat, an asceticism that signalled his credit as a more spiritual truth-teller.<sup>5</sup> Interestingly, however, Shapin and others have had little to say about the clothes that signalled gentility, spirituality and credibility. In her contribution to *Science Incarnate* on Darwin, the historian of biology Janet Browne noted how Charles Darwin cultivated a self-image as a "care-worn and modest" philosopher:

Judging from the mass-reproduced photographs available in archive collections, [Victorians] principally saw a well-to-do gentleman in dark, sober suits, a gentleman with little regard for fashionable taste. He always wears warm clothes, sometimes a cape or an overcoat on top, waistcoat underneath, perhaps a scarf draped over the shoulders, a felt hat, he is mostly sitting down.<sup>6</sup>

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<sup>3</sup> Shapin, *Social History of Truth*, 151-2.

<sup>4</sup> Shapin, *Social History of Truth*, 154.

<sup>5</sup> Steven Shapin, "The Philosopher and the Chicken: On the Dietetics of Disembodied Knowledge," in *Science Incarnate: Historical Embodiments of Natural Knowledge*, eds. Christopher Lawrence and Steven Shapin (Chicago: The University of Chicago Press, 1998), 21-50.

<sup>6</sup> Janet Browne, "I Could Have Retched All Night: Charles Darwin and His Body," in *Science Incarnate: Historical Embodiments of Natural Knowledge*, eds. Christopher Lawrence and Steven Shapin (Chicago: The University of Chicago Press, 1998), 240-287, on 253.

As in Sokal and Bricmont, Darwin's modest, sober status as a man of science is reflected in his disregard for fashion. Nevertheless, there has not been a sustained exploration of how fashion and science were in fact connected.

One reason why this may have been neglected might have to do with gender perceptions. This could be because the history of costume and fashion is assumed to be a female preoccupation, but it also arises from a lack of appreciating the gendered dynamics of early modern credibility. Feminist historians of science have brought to light the situated gender perceptions pervasive in early modern science. In books such as *The Mind Has No Sex* (1989) and *Nature's Body* (1993), Londa Schiebinger explored the opportunities and limitation on women's agency within early modern science.<sup>7</sup> Carolyn Merchant's *The Death of Nature* (1989) illustrated the gendered violence built into the rhetorical strategies of the new experimental science of the seventeenth century.<sup>8</sup> In *Modest\_Witness@Second\_Millennium* (1997) the feminist historian Donna Haraway drew attention to the masculine focus of Shapin and Schaffer's *Leviathan* and the significance of the new science for excluding women. *Modest\_Witness* described how important 'self-invisibility' was to the production of matters of fact among the fellows of the Royal Society in the seventeenth century.<sup>9</sup> Self-invisibility was the "specifically modern, European, masculine, scientific form of the virtue of modesty."<sup>10</sup> So gentility and sobriety were not just epistemic values but masculine epistemic values. Haraway posed the question: "How did some men

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<sup>7</sup> Londa Schiebinger, *The Mind Has No Sex?: Women in the Origins of Modern Science*. (Cambridge, Mass.: Harvard University Press, 1989); Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science*. (Boston, Mass.: Beacon Press, 1993), Londa Schiebinger, *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*. (Philadelphia: University of Pennsylvania Press, 2005).

<sup>8</sup> Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: HarperCollins, 1989).

<sup>9</sup> Donna Haraway, *Modest\_Witness@Second\_Millennium.FemaleMan-Meets-OncoMouse: Feminism and Technoscience* (London: Routledge, 1997), 23.

<sup>10</sup> Haraway, *Modest\_Witness*, 23.

become transparent, self-invisible, legitimate witnesses to matters of fact, while most men and all women were made simply invisible, removed from the scene of action?"<sup>11</sup>

Shapin's accounts of dietetics and health indicate that part of the answer lay in asceticism, but clothing was also a key element in this process. And if, as this thesis will argue, a certain sobriety of clothing achieved this, then it equally had consequences for women, whose fashions made them more visible and immodest according to masculine perspectives. This was not always the case (as chapter one will show), because prior to the seventeenth century, fashion and credibility were not opposed or seen as mutually exclusive in the way they would come to be later. Furthermore, understanding this pre-seventeenth-century culture enables us to see female clothing as an expression of knowledge in itself, so another goal of this thesis is to show how this worked.

A second claim, then, is that before the introduction of the form of modesty that was considered so essential to the Royal Society and experimental philosophers, clothing was a material that could express natural knowledge. Historians of science have revealed a variety of long-neglected forms of display and culture that served this end in the sixteenth and seventeenth centuries, such as the cabinet of curiosities, jokes of nature, and even fireworks.<sup>12</sup> These histories, often by women, recognize that academic experiment was only one of a variety of ways of knowing for early moderns. Their work will provide a model for making sense of fashion as a form of natural knowledge, which hinged on craft and display. The cabinet of curiosity has enjoyed much academic attention for the past twenty years: to many, it is a material emblem of early modern attitudes toward nature. Historians of science Lorraine

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<sup>11</sup> Ibid., 29.

<sup>12</sup> See also O. R. Impey and Arthur MacGregor, *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe* (Oxford: Clarendon, 1985); Thomas DaCosta Kaufmann, *The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance* (Princeton, NJ: Princeton University Press, 1993); Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art and Technology*, trans. Allison Brown (Princeton: Markus Wiener Publishers, 1995); Simon Werrett, *Fireworks: Pyrotechnic Arts and Sciences in European History* (Chicago, Ill.: University of Chicago Press, 2010).

Daston and Katherine Park's highly influential work *Wonders and the Order of Nature*, published in 1998, revealed the importance of wonders and curiosity in cabinets and in early modern science generally. Wonders, they argue, were intimately connected to emotional responses, to delight and surprise as ways of knowing, achieved within a culture of collecting and display, particularly in the courts of Renaissance Europe. Science flourished in an aesthetically driven, decorative setting.<sup>13</sup> In her 1990 article "Jokes of Nature and Jokes of Knowledge," historian of science Paula Findlen used the cabinet of curiosity to illustrate the light-hearted, playful attitude that she also considers to be essential to natural philosophy prior to the Enlightenment.<sup>14</sup> Findlen expanded on this idea in her 1994 book on collecting and scientific culture, *Possessing Nature*.<sup>15</sup> She also showed how displayed *naturalia*, the natural objects in cabinets, and *artificialia*, crafted objects, could be sources of wonder and knowledge.

Like Shapin, Daston, Park, and Findlen had little to say about fashion as a form of wonder or natural display. But as this thesis will show, fashion could be very much like a cabinet of curiosities in serving as a stage for displaying finely-crafted designs and natural knowledge. Jewellery and accessories could be made out of wondrous materials, and marvels could be represented in embroidered clothing. The logic of display that Daston, Park, and Findlen have explored also applied to early modern clothing before display was ostracised by modesty.

### *Science in the History of Fashion*

To understand the role of clothing in science requires an engagement with the growing field of costume history. Costume history developed from the charting of the progression of high fashion in the west such as François Boucher's 1967 book *A*

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<sup>13</sup> Lorraine Daston and Katharine Park. *Wonders and the Order of Nature, 1150-1750*. (New York: Zone Books, 1998).

<sup>14</sup> Paula Findlen, "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe." *Renaissance Quarterly* 43, no. 2 (1990): 292-331.

<sup>15</sup> Paula Findlen, *Possessing Nature Museums, Collecting, and Scientific Culture in Early Modern Italy*. (Berkeley: University of California Press, 1994).

*History of Costume in the West*<sup>16</sup> and *A Concise History of Costume*, published in 1969 by James Laver.<sup>17</sup> These works investigated the making and design of clothes, and changes of fashion from prehistoric times to the present. These histories were typically about connoisseurship, identifying historical clothes, high fashion (the clothing of elites) in the west, and told as chronological stories. However, within recent decades a sub-discipline has developed which focuses on the cultural meanings of clothing. As Terence Turner noted in 1980,

The adornment and public presentation of the body, however inconsequential or even frivolous a business it may appear to individuals, is for cultures a serious matter... Adornment of the body... is the medium most directly and concretely concerned with the construction of the individual as a social actor or cultural subject.<sup>18</sup>

Christopher Beward, writing in 1998, argued that costume history needed to be more of a cultural history, allied with history, rather than a sub-field of art history centred on connoisseurship.<sup>19</sup> As Beverly Lemire has shown, subsequent cultural histories of fashion shifted attention from the body to clothing as a medium of expression.<sup>20</sup> Historians have looked at attire as an extension of the skin. As a visual barrier between skin and the eyes of the beholder, clothing interrupts, mediates, and curates a body.<sup>21</sup> In the edited collection *Clothing Culture*, Catherine Richardson has

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<sup>16</sup> François Boucher, *A History of Costume in the West*, trans. John Ross (London: Thames and Hudson, 1987).

<sup>17</sup> James Laver and Amy Haye, *Costume and Fashion: A Concise History*. 4th ed. (New York: Thames & Hudson, 2002).

<sup>18</sup> Terence Turner, "The Social Skin," (1980) reprinted, *Journal of Ethnographic Theory* 2 (2012): 486-504, on 501.

<sup>19</sup> Christopher Beward, "Cultures, identities, histories: Fashioning a cultural approach to dress," *Fashion History* 2 (1998): 301-313.

<sup>20</sup> Beverly Lemire, "Thinking Fashion: A Historian's Reflection," *Journal of Design, the Creative Process and the Fashion Industry* 8 (2016): 10-14.

<sup>21</sup> Terence Turner, "The Social Skin," (1980) reprinted, *Journal of Ethnographic Theory* 2 (2012): 486-504.



described clothing as “a vehicle for the representation of the self within society.”<sup>22</sup> Clothing is an extension, therefore, of identity. An important investigation on the cultural meanings of clothing was made by Daniel Roche in *Culture of Clothing: Dress and Fashion in the Ancien Regime* (1994).<sup>23</sup> To Roche, clothing was not just functional, serving to provide warmth and protection, but was also an indication of social attitudes. For Roche, costume has a politics and is an agent in the production of social order.

The history of clothing is a way of penetrating to the heart of social history. It is [a] good way of trying to observe how the different ideological models which co-exist and compete to regulate behaviour and habits interact with the reality one hopes to attain.<sup>24</sup>

Since Roche’s work, historians have expanded these ideas in various ways. Beverly Lemire has examined the materiality of clothing in detail and also extended the historical scope of fashion studies to a global perspective.<sup>25</sup> John Styles has considered the class aspects of fashion in eighteenth-century England in *The Dress of the People* (2007).<sup>26</sup> Most recently, Evelyn Welch has furthered historians’ understanding of the trade networks, dissemination and consumption patterns involved in early modern European fashion.<sup>27</sup> An important work for this thesis was written by costume historian David Kutcha in 2002. In *The Three-Piece Suit and*

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<sup>22</sup> Catherine Richardson, *Clothing Culture, 1350-1650* (Aldershot: Ashgate, 2004), 8.

<sup>23</sup> Daniel Roche, *The Culture of Clothing: Dress and Fashion in the "Ancien Régime"* (Cambridge: Cambridge University Press, 1994).

<sup>24</sup> Roche, *Culture of Clothing*, 5.

<sup>25</sup> Beverly Lemire, *Fashion's Favourite: The Cotton Trade and the Consumer in Britain, 1660-1800* (Oxford University Press, 1991); Beverly Lemire, *The Force of Fashion in Politics and Society: Global Perspectives from Early Modern to Contemporary Times* (London: Routledge, 2016).

<sup>26</sup> John Styles, *The Dress of the People: Everyday Fashion in Eighteenth-Century England* (New Haven: Yale University Press, 2007).

<sup>27</sup> Evelyn Welch, ed., *Fashioning the Early Modern: Dress, Textiles, and Innovation in Europe, 1500-1800* (Oxford: Oxford University Press, 2017).

*Modern Masculinity: England, 1550-1850*, Kutcha presents a cultural and political history of male clothing and masculinity in the seventeenth and eighteenth centuries.<sup>28</sup> Kutcha asks what led to the “Great Male Renunciation” at the turn of the eighteenth and nineteenth centuries, when men abandoned highly-adorned forms of dress while women did not.<sup>29</sup> Kutcha traces this back to the late seventeenth-century adoption of the three-piece suit in the reign of King Charles II. He argues that the introduction of the three-piece suit coincided with the rise of a new definition of masculinity based on what he calls “inconspicuous consumption”, in which “virtue itself was defined as the absence of display.”<sup>30</sup>

It is interesting that Kutcha makes the Restoration era the time when the key change in English costume occurred, culminating in the renunciation around 1800. Neither Kutcha, nor in fact any of the costume historians discussed above, connect Restoration fashion with Restoration science, but as we have seen, for Shapin, Schaffer, and others, the reign of Charles II was also a key moment in the transformation of scientific method and the definition of who could practice science. What follows, therefore, is an attempt to bring these two fields together.

### *Methodology*

This thesis combines textual analysis of primary and archival sources with the study of museum objects. It firstly combines two literatures, the history of science and the history of costume, to better understand their relationships in early modern England. As such, the thesis draws on cultural history of science and fashion, where cultural history is understood as history that examines the forms of ways of life of a

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<sup>28</sup> David Kuchta, *The Three-Piece Suit and Modern Masculinity: England, 1550-1850* (London: University of California Press, 2002).

<sup>29</sup> John Carl Flugel, *The Psychology of Clothes* (London: Hogarth Press, 1930), 111; see also Joanna Bourke, “The Great Male Renunciation: The Men's Dress Reform Party in Interwar Britain,” *Journal of Design History* 9 (1996): 23-33.

<sup>30</sup> Kuchta, *The Three-Piece Suit and Modern Masculinity*, 5.

particular community in a particular time.<sup>31</sup> Another important approach for this thesis is feminist history. Feminist history has shown that the place of women outside science cannot be taken for granted and reveals that women played significant roles in the production of natural knowledge that had previously been invisible.<sup>32</sup> A study of clothes also needs to take materiality seriously and this thesis draws on a growing body of literature in material history and the history of material culture in science.<sup>33</sup> Historians of science have argued that rather than tell the history of science as a history of free-floating ideas, it is important to recognize that ideas are always embodied in material things. As such, historians have sought to understand better the instruments, books, and sites of scientific inquiry. Accounts of the body such as Shapin's fit into this approach, but it should also take in costume. So this thesis makes use of extant examples of clothing and textiles and also textual and visual representations of clothes to access their materiality. The thesis makes use in particular of the Clothworkers collections in the Victoria and Albert Museum which contains, among other things, a large variety of textiles and garments from the Elizabethan era to the nineteenth century.<sup>34</sup> These are considered in terms of their visual appearance, to explore them as media of ornament and display, and in terms of their shapes, textures, colours and forms of making, which contributed to their meanings for both wearers and those who saw them. Surviving clothes cannot account for all the clothes worn in a given time, or those worn by particular individuals so portraits and visual representations are a critical resource to make use of to capture past fashions and garments. At the same time, portraits are highly

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<sup>31</sup> Peter Dear, "Cultural history of science: An overview with reflections," *Science, Technology and Human Values* 20 (1995): 150-170.

<sup>32</sup> Londa Schiebinger, *Has Feminism Changed Science?* (Cambridge, MA: Harvard University Press, 1999); Londa Schiebinger, ed., *Feminism and the Body* (Oxford: Oxford University Press, 2000).

<sup>33</sup> Jules David Prown, "Mind in Matter: An Introduction to Material Culture Theory and Method," *Winterthur Portfolio* 17 (1982): 1-19; Simon Werrett, "Matter and Facts: Material Culture in the History of Science," in *Material Evidence: Learning from Archaeological Practice*, eds. Robert Chapman and Alison Wylie (New York: Routledge, 2014), 339-352.

<sup>34</sup> Natalie Rothstein, *Silk Designs of the Eighteenth Century: In the Collection of the Victoria and Albert Museum, London, with a Complete Catalogue* (London: V&A, 1990); Avril Hart, Susan North, *Seventeenth and Eighteenth-Century Fashion in Detail* (London: V&A, 2009).

mediated: that is, they do not simply represent ‘the facts’ but portray idealized images or versions of reality collaboratively negotiated by e.g. a patron, an artist, and a sitter or subject, and in the case of the meaning of the work, various audiences.<sup>35</sup>

### *The Structure of the Argument*

This thesis presents a narrative arch in five chapters: the fall from grace of fashion, ornament, and display on the body. It is also the rise of empirical science with a new model for credibility: one that makes little use of fashion. The fall of fashion and the rise of the new model of credibility helped to discredit femininity in knowledge-making. Femininity began to be associated with consumption and display, and seemingly effeminate practices were relegated to the sidelines of knowledge-making.

The first chapter proposes that clothing was an ornament used to display virtue and signal learning in the sixteenth century, often through textiles and accessories showing *naturalia*. The logic of collecting and display that created the cabinets of curiosities also informed the understanding of nature depicted in embroidery or fashioned into jewellery. This Renaissance culture of clothing celebrated adornment and display on both male and female bodies. It was not to last. The second chapter argues that in the seventeenth century, members of the Royal Society, particularly John Evelyn, were complicit in the introduction of the three-piece suit and the notion that men should dress in a sober fashion. Examining the Royal Society’s reaction to Margaret Cavendish, whose dress and philosophy they criticized, the chapter argues that the Royal Society was complicit in positioning ornament and fashion in opposition to the sobriety associated not only with proper masculinity but also proper knowledge-making, since they urged a sobriety and plainness of knowers often analogized to sober and plain dress. The society’s rejection of Margaret

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<sup>35</sup> Joanna Woodall, ed., *Portraiture: Facing the Subject* (Manchester: Manchester University Press, 1997); Ludmilla Jordanova, *The Look of the Past: Visual and Material Evidence In Historical Practice* (Cambridge: Cambridge University Press, 2012); Ludmilla Jordanova, *Defining Features: Scientific and Medical Portraits, 1660-2000* (London: Reaktion, 2000).

Cavendish was not articulated through philosophical disagreements, but by dismissing her as an eccentric woman on account of her appearance and dress.

The third chapter then shows how this opposition became a commonplace in the eighteenth century, as various authors attacked those who engaged in fashionable dress as improper or unreliable thinkers, and allied forms of knowledge they disdained with fashions and fashionability. In an epistemology that valued virtue and virtuosity, excessive and morally deficient attention to fashion and luxury was damaging to the reputation of an individual or group of knowledge makers. Many such accusations were levelled against women.

The final two chapters consider contexts where women asserted their status as knowers of nature through the limited opportunities they were faced with in the eighteenth century. Chapter four is a study of Spitalfields silk designer Anna Maria Garthwaite, who used textile design to express her knowledge of nature, in highly accurate and well-observed renditions of plants and animals on fabrics. Her silks were part of a feminine language of showing: one that rejected the delineation advocated by the men of the Royal Society and continued the tradition of display that was prominent in the Renaissance. Chapter five, finally, examines the Bluestocking circle in London as a community where women manipulated their dress so as to cultivate credit among philosophical networks. The case of Paris salons is used in this chapter to make sense of the bluestockings' sartorial strategies to gain access to knowledge-making. These chapters demonstrate that even if female dress had been demoted from the same level of credibility as male costume in the eighteenth century, women still worked to use it as a means to secure credit and express their knowledge of nature.

## Chapter One:

### The Hardwick Portrait: Dress as a Cabinet of Wonders

Hardwick Hall is home to a full-length portrait in oils of Queen Elizabeth I (1533-1603). (Fig. 1) The portrait was likely commissioned by the woman who constructed the estate, prominent courtier Elizabeth Cavendish, also known as “Bess of Hardwick” (circa 1527-1608). The Queen is dressed sumptuously, standing and turned slightly to the left in an interior setting. The petticoat of her ensemble is particularly striking. It is adorned with birds, beasts, insects, and flowers, both imagined and found in nature. (Fig. 2) If we assume the dress was real, then these animals and plants were likely rendered in embroidery, as was extremely popular in contemporary clothing. Queen Elizabeth used representations of *naturalia* in many of her portraits as symbols of her power. Roses, as the symbol of the Tudor dynasty, often featured prominently in Elizabeth’s portrait costumes, but in this portrait they are accompanied by embroidered daffodils, violets and irises, as well as abundant birds and even sea monsters. What did these assorted natural objects signify? Why were there sea monsters on Elizabeth’s dress?

Historians have long established that portraits of sovereigns were utilised as displays of power. Elizabeth I was a master of self-invention and re-invention, as evidenced by her portraits and the wealth of scholarship surrounding them.<sup>36</sup> Early portraits focussed on her ties to her father, Henry VIII (1491-1547), and the legitimacy of her place in the royal family.<sup>37</sup> During her reign, portraits were used to solidify her place as sovereign and advertise her role as deputy of the Protestant

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<sup>36</sup> Roy Strong, *Gloriana: The Portraits of Queen Elizabeth I* (London: Thames and Hudson, 1987); Roy Strong, *The Cult of Elizabeth: Elizabethan Portraiture and Pageantry* (Berkeley: University of California Press, 1986); Maria Hayward, “The ‘Empresse of Flowers’: The Significance of Floral Imagery in Two Portraits of Elizabeth I at Jesus College, Oxford,” *Costume* 44, no. 1 (June 1, 2010): 20–27; Susan Doran, “Virginité, Divinity and Power: The Portraits of Elizabeth I,” in *The Myth of Elizabeth* (Palgrave, London, 2003), 171–99; Susan Frye, *Elizabeth I: The Competition for Representation* (New York ; Oxford: Oxford University Press, 1993).

<sup>37</sup> Susan Frye, *Pens and Needles: Women’s Textualities in Early Modern England* (Philadelphia: University of Pennsylvania Press, 2010), 42.

God.<sup>38</sup> The queen and her artists developed a visual language using allegory and heraldry. Much of this language involved images of nature, most notably, the Tudor rose symbolising her dynasty.<sup>39</sup>

Surprisingly, the Hardwick portrait has received little academic attention. It is most frequently discussed as an example of the artist Nicholas Hilliard's (1547-1619) "mask of youth" paintings. Art historian and former curator at the National Portrait Gallery Roy Strong wrote many works on Elizabeth I and Tudor culture. His survey of portraits of Elizabeth I, *Gloriana*, was dismissive of the portrait, describing it as an "outmoded" image seeking to depersonalise the Queen by hiding her age.<sup>40</sup> Strong had little to say about the clothing featured in this portrait except to suggest that it featured allegorical symbols of her power or virginity. While there is no doubt that Elizabeth deployed allegorical symbols in portraiture to enhance the message of her divine right, virtue, and magnificence, there is perhaps more to these images of embroidered *naturalia*.

This chapter uses the Hardwick portrait as a way into understanding Renaissance clothing as part of a culture of wonders and curiosities. To make sense of the plants, animals and monstrous creatures on the dress, and why Elizabeth might have worn such a garment (or been depicted as such) requires an exploration of a culture of Renaissance collecting and science which valued the marvellous and the exotic. The first section therefore explores the general contours of this Renaissance culture of emblems and wonders, and the principal institution which made them manifest, the cabinet of curiosities. In cabinets, princes and other elite collectors displayed a world at play, crossing boundaries between art and nature, myth and reality, celebrating ambiguity and uncertainty. During Elizabeth's reign, a plethora of novel natural wonders were imported into England from colonial conquests in the New World, allowing collectors an ever-increasing catalogue of

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<sup>38</sup> Frye, *Elizabeth I: The Competition for Representation*, 13.

<sup>39</sup> Hayward, "The 'Empresse of Flowers,'" 20.

<sup>40</sup> Strong, *Gloriana*, 147.

exotica to acquire.<sup>41</sup> Natural and artificial objects were understood to be imbued with allegorical and mystical meanings, which it was the job of the learned aristocrat to unravel. The second section then argues that textiles and clothing, the adornments of the body, formed an important part of this culture of curiosity. Clothes were a form of display and constituted a canvas on which representations of the same wondrous animals and plants that adorned the cabinets of curiosity might be seen. Elizabeth's dress then comes into focus as one such display. Textiles depicting wonders were a sign of the erudition of their wearers. As aristocracies across Europe became more leisured during the Renaissance, so they took up learning as a pleasing pastime and sign of distinction.<sup>42</sup> Collecting served this "virtuosity", as did the presentation of *naturalia* on the body in clothing and jewellery. A third section explores the connection between scholarship and textiles through the remarkable pattern books of the artisan Thomas Trevelyon (died circa 1616), who worked at the turn of the seventeenth century. Trevelyon looked to the latest works of botany, medicine, and astronomy for visual images to serve as patterns for textiles. This was not simply an aesthetic appreciation but fitted into a culture in which the body was as much a location for displaying knowledge as books were. Finally, the conclusion returns briefly to Elizabeth's dress in the Hardwick portrait to re-read it in light of the previous discussion. The chapter as a whole establishes a distinctive relationship between fashion and natural knowledge in the Elizabethan era that would be challenged profoundly in the seventeenth century.

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<sup>41</sup> Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy*, Studies on the History of Society and Culture; 20 (Berkeley ; London: University of California Press, 1994); Roger Cardinal and John Elsner, *The Cultures of Collecting* (Cambridge, MA: Harvard University Press, 1994); Peter C. Mancall and Daniela Bleichmar, eds., *Collecting Across Cultures: Material Exchanges in the Early Modern Atlantic World*, The Early Modern Americas (Philadelphia, Philadelphia, Pa.: University of Pennsylvania Press, 2011), Giorgio Riello and Anne Gerritsen, eds., *The Global Lives of Things: The Material Culture of Connections in the Early Modern World* (London: Routledge, 2015).

<sup>42</sup> William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture* (Princeton, N.J: Princeton University Press, 1994).



## *Naturalia in Cabinets of Curiosity*

To appreciate how Elizabeth's dress might be seen as a form of display evoking more than just royal power, it is necessary to explore the culture of display in the period of her reign. This section examines the general culture of curiosity in Renaissance Europe, before the next focuses on the particular place of textiles within this culture. In his 1966 book *The Order of Things*, the French philosopher Michel Foucault described the Renaissance as a period fascinated with the "prose of the world."<sup>43</sup> Little distinction was made between words and things, and each thing was imagined as a kind of word filled with the potential for meaning and signification. Scholarship entailed revealing these meanings and the connections that existed between them. William Ashworth Jr., historian of Renaissance science, similarly identified the period as one holding an "emblematic world view" in an essay on the natural history of the Renaissance.<sup>44</sup> Emblems were symbolic images or words that signalled moral meanings, which while defined were quite open-ended, inviting interpretation and connection to other emblems. (Fig. 3) Ashworth proposes that the Renaissance view of nature also saw in the natural world "a complex matrix of seemingly obscure symbols and hidden meanings."<sup>45</sup> Identifying their hidden connections and resemblances provided the basis of natural history, which would "suddenly become clear in a burst of illumination, if only you view [emblems and symbols] through enough different angles."<sup>46</sup>

One of the most widely used emblem books of the Renaissance was *Iconologia*, first published by Cesare Ripa (circa 1560-circa 1622) in 1593.<sup>47</sup> A second

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<sup>43</sup> Michel Foucault, 'The Prose of the World', in *The Order of Things*, Routledge Classics (London: Routledge, 2002), 19-50. See especially 19-27 on "The Four Similitudes."

<sup>44</sup> William B. Ashworth, Jr., "Emblematic Natural History of the Renaissance," in *Cultures of Natural History*, ed. N. Jardine, J. A. Secord, and E. C. Spary (Cambridge: Cambridge University Press, 1996), 17-37.

<sup>45</sup> Ashworth, Jr., "Emblematic Natural History of the Renaissance," 23.

<sup>46</sup> *Ibid.*

<sup>47</sup> Cesare Ripa, *Iconologia di Cesare Ripa* (presso Cristoforo Tomasini, 1645).

edition, published in 1603, included 151 woodcut illustrations whose influence can be traced throughout seventeenth and eighteenth-century art. An English emblem book, *A Choice of Emblems* published in 1586 by poet Geoffrey Whitney (circa 1548-1601), further enriched and expanded the language of emblems in Tudor culture.<sup>48</sup> The need to standardize allegories of images suggests how essential their evocative purpose was. The emblem book portrayed images as a form of communication, to be translated, understood, and used almost as part of the vernacular.

Despite emblem books, the meanings invoked by images were not necessarily static. Rather, a single image could have a variety of meanings interpreted according to context and the viewer's imagination. The contemplation of images - whether visually presented, or invoked through prose, poetry, or song - was considered a pleasurable activity in early modern society.<sup>49</sup> The mind, the eye and the emblem worked together to form meaning. Perhaps even more so than the written word, visual images enjoyed a dynamic function and richness that multiplied throughout mediums and contexts. Allegorical imagery was pervasive in European high culture. Emblems "appeared in monumental painting and sculpture created for the reception halls of royal patrons, the homes of humanist merchants, and for display in the public square."<sup>50</sup> Similarly, emblems were essential components of smaller, private early modern practices: they adorned gifts exchanged between friends, embellished decorative objects, and frontispieces of books. Emblematic language spoke everywhere.

Renaissance naturalists sought to uncover the hidden connections between things and to interpret the emblematic meanings of the natural world. As historian of science Paula Findlen wrote in her 1990 article "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe," natural

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<sup>48</sup> Eleri Lynn, *Tudor Fashion: Dress at Court* (New Haven: Yale University Press, 2017), 90; Geoffrey Whitney, *A Choice of Emblems* (Leyden: Francis Raphelengius, 1586).

<sup>49</sup> Simon Werrett, *Fireworks: Pyrotechnic Arts and Sciences in European History* (Chicago, Ill.: University of Chicago Press, 2010), 5.

<sup>50</sup> Cristelle Louise Baskins and Lisa Rosenthal, *Early Modern Visual Allegory: Embodying Meaning* (Aldershot: Ashgate, 2007), 1.

history consisted of “analogies spun by natural philosophers, which held the fabric of their universe together.”<sup>51</sup> Scholars took pleasure in the hidden connections and blurred boundaries of nature and art in this world, seeing them as “jokes of nature” (*lusus naturae*). As Findlen has shown, amusement was essential to understanding: “Renaissance naturalists considered *lusus naturae* to be the key to an efficacious reading of the book of nature.”<sup>52</sup> Observation was an all-important element of acquiring natural knowledge, and to take joy in the reading of nature’s symbols and similitudes was the optimal way to understand it. Knowledge of curious jokes evoked “wonder” and any object could be a wonder “if only we examine it for a little.”<sup>53</sup>

The principal location for displaying such jokes of nature in the sixteenth century was the “cabinet of curiosities”. (Fig. 4) Long seen as simply an inferior predecessor to the modern museum, in the 1990s the German art historian Horst Bredekamp argued that such cabinets in fact involved a distinctive logic which guided the inclusion of particular kinds of object and forms of exhibition.<sup>54</sup> Following this, historians of science Lorraine Daston and Katherine Park argued in their work *Wonders and the Order of Nature, 1150-1750*, published in 1998, that the category of “wonder” was key not just to the cabinets but to Renaissance science more generally.<sup>55</sup>

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<sup>51</sup> Paula Findlen, “Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe,” *Renaissance Quarterly* 43, no. 2 (1990): 294.

<sup>52</sup> *Ibid.*

<sup>53</sup> Avicenna qtd. in Lorraine J Daston and Katharine Park, *Wonders and the Order of Nature, 1150-1750* (London: Zone Books, 1998), 135.

<sup>54</sup> O. R. Impey and Arthur MacGregor, *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe* (Oxford: Clarendon, 1985); Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art and Technology*, trans. Allison Brown (Princeton: Markus Wiener Publishers, 1995).

<sup>55</sup> Daston and Park, *Wonders and the Order of Nature, 1150-1750*, 136.

Findlen has argued that to best understand the cabinet of curiosities, one must look at the plethora of playful nature and art, the jokes displayed in such collections.<sup>56</sup> Cabinets displayed the marvels of nature and the erudition of the collector. In the cabinet, the aesthetic and the epistemic were inseparable. Nature and art had been considered opposing entities since antiquity, but early moderns combined the two to create visual delights for people to collect, identify, and contemplate. Personified as a woman, Nature was both creator and trickster, like an artisan with a keen sense of humour. Both Nature and artists might sport and joke, to create objects appropriate to the cabinet.

Wonder was a key requirement of objects in the cabinet of curiosities. Wonders or marvels included extraordinary creatures from faraway lands, either taxidermied or represented in illustrations. Many wonders were both emblems and demonstrations of nature's playful inventiveness. Described as "the princess of fruits" by courtier and explorer Walter Raleigh (1552-1618), the South American pineapple was an exotic fruit and an image evoking welcome.<sup>57</sup> Closer to home, everyday herbs or animals could also be included in cabinets of curiosities, chosen for their marvellous properties when used to cure illnesses.

Wonders might possess many curious or paradoxical properties. Coral was evocative because it eluded or played with familiar boundaries and expectations. Natural philosophers were uncertain whether coral was a stone, a plant, or perhaps an animal. In the seventeenth-century natural history work, *A History of the Wonderful Things of Nature*, Polish physician John Johnston (1603-1675) noted that coral, otherwise known as "stone-tree," grew "from a juice that is stony when it grows, under the Sea water: it is a small Tree green and soft, bearing Berries, ... it

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<sup>56</sup> Findlen, "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe," 292.

<sup>57</sup> Kim Sloan, *A New World: England's First View of America* (Chapel Hill: University of North Carolina Press, 2007), 178.

presently grows hard before it is cut.”<sup>58</sup> Coral, according to Johnston, had many reported uses, but not all of them were true: “Southsayers think it avoids dangers. The vulgar thinks it can preserve their Children from Witches. This is superstitious, but certain it is, it will quench thirst, being extreme cold. Tied to the neck, it drives away troublesome dreams, and stills the nightly feares of Children.”<sup>59</sup> The Neopolitan natural magician Gimabattista Della Porta (1535-1615) gave a recipe for “Tincture of Coral” in which coral should be beaten into a powder, “then with a vehement fire turn it into Salt,” and, with additions of salt-peter and Aqua Vitae, the resulting tincture would have a “wonderful virtue.”<sup>60</sup>

Coral thus formed an appropriately marvellous substance worthy of display in a cabinet of curiosities. It was displayed either carved into shapes or in a raw state. The *Kunstkammer* of Schloss Ambras in Innsbruck, created by Holy Roman Emperor Ferdinand II (1578-1637) in sixteenth-century Austria, included coral exhibits. A master artisan displayed his or her skill by rendering the natural forms of coral into a sculpture of Hercules battling the Hydra. (Fig. 5) The natural bends and branch-like qualities of coral gave Hercules, and especially the Hydra, a dynamic writhing quality. The artisan rendered the connection of the Hydra and the sea by using a wondrous material of the ocean. Coral branches were also used to suggest trees. Another object in Schloss Ambras was a coral mountain or *Korallenberg* constructed of natural coral on a plaster mountain with a castle and a house.<sup>61</sup> (Fig. 6) The branching form of the coral echoed the form of trees, though they were a vibrant red. Coral in its natural state was also used, not as an illusion, but to decorate objects. The red winding branches were also marvellous enough on their own to augment other wonders. The Schloss Ambras cabinet contained an ostrich egg fitted into a stand decorated with coral. (Fig. 7)

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<sup>58</sup> John Johnston, *A History of the Wonderful Things of Nature* (London: John Streater, 1657), 101. “John Johnston” is an anglicised name; the original Polish name was Jan Jonston, but publications also used the latin “Joannes Jonstonus.”

<sup>59</sup> John Jonston, *A History of the Wonderful Things of Nature*, 101.

<sup>60</sup> John Baptista Della Porta, *Natural Magick* (London: R. Gaywood, 1658), 275.

<sup>61</sup> Seipel, *Meisterwerke Der Sammlungen Schloss Ambras*, (Milan: Skira, 2008), 104.

Another feature of objects in the cabinet of curiosities was a blending of natural and artificial elements into a single item to create a scene or sculpture. Such items played on the boundary between art and nature. Numerous items featured scenes painted onto backgrounds of wood or stones in which the form of the painted scene was suggested by the grain of the wood or the veins in the stones. The Schloss Ambras collection included a painted alabaster slab, in which the winding colours naturally found in alabaster suggest the raging seas and jagged rocks in a depiction of Perseus rescuing Andromeda. (Fig. 8) Such items created an illusion from the texture of a material, but others used one material to mimick another's form. Marble fruit, for example, appeared as natural fruit, a soft substance, but was made of the hardest stone. An example in Schloss Ambras consisted of two apples and one pear, similar to real fruit in size, shape, and colour. (Fig. 9) Because they are made of marble, their colours change slightly, including streaks of ripe red and brown bruises, immitating the appearance of real fruit. The creator of these pieces has even gone to the trouble of creating sections where it appears the pear is overripe.

Other exhibits in the cabinet of curiosities played on the boundary of nature and art, consisting of natural objects enhanced and elaborated through craft and artisanry. A collection of crystals might be sculpted into cities and mountains.<sup>62</sup> A handstein, or hand stone, sculpture could be made to represent the scene of Christ's crucifixion at Golgotha. (Fig. 10) Hand stones were products of the mining of precious minerals and ores, and they could be constructed together to create a landscape. The hand-sized stones would stand in for large boulders, the illusion enhanced by adding little buildings made from precious materials. The Golgotha scene included figures of miners, contemporary to the time the sculpture was created, which connected the artisan's era to the time of Jesus, whose crucifixion tops the display. Another scene in the Schloss Ambras collection looked as if it might have been made with handsteins, but it was not.<sup>63</sup> Appearing to be constructed on the surface of the rock, this artificial mountain mimicked the texture of the Golgotha

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<sup>62</sup> Wilfried Seipel, *Meisterwerke Der Sammlungen Schloss Ambras*, 82.

<sup>63</sup> Seipel, *Meisterwerke Der Sammlungen Schloss Ambras*, 84.

scene, further playing with the categories of natural and artificial. In other cases, natural objects such as ivory or rhinoceros horn were carved to represent the animals they originated from.<sup>64</sup> Alternatively, material from one animal was used to represent another, in the use of ivory to depict a mythical phoenix. (Fig. 11)

Cabinets of curiosity and the objects they contained thus followed a playful logic of evoking wonder by crossing the boundaries of nature and art, the exotic and mundane, reality and illusion, through an ingenious use of materials. As ecofeminist philosopher and historian of science Carolyn Merchant has shown in her 1989 book *The Death of Nature: Women, Ecology, and the Scientific Revolution*, another important boundary played with was that of gender.<sup>65</sup> Categories of male and female were blurred and crossed in the practice of collecting and in the practice of natural philosophy. Findlen identified the snail as a *lusus naturae* because,

its sexual ambiguity, as seen first in the debates over its ability to generate spontaneously and later in the discovery of its hermaphroditism, was a physiological manifestation of the occult properties of *ludere* and of nature's ability to threaten man's rigid perceptions of normality and abnormality.<sup>66</sup>

The value placed on ambiguity and mixing of the genders in courtly cabinets was reflected in another practice highly prized at court, namely alchemy. Merchant points out that the creative process in alchemical discoveries was couched in terms of a procreative cooperation between genders.<sup>67</sup> Alchemical and intellectual fecundity were understood to result from “the unification of male and female principles,” the

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<sup>64</sup> Seipel, *Meisterwerke Der Sammlungen Schloss Ambras*, 32.

<sup>65</sup> Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: HarperCollins, 1989).

<sup>66</sup> Findlen, “Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe,” 305.

<sup>67</sup> Merchant, *The Death of Nature*, 18-19.

male alchemist cooperating with a female nature in a hermaphrotitic, generative process.<sup>68</sup>

While cabinets proliferated in the Italian and German lands, they also made their way to the England of Elizabeth I. As historian Ken Arnold has shown in his 2006 book *Cabinets for the Curious: Looking Back at Early English Museums*, visitors to London in Elizabeth's reign marvelled at wonders ranging from Chinese boxes to whale bones.<sup>69</sup> A visitor in 1599 recorded that the politician Sir Walter Cope (1553-1614) kept a room with objects such as an African charm, a unicorn horn, and an Indian canoe at his London home.<sup>70</sup> In 1594, a young Francis Bacon (1561-1625) penned the play *Gesta Grayorum* for the Shrovetide revels of Gray's Inn, where he proposed that princes should have,

a goodly huge cabinet, wherein whatsoever the hand of man, by exquisite art or engine, hath made rare in stuff, form, or motion, whatsoever singularity, chance and the shuffle of things hath produced, whatsoever nature hath wrought in things that want life, and may be kept, shall be sorted and included.<sup>71</sup>

Such cabinets displayed wonders and were equally displays of the power and knowledge of their owners. In *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture*, historian of early modern science William Eamon identified the Elizabethan era with the rise of *virtuosity*, an aristocratic sensibility to cultivate learning as a means to gain distinction from the "vulgar" or

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<sup>68</sup> Ibid., 19.

<sup>69</sup> See Ken Arnold, *Cabinets for the Curious: Looking Back at Early English Museums* (London: Ashgate, 2006), 13.

<sup>70</sup> See Marjorie Swann, *Curiosities and Texts: The Culture of Collecting in Early Modern England* (University of Pennsylvania Press, 2010), 3.

<sup>71</sup> William Canning, ed., *Gesta Grayorum, or, The History of the High and Mighty Prince of Purpoole* (London, 1688), 34-35.



common people.<sup>72</sup> As state service among the aristocracy declined, so aristocratic leisure increased and with it a desire to develop and display a pleasing form of education as a type of social ornament. An aristocrat or prince displaying learning would, as the courtly writer Henry Peacham (1578-circa 1644) put it, “winneth to himselfe both love and admiration; heightening with skill his Image to the life, making it pretious, and lasting to posteritie.”<sup>73</sup> To collect wondrous items in a cabinet of curiosities served exactly this cultivation of virtuosity. In *Gesta Greyorum*, Bacon thus supposed that cabinets would lead people to “wonder at the prince’s reason and knowledge” so that “when all other miracles and wonders shall cease, by reason that you shall have discovered their natural causes, your self shall be left the only miracle and wonder of the world.”<sup>74</sup>

### *Naturalia in Textiles*

Elizabeth’s dress in the Hardwick portrait might be viewed as another wonder in the culture of curiosities growing in London during her reign. Having established the broad features of this culture in the previous section, this following section explores the connection of textiles and clothing to the cabinet of curiosity and their role as a signifier of virtuosity and power.

Cabinets of curiosities often included textiles and accessories in their collections, while wardrobes similarly included curiosities and marvels as accessories or adornment on clothing. Historian and anthropologist Mariana Françoza has explored the complex role of Brazilian featherwork in European collections of exotic

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<sup>72</sup> William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture* (Princeton, NJ: Princeton University Press, 1994), 302-314.

<sup>73</sup> Henry Peacham, qtd. in Eamon, *Science and the Secrets of Nature*, 303.

<sup>74</sup> Canning, ed., *Gesta Grayorum*, 34-35.

marvels.<sup>75</sup> Françaço described the myriad forms of indigenous feather-decorated objects found in inventories in cabinets of curiosities: “capas, headdresses, bonnets, bracelets, knee and ankle ornaments.”<sup>76</sup> Feather ornament was not restricted to these collections, rather, they were worn as luxurious decoration by both men and women in the Tudor court. The clothing inventory of Elizabeth’s father, Henry VIII, revealed “elaborate feathers of ostrich, heron and pelican dyed yellow, purple, red, green, russet and blue.”<sup>77</sup> These would be incorporated into women’s fans and hats for both men and women. Displaying and collecting curiosities on the princely body reflected the practices of displaying and collecting curiosities in princely collections.

That marvels might be displayed on the body in addition to within cabinets is an example of what historian of science Benjamin Schmidt has described as a “*transmedia* quality” that was fundamental to the popularity of exotic objects in Renaissance Europe.<sup>78</sup> Early modern collectors of curiosities sought out not only specimens themselves but also representations of them in books, prints, maps, and other media. A painting might reappear as a frontispiece, as a decoration on ceramics, as a design on furniture, as a tapestry, or carved into the wooden front of a cabinet of curiosities. Textiles were one such medium that could carry images of the wondrous or exotic and thus serve to amuse and educate, similar to a specimen in a cabinet of curiosities. Images of exotic flowers or plants or rare insects could appear

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<sup>75</sup> Mariana Françaço, “Beyond the Kunstkammer: Brazilian Featherwork in Early Modern Europe,” in *The Global Lives of Things: The Material Culture of Connections in the Early Modern World*, ed. Maxine Berg, Giorgio Riello, and Anne Gerritsen (London: Routledge, 2015), 105-127.

<sup>76</sup> Françaço, 107.

<sup>77</sup> Lynn, *Tudor Fashion: Dress at Court*, 38.

<sup>78</sup> Benjamin Schmidt, *Inventing Exoticism: Geography, Globalism, and Europe's Early Modern World* (Philadelphia: University of Pennsylvania Press, 2015), 294-307; Benjamin Schmidt, “Collecting Global Icons: The Case of the Exotic Parasol,” in *Collecting Across Cultures: Material Exchanges in the Early Modern Atlantic World*, ed. Daniela Bleichmar and Mancall (Philadelphia: University of Pennsylvania Press, 2011), pgs. 31–57; Benjamin Schmidt, “The Limits of Language and the Challenges of Exotica: Pictures, Words, and Global Knowledge in Early Modern Europe,” in *Translating Knowledge in the Early Modern Low Countries*, ed. Harold John Cook (London: LIT, 2013), 79–105.

as wonders, but now exhibited on the body, in the form of clothing, rather than in a cabinet.

In Renaissance culture, an image was imbued with “sensual and discursive powers” that inspired an entire element of visual and spoken language revealed only through contemplation of the connections between image and idea.<sup>79</sup> Emblem books carried explanations of the meanings of plants and they might appear in popular plays and poetry. Flowers could speak volumes, as evocatively evidenced in Ophelia’s dying monologue in Shakespeare’s *Hamlet*. “There’s rosemary, that’s for remembrance. Pray you, love, remember,” she says, “And there is pansies, that’s for thoughts.” Much has been made of Ophelia’s choice of flowers, for in her final gifts to the other characters is a message of helplessness, sorrow and regret.<sup>80</sup> The language of flowers was part of the emblematic culture discussed by William Ashworth, as noted above.<sup>81</sup> Emblems functioned in textile imagery in the same evocative way that they functioned in Shakespeare’s language.

As in a still-life painting or stone fruit or crystal mountains, textiles might create the illusion of real plants and animals using an artificial material. In a 1606 play, *Sir Giles Goosecap*, one character remarked on an embroiderer so skilful that he,

will work you any flower to the life, as like it as if it grew in the very place, and being a delicate perfumer, he will give it to you his perfect and natural savour... he will make you flies and worms of all sorts, most liuely, and is now working a whole bed embrodred with nothing but glow-wormes; whose

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<sup>79</sup> Baskins and Rosenthal, *Early Modern Visual Allegory: Embodying Meaning*, 3.

<sup>80</sup> William Shakespeare, *Hamlet*, ed. Burton Raffel, *The Annotated Shakespeare* (New Haven: Yale University Press, 2003), 162-165.

<sup>81</sup> Ashworth, Jr., “Emblematic Natural History of the Renaissance,” 17-37.

lightes has so perfectly done, that you may goe to bed in the chamber doe anything in the chamber.<sup>82</sup>

The skilled embroiderer had the power to create images that could evoke nature. When done successfully, the textile image could transcend the limits of thread to mimic the properties of the actual natural object it resembled. In practice, textiles might imitate but not try to exactly mimic natural objects. The Victoria and Albert collection holds several purses from the sixteenth and seventeenth centuries made to look like grapes. The best preserved of them, an 8.3 cm by 5 cm bag, is from the first half of the seventeenth century and would have belonged to either a man or a woman. (Fig. 12) The grapes were embroidered in blue and red silk and were given the illusion of depth by the use of light and dark threads to create shading. The top of the embroidered grapes includes a large green vine leaf, and the bag is held together by plaited silk drawstrings that end with three more small embroidered grapes. Renaissance courtiers might have known the story related by ancient historian Pliny the Elder of Zeuxis the artist who rendered grapes so perfect in paint that birds tried to peck at them.<sup>83</sup> This purse was not made to perfectly fool the viewer into thinking they are real, however, they are emblematic of real grapes. The early modern man or woman wore purses such as this as an evocative accessory.

Extant examples of Elizabethan and Jacobean clothing demonstrate how the emblematic implications of a plant or animal could be deployed in clothing. Winding vines resembling strawberries of various colours feature heavily in many extant examples preserved in the Victoria and Albert collections, such as a man's nightcap from circa 1600 and a women's jacket dating from 1620-1640. (Figs. 13-14) The

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<sup>82</sup> George Chapman, *Sir Gyles Goosecappe: Knight. A Comedie Presented by the Chil. of the Chappell* (London: Printed by John Windet for Edward Blunt, 1606).

<sup>83</sup> See Daston and Park, *Wonders and the Order of Nature*, 284.

patterns are reminiscent of an emblem Shakespeare included in his description of Othello's wife Desdemona's embroidered handkerchief: it was "spotted with strawberries," symbolising her blamelessness despite the slander that led to her death.<sup>84</sup> Indeed, historian Lawrence J. Ross pointed out that strawberries would be a useful emblematic image to deploy in the supposed proof of Desdemona's infidelity as they had associations with incorruptibility and purity.<sup>85</sup> In the early modern garden, plants were placed strategically so that they could be properly influenced by their neighbours. Incorrect placement could render a plant corrupted by its neighbour, but not the strawberry. Instead it could be "exposed to every sort of contamination, yet no evil companionship could taint its purity."<sup>86</sup> In the case of the strawberry, the botanical properties of the natural marvel informed the emblematic meaning of the image.

The emblematic function of the strawberry as a symbol of incorruptibility was further echoed in medicinal uses of the plant. Strawberries were used frequently not only in gardens and kitchens but also in medicines for a wide variety of complaints. They could be distilled into strawberry-water tinctures, or their leaves and roots could be added to herbal and butter ointments "for all Aches which come from cold

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<sup>84</sup> William Shakespeare, *Othello* (Courier Corporation, 2012), 53.

<sup>85</sup> Lawrence J. Ross, "The Meaning of Strawberries in Shakespeare," *Studies in the Renaissance* 7 (1960): 227.

<sup>86</sup> Prothero qtd. in Ross, "The Meaning of Strawberries in Shakespeare," 227.

causes, shrunken Sinewes, strains in man or beast.”<sup>87</sup> These marvellous healing properties echoed the strawberry’s emblematic property of resistance to contamination: it could possibly purify the body of ailment-inducing corruption. One early modern remedy suggests bathing in a hot infusion of “Mallow leaves, Violet leaves, Endive, Motherwort, Mugwort, Rose leaves, Lettice, Cammomill, Bay leaves” and after cooling down eating strawberries to “clear the body and purifie the blood.”<sup>88</sup> Though wearing strawberries was not necessarily thought to materially ward away illness, its popularity in surviving embroidery demonstrated the relationship between worn emblems and marvellous properties.

Emblematic plants and animals could be combined together to create elaborate patterns on clothing. The Victoria and Albert Museum’s collections hold an Elizabethan satin petticoat panel embroidered with a whimsical design featuring lions, exotic birds, flowers, and insects. (Fig. 15) The flowers depicted appear to be pansies, violets, and roses, among other more abstract floral designs. The forefront shows a lion, perhaps depicted on a hill. The very bottom of the panel shows two herons or cranes with gracefully bowed heads. Just to the left, bright green and blue birds may be seen, similar to the exotic, tropical birds that were being discovered in the new world and which might be included in cabinets of curiosity. In the sky, delicate insects fly, and spiders spin webs in thin air. The spiders are emblems of Aracne, the mythological patron of weaving. Aracne was so skilled in weaving that Athena, goddess of wisdom, became jealous and, after a contest of skills, turned Aracne into a spider to condemn her to weave forever. In the early modern era, Aracne came to symbolise the diligence of skilled weavers and embroiderers. In this

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<sup>87</sup> *Queen Elizabeth’s Closset Of Physical Secrets* (London: Will Sheares, 1656), 34.

<sup>88</sup> *Queen Elizabeth’s Closset Of Physical Secrets*, 134-135.

petticoat, the emblem of Aracne drew attention to the act of weaving, sewing, and embroidering, which suggests to the viewer the artificial creation of these images of nature. In this respect, the textile echoed other curious artefacts. Much as the presence of miners drew attention to the process of making a handstein, the spider weaving drew attention to the process of making the petticoat. This was a playful trait of wondrous displays that points to the artificial quality of the images depicted in either cabinets of curiosities or textiles. It is possible that Elizabeth I herself deployed this playful reference to the artificiality of clothing through the emblem of Aracne, the image of a spider. In existing records of Elizabeth's wardrobe inventory, one entry notes a white satin garment embroidered with spiders, flies and roundels with cobwebs.<sup>89</sup> This is not the only instance of the motifs of spiders in her wardrobe. One courtier recorded that Elizabeth "wore a long filigree lace shawl, on which sat a hideous large black spider that looked as if it were natural and alive. Many might have been deceived by it."<sup>90</sup> The spider brooch not only drew attention to the queen's sumptuous textiles, but also may have playfully deceived her onlookers, much like the marble fruit discussed above.

Other elements of the Victoria and Albert Museum petticoat recall the *lusus naturae*. Just as natural shapes and artificial shapes were combined to create scenes out of the unique characteristics of both nature and art, this panel used embroidery to create a scene reminiscent of a cityscape or castle. Silk and silver gilt threads became animals, flowers, and insects, which were then combined to construct a tower-like shape in the centre of the panel. A face of a cherub, a mythical creature much like the sea dragons in Elizabeth's skirt, was placed in the centre of the tower, flanked by a squirrel and a red bird, creatures more grounded in reality. Just as the boundary between architecture and nature was blended, fact and fiction play in this whimsical, delicate embroidery. On this panel, nature and textile could play with each other to construct artificial images similar to those of the cabinet of curiosities. Elizabeth I's petticoat in the Hardwick Portrait is no longer extant, but the many

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<sup>89</sup> 'Inventory of the Wardrobe of Robes, 1600' (1600), Fol. 50r no 59, Stowe MS 557, British Library.

<sup>90</sup> Victor Von Klarwill, *Queen Elizabeth and some foreigners*, Bodley Head, 1928.

layers of display of nature, emblems, and wonders in the Victoria and Albert's embroidered petticoat may give an indication of what logic was implied in the display of the petticoat in the portrait. Furthermore, just as objects in the cabinet served as expressions of virtuosity and knowledge of nature, so these insects, plants and animals could emblemize the learning of those who wore them. As Bacon said of cabinets, dress might lead those who witnessed it to "wonder at the prince's reason and knowledge."<sup>91</sup>

### *Naturalia in Jewellery*

Weaving plants and animals into clothing was not the only way in which natural knowledge could be displayed on the body. Precious stones and jewels were not only a common feature of cabinets of curiosity but were also worn on the body. Rudolf II's cabinet in Prague included items made of jasper, agate, gold, and garnet, not to mention "a large eagle made out of diamonds."<sup>92</sup> Recently, Natasha Awais-Dean has demonstrated that in the Tudor court, elaborate jewellery was ubiquitous not just on women's bodies, but especially on men's.<sup>93</sup> Elizabethan court jewellery was especially ornate, and included earrings, intricate pendants, and rings worn by both men and women. In addition, men and women's clothing would be adorned with precious gems and pearls. Daston and Park noted that gems were objects of connoisseurship that had been used to indicate a collector's expertise as early as the high middle ages.<sup>94</sup> This section will demonstrate that jewellery functioned as a vehicle for the display of marvels just as precious gems and metals did in princely cabinets of curiosities.

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<sup>91</sup> William Canning, ed., *Gesta Grayorum*, 34-35.

<sup>92</sup> Beket Bukovinska, "The Known and Unknown Kunstkammer of Rudolf II," in *Collection – Laboratory – Theater: Scenes of Knowledge in the 17th Century*, Helmar Schramm, Ludgar Schwarte, Jan Lazardig, eds. (Berlin; New York: Walter de Gruyter, 2005), 199-227; 223-224.

<sup>93</sup> Natasha Awais-Dean, *Bejewelled: Men and Jewellery in Tudor and Jacobean England*, British Museum Research Publications, No. 209 (London: The British Museum, 2017).

<sup>94</sup> Daston and Park, *Wonders and the Order of Nature, 1150-1750*, 87.



Different gems and stones were held to have different magical and healing powers and as such were considered wonders. A ring in the Victoria and Albert Museum carries an arrangement of wolf's teeth. (Fig. 16) A recipe from 1639 recommended using a wolf's tooth to cut a child's gums when teething to help the new tooth come through, "To make children's teeth grow with little pain. Hang about the neck a wolf's tooth that the child may rub the gums therewith."<sup>95</sup> In *A Description of the Nature of Four-Footed Beasts*, John Johnston described wolf's teeth, much like those in the ring, as "sharp, and uneven, and round."<sup>96</sup> He noted that wolves maintained sharp teeth by eating herbs, "especially Dracontium."<sup>97</sup> Johnston listed many parts of wolves that were "very usefull in Physick," noting that "the tooth takes away the swelling of the gums, making way for the teeth to come with ease."<sup>98</sup>

Another dangerous predator that could be worn on the hand in the form of a ring was the lion, as seen by a ring made to represent a roaring lion with emerald eyes. (Fig. 17) Lions featured in alchemical works and appeared in natural philosophical compendiums of animals as a noble and intelligent species. Johnston reported that they "could tell noble blood from base."<sup>99</sup> Lions had the quality of mercy, associated with kingliness. Lions were "mild to them that yeeld. He will scase hurt those that lye down."<sup>100</sup> Though a lion would attack a man, he reportedly would not hurt more vulnerable humans: "he will seaze on men, rather then women, but not upon Children unlesse he be extream hungry." Lions were said to seek vengeance when it was righteous: "if any man throw a stone or dart at the Lyon, and misse him, or hurt him but little he will rather threaten him than kill him: if he do revenge, he

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<sup>95</sup> Manuscript recipe book of Katherine Packer, 1639, quoted in Patricia M. Crawford, Laura Gowing, *Women's Worlds in Seventeenth-century England* (London: Routledge, 200), 203.

<sup>96</sup> John Johnston, *A Description of the Nature of Four-Footed Beasts* (Amsterdam, 1678).

<sup>97</sup> Johnston, *A Description of the Nature of Four-Footed Beasts*, 71.

<sup>98</sup> Ibid.

<sup>99</sup> Johnston, *A History of the Wonderful Things of Nature*, 223.

<sup>100</sup> Ibid., 223.

will do no more hurt, than he received.”<sup>101</sup> Lions, like Tudor roses, were an emblem of royalty and a frequent decoration in heraldry and attire. A textile object embroidered with a crowned lion and griffin, such as a silver-gilt pouch in the Victoria and Albert collection, signified the possessor’s loyalty to the noble monarch. (Fig. 18)

Coral, which adorned so many cabinets of curiosity, appeared frequently in jewellery. Some of coral’s marvellous properties involved the wearing of coral by men or women. According to Johnston, “If a Man weare it, it will be very red: but pale, if a woman use it. The fuliginous Spirits in a woman are the cause of it, and the faint heat in Coral. In men the naturall heat is strong and evaporates.”<sup>102</sup> Coral reacted to the heat (or lack thereof), in the bodies of the men and women it adorned, making its interaction with the human form a wonder in and of itself. Coral would be carved into intricate filigreed designs, used as beads, or worn as pendants.<sup>103</sup> Maritime marvels were some of the most frequent precious materials in jewellery.

Pendants made with “baroque” or irregular pearls were another form of jewellery evocative of the *lusus naturae*. Using their unusual form to mimic some part of a figure, usually of a ship or an animal, these pearls were often featured in the centre of an elaborately jewelled and enamelled pendant. Pendants could be worn on a chain or affixed to the breast of a garment. These baroque pearls and the pendants made from them echo the cabinet of curiosity’s melding of artificial and natural substances and shapes to create an image or sculpture. An example from the late sixteenth century in the Victoria and Albert Museum depicts a salamander whose body is made up of a pearl. (Fig. 19) The salamander held a particular fascination for early modern scholars. They were inextricably linked to the wondrous qualities of fire.<sup>104</sup> “The greatest matter in the Salamander to be inquired after,” according to

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<sup>101</sup> Ibid.

<sup>102</sup> Johnston, *A History of the Wonderful Things of Nature*, 101.

<sup>103</sup> Ian Wardropper, “Between Art and Nature: Jewelry in the Renaissance,” *Art Institute of Chicago Museum Studies* 25, no. 2 (2000): 13.

<sup>104</sup> Johnston, *A History of the Wonderful Things of Nature*, 37.

cleric and naturalist Edward Topsell (1572-1625) in his 1608 bestiary *A Historie of Serpents*, “is whether it can live and be nourished by and in the fire, or whether it can passe thorough the fire without any harme, or quench and put out the same.”<sup>105</sup> The salamander was an emblematic beast, raising the question as to whether or not a living animal could survive in fire. If the Salamander could avoid incineration, might not the bodies of sinners endure the eternal flames of hell, persisting so that they could burn forever? Topsell explained the theory about why a salamander would not burn:

Some doe affirme that it is as cold as Ise, and that it therefore quencheth heate or fire like a peece of Ise, which if it be true, then is the old phylosophicall Maxime utterly false, namely, that all living creatures are hot and moyst, beeing compared to creatures without life and sence, for there is not any dead or sencelesse body that so quencheth fire as the Ise doth.<sup>106</sup>

The mysterious properties of salamanders had implications for the system of humours and the relationship of heat to life. Wearing this salamander pendant would be an invitation to contemplate these mysteries. Topsell described salamanders as “having a pale white belly,” which can be seen in this pearl. For all its terrible implications of burning, the salamander was also considered wondrous in appearance. Topsell described “one part of their skinne exceeding blacke, the other yellow like Verdigreace, both of them very splendent and glistering... having upon it many little spots like eyes: And from hence it commeth to be called a Stellion, or *Animal stellatum*, a creature full of starres.”<sup>107</sup> An *Animal Stellatum* was the perfect form to translate into glistening jewelled pendants.

The wondrous provenance of pearls may have suggested a nautical theme to some artists that may be seen in another pendant from the British Museum. (Fig. 20) This pendant used an irregular pearl to form the body of a Hippocampus, or Sea Horse, a

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<sup>105</sup> Edward Topsell, *The Historie of Serpents* (London: William Jaggard, 1608).

<sup>106</sup> Topsell, *The Historie of Serpents*, 218.

<sup>107</sup> *Ibid.*, 217-218.

semi-mythological sea monster much like those found on Elizabeth I's petticoat in the Hardwick Portrait. The hippocampus was described by Johnston in *A History of the Wonderful Things of Nature* as being found in a "River of Mauretania," and having "a head like a horse, and a snout and a Mane; the rest of the body is rough with grisly indentures. On the back, it hath a tail with a fin, that is four square and pliable."<sup>108</sup> These features, according to Johnstone, meant it was "a fish not to be eaten."<sup>109</sup> The hippocampus pendant therefore was a precious pearl, itself a marvel, wrought into a representation of another maritime marvel, jesting about the abundance of wonders to be found in the sea.

To wear pendants with baroque pearls was to wear an object in which nature and artistry combined to create an image of wonder. Wearing pendants followed the logic of the cabinets of curiosities. Other materials prominent in the cabinets were used to fashion pendants. The Victoria and Albert Museum holds the Danny Jewel, a pendant from about 1550 in the shape of a ship, which was made from what was alleged to be a fragment of unicorn's horn. (Fig. 21) Unicorns, believed at the time to be real creatures attested in many trusted sources, were described as being "tailed like a Boar, grins and snarls like a Lyon, headed like an Hart, footed like an Elephant, furnisht with one onely horn, and that a black one, two cubits long, standing in the midst of his fore-head."<sup>110</sup> The horn was the most marvellous aspect of this animal. It was "so sharp and strong, that what ever he strikes at, he shatters, or pierces it through."<sup>111</sup> Unicorn horns were often to be found in cabinets of curiosity. Johnston noted that, "the Horn is shewen in many places; the most famous are, S. *Denys* in France, Venetia, Spain, Utrecht, Helvetia, Denmark, Hampton-Court in England, Windsor, and the Gedansian of Empiricus. That at S. *Denys* is of greatest note, being rugged, not polished, blackish, and nearest those Ancients describe."<sup>112</sup> He supposed the horns to have come from faraway lands: "they are said to be found in the Arabian

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<sup>108</sup>Johnston, *A History of the Wonderful Things of Nature*, 254.

<sup>109</sup> Ibid.

<sup>110</sup> Johnston, *A History of the Wonderful Things of Nature*, 19-20.

<sup>111</sup> Ibid., 19.

<sup>112</sup> Ibid., 19-20.

Deserts, and so have been seen there by Merchants; as also between the Cape of Good-Hope.”<sup>113</sup> Being able to wear an exotic creature’s horn was similar to displaying a similar marvel in a cabinet of curiosities. The pendant’s small scale allowed the wearer to display a piece of natural wonder on his or her person.

Pendants, in addition to being worn and displayed on the body, could also be displayed in portraits, another example of transmedia similar to that outlined by Schmidt above.<sup>114</sup> Sitters in Renaissance portraiture were painted wearing pendants created out of wonderful objects and portraying wonderful images. In 1575, Elizabeth I was portrayed in two paintings attributed to Nicholas Hilliard (the same artist to whom the Hardwick Portrait is attributed) in which she is depicted wearing elaborate pendants. The two portraits are called “the Phoenix portrait” and “the Pelican portrait” by scholars because the pendants depict these two birds.<sup>115</sup> One of Elizabeth’s jewelled pendants was in the shape of a phoenix rising from ashes constructed from a ruby, garnet, or similarly red precious gem.<sup>116</sup> The Pelican portrait shows an enamelled white bird piercing its own chest to feed its young with its own blood. (Fig. 22) This emblem signified sacrifice for others under one’s care, namely the sacrifice by Christ on the cross.<sup>117</sup> Elizabeth used this to suggest both her godly connection and also her own care for the people of England.

### *Books of Nature to Textiles of Naturalia*

Before returning to the Hardwick Portrait to examine the particulars of Elizabeth’s dress, this section will deepen the connections between early modern

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<sup>113</sup> Johnston, *A Description of the Nature of Four Footed Beasts*, 19.

<sup>114</sup> Benjamin Schmidt, “Collecting Global Icons: The Case of the Exotic Parasol,” 31–57.

<sup>115</sup> Associated with Nicholas Hilliard, *The Phoenix Portrait of Elizabeth I*, oil on panel, circa 1575, National Portrait Gallery, NPG 190; associated with Nicholas Hilliard, *The Pelican Portrait of Elizabeth I*, Oil on canvas, circa 1575. Walker Art Gallery, Liverpool, 2994.

<sup>116</sup> Lynn, *Tudor Fashion*, 52.

<sup>117</sup> David Howarth, *Images of Rule: Art and Politics in the English Renaissance, 1485-1649* (University of California Press, 1997), 104.

knowledge of nature and the representation of nature on clothing. It should be apparent by now that textiles representing plants, animals, and insects, real and mythical, served as both emblems and wonders, evocative of the complex meanings and powers of the natural world, and of the learning and virtuosity of their wearers. The latter becomes even clearer if we consider the relationship between textiles and writing in this period. In “On Seeing Me Write:’ Inscription Devices in the South Seas,” Simon Schaffer discussed tattoos as a form of knowledge written on the skin.<sup>118</sup> A similar association between knowledge and the surface of the body can be traced by understanding the importation of printed natural knowledge into the designs of artisanal embroidery.

At a time when the boundaries of words and things were unclear, clothing could be a form of writing and writing considered a kind of textile. Hence the remarkable words of the dramatist Jasper Mayne in a play of 1639, which referred to the practice of embroidering biblical quotations on clothing,

My smock sleeves have such holy embroideries,  
And are all so learned, that I fear in time  
All my apparell will be quoted by  
Some pure instructor.<sup>119</sup>

Making natural knowledge and making clothes were related processes. Books were made with paper produced by recycling rags.<sup>120</sup> This section will demonstrate that books, specifically those filled with natural knowledges and images of *naturalia*, could be used to inspire embroidered adornment on textiles, thereby transcribing the books’ illustrations onto early modern bodies.

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<sup>118</sup> Simon Schaffer, “On Seeing Me Write:’ Inscription Devices in the South Seas,” *Representations* 97, no. 1 (2007): 90–122.

<sup>119</sup> Jasper Mayne, *City Match*, II.ii.227.

<sup>120</sup> Simon Werrett, *Thrifty Science: Making the Most of Materials in the History of Experiment* (London: University of Chicago Press, 2019).

Clothes were often decorated with images of plants and animals taken from recent learned literature. An excellent example of this practice may be found in the works of Thomas Trevelyon. A manuscript in the Special Collections of University College London recently gained academic attention when it was discovered to be a third, previously unknown work created by Trevelyon.<sup>121</sup> Trevelyon's three manuscripts, of which MS Ogden 24 in UCL is the earliest, are collections of images illustrating a variety of proverbs, myths, histories, and natural knowledge. They date from the early years of Stuart England; MS Ogden 24 is believed to be from 1603.

The Trevelyon Miscellany of the Folger Shakespeare Library dates to 1608, and the final manuscript, Trevelyon's Great Book was written in 1616.<sup>122</sup> Each of Trevelyon's manuscripts contained extensive embroidery patterns, which Wolfe identified as "intended for blackwork (for lightweight pillow covers, coifs, and shirts); heavier colored-thread embroidery where each element is completely filled in; or tent stitchwork, which imitates the look of more expensive woven tapestry."<sup>123</sup> Blackwork was one of the most common style of decoration for undergarments of both men and women, and would often incorporate botanical images. (Fig. 23) Each of the three manuscripts contains a wealth of botanical and zoological illustration as well as astronomical and astrological information. To reveal the connection between embroidered *naturalia* and books of natural knowledge, one need only examine Trevelyon's works and trace the travels of images from printed books, to manuscript,

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<sup>121</sup> Thomas Trevelyon, "Trevelyon Miscellany" (1603), MS Ogden 24, UCL Special Collections. See also Heather Wolfe, "A Third Manuscript by Thomas Trevelyon/Trevilian," *The Collation*, December 7, 2012, <https://collation.folger.edu/2012/12/a-third-manuscript-by-thomas-trevelyontrevilian/>.

<sup>122</sup> Thomas Trevelyon, *The Trevelyon Miscellany of 1608: A Facsimile of Folger Shakespeare Library MS V.b.232*, ed. Heather Wolfe (London: Folger Shakespeare Library, 2007). Thomas Trevilian, *The Great Book of Thomas Trevilian: A Facsimile of the Manuscript in the Wormsley Library*, ed. Nicolas Barker (London: Printed for presentation to the members of the Roxburghe Club, 2000).

<sup>123</sup> Trevelyon, *The Trevelyon Miscellany of 1608*, 14.

to embroidered design. Thus we will see how printed images of *naturalia* were imported into clothing.

MS Ogden 24 measures 198 x 292 millimeters and is comprised of about 200 paper folios. Each page, save for a few depicting larger, more complex illustrations, is bordered with a pattern of winding green vines. The drawings are boldly coloured with distinctive outlining and highly stylized, geometrical forms. The images found in MS Ogden 24 are an eclectic mix of the practical and imaginative in Elizabethan life. Stylized alphabets and zodiac charts appear next to fashion plates and biblical mythology. Most if not all of Trevelyon's images have been copied from the illustrations in contemporary print books. MS Ogden 24 and its related works are a collection that "provides so large and diverse a profusion of visual imagery, reflecting the interests, occupations, and needs of contemporaries."<sup>124</sup> Gillian Furlong describes MS Ogden 24 as a "rare and unusual late Elizabethan commonplace book," connecting Trevelyon's image-copying practice with a widespread early modern word-copying practice.<sup>125</sup> If Trevelyon's works are commonplace books, they are visual commonplaces, in which he copied illustrations from published herbals and almanacs for use in composing embroidery designs.

Fol. 101v begins the section of MS Ogden 24 dedicated to embroidery patterns. It is here that the playful artistry of Trevelyon's work can be appreciated in full. Using black ink, Trevelyon sketched winding lines contrasted with little marks which easily evoke the look of stitchwork. What is particularly notable is that, save perhaps for one (fol. 111r), each pattern incorporates forms from nature. Leaves and vines seem to be a favoured motif, as most patterns include a curling, often interwoven series of stems. Grapes, reminiscent of the textile purse discussed above, are his favoured type of vine: in fact, fol. 103r is a study entirely dedicated to interwoven grapevines. Another favourite are oak leaves and acorns transfigured into the shape of vines, which he often places on the bottom of his embroidery pages as

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<sup>124</sup> Trevilian, *The Great Book of Thomas Trevilian*, 3.

<sup>125</sup> Gillian Furlong, ed., "A Rare and Unusual Late Elizabethan Commonplace Book," in *Treasures from UCL*, 1st ed. (UCL Press, 2015), 96–100.



though it were a ribbon bordering the main pattern. Other patterns incorporate more abstract geometric shapes, as in fol. 107v which includes grapes (or perhaps hops) alternating with primroses in a straight, criss-crossed diamond grid augmented by twirling bands. Scattered throughout the folios of MS Ogden 24 are more motifs of pears, cucumbers, strawberries, roses, pomegranates, peapods, daffodils, carnations, lilies, borages, acorns, grapes, cowslips. The depictions of plants in the 1603 manuscript are highly stylized representations, even to the point where some plants look alien. This does not indicate that his images lack function. In an emblematic culture, the appeal of an embroidery pattern is not always tied to the accuracy of its represented images. Pamela Smith argues that the pursuit of naturalism figured prominently in the involvement of artisan practice and natural philosophy, but an artisan's interest in nature need not produce an exact replica of the world.<sup>126</sup> Instead, Trevelyon's designs may be evidence that when natural knowledge was imported into embroidery, naturalism bowed to aesthetic. Thus, the representation of natural knowledge became malleable according to artisanal needs.

Some of Trevelyon's sources are identifiable and each of these were printed books, such as Topsells' *Historie of Serpents* and Leonhardt Fuch's *Herball*. These printed materials date to the earliest years of the sixteenth century, but also include some of the most recent contemporary publications, suggesting not only that the collection included books dating to the beginnings of popular English print, but also that it was updated with important new volumes. The broad range of themes and topics represented within the pages of MS Ogden 24 indicate that the collection housed an array of secular, devotional, instructive, and entertaining literature. It was this array of printed knowledge that was copied into his design manuscripts and imported into the textiles created from those designs. Consumers of Trevelyon's textiles wore the collection of knowledge found in the books he used.

In addition to botanical and zoological knowledge, astronomical knowledge was imported into embroidered textiles from books. Out of all the manuscripts

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<sup>126</sup> Pamela H. Smith, "Art, Science, and Visual Culture in Early Modern Europe," *Isis* 97, no. 1 (2006): 83–100.

attributed to Trevelyon, MS Ogden 24 includes many more images devoted to astronomy and astrology. (Fig. 24) Trevelyon illustrated the size and placement of planets, as well as colourful, circular navigation charts and other tools to understand the heavens. Trevelyon utilised an array of almanacs for his works, including publications by Edward Pond, Richard Grafton, John Snow, and, most frequently, Leonard Digges. Trevelyon appears to have made much use of Digges's almanac, *A Prognostication of Right Good Effect*.<sup>127</sup> This thoroughly illustrated almanac was first published in 1555 and reprinted in at least thirteen later editions. Digges' success can be attributed to his novel approach to compiling the *Prognostication*: rather than publishing a book that needed updates each year as was the common practice among almanac authors, he wanted to make a book that would be useful for more than one year. The *Prognostication* included all matters considered to be determined by astronomy and astrology: "calendrical tables and explanations of meteorological phenomena, with basic astrological information and rules for predicting the weather as well as times for planting, grafting, and blood-letting."<sup>128</sup> In MS Ogden 24, fol. 19r depicts a near-exact replica of Digges's known planetary spheres, shown next to one another to compare their sizes. Opposite this image, on fol. 18v, is another Digges illustration: a beautifully intricate, geometrical chart showing the connections between the zodiac influences and their positions in the sky.

The dedication of so many pages to astronomical and astrological images may seem strange when compared to the infrequency with which astronomy is depicted on extant examples of embroidery contemporary to Trevelyon. One rare example is a white linen smock in the Whitworth Art Gallery that includes clouds, rainbows, and rain among more familiar botanical embroidery. (Fig. 25) Though the petticoat in the Hardwick portrait was not depicted with astronomical or astrological images on it, two portraits do provide evidence that the queen wore astronomical embroidery. The Armada portrait depicts the queen with suns decorating her sleeves. (Fig. 26) Elizabeth's surviving wardrobe inventories mention many astronomical images. The

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<sup>127</sup> Leonard Digges, *A Prognostication Euerlasting of Right Good Effect*, Early English Books, 1475-1640 (London: Thomas Orwin, 1592).

<sup>128</sup> Stephen Johnston, "Digges, Leonard (c. 1515–c. 1559), Mathematician," Oxford Dictionary of National Biography, accessed February 22, 2018, <https://doi.org/10.1093/ref:odnb/7637>.

account of her wardrobe includes many references to what dress historian Jane Ashelford identified as “motifs drawn from the four elements, including clouds, rainbows, flames, and suns.”<sup>129</sup> Ashelford’s 1988 study of records pertaining to the Queen’s wardrobe circa 1599-1600 reveal many textile gifts from courtiers that allude to the heavens, such as “Rainebowes, clouds, flames of fire, and sonnes of silke of sondrie colours” all on one garment.<sup>130</sup> Also listed was a cloak of satin, embroidered on the shoulders “like a cloude with sonnebeames and rainbows,” and a petticoat of white satin with “borders of the Sonne Mone and other signeas and plannetts.”<sup>131</sup> The popularity of astronomical embroidery in Elizabeth’s court suggests that Trevelyon and embroidery designers like him had good use for designs copied from books such as Digges’ *Prognostication*. The practice gained from copying Digges’s planets helped to fulfil Trevelyon’s customers’ desire to have the heavens represented on their own embroidered garments.

Remarkably, there is an extant textile that can be linked to Trevelyon’s visual commonplaces. Janet Arnold conducted an intensive study on the 1608 manuscript in the Folger Library, and was therefore able to compare the designs in Trevelyon’s visual commonplace with extant examples of textiles in the Metropolitan Museum of Art in New York. One textile matches an embroidery pattern from Trevelyon: a 476cm x 41.2cm section of black silk that may originally have been used as a sleeve.<sup>132</sup> The design shows an interwoven design of grapes (or hops) alternating with pansies (or hearts ease). What is most interesting about this is that the knotted design is identical to Trevelyon’s drawing, save for the choice of flowers represented. Trevelyon drew roses instead of grapes/hops or pansies/heartsease. The substitution suggests that the choice of flowers represented was a significant part of the textile’s appeal to the contemporary consumer, for whom the change in floral motifs would have meant a change in symbolism and significance. This extant textile is material evidence of the relationship between knowledge printed into books and knowledge

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<sup>129</sup> Jane Ashelford, *Dress in the Age of Elizabeth I* (London: Batsford, 1988).

<sup>130</sup> ‘Inventory of the Queen’s Wardrobe’ (1600), fol. 44r, L.2/21, Public Record Office.

<sup>131</sup> *Ibid.*, fol. 50v no. 51.

<sup>132</sup> Metropolitan Museum of Art, New York, Rogers Fund, 35.21.3

worn on the body. From illustrated book, to manuscript of drawings, to embroidered textile, the consumption of Trevelyon's work was in fact the consumption of natural knowledge.

### *The Portrait: Naturalia on the Body*

We now turn to the Hardwick Portrait and the knowledge displayed in Queen Elizabeth's elaborately decorated petticoat. (Fig. 2) This final section will unpack what natural knowledge is displayed on Elizabeth's petticoat and seek to understand the implications of nature displayed on this monarch. Before closely examining the Queen's dress, it is important to understand the role of embroidery and textiles in Elizabeth I's life.

Portraits of Elizabeth depicting representations of her ornate gowns are very important. In the absence of surviving garments, portraits make it possible to understand what representations of *naturalia* were actually included in the Queen's collection of attire. Unfortunately, Oliver Cromwell sold the royal wardrobes when he rose to power, and only one item of clothing still extant has been linked to Elizabeth I's wardrobe.<sup>133</sup> Recently, Eleri Lynn, curator of historic dress for Historic Royal Palaces, identified a former altar cloth in a Herefordshire church as being reasonably similar to the bodice featured in another famous allegorical portrait of Elizabeth, known as the "Rainbow Portrait."<sup>134</sup> (Figs. 27-28) This textile may have come to the church from a favourite lady-in-waiting to Elizabeth, Blanche Parry (1507-1590), who is buried there. This textile was embroidered lavishly with botany and entomology rendered on a cloth of silver. Under sumptuary law, cloth of silver was only available to the royal family, so it would have been a luxurious gift between friends.<sup>135</sup> Even if it was not the exact textile depicted in this portrait, the altar cloth is still likely a remarkable discovery. It is remarkable that the lone possible surviving

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<sup>133</sup> Eleri Lynn, *Tudor Fashion*, 168-171.

<sup>134</sup> *Ibid.*, 170.

<sup>135</sup> Lynn, *Tudor Fashion*, pgs. 168 – 171.

example of Elizabeth's many items of clothing and accessories is embroidered with *naturalia*.

Elizabeth herself was a known proficient embroiderer and it is possible that she appreciated the manifold meanings of rendering nature in needlework. As Susan Frye, historian of early modern gender, describes in *Pens and Needles: Women's Textualities in Early Modern England*, Elizabeth used needlework images to further her connections with powerful family members.<sup>136</sup> She worked by hand several emblems and designs as gifts to her father and his sixth and final wife Catherine Parr (1512-1548) to make manifest her loyalty to Henry VIII. Wearing needlework, or at least being painted in representative needlework, that associated her with power would be no strange leap for her in such an emblematic, heraldic culture. Surviving objects embroidered by then Princess Elizabeth suggest that one of Elizabeth's preferred objects to embroider were book covers, further intertwining the relationship between word and stitch.<sup>137</sup> One such book cover was a gift for her stepmother Catherine Parr which she covered in knots and four pansies. (Fig. 29) Her proficiency with the needle was not merely private: it became part of her identity and legacy. This is borne out in a poem from *The Needle's Excellency: A New Booke wherein are diverse Workes wrought with the Needle*, published 1631. In it, author John Taylor included poems praising women who practiced needlework, including poems dedicated to Elizabeth and her sister Mary I (1516-1558). Elizabeth's poem eulogised her:

When this great Queene, whose memory shall not  
By any tearme of time be ouercast:  
For when the world, and all therein shall rot,  
Yet shall her glorious fame for euer laft.  
When she a Maide, had many troubles past,  
From Iayle to Iayle, by *Maries* angry spleene:  
And *Wood-stocke*, and the *Tower* in prison fast,

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<sup>136</sup> Susan Frye, *Pens and Needles: Women's Textualities in Early Modern England*, 33.

<sup>137</sup> *Ibid.*, 33-35.

And after all, was *Englands* Peerelesse Queene.  
Yet howsoeuer sorrow came or went,  
She made the Needle her companion still:  
And in that exercise her time she spent,  
As many liuing yet, doth know her skill.  
Thus was she still a Captiue, or else Crown'd,  
A Needle-woman Royall, and renown'd.<sup>138</sup>

Taylor's eulogy of Elizabeth described her use of needlework during her struggles for legitimacy as her sister Mary moved her from "jaylor to jaylor," and even to the Tower of London as an accused traitor. He evoked her imprisonment and "troubles past" to paint her as steadfast in the face of trials, dutifully working with her needle. The virtuous feminine craft of needlework was ever her "companion" in her sorrow, by implication cultivating a queen with great "virtu" in her eventual triumph.

While working with needle and thread was part of her courtly image early on, Elizabeth's use of embroidery developed into a rich language as her reign progressed. Her portraits are not the only record of possible uses of embroidery. Lynn has noted that Elizabeth would be sent buckram toiles, or mock-ups of embroidered cloth, to approve for her wardrobe.<sup>139</sup> This demonstrates that Elizabeth's wardrobe was a project of self-representation that extensively utilised embroidery. Elizabeth's courtiers knew of her appreciation for fine textiles and accessories. Clothing richly covered in embroidered *naturalia* was frequently gifted to the queen by ambitious courtiers seeking favour. New Years Day was a holiday in which courtiers gifted the most elaborate gowns to the queen.<sup>140</sup> Inventories of the queen's wardrobe towards the end of her reign demonstrate the abundance of images the queen could deploy and display on her person. Entries in the inventory describe embroidered gowns with "pomegranates, pineapple trees, frutidge and the Nyne Muses," showing the

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<sup>138</sup> John Taylor, *The Needle's Excellency* (London: James Boler, 1634), 12.

<sup>139</sup> Lynn, *Tudor Fashion: Dress at Court*, 153.

<sup>140</sup> Jane Ashelford, *Dress in the Age of Elizabeth I*, 94.

combination of emblems drawn from nature and classical mythology.<sup>141</sup> A more unusual garment depicted “dead trees floweres and a lyon in the myddest.”<sup>142</sup> Others depicted specific trees, such as hawthorns, or abundant harvests of hops.<sup>143</sup> One entry that closely resembles the petticoat in the Hardwick portrait describes the use of sea emblems “with dyvers devyses of rockes, shippes and fishes.”<sup>144</sup> This inventory is a record not merely of the magnificence of the Queen’s wardrobe, but also of the princely collection of *naturalia* displayed on the Queen’s person.

By 1599, the date attributed to the Hardwick portrait, the language of embroidery had been extensively developed in Elizabethan culture. So, let us now turn, finally, to the petticoat itself. The logic of the Queen’s embroidered images applies here, incorporating animals, birds, fish, insects, and flowers.

Flowers are one of the most ubiquitous types of images associated with Queen Elizabeth. Her personal emblem was eglantine, a five-petalled white rose which had been associated with the Virgin Mary. The eglantine can be found in the top centre of the petticoat, almost exactly underneath the point of the Queen’s bodice. So great was her association with this flower that it became an emblem of the queen used by her courtiers. The eglantine was a necessary inclusion in the garden of her advisor, William Cecil (1520-1598), Lord Burghley. In an evening of speeches performed for the queen, Burghley’s gardener quoted his lord’s instructions: “‘Eglantine’ quoth he ‘I must honour, and it hath been told me that the deeper it is rooted in the ground the sweeter it smelleth in the flower, making it ever so green that the sun of Spain at the hottest cannot parch it.’”<sup>145</sup> This eglantine was to be given a place of honour in a garden representing “all the Virtues, all the Graces, all the Muses winding and wreathing about your Majesty... one Virtue we’ve done in roses... the Graces of

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<sup>141</sup> ‘Inventory of the Wardrobe of Robes, 1600’, Fol. 60r.

<sup>142</sup> Ibid., Fol. 50v.

<sup>143</sup> Ibid., Fol. 46r, no. 4.

<sup>144</sup> Ibid., Fol. 50v no. 53.

<sup>145</sup> George Peele, *The Works of George Peele*, ed. A. H. Bullen, vol. II (London, 1888), 303–20.

pansies parti-coloured... the Muses of nine several flowers.”<sup>146</sup> Burghley found it necessary to include a representation of the queen in his collection of garden flowers, further connecting the natural marvel to the body of the monarch.

Elizabeth was referred to in courtly poetry as the “Empress of Flowers,” the embodiment of abundant spring.<sup>147</sup> The petticoat was covered in irises, lillies, violets and more, reflecting the verdant spring of the queen’s allegorical youth. Strawberries, mentioned above as popular emblems of incorruptibility, can be found in the lower centre of the petticoat. Pansies, representations of the muses, are found on the petticoat, once in the centre next to a whale, and again in the bottom left corner. Like pansies, many flowers were emblematic of classical characters and the attributes they represented. Elizabeth used emblems of muses often, especially that of Urania, the muse of astronomy.<sup>148</sup> Classical goddesses appeared alongside Elizabeth in another, earlier portrait that was part of the Queen’s own collection. Painted in 1569, this portrait depicted Elizabeth with Juno, Minerva, and Venus, the goddesses whose competition for the title of “fairest” sparked the mythical Trojan War. (Fig. 30) Artist Hans Eworth (1520-1574) depicted Elizabeth as the victor of the competition, implying that she combined all the divine virtues that the goddesses represented. Portraits of Elizabeth emphasised her classical virtues by placing her within scenes from mythology, or by adorning her with botanical emblems of classical virtues.

Also depicted are birds, many of which appear to be the type familiar to the English landscape: swallows, kites, kingfishers, cranes and swans.<sup>149</sup> Cranes, one of which is found on the far left of the petticoat, were said to be inventive in their behaviour: according to Johnston, to maintain wakefulness, they “stand upon one

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<sup>146</sup> Ibid.

<sup>147</sup> John Davies, *Hymnes of Astræa: In Acrosticke Verse*. (London: Printed by R. Field for I. Standish, 1599).

<sup>148</sup> Jean Wilson, ‘Queen Elizabeth I as Urania’, *Journal of the Warburg and Courtauld Institutes* 69 (2006): 151–73.

<sup>149</sup> Rebecca Ann Bach, *Birds and Other Creatures in Renaissance Literature : Shakespeare, Descartes, and Animal Studies* (London: Routledge, 2017), 9.



foot, and hold a stone in the other above ground, that if at any time being weary they should be oppressed with sleep, the stone falling might awaken them.”<sup>150</sup> Another prominent bird in the design of the petticoat was a swan, which had emblematic connotations of love, beauty, and nobility. Its physiology and its singing were equally described as “wonderfull.”<sup>151</sup> Like the pendants of pelicans and phoenixes that Elizabeth wore in other portraits, these marvellous birds serve to emphasise the positive virtues of their wearer.

A great many images on the petticoat are of sea monsters. Almost directly in the centre of the petticoat panel, a great whale spouts water from its blow-holes. This is similar to the whales found in Renaissance maps, save that this whale appears to lack the tusks and horns frequently depicted on large marine mammals at the time.<sup>152</sup> Whales, interchangeably referred to simply as “monsters,” were considered some of the most marvellous sea creatures. One was reported to be 600 feet by 300 feet.<sup>153</sup> Whales, according to Olaus Magnus and his 1539 *Carta Marina*, were known for their care and concern for their young.<sup>154</sup> Though the whale on Elizabeth’s petticoat was not represented with a calf by its side, this allusion to maternal care was in keeping with many emblems deployed by Elizabeth and her portraits, such as the pelican pendant discussed above. Other sea monsters include two dolphins, described by natural history books as able to “swim faster than a ship could run under sayle,” and intelligent enough to predict weather: “When then play on the calme Sea, they foreshew which way the wind will blow, and when they cast up water, the Sea being troubled, they foreshew a calme.”<sup>155</sup> Also depicted are two more mysterious creatures, possibly a sea horse and a sea dog.

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<sup>150</sup> Johnston, *A History of the Wonderful Things of Nature*, 181.

<sup>151</sup> *Ibid.*, 178.

<sup>152</sup> Joseph Nigg, *Sea Monsters: The Lore and Legacy of Olaus Magnus’s Marine Map* (Lewes: Ivy Press, 2013).

<sup>153</sup> Johnston, *A History of the Wonderful Things of Nature*, 199.

<sup>154</sup> Nigg, *Sea Monsters*.

<sup>155</sup> Johnston, *A History of the Wonderful Things of Nature*, 294.

Sea monsters were regular features in contemporary maps of the kind that might be found in a princely cabinet of curiosities to emblematically evoke exploration. Representing exploration was a prominent strategy in Elizabeth's iconography. One of Elizabeth's favourite courtiers, Walter Raleigh, had just completed an expedition of the Orinoco river in South America in 1595. Her empire was evoked in many portraits during the later years of her reign. In the Armada portrait of 1588, Elizabeth's right hand was depicted resting on a globe, her fingers covering the Americas. (Fig. 26) In another portrait, a magnificently dressed Elizabeth is depicted standing on a map of England and Wales. (Fig. 31) Known as the Ditchley Portrait, this painting was commissioned in 1592, seven years before the Hardwick portrait.<sup>156</sup> The sea monsters in the Hardwick portrait can be read as emblematically evoking the seas conquered by Elizabeth's powerful navy and intrepid explorers. The monsters in the Hardwick Portrait are emblematic of Elizabeth's expanding empire into the exotic New World.

The plants and animals displayed on Elizabeth's petticoat are representative of land, sea, and air. Land is represented by a diverse range of flowers, air by birds, and sea by fish and serpents. These emblems of nature are combined together without consideration for the boundaries of their environments. Much like *naturalia* in the cabinet of curiosities, these land, sea, and air animals are displayed together when they would be found apart in nature. The placement joked with taxonomic boundaries.

The petticoat's richly embroidered representations of natural objects were not the only aspect of Elizabeth's dress that incorporated the logic of curiosities and marvels. Around Elizabeth's neck was an extremely long string of pearls, knotted and falling below her waist. As precious goods and curiosities of the sea, these pearls serve to emphasize the maritime marvels already depicted on the petticoat. Many of Elizabeth's accessories in the Hardwick Portrait were emblematic of marvels imported from overseas. She was depicted holding a luxurious feather fan, which was

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<sup>156</sup> Marcus Geeraerts the Younger, *The Ditchley Portrait of Elizabeth I*. Oil on canvas, circa 1592. The National Portrait Gallery, London, NPG 2561.

reminiscent of the prized featherworks collected in cabinets of curiosities, discussed above. The feathers were white, textured in a way that suggests ostrich feathers, and the handle was either ruby or garnets. In her other hands she held dark gloves with more pearls and rubies or garnets on the cuff.

Blurred boundaries between gendered marvels found in cabinets of curiosities were reflected in the ambiguity of gendered garments and accessories. Hermaphroditic qualities were referenced in the dress depicted in the Hardwick Portrait. Elizabeth's torso was clad in a doublet, a traditionally male garment.<sup>157</sup> The doublet was a tight-fitting jacket used in most men's upper body attire throughout the Tudor era. It had grown from the shape of armour and developed into richly embroidered and bejewelled garments.<sup>158</sup> (Fig. 32) The use of male elements in women's clothes reflects the hermaphroditic blending of men and women's fashions that was especially prominent in the last decades of Elizabeth's reign.<sup>159</sup> Elizabeth's portraits show a frequent use of hermaphroditic clothing, reflecting her use of hermaphroditic rhetoric to promote her status as a marvellous combination of king and queen.<sup>160</sup>

That Elizabeth is decorated in marvels and emblems points to her mastery over nature, emphasising her right to rule over England. Pearls, gems, feathers, and embroidered *naturalia* worn on the queen's body can be understood as a princely collection displayed on her skin.

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<sup>157</sup> Lynn, *Tudor Fashion: Dress at Court*, 51.

<sup>158</sup> *Ibid.*, 173.

<sup>159</sup> Janet Arnold, *Queen Elizabeth's Wardrobe Unlock'd: The Inventories of the Wardrobe of Robes Prepared in July 1600* (Leeds: Maney, 2014), 19.

<sup>160</sup> For more on Elizabeth's strategic deployment of hermaphroditic or androgynous tropes, see Carole Levin, ed., 'Elizabeth as King and Queen', in *The Heart and Stomach of a King*, 2nd ed., Elizabeth I and the Politics of Sex and Power (University of Pennsylvania Press, 2013), 121–48.

## *Conclusion*

This chapter has sought to understand the role of display in clothing such as the petticoat depicted in the Hardwick portrait of Elizabeth I. First, this chapter identified an analogous culture of display in the Renaissance collections known as cabinets of curiosities. The logic of display and the meaning of marvels and emblems translated from cabinets to clothing. The second section demonstrated how similitude, playfulness, and the use of emblems that historians have identified in cabinets of curiosity can also be found in clothing. The third section looked closely at an artisan's use of printed natural knowledge in his designs, further intertwining Renaissance natural history and Renaissance attire. These discussions then served to make sense of the petticoat in the Hardwick portrait as a display of wondrous creatures and of the virtuosity of the Queen. The petticoat worn by Elizabeth I demonstrated her mastery over land, air, and sea, and all the marvels discovered therein.

The practice of display on the body in the Renaissance was considered acceptable for both male and female bodies. To blend and jest with gender boundaries was well in keeping with the practices of play and paradox found in the cabinets of curiosities. Much like the practice of natural knowledge incorporated both male and female aspects, Renaissance display in cabinets and on bodies was hermaphroditic. It is this conspicuously hermaphroditic display that would be challenged by the new "experimental" philosophy. As the next chapter will show, gendered implications in display changed in the Restoration. Ornament became feminized luxury. The idea of the body as an appropriate space for the display of knowledge would be discarded.

## Chapter Two:

### “Adorned, Embellished, and Ornamented:” Science, Fashion, and Credibility in the Early Royal Society

Eminent author, philosopher, and aristocrat Margaret Cavendish (1623-1673), the Duchess of Newcastle, visited a meeting of the Royal Society on 30 May 1667. There were two notable mentions of this event in diaries of members of the Royal Society. Both descriptions focus heavily on Margaret Cavendish’s physical appearance. Samuel Pepys (1633-1703) wrote:

She is indeed black, and hath good black little eyes, but otherwise but a very ordinary woman I do think, but they say sings well. The Duchesse hath been a good, comely woman; but her dress so antick, and her deportment so ordinary, that I do not like her at all, nor did I hear her say any thing that was worth hearing, but that she was full of admiration, all admiration.<sup>161</sup>

Though Pepys also said “several fine experiments were shown her of colours, loadstones, microscopes, and of liquors among others,” the bulk of his remembrance is a pointed criticism of her physical presence. Pepys first evaluated her “good black little eyes,” meaning she had dark eyes. She had the potential to be a “good, comely woman.” What prevented her from reaching her potential for attractiveness was her “antick,” or outdated, dress and “ordinary” deportment. Those two traits were what caused Pepys to dislike her and deem her words unworthy. Similarly, John Evelyn (1620-1706) wrote in his diary that she “came in great pomp,” but that she was “a pretender to learning.” Later, Evelyn composed the following verse: “But, Ho! Her head-gear was so pretty, / I ne’er saw anything so witty; / Though I was half afeared, / God bless us! When I first did see her / She looked so like a Cavalier, / But

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<sup>161</sup> Samuel Pepys, *The Diary of Samuel Pepys. Vol. 8, 1667*, ed. Robert Latham and William Matthews, vol. 8 (London: HarperCollins, 2016), 243.

that she had no beard.”<sup>162</sup> These accounts are conclusively dismissive: Margaret Cavendish did not belong in the Royal Society.

Cavendish’s posthumous reputation has been greatly influenced by Pepys’s and Evelyn’s accounts. Their opinions on Cavendish have contributed to her image as an eccentric. Cavendish’s first modern biographer, Douglas Grant, focused the first chapter of his 1957 biography on her visit and Pepys’s and Evelyn’s writings about it. It was, according to Grant, “the climax of her trip to London, and, in a sense, of her whole extraordinary career.”<sup>163</sup> Cavendish’s own works have only recently been re-evaluated by feminist historians and literary critics, bestowing upon her the value of a feminine voice opposed to masculine intellectual norms. Literary studies now value her as a playwright and author of early speculative utopian fiction.<sup>164</sup> Historians of science such as Evelyn Fox Keller have turned to Cavendish to understand women’s perspectives on the so-called Scientific Revolution.<sup>165</sup> Cavendish’s writings presented an alternative, feminine natural philosophy that challenged traditional narratives on the primacy of experimental philosophy. Before this reassessment, her main

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<sup>162</sup> Qtd. In Rees, Emma L. E. *Margaret Cavendish: Gender, Genre, Exile*. (Manchester: Manchester University Press, 2003), 13.

<sup>163</sup> Grant, Douglas. *Margaret the First: A Biography of Margaret Cavendish, Duchess of Newcastle, 1623-73*. (London: Rupert Hart-Davis, 1957), 17.

<sup>164</sup> Anna Battigelli, *Margaret Cavendish and the Exiles of the Mind*, *Studies in the English Renaissance* (Lexington, Ky.: University Press of Kentucky, 1998); Emma L. E. Rees, *Margaret Cavendish: Gender, Genre, Exile* (Manchester: Manchester University Press, 2003); E. L. Bonin, “Margaret Cavendish’s Dramatic Utopias and the Politics of Gender,” *Studies in English Literature, 1500-1900*. 40, no. 2 (2000): 339–354.

<sup>165</sup> E. Keller, “Producing Petty Gods: Margaret Cavendish’s Critique of Experimental Science,” *ELH: A Journal of English Literary History*. 64, no. 2 (1997): 447–472; Lisa Walters, *Margaret Cavendish: Gender, Science and Politics* (Cambridge England: Cambridge University Press, 2014); Brandie R. Siegfried and Lisa T. Sarasohn, *God and Nature in the Thought of Margaret Cavendish* (Burlington: Ashgate, 2014, 2014); D. Tillery, “Margaret Cavendish as Natural Philosopher: Gender and Early Modern Science,” *ISR. Interdisciplinary Science Reviews* 28, no. 3 (2003): 200–208; Deborah Boyle, “Margaret Cavendish on Gender, Nature, and Freedom,” *Hypatia: A Journal of Feminist Philosophy* 28 (2013): 516–532.

accomplishment was her attendance at the Royal Society meeting, a day where she was an audience member being scoffed at by notable men.

This chapter takes Cavendish's reception on 30 May 1667 as illustrative of the importance of appearance in the early Royal Society, and in the larger social legitimation of experimental science. The previous chapter demonstrated how decoration in clothing functioned as a form of display of natural knowledge. This practice of display was one that was open to both men and women of knowledge and learning. However, this chapter will demonstrate that the emergence of experimental philosophy also changed the way that the genders were able to promote their learned qualities. These changes to fashion, to natural knowledge, and to the construction of social credit, occurred in tandem and had lasting consequences for the ways that men and women could participate in experimental philosophy.

As this chapter will demonstrate, their assertion of credibility as trustworthy purveyors of natural knowledge was couched in the new forms of gentlemanly credit emerged in the Restoration. This gentlemanly credit eschewed luxury and ornament as effeminate and morally corrupt. A language eschewing ornamentation was developed by early members of the Royal Society, and as this chapter will show, a style of plain, modest clothing was developed in parallel. The Royal Society members dealt with the problem of *looking* like a trustworthy gentleman. This problem was also faced by Margaret Cavendish when she was assessed by Samuel Pepys and John Evelyn. Margaret Cavendish did not belong, not just based on any of her intellectual credentials, her positions on epistemic practice, or her social position. This essay argues that she also did not belong because of her clothing. Or, at least, her outsider status was articulated, in the eyes of her onlookers, in terms of her physical presence.

### *A Plain Way of Speaking... and Dressing*

This chapter will begin by first examining the culture of clothing in the Royal Society in order to understand why criticism of a woman might have been voiced through critique of her clothing. In the mid- and late seventeenth century, English

experimental philosophers worked to establish credibility for their approach to science. As the practice of acquiring knowledge through observation and experiment was an emerging epistemology, its merits were not obvious nor were they self-evident. Rather, groups of experimental philosophers navigated already existing norms of social credibility and appropriated them into the practice of their science. Sociologist of science Steven Shapin and historian of science Simon Schaffer examined some of these forms of social credibility in the Royal Society in their 1985 book *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life*, demonstrating the fellows' projection of virtuous, gentlemanly identities as key strategies in promoting their potential to be truth tellers.<sup>166</sup>

The Royal Society promoted a form of knowledge-making that depended on appeals to communal assent. "Matters of fact" were established when an experiment was presented to an audience and a consensus of the witnesses over what occurred was reached. Shapin and Schaffer describe an "experimental experience" in which a group would come to believe that the experiment demonstrated a fact. The visual appearance of things was thus a vital component of this epistemology.

The legitimacy of experiment could not be taken for granted, so the Royal Society used culturally established modes of authority to secure its legitimacy. The model of gentlemanly credit was a powerful social tool deployed by the men of the Royal Society. As demonstrated by Shapin in *A Social History of Truth*, one of the strongest indications of credibility was social rank.<sup>167</sup> Landed gentlemen were actively sought after as fellows because, as the Society's historian Thomas Sprat (1635-1713) said, they were "free and unconfin'd." Gentlemen had no dependence on wages for work and so could be trusted. The membership of independently wealthy

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<sup>166</sup> Steven Shapin and Simon Schaffer. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, N.J.: Princeton University Press, 1985).

<sup>167</sup> Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England*, Science and Its Conceptual Foundations (London: University of Chicago Press, 1994).



men was a safeguard, he said, against a great “corruption of learning,” overcoming the problem “That knowledge still degenerates to consult present profit too soon.”<sup>168</sup>

In 1667, the Royal Society’s fellowship secured the legitimacy of experimental achievements by reference to aristocratic status or courtly connections, whose existing credit served to underwrite experimental claims. Fellows were gentlemen; therefore, they were honest philosophers or “modest witnesses”. Some of them, such as Pepys, elected President of the Royal Society in 1684, never wrote a single dissertation or performed any experiments. Pepys was a very well-connected man in the circles around the King, his Court, and the gentlemanly culture of London. His career had gained him a considerable amount of social and political credibility by the time he was approached to join the Royal Society. He was Chief Secretary to the Admiralty, where he used his influence to reform the infrastructure of the Royal Navy.<sup>169</sup> The Royal Society recruited men such as Pepys to add social and political credibility to their ranks. Pepys was a useful modest witness because he was a recognisable name to the court and London society. When the Royal Society members made a report of an experiment with Pepys’ signature attesting what had taken place, they incorporated the credibility of a Chief Secretary into their collective witnessing. In principle, Margaret Cavendish could also have been a modest witness to experiment at the Royal Society, being both an aristocrat and a philosopher. But other factors barred her from belonging.

Robert Boyle (1627-1691) was of the most highly credited members of the Royal Society, who was widely considered to be a model gentleman and modest witness. He was a founding member of the Society whose experiments, inventions, and writings helped define the method of experimental philosophy. Boyle’s thoughts on Cavendish’s visit were not recorded but it is possible to ascertain Boyle’s thoughts on women’s potential in philosophy. Boyle was uncertain “whether the ignorance

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<sup>168</sup> Thomas Sprat, *History of the Royal Society*, ed. Jackson I. Cope and Harold Whitmore Jones (London: Routledge, 1959), 67.

<sup>169</sup> Marjorie Hope Nicolson *Pepys’s Diary and the New Science* (Charlottesville: University Press of Virginia, 1965), 13.

wont to be imputed to women be their fault, or that of their accusers; and whether it is any natural want of capacity, or want of instruction, that keeps most of them from knowledge.”<sup>170</sup> He left the possibility open for women to be naturally as capable as men, but at the same they may be naturally incapable. Another clue that may point to Boyle’s views on Cavendish’s visit is an incident in which his air pump experiment, which involved the suffocation of a bird, was interrupted by women. Boyle reported:

Another bird being within about half a minute cast into violent convulsions, and reduced into a sprawling condition, upon the exsuction of the air, by the pity of some fair ladies... who made me hastily let in some air at the stop-cock, the gasping animal was presently recovered, and in a condition to enjoy the benefit of the ladies compassion.<sup>171</sup>

This was quite inconvenient for Boyle. His male compatriots assembled at night to continue, “being resolved not to be interrupted in our experiment.”<sup>172</sup> Not only were women potentially ignorant and distracting, but their compassion, and the fact that their dispositions were not trained to be disinterested, were disruptive to experiments. When John Evelyn said that Margaret Cavendish was “a pretender to learning,” he was voicing the normal perspective on women who intruded on the masculine pursuit of knowledge.

According to Pepys, Cavendish did not provide such an inconvenience at the Royal Society and showed polite admiration for the experiments performed in front of her. She apparently aired none of her thoroughly developed critiques of experimental philosophy to any of its proponents. Still, she was found objectionable by the Society’s two main diarists, who strongly emphasised her attire in their evaluations. The sartorial, rather than explicitly epistemic, rejection of Margaret Cavendish reveals problems faced by natural philosophers when visually

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<sup>170</sup> Potter, Elizabeth. *Gender and Boyle's Law of Gases*. (Bloomington: Indiana University Press, 2001), 3.

<sup>171</sup> Qtd in Potter, *Gender and Boyle's Law of Gases*, 17.

<sup>172</sup> *Ibid.*

constructing a credible self-image. When performing the role of a reliable truth-teller, philosophers and savants needed to dress the part. English philosophers visually signalled their credibility through dress that identified them as a modest witness. As individuals, each projected a unique visual identity based on the type of credibility they needed, while certain unifying themes defined them as a group. It is against this image that Margaret Cavendish's attire was compared and found wanting.

Donna Haraway, historian and sociologist of science, asserts in her 1996 work *Modest\_Witness@Second\_Millennium* that core identities were at stake in the makings of experimental science.<sup>173</sup> This included not just the intellectual identity of fellows of the new Royal Society, but also Englishness, and especially manliness.<sup>174</sup> During the Restoration, part of the healing of post-Civil War English society involved a major reformulation of what it meant to be a good Englishman and a good Englishwoman. The Restoration of Charles II (1630-1685) brought with it anxieties about slipping back into the chaos of the Puritan Commonwealth, or conversely succumbing to Catholic French influence. For the men of Restoration society, among them the experimental philosophers, clothing played a powerful role in signalling correct Protestant virtues. A man of correct virtue, according to an anonymous moralist in *An Address to the Hopeful Young Gentry of England* in 1669, “no where devests himself of his invariable habit of Virtue; which, as the richest, warmest, easiest, and immaculate, can never be worn out of Fashion.” The members of the Royal Society developed an approach to clothing that reflected their approach to language, a field familiar to historians of science in this context. Peter Dear has demonstrated that the language of experimental knowledge-making was specifically

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<sup>173</sup> Haraway, Donna.

*Modest\_Witness@Second\_Millennium :Femaleman\_Meets\_Oncomouse*. (London: Routledge, 1996), 27.

<sup>174</sup> *Ibid.*

deployed to signal a rejection of either religious or political extremes.<sup>175</sup> Experimentalists promoted a form of language that avoided rhetorical embellishment to promote what Thomas Sprat called, in his *History of the Royal Society*, a “close, naked natural way of speaking.”<sup>176</sup> Language should be “plain.” Clothing was a material version of the same phenomenon. Moderation in clothing implied moderation in thought, a Protestant virtue contrasted with the fanatical “enthusiasm” of radicals and Catholics. The need for men to demonstrate moderation in clothing was a novel social construct, with lasting implications for gender.

It is essential to understand the change in gender identities in order to understand the formulation of experimental credibility. The value placed on moderate clothing may help to explain comments such as Pepys and Evelyn’s regarding Cavendish. Her intellectual accomplishments might have been suspect among male fellows prior to her visit to the Royal Society but they did not preclude her attendance. Her dress and appearance, on the other hand, precipitated hostile comments. Cavendish evidently dressed in an inappropriate manner that was taken as a signal of her inappropriateness as a modest witness. Such a reading offers a material complement to Carolyn Merchant’s seminal work *The Death of Nature* which exposed a shift in attitude against femininity as one of the hallmarks of the Scientific Revolution.<sup>177</sup> Drawing on the work of Merchant, Haraway demonstrated that the Royal Society’s strategies of self-promotion created an identity that disallowed femininity in credible knowledge-making. This argument may be complemented by a material element: it is possible that the physical, material presence of a woman, Margaret Cavendish, was unwelcome in the Royal Society. Part

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<sup>175</sup> Dear, Peter. "Totius in Verba: Rhetoric and Authority in the Early Royal Society." *Isis* 76, no. 2 (1985): 145-61; Dear, Peter. "From Truth to Disinterestedness in the Seventeenth Century." *Social Studies of Science* 22, no. 4 (1992): 619-31; Dear, Peter. "Miracles, Experiments, and the Ordinary Course of Nature." *Isis* 81, no. 4 (1990): 663-83.

<sup>176</sup> Thomas Sprat, *History of the Royal Society*, (London: Routledge, 1959), 113.

<sup>177</sup> Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: HarperCollins, 1989).

of Cavendish's outsider status was in her feminine body, highlighted by her feminine clothing. By rejecting and ridiculing Cavendish through her clothing, the men of the Royal Society were expressing ideas about belonging, legitimacy, style, and gender.

### *Modesty, Virtue, and the Modest Witness*

It is important to recognize that the outward appearance of the experimenter was a critical signifier of their social status and hence credibility. It was not essential but valuable to succeed in this novel epistemology, an experimental philosopher had to visually cater to the group's ideas of what counted as a "believable" experimenter. In an epistemology so couched in witnessing a visual demonstration, appearances mattered. Fellows negotiated social and visual cues to project their credibility. Many of the forms this self-fashioning were sartorial. As will be seen below, fellows manipulated their appearance to suit experimental or other occasions.

The importance of dress becomes apparent through the example of Robert Boyle. As a landed aristocrat, he already had the social credibility of a disinterested gentleman, and he deployed this credibility to legitimise the new practice of experiment. Shapin and Schaffer's *Leviathan and the Air Pump* describes three "technologies" Boyle used to secure the experimental philosophy: a material technology, a literary technology, and a social technology.<sup>178</sup> Clothing figures into these technologies as a visual signal, but Boyle also used the analogy of clothing in his literary technology.

Boyle was especially conscious of the role of language in communicating and legitimising experimental practices. The plainness of Boyle's literary technology was purposefully different from the normal intellectual style of the age. He rejected the use of elaborate persuasive rhetoric because confidence, he thought, was immodest. Modesty in manner was considered a key virtue for credibility and this was supposed to carry into the writing style of experimental philosophers. Experimentalists wished,

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<sup>178</sup> Shapin and Schaffer. *Leviathan and the Air-Pump*, 25.

according to Sprat, “to return back to the primitive purity, and shortness, when men deliver’d so many *things*, almost in an equal number of words.”<sup>179</sup> Against the verbose argumentation of scholasticism and the extravagant courtly flourishes of humanist prose, the experimentalist should avoid embellishment. This was itself a rhetoric, of course, promoting plainness and modesty. As Sprat wrote, experimental language was supposed to be restricted to “positive expressions, clear senses, a native easiness: bringing all things as near the mathematical plainness as they can.”<sup>180</sup>

With this in mind, Boyle developed a way of describing that was purposefully cautious. In his “proemial essay” of 1661 he described his desire to eschew rhetoric and present plain matters of fact, using the language of visual ornament, textiles, and clothing. Boyle explained that he avoided “embroidered” rhetoric, his goal being to generate a “naked way of writing,” almost the exact same expression as that used by Sprat.<sup>181</sup> Language and dress were interchangeable as resources for expressing modesty and sobriety. “Rhetorical Ornaments” were to be avoided so that his “expressions should be rather clear and significant, than curiously adorn’d.”<sup>182</sup> Quoting Cicero, Boyle wrote that a persuasive embellishment would compromise the effectiveness of an argument, because “Everything which is clearly spoken of an important matter, seems to me to be spoken admirably. But it would be childish to wish to speak in an ornate manner about this kind of thing, for learned and intelligent men will be able to explain it plainly and clearly.”<sup>183</sup>

Boyle’s epistemic prescriptions followed current advice on fashion. Economist and politician Dudley North (1602-1677) advised readers of his 1669 *Observations*

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<sup>179</sup> Thomas Sprat, *The History of the Royal Society of London*, 113.

<sup>180</sup> *Ibid.*

<sup>181</sup> Robert Boyle, “A Proemial Essay, Wherein, with Some Considerations Touching Experimental Essays in General, Is Interwoven Such an Introduction to All Those Written by the Author, as Is Necessary to Be Perus’d for the Better Understanding of Them,” in *The Works of the Honourable Robert Boyle*, vol. 1 (London: J. and F. Rivington, 1772), 318.

<sup>182</sup> *Ibid.*

<sup>183</sup> *Ibid.*, 304.

*and Advices Oeconomical*, a book of household management, to avoid wasting money on fashionable clothes. A gentleman, however, should not avoid such things entirely, so as to avoid being completely unfashionable.<sup>184</sup> Boyle made a similar argument regarding philosophical language, using the analogy of fashion to explain why, despite his plain way of speaking, he did use some “exotick words and terms borrowed from other languages.”<sup>185</sup> According to Boyle, it was not possible to avoid the flourishes of colloquialisms:

For as in Fashions of Clothes, though perhaps Fools begin them, yet Wise men, when they are at once generally receiv'd, scruple not to follow them, because then obstinately to decline them would be as ridiculously singular as at first it would have been to begin them: so in Exotick Words, when Custom has once made them familiar and esteem'd, scrupulously to decline the use of them may be as well a fault, as needlessly to employ them: For it is not the Use but the Affectation of them that is unworthy a Philosopher.<sup>186</sup>

A philosopher's credibility might rest on plain language, but to entirely reject fashion in language, as in clothes, would also be inappropriate if the fashion was widely employed and understood.

If Boyle promoted plainness in language, it appears he also represented himself as unadorned and plain in his choice of dress. This is apparent from the portraits made of Boyle during his lifetime, in which a carefully self-fashioned image was projected of the sober, Protestant experimental philosopher. In 1689, artist Johann Kerseboom (d. 1708) completed an oil portrait of Boyle which depicted him in the modest fashion he had discussed in his writings (Fig. 33). Boyle appeared in very sombre attire for the late seventeenth century. The main elements of his costume consisted of a draped morning gown, a cravat with fringe instead of lace, and a large, grey wig. Just as he explained in his analogy on language in the

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<sup>184</sup> Dudley North. *Observations and Advices Oeconomical* (London, 1669), 99-100.

<sup>185</sup> Boyle, “A Proemial Essay,” 305.

<sup>186</sup> *Ibid.*

“Poemical Essay”, Boyle adopted the broad forms of fashion so that he fit in to the image of an English gentleman. However, he eschewed all of the stylistic flourishes that may have appeared more lavish. The outfit rendered in Kerseboom’s painting may not have corresponded to any actual clothing Boyle owned, however the use of such plain style in a portrait shows the importance of sobriety in Boyle’s public image. The portrait projected Boyle as a gentleman who could be trusted as a sober, modest source for natural knowledge. Just as his body was unadorned by needless stylistic ornaments, so his mind and language were free of needless rhetorical ornaments. In Kerseboom’s portrait, a literary and visual technology combined to signal Boyle’s credibility. When considered side by side with another portrait by Kerseboom of an aristocrat, Boyle’s sobriety is further emphasised. A contemporary of Boyle’s, John Harpur, 4<sup>th</sup> Baronet, includes much more colour and a higher wig. That this was self-conscious fashioning on Boyle’s part became apparent from his dress in other circumstances. Boyle was a landowner and occasionally visited his tenants. On these occasions he chose to dress in a different manner to his normal self-presentation as a plain-clothed experimenter. As a landlord, Boyle “found it necessary to shew a litle finer [sic] among his Tennants to have his land well let.”<sup>187</sup> Clothing, therefore, was a tool Boyle used to play certain parts, whether it was a modest witness or a grand landlord.

To judge based on the views of his contemporaries, this sartorial strategy paid off. According to their accounts, Boyle succeeded in navigating the balance between being overly stylish and inappropriately unfashionable. After his death, eulogisers paid a great deal of attention to his disdain of extravagance in dress and manners. Friends and colleagues recorded reminiscences of Boyle in which they noted his sombre dress and indicated how fitting it was for a man of Boyle’s intellect. John Evelyn advised an aspiring Boyle biographer that “in his diet, (as in Habite), [Boyle] was extremely Temperate & plaine; nor could I ever discern in him the least Passion, transport of censoriousnesse, whatever Discourse, or the Times suggested;

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<sup>187</sup> Michael Hunter, *Robert Boyle by Himself and His Friends*. (London: W. Pickering, 1994), 28.



all was tranquil, easy, serious, discrete & profitable.”<sup>188</sup> Evelyn described Boyle’s diet and dress as a metaphor for Boyle’s mind. The body’s temperance reflected the mind’s tranquillity.

Philosopher and historian Gilbert Burnet (1643-1715), Bishop of Salisbury, gave the sermon for Boyle’s funeral. Both his preparatory notes and the text of his sermon eulogised Boyle’s sombre clothing and described it as fitting for his intellect. Boyle was “never addicted to Vanity in his Apparel.”<sup>189</sup> Boyle’s physical frailty was given a great deal of attention, as it served to illustrate how powerful his mind was: he “laboured under such a feebleness of Body, and such lowness of Strength and Spirits, that it will appear a surprizing thing to imagine, how it was possible for him to Read, to Meditate, to try Experiments, and to write as he did.”<sup>190</sup> Burnet further suggested that modesty in clothing and surroundings was similarly a scholarly trait: Boyle “had about him all that unaffected neglect of Pomp in Cloaths, Lodging, Furniture and Equipage, which agreed with his grave and serious course of Life.”<sup>191</sup> This suggests that a man’s course of life could be reflected in his aesthetic choices such as his clothing and décor. Boyle’s sartorial choices promoted his status as a man of *virtu*.

### *The Banyan: the Indicator of a Philosopher*

While Boyle might be taken as the archetype of the modest philosopher, we do not know his comments on Margaret Cavendish’s appearance at the Royal Society. It remains to consider the sartorial strategies of her two commentators, Samuel Pepys and John Evelyn. Boyle’s was not the only solution to the question of how to present oneself as a learned individual in the second half of the seventeenth century. Pepys was a promoter of experimental philosophy though not an experimentalist himself.

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<sup>188</sup> Ibid., 88-89.

<sup>189</sup> Ibid, 51.

<sup>190</sup> Ibid.

<sup>191</sup> Ibid.

Pepys did not need to promote a sobriety in the manner that Boyle did, and his portraits indicate a willingness to be seen in luxurious attire. But Pepys also presented himself as a learned individual – someone who eschewed ornament, like Boyle, but did not need to project an image of plainness. The item of dress that served these ends for Pepys was the banyan, also referred to as an “Indian gown” or “dressing gown.” (Fig. 34)

In his diary entry on 30th March 1666, Pepys recorded a trip to the artist John Hays (1600-1679) to sit for a portrait: “to Hales’s [sic], and there sat till almost quite darke upon working my gowne, which I hired to be drawn in; an Indian gowne, and I do see all the reason to expect a most excellent picture of it.”<sup>192</sup> (Fig. 35) For the occasion Pepys borrowed an “Indian gowne” which Hales painted with a copper colour, the shine of the satin artfully rendered. As with the style of the time, the gown was not painted with a woven or embroidered pattern. Such gowns were popular in London at this time, where at least five warehouses specialised in these luxurious robes, often made of exotic silks, catering to the wealthy gentleman.<sup>193</sup> To be painted in a dressing gown was to be associated with status, luxury, and worldliness.

The gentleman’s gown was a form of undress worn around the house for comfort in the seventeenth and eighteenth centuries. It was considered a convenient type of *deshabillé* to wear around the house, which enabled comfort while protecting more formal garments from wear and tear.<sup>194</sup> At home, the gentleman would remove the surtout coat (the outermost layer) and waistcoat and wear the gown over his shirt and breeches. In the seventeenth century, the dressing gown usually took the form of

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<sup>192</sup> Samuel Pepys, *The Diary of Samuel Pepys. Vol. 7, 1666*, ed. Robert Latham and William Matthews, vol. 7 (London: HarperCollins, 2016), 85.

<sup>193</sup> Moira Thunder, “Object in Focus: Man’s Banyan,” *Fashioning the Early Modern*, accessed 17 April 2017, <http://www.fashioningtheearlymodern.ac.uk/wordpress/wp-content/uploads/2012/02/Banyans-21.pdf>.

<sup>194</sup> Brooke, I. *Dress and undress: The Restoration and eighteenth century*. (London: Methuen, 1958), 57.

a long, loose garment wrapping around the body.<sup>195</sup> There were several different iterations of this casual garment, varying in length or fastenings. The term “banyan” was an Anglicised form of the Gujerati word for a Hindu trader. Europeans mistakenly believed that the banyan gown was worn by these traders.<sup>196</sup> Though the garment is in reality a manifestation of western perceptions, its ancestor was likely to have been the caftan and kimono.<sup>197</sup> The casual gown first appeared in the uppermost echelons of European society in the seventeenth century and became de rigueur throughout the eighteenth century. Pepys sometimes noted that he spent the day in his “cap and nightgown,” meaning that he remained in his comfortable banyan, with a cap instead of a wig.<sup>198</sup> Considered nothing like bedclothes or undergarments, the dressing gown was the common style for a gentleman receiving guests in his home.<sup>199</sup>

The looseness and ease of the dressing gown gave it an intellectual association. Gowns were long associated with scholarship. University scholars were “gown-men” in late seventeenth-century parlance.<sup>200</sup> However, the lack of formality and easy manner of the dressing gown may have made it appealing at a time when experimental philosophers were seeking to promote their “modest” philosophy. This is because openness and ease were important epistemic values, contrasted by philosophers with dogmatism, an insistence that a particular theory or opinion was incontestable. Boyle’s adversary, philosopher Thomas Hobbes (1588-1679), an associate of Margaret Cavendish, was identified with “modern dogmatists” for his

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<sup>195</sup> Cunnington, C. Willett, and Phillis Cunnington. *Handbook of English Costume in the Seventeenth Century*. (London: Faber and Faber, 1972), 145.

<sup>196</sup> Thunder, “Object in Focus: Man’s Banyan.”

<sup>197</sup> Jolly, A., *A Taste for the Exotic: Foreign Influences on Early Eighteenth-Century Silk Designs*. (Riggsberg: Abegg-Stiftung, 2007), 10.

<sup>198</sup> Samuel Pepys, *The Diary of Samuel Pepys. Vol. 6, 1665*, ed. Robert Latham and William Matthews, vol. 6 (London: HarperCollins, 2016), 175.

<sup>199</sup> Koda, Harold and Andrew Bolton. *Dangerous Liaisons: Fashion and Furniture in the Eighteenth Century*. (New York: Metropolitan Museum of Art, 2006), 26.

<sup>200</sup> Sprat, *History of the Royal Society*, 53.

insistence that proper philosophical knowledge must be based on a logical and unassailable reasoning. Against this, the experimenters argued that sound knowledge should be open to reinterpretation and qualification in light of new facts, another element of philosophical modesty and humility that was set up against an imperiousness and vanity caused by dogmatism.<sup>201</sup> For Sprat, the “bare, rational account” of a “yielding” experimenter would always be superior to the views of “haughty Assertors.”<sup>202</sup>

The loose, open fit of the dressing gown might thus make a sartorial association with the openness of right philosophy. Pepys’s was one of the first scholarly portraits to feature the gentlemanly dressing gown, and it quickly became a trope of intellectual portraiture. Indeed, so ubiquitous did the dressing gown become in representations of scholars that by the late eighteenth century an American physician could write, “loose dresses contribute to the easy and vigorous exercise of the faculties of the mind. This remark is so obvious, and so generally known, that we find studious men are always painted in gowns, when they are seated in their libraries.”<sup>203</sup> Along with a periwig, cravat and perhaps a book in hand, the gown became a defining feature of the intellectual gentleman and modest scholar.

### *Re-Fashioning Masculinity*

The other person to comment on Cavendish’s appearance was John Evelyn, the famous diarist and a fellow of the Royal Society from its foundation in 1660. Like Boyle and Pepys, Evelyn identified a close connection between costume and place, both geographically and socially. He was highly sensitive to sumptuary codes and the symbolic resonances of dress. On his travels about Europe, he often recorded local costume, noting villages, for example, that were “remarkable for nothing so much as

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<sup>201</sup> Shapin and Schaffer, *Leviathan and the Air-Pump*, 137-139.

<sup>202</sup> Sprat, *History of the Royal Society*, 34.

<sup>203</sup> Rush, Benjamin. "On the Influence of Physical Causes in Promoting an Increase of the Strength and Activity of the Intellectual Faculties of Man." In *Sixteen Introductory Lectures*. (Oceanside, N.Y.: Dabor Science Publications, 1977), 95.

the odd, yet useful habits which the good women wear, of bears' and other skins."<sup>204</sup> Visiting the Sorbonne in Paris, Evelyn attended a lecture from a Doctor of Theology where he recorded the way one individual's clothing prompted ridicule from the scholar in attendance.

After we had sate a little, our Cavalier started up, and rudely enough began to dispute with the Doctor; at which and especialy as he was clad in ye Spanish habit, which in Paris is the greatest bugbare imaginable, the Scholars & Doctor fell into such a fit of laughter that nobody could be heard to speake for a while; but silence being obtain'd, he began to speake Latine, and make his apology in so good a style, that their derision was turn'd to admiration.<sup>205</sup>

Evelyn pointed to the way assumptions about the disputant's intellect followed assumptions about his dress, even though these might be overcome once the individual began to display his intellect.

Evelyn played a leading role in changing sartorial styles in Restoration England. In 1661, Evelyn published a moral and political pamphlet entitled *Tyrannus, or the Mode*, in which he argued that English fashion should adopt its own aesthetic rather than follow the French styles; in this way England could solidify its independent identity.<sup>206</sup> French influence on English culture was especially strong in the mid-seventeenth century, first through the marriage of Charles I to Henrietta Maria (1609-1669), who arrived in England in 1625, aged fifteen, with a retinue of French courtiers and their customs. When Charles was beheaded and Henrietta took the court into exile, she settled in France. English aristocrats were to spend many long

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<sup>204</sup> Evelyn, John. *Memoirs Illustrative of the Life and Writings of John Evelyn*, ed. William Bray (London: Henry Colburn, Conduit St., 1818), 45.

<sup>205</sup> Spain and France were at war at this time, so Evelyn's companion was dressed as the enemy. Evelyn, John. *The Diary of John Evelyn*. Oxford Scholarly Classics. 6 vols. Vol. 2, (Oxford: Oxford University Press, 2000), 84.

<sup>206</sup> John Evelyn, *Tyrannus, or, The Mode: In a Discourse of Sumptuary Lawes*. (London: Printed for G. Bedel, T. Collins, and J. Crook, 1661).

years in France absorbing the culture and fitting into the customs. After the Restoration, many of the aristocrats returning from Paris or other parts of Europe felt the need to assert Englishness. But what did Englishness look like?

By 1667, gentlemen's clothing had undergone many changes since the luxuriously adorned doublet and hose of Elizabeth's court. Beginning around 1625, men's fashion became less structured and the form fitting doublet gave way to a loose doublet showing the undershirt and sleeves underneath. This ensemble can be seen on William Cavendish in figure 2. The ornament of the shirt became integral, and increasingly elaborate cuffs and ruffled collars became centrepieces of a gentleman's ensemble.<sup>207</sup>

At this time, English fashion borrowed heavily from France, echoing the complicated relationship between the English and French monarchies during the upheavals of the seventeenth century. Margaret Cavendish's lifetime was one of major political and social crises in England. Elizabeth I had been succeeded by James VI of Scotland (1566-1625), a Catholic with close ties to the French monarchy. He used lavish spending as part of his assertion of his divine right to rule, leading to conflicts with Parliament which came to a deadly dénouement in the reign of his son, Charles I (1600-1649). As Civil War broke out, many members of the aristocracy took shelter in the French court, including a young Margaret Cavendish. The court in exile became very closely associated with French culture, further blending French and English courtly fashions.

During the tumult of Civil War, luxury and adornment in clothing became a fraught moral issue. Men's display reached a peak of ornamentation in the mid 17<sup>th</sup> century, at the time of utmost unrest. In his work *The Three-Piece Suit and Modern Masculinity: England, 1550-1850*, historian of clothing David Kuchta said, the Tudor and Stuart monarchies "had clothed power in conspicuous consumption," displaying

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<sup>207</sup> Phyllis G. Tortora, ed. *Survey of Historic Costume: A History of Western Dress*, 5th ed (New York: Fairchild Books, 2010), 244-247.

their power in adornment.<sup>208</sup> As rifts between Parliament and the crown grew, the King's critics used this display against the monarchy, reframing luxury as effeminate vice rather than kingly splendour. As we shall see, new attitudes accompanying the Restoration of the crown brought about consequences for ornament in clothing.

To Evelyn, national identity could be influenced through clothing. In *Tyrannus*, he expressed concern that the English desire to mimic clothing styles from France would lead to a sort of assimilation into the French sphere of influence. He rested his argument on cultural impositions that conquerors often make on the conquered:

when a Nation is able to impose and give laws to the habit of another (as the late *Tartars* did in *China*) it has (like that of Language) proved the forerunner of the spreading of their conquests there; because, as it has something of shew and magisterial, so it gains them a boldnesse and an assurance, which easily introduces them without being taken notice of for Strangers where they come; til by degrees they insinuate themselves into all those places where the Mode is taken up, and so much in credit.<sup>209</sup>

Evelyn was not opposed to the French, but he did feel that if England continued to follow another country's fashions, it would give that country a cultural, economic, and possibly political foothold in England. To Evelyn, clothing was a signifier of national identity: the mimicry of French styles was more than a lack of distinct English fashion, but was a mimicry of belonging to the French, with their social values projected into English clothing.

The language of clothes was especially political in the seventeenth century. Tyranny was a common analogy used by moral critics. One anonymous author opined, "The mode is a tyrant, and too often ruins her best servants by engaging

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<sup>208</sup> David Kuchta, *The Three-Piece Suit and Modern Masculinity: England, 1550-1850* (London: University of California Press, 2002), 56.

<sup>209</sup> Evelyn, *Tyrannus, or, the Mode*, 4.

them into many other kind of expenses and inconveniences.”<sup>210</sup> Not only was the mode a tyrant, it was a female tyrant, called “Madam La Mode” by yet another anonymous critic.<sup>211</sup> Madam la Mode emasculated Englishmen, making them vulnerable to further social disruption.

Evelyn’s suggestion was to develop a new English style of clothing to signify English virtues and identity. This “virile and comely fashion” should “incline to neither extreme.” Evelyn’s ideal fashion for Englishmen would “prove of infinite more reputation to us” than the French-influenced fashions in which “there is nothing fixed, and the liberty so exorbitant.”<sup>212</sup>

Evelyn even presented the *Tyrannus* pamphlet to the newly-restored King Charles II in the hopes that it might influence his fashion decisions. Though it is unknown if the King read the pamphlet, Charles II was interested in the relationship between sartorial and political signifiers. As early as 1662, he wrote to Parliament that he wanted to promote sartorial virtue:

I cannot but observe to you, that the whole nation seems to me a little corrupted in their excess of living. Sure all men spend much more in their clothes, in their diet, in all their expenses, than they used to do.... I do believe I have been faulty that way myself: I promise you I will reform; and if you will join with me in your several capacities, we shall, by our examples, do more good, both in city and country, than any new laws would do.<sup>213</sup>

Charles suggested that changing the narrative of sartorial aspirations towards temperance would be more effective than sumptuary laws. He showed a shrewd understanding of how clothing and consumption interplayed. To this end, he

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<sup>210</sup> Short Notes and Observations Drawn from the Present Decaying Condition of this Kingdom in Point of Trade (London: 1662), 11.

<sup>211</sup> An Account of the French Usurpation, (London: 1679), 20.

<sup>212</sup> Ibid., 14.

<sup>213</sup> Qtd in Kuchta, The Three-Piece Suit and Modern Masculinity: England, 1550-1850, 80.



materially transformed masculine attire, a shift which would have far reaching implications for the image of masculinity.

Consequently, contemporary to the Royal Society's inception, Charles II introduced a style of suit called the cossack, an ensemble consisting of three main garments: the jacket, the vest, and the trousers. This would be the inception of the three-piece suit, for centuries afterward a key component of the visual form of masculinity. The three-piece suit and the political identities it signified were part of what historians of costume call the "great renunciation" of variation and ornament in men's attire. Pepys recorded the announcement of the sartorial upheaval. The King declared "his resolution of setting a fashion for clothes, which he will never alter. It will be a vest, I know not well how; but it is to teach the nobility thrift, and will do good."<sup>214</sup> Thrift, the same value that Dudley North championed in his *Advices Oeconomical*, should be a key element of noble attire. Against a conspicuous consumption and lavish ornament associated with French masculinity, the English should display virtue through an absence of adornment. Kutcha explained that "virtue itself was defined as the absence of display."<sup>215</sup> On 7<sup>th</sup> October, 1666, some eight months ahead of Cavendish's visit to the Royal Society, the King debuted the new style of manly, virtuous, inconspicuous display. Pepys recorded the event:

This day the King begins to put on his vest... being a long cassock close to the body, of black clothe and pinked with white silk under it, and a coat over it, and the legs ruffled with black ribbon.... Upon the whole, I wish the King may keep it, for it is a very fine and handsome garment.<sup>216</sup>

Evelyn made a special trip to court to see the new style.

It being the first time of his *Majesties* putting himselfe solemnly into the *Eastern fashion* of vest, changing doublet, stiff Collar, bands and Cloake,

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<sup>214</sup> Kutcha, *The Three-Piece Suit and Modern Masculinity*, 82.

<sup>215</sup> *Ibid.*

<sup>216</sup> Qtd in Kutcha, *The Three-Piece Suit and Modern Masculinity*, 83.

etc.: into a comely Vest, after the *Persian* mode with girdle or shash [sic], and Shoe strings and Garters, into bouckles, of which some were set with precious stones, resolving never to alter it, and to leave the French mode, which had hitherto obtained to our great expense and reproach.<sup>217</sup>

Though it claimed to be derived from Persian styles, the English cossack, like Pepys's dressing gown, had no real connection to a garment anywhere in Eastern clothing. The King introduced a more modest form of dress, perhaps with Evelyn's calls for a less extravagant style to distinguish the English from the French in mind. Perhaps this royal enthusiasm for a more plain form of dress provided a context for Boyle and Pepys's promotion of a plain form of dress as appropriate to the practitioners of experimental philosophy. Charles II was depicted in his new style in a portrait painted in about 1677. (Fig. 36) This thrifty new mode of dress began to be adopted in portraiture. The new cossack ensemble was the style of dress that Boyle was painted in by Johann Kerseboom, discussed above. Similarly, portraits of the influential Kit-Cat Club by Godfrey Kneller show an increasingly modest style of dress among its sitters.<sup>218</sup> The portraits, painted over a twenty year period in the earliest decades of the eighteenth century, show the increasingly common practice of male sitters being depicted with not only a banyan, but a turban instead of a wig.<sup>219</sup> Substituting a turban for a wig mirrored the domestic appearance of a man in his study just as the banyan did, as men would remove their heavy, itchy wigs while indoors and replace them with turban-like caps. These two items of clothing were chosen with increasing frequency in the late seventeenth century through the eighteenth century, creating a trope in portraiture signifying male credibility.

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<sup>217</sup> Evelyn, *The Diary of John Evelyn*, vol. 2, 465.

<sup>218</sup> Field, Ophelia. *The Kit-Cat Club : Friends Who Imagined a Nation*. .London: HarperPress, 2008.

<sup>219</sup> Stewart, J. Douglas. *Sir Godfrey Kneller and the English Baroque Portrait*. Oxford Studies in the History of Art and Architecture. Oxford: Clarendon, 1983.

## *Masculine Fashions and the Place of Women*

We now begin to see why the fellows of the Royal Society might have balked at Margaret Cavendish's dress. Cavendish had close ties to France, through her time in exile during the Civil War, and to the Royal Society's enemy Thomas Hobbes. She was invited to the Royal Society regardless. But her dress was marked by "pomp" and was described by Pepys as "antick". Cavendish was not the kind of modestly-dressed philosopher that a royal experimental institution wanted to admit.

Charles II's deliberate shift in the fashion of the day was not without its critics. Evelyn reports that "divers courtiers and gentlemen gave his Majesty gold by way of wager that he would not persist in this resolution," supposing the king would change his mind about the cassocks.<sup>220</sup> Evelyn bet that the Persian style would remain, and by 30th October, he had adopted the new style himself.

Virtuous masculinity had been made material through the cassock. The three-piece suit acquired associations with a broad set of desirable traits. Many of these were the same traits of gentlemanly virtue that the Royal Society used to promote their members' credibility. In 1669 Edward Chamberlayne (1616-1703), writer and fellow of the Royal Society, echoed Sprat and Boyle's terms to discuss English sartorial virtues:

England never saw, for matter of wearing apparel, less prodigality, and more modesty in clothes, more plainness and comeliness, than amongst her nobility, gentry, superior clergy; only the citizens, and country people, and the servants, appear clothed for the most part above and beyond their qualities, estates or conditions; since our last breach with France, the English men (though not the women) quitted the French mode, and took a grave wear.<sup>221</sup>

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<sup>220</sup> Ibid.

<sup>221</sup> Chamberlayne, Edward. *Angliae Notitia: Or, the Present State of England*. (London: T. Newcomb, 1669), 25-26.

According to David Kutchka, the cassock was not merely the reshaping of English masculine fashion, it was also a shift in the prevailing symbols of masculine authority.<sup>222</sup> Replacing the doublet and hose, the form of the cassock became the quintessential form of masculine appearance. Just as with Englishness and political identity, masculinity was undergoing a radical shift in the late seventeenth century.

Masculine fashion had changed and acquired virtuous implications. However, Charles neglected to suggest a form of virtuous costume for women, or indeed for anyone who was not a courtly gentleman. This had lasting social implications. As a consequence of their exclusion from the new form of virtuous fashion, women became by default conspicuously unthrifty. Moralists such as Edward Chamberlayne who wished to criticise feminine excess now had a convenient material example to point to. It was now the woman's role to consume conspicuously, in contrast to men. Just as masculinity was shifted, so was femininity. Kuchta has exposed the deeply gendered role that virtue and fashion played in the creation of the cassock: "sartorial renunciation was embraced as manly refinement, extravagance renounced as base effeminacy."<sup>223</sup> Women, to the degree that they did not adopt the new fashion, would now be considered, by default, as extravagant in their dress.

The three-piece suit introduced in 1666 made material a modern iteration of gender. This gender distinction was one with moral implications, especially that virtues and vices became increasingly associated with the acquisition of goods. This same distinction is epistemic; the three-piece suit was the uniform signifying what Haraway calls "the specifically modern, European, scientific form of the virtue of modesty."<sup>224</sup> Folded into this visual identity is the modest witness's "self-invisibility:" the ability to be a witness present in an epistemic space that purports to be universal, cultureless, situated without social biases of any type. Biases, Haraway says, are embodied; therefore, any person claiming to be unbiased must also claim to be

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<sup>222</sup> Kuchta, *The Three-Piece Suit and Modern Masculinity*, 3.

<sup>223</sup> *Ibid.*, 4

<sup>224</sup> Haraway, *Modest\_Witness*, 23.

disembodied. Though their self-fashioning prioritised self-invisibility, and therefore implied a disembodied philosophical position, the Royal Society's practice came from an implicitly gendered pedigree. Early modern women were unavoidably embodied beings. Perpetually evaluated based on beauty and youth, scores of early modern women writers both conservative and progressive attempted to draw attention to their experiences as objects of display. Cavendish herself bemoaned the role of beauty in women's lives: "beauty is the light of our sex, which is eclipsed in middle age, and benighted in old age, wherein our sex sits in melancholy darkness; and the remembrance of beauty past is as a displeasing dream."<sup>225</sup> Beauty, by necessity an embodied attribute, played a defining role in all stages of women's lives. Women, therefore, could not escape their roles as embodied, situated people. Self-invisibility was not available to the early modern woman as it was to the early modern man.

### *Margaret Cavendish, Philosopher and Outsider*

With the three piece suit, the banyan, and the goal of thrift in attire, a new set of visual signals was being developed by men in the court and at institutions such as the Royal Society. These signals of credibility prioritised sobriety, modesty, and virtuous restraint. Such visual signals were available to men, but not women. The case of Margaret Cavendish's visit to the Royal Society illustrates the gendered consequences of the new, exclusively male, image of sobriety.

Margaret Cavendish's reputation for unusual dressing was a result of her self-confessed pursuit of uniqueness. She had a lifelong interest in curating a radically different self-image. Her publications often included an engraved frontispiece in which Cavendish was portrayed in flowing, bejewelled classical robes and sandals. (Fig. 37) Historian Jane Stevenson described her stance as "standing in a masculine heroic pose with hand on hip, elbow pointed towards the viewer."<sup>226</sup> Cavendish stood

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<sup>225</sup> Qtd. In Grant, *Margaret the First*, 20.

<sup>226</sup> Jane Stevenson, "Women and the Cultural Politics of Printing," *The Seventeenth Century* 24, no. 2 (2009): 212.

between Minerva, goddess of wisdom, and Apollo, patron god of music and poetry. This portrait of the author introduced her readers to a woman confident in her talent. Despite this confidence, a pervasive theme in her writings was how out of place she was as a woman intellectual. She had a strong sense that she was invading a masculine brotherhood of writers. As Emma L. E. Rees has written, Cavendish's "anomalous role as a writing woman allowed her a license to propagate at times uncompromisingly contentious ideas which a *man* – in the context of the age, the only proper pretender to the title of 'writer' – would dare to publish."<sup>227</sup> The fact that there was no prescribed feminine literary identity meant that she had the freedom to playfully invent her own. Her writings demonstrate a woman who treasured her role as a singularity, promoting herself as a marvel so prized by collectors of curiosities. Her self-invention extended to her wardrobe, echoing her determination to experiment with the unusual and unique. Writing in her memoir "A True Relation of my Birth, Breeding, and Life," she recalled:

I took great delight in attiring, fine dressing and fashions, especially such fashions as I did invent my self, not taking that pleasure in such fashions as was invented by others: also I did dislike any should follow my Fashions, for I always took delight in a singularity, even in accoutrements of habits.<sup>228</sup>

Women's clothing retained the format of an open gown over a stomacher and petticoat, but lost the wheel farthingale structure under the skirt by 1630. Ruffs, a main element of ornamentation in feminine dress of the previous century, became extremely large in the early half of the seventeenth century, but were gradually replaced by "falling ruffs" laying flat on the shoulders. Women's sleeves and collars were prominent areas of ornament. This is the style of clothing that Margaret Cavendish would have been accustomed to wearing throughout her youth and early adulthood. A portrait depicting Margaret Cavendish and her husband, William

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<sup>227</sup> Rees, *Margaret Cavendish: Gender, Genre, Exile*, 3.

<sup>228</sup> Margaret Cavendish, *Paper Bodies: A Margaret Cavendish Reader*, ed. Sylvia Lorraine Bowerbank and Sara Heller Mendelson, Broadview Literary Texts (Letchworth: Broadview Press, 2000), 60.

Cavendish, the Duke of Newcastle, depicts the fashion that English aristocracy wore in their years of exile. (Fig. 38)

In 1667, during her London visit, her style included a justaucorps, a French-originated style of coat normally worn by men (Fig. 39). The garment was fitted to the waist and flared out down to the knees. The sleeves were long and characterised by large, deep cuffs. On men, this was a normal coat. On women, the justaucorps was worn with a petticoat, but normally only used in riding ensembles. Without the context of riding, Margaret Cavendish's choice of *justaucorps* ensemble would have been somewhat androgynous.<sup>229</sup> On 26 April 1667, Pepys glimpsed Cavendish in her black justaucorps "with her velvetcap, her hair about her ears, many black patches, because of pimples about her mouth; naked-necked, without any thing about it."<sup>230</sup> Her velvet cap may have been similar to the cap in her 1665 portrait by Peter Lely. (Fig. 40) Similar to Pepys's description, the portrait shows Cavendish wearing her hair in curls about her ears. Her dress in the portrait is not a justaucorps ensemble, rather, it is a blue embroidered dress appropriate for court. A feathered cap and justaucorps is also seen in the "cavalier bien mis" ensemble drawn in *Recueil des Modes de la Coeur de France*.<sup>231</sup> Perhaps these similarities were why Evelyn exclaimed that she looked like a cavalier in his description of her visit to the Royal Society.

Evelyn, who discussed her excessive pomp and cavalier-like appearance with more than a little mockery, seemed to have a kinder opinion of Cavendish's dress prior to the Royal Society meeting. Visiting her in her own London residence a month before the Royal Society meeting, Evelyn recorded that he was delighted by

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<sup>229</sup> As demonstrated in the previous chapter, Elizabethan courtiers would not have found blurring the gendered boundaries of clothing unusual. By 1667, however, that propensity to blur gender boundaries was no longer part of courtly culture.

<sup>230</sup> Pepys, *The Diary of Samuel Pepys*. 1667, vol. 8, 181.

<sup>231</sup> Henri Bonnard, *Le Cavalier Bien Mis*, circa 1670, Hand-coloured engraving on paper, 362 mm x 241 mm, Los Angeles County Museum of Art, Los Angeles.

her “extraordinarily fanciful habit, garb, and discourse.”<sup>232</sup> His wife, however, disliked her immediately. Mary Evelyn (1635-1709), who believed it was unnatural for women to pursue philosophy, was coldly dismissive of Cavendish. Mary Evelyn deemed Margaret Cavendish vain, anticipating her husband’s criticism of Cavendish a few months later.<sup>233</sup>

Cavendish did not think herself vain. In her memoirs, she wrote that “whatever I was addicted to, either in fashions of Cloths, contemplation of Thoughts, actions of Life, they were lawfull, Honest, Honorable, and Modest.”<sup>234</sup> She knew that her style, like her writing, was unusual, but she believed herself modest within her uniqueness. She also believed women to be naturally more modest than men: “In their dressings and fashions [men] are more phantastical, various and unconstant than women are.”<sup>235</sup> It was male fashion she found frivolous, not that of her own gender. Unfortunately, this opinion was not often shared by her contemporaries. Her self-fashioning and purposefully unique taste did not fit in with the image of sobriety that the men of the Royal Society sought.

### *Critiquing Experimental Philosophy*

Cavendish was a sharp critic of the Royal Society’s claims regarding experimental knowledge-making. Cavendish’s solitary status as an outsider to the masculine circles of knowledge-making allowed her the perspective needed to criticise the flaws in men’s practices. In the two years preceding her visit to the Royal Society, she had published criticisms of prominent philosophers including Hobbes, Descartes, and the experimentalists. Her conception of nature was one of “Organic Materialism.” Though she agreed with Hobbes that nature was composed of matter in motion, she rejected Hobbes’s distinction between animate and inanimate, intelligent and unaware. She also rejected Descartes’ separation of mind and body.

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<sup>232</sup> Qtd. In Grant, *Margaret the First*, 19.

<sup>233</sup> Ibid.

<sup>234</sup> Margaret Cavendish, *Paper Bodies*, 60.

<sup>235</sup> Qtd in Grant, *Margaret the First*, 19.



Her writings emphasised ecological relationships: each part of the natural world was an active participant. “For Cavendish,” Shiebinger has argued, “matter is not dead body, devoid of spirit, rather corporeal nature is both subject and agent... She insisted that a fundamental unity pervaded the world, that nature was composed of one self-moving, intelligent matter.”<sup>236</sup>

As such, the experimental project of pulling apart nature was folly. Separating natural phenomena out and isolating them in experimental machines, such as the air pump, would not account for the whole of nature, and therefore was a wasted exercise. Furthermore, for men to attempt this was sheer arrogance: how could one part of nature, humanity, claim to understand the whole of it? Cavendish wrote that “although each particular creature or part of Nature may have some conceptions of the Infinite parts of Nature, yet it can not know the truth of those infinite parts, being but a finite part itself.”<sup>237</sup> Men and women could write about their thoughts on natural philosophy, because as part of a united self-knowing system they could have some insight. Claiming to be able to establish matters of fact was going a step too far “[because] Man is but a small part, and his powers are but particular actions of Nature... he cannot have a supreme and absolute power.”<sup>238</sup>

Men who wanted the power to pronounce matters of fact about nature could not work with this living, ecological model. Experimental philosophers pretended to be “petty gods” who would “fain be above nature.”<sup>239</sup> They refused to accept the power of a self-motivated nature. Instead “they [would] rather maintain absurdities and errors, than allow any other self-motion in nature, but what is in themselves.”<sup>240</sup> Evelyn Fox Keller brought out the gendered implications in Cavendish’s critiques,

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<sup>236</sup> Londa Schiebinger, “Margaret Cavendish, Duchess of Newcastle,” in *A History of Women Philosophers* (London: Springer, 1991), 7.

<sup>237</sup> Margaret Cavendish, *Observations Upon Experimental Philosophy*. Eileen O’Neill, ed. (Cambridge: Cambridge University Press, 2001); 48.

<sup>238</sup> *Ibid.*, 49.

<sup>239</sup> *Ibid.*, 112.

<sup>240</sup> *Ibid.*

explaining that “for Cavendish, men pronounce upon a dead, mechanical nature because man is thereby made easy master.”<sup>241</sup>

In 1666, Cavendish published *Observations on Natural Philosophy*, a thorough study of the microscope and air pump, and the related claims of Hooke and Boyle. In addition to her philosophical objections to men claiming to fully comprehend nature, she further accused experimental philosophy of being unreliable on the grounds that no information collected from the senses could be flawless. Machine-augmented observations were even further from the truth than mere eye witnessing. Cavendish asserted that rather than the “naked, natural” depiction of nature that the Royal Society claimed to present, the product of their enquiries was actually highly augmented. They presented a mediated form of nature resulting in “mixt figures, partly artificial, and partly natural... For example, a louse by the help of a magnifying glass appears like a lobster.”<sup>242</sup> Robert Hooke’s microscope was thoroughly examined in Cavendish’s *Observations*: “It is not the real body of the object which the Glass presents, but the Glass onely figures or patterns out the picture presented in and by the Glass and there may easily mistakes be committed in taking copies from copies.”<sup>243</sup> In her utopian fiction *The Blazing World*, Cavendish further emphasised the unreliability of using glasses to observe nature. Several of the utopia’s philosophers look through one such glass and could not agree on what they had seen, despite having each peered at exactly the same thing.<sup>244</sup>

Furthermore, what was there to be gained from a magnified, dead specimen? Using the example of a louse, Cavendish posed the question, “if a painter should draw a louse as big as a crab, and of that shape as the microscope presents, can anybody imagine that a beggar would believe it to be true? But if he did, what

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<sup>241</sup> Keller, Evelyn Fox. "Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science." *ELH* 64, no. 2 (1997): 447-71; 456.

<sup>242</sup> Cavendish, *Observations Upon Experimental Philosophy*, 50.

<sup>243</sup> *Ibid.*, 51.

<sup>244</sup> Margaret Cavendish, *The Description of a New World, Called the Blazing World*, ed. Kate Lilley, Penguin Classics (London: Penguin, 2004), 33.

advantage would it be to the beggar? For it does neither instruct him how to avoid breeding them, or how to catch them or hinder them from biting.”<sup>245</sup> The *Micrographia*’s representation of a louse could not account for its role in Cavendish’s conception of nature. It showed nothing about the louse’s relationship to other beings, its environment, or its habits. Ecological relationships could not be accounted for in an epistemology that wanted to dissect nature, so that Cavendish pronounced experimental philosophy inadequate.

### *Conclusion*

On 30<sup>th</sup> May 1667, some of the very men responsible for these changes in epistemic, sartorial, and gendered practices came together to reject Margaret Cavendish from the Royal Society. Through her philosophical critiques of experimental observation, Cavendish was not in a position to be received well by the Society. Her rejection was articulated in clothing rather than philosophical matters. The Royal Society was not receptive to her physical presence, therefore her intellectual credentials meant nothing. Her sartorial and gendered identity did not suit the collective identity of the Royal Society; she did not appear as the modest witness they required.

Dismissal had lasting implications for Cavendish’s intellectual credibility. The members of the Royal Society who recorded their impressions of Cavendish seemed to have continued to be unimpressed by her after her visit. The year following Cavendish’s attendance at the Royal Society, her next publication drew scorn from Pepys, who wrote that her writings showed “her to be a mad, conceited, ridiculous woman, and [William Cavendish] an asse to suffer her to write what she writes to him, and of him.”<sup>246</sup> Whereas before her trip to London, Pepys was interested in Cavendish, seeing her in person seems to have turned his opinion from curiosity to

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<sup>245</sup> Cavendish, *Observations Upon Experimental Philosophy*, 52.

<sup>246</sup> Samuel Pepys, *The Diary of Samuel Pepys. Vol. 9, 1668-1669*, ed. Robert Latham and William Matthews, vol. 9 (London: HarperCollins, 2016), 123.

disdain. Now, her writings could hold no value. Furthermore, those who associated with her lost credibility and appeared foolish to Pepys.

As English identity changed in the Restoration era, so too did epistemic credibility and sartorial signifiers. Modest masculinity was the key to acceptance in court and in the academy, shutting out sartorial visibility as a detrimental, feminine trait. In this process, traits that appeared to be counter to the “self-invisibility” of the modest witness became associated with femininity. Cavendish’s visit to the Royal Society was a moment when sartorial individualism, worn by a non-experimentalist woman, was central to the intellectual rejection of a philosopher.

## Chapter Three:

### Fashions of Sense and Nonsense: Severing Display from Virtue

As the introduction pointed out, in *Fashionable Nonsense* Sokal and Bricmont's critique of constructivist humanities is representative of an assumption that science and fashion are opposed. In the nineteenth century, the critic Thomas Carlyle made satire from this opposition in his account of a fictitious German professor called Teufelsdröckh who espoused a complicated philosophy of clothes. This chapter examines the continuing development of experimental philosophy and the three-piece suit into the eighteenth century to argue that it was in this period that reason and fashion began to be seriously opposed.

It was in the seventeenth and eighteenth centuries, as the first section shows, that a vocabulary and language of fashion entered European languages. Three case studies then consider a variety of connections and critiques made of knowledge and fashion in the eighteenth century. Historians of the early modern era have established that consumption was a practice fraught with moral implications, particularly in the eighteenth century. Consumption, especially of fashion, could make a person vulnerable to accusations of low virtue or irrationality. "Inconspicuous consumption" was a strategy by which a gentleman could increase his credit by distancing himself from fashion. As David Kutchka has written in *The Three-Piece Suit and Modern Masculinity*, after the changes that Charles II began by introducing the new model of thrifty masculinity, "the good repute of the gentleman rested not on conspicuous consumption, but on inconspicuous consumption, on the display of public virtue, while virtue itself was defined as the absence of display."<sup>247</sup> Inconspicuous consumption was the non-display of luxury, or the display of apparent restraint. In early modern world of science, abstaining from consumption implied virtuous modesty. Writers in the late seventeenth and early eighteenth centuries served to promote this alliance of masculinity, thrift, and authority in knowledge against a supposedly feminine culture of fashion and consumption.

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<sup>247</sup> David Kutchka, *The Three-Piece Suit and Modern Masculinity: England, 1550-1850* (London: University of California Press, 2002), 5.

In the 1740s the Anglo-French physician Dennis De Coetlogon (d. 1749) used the history of fashion to attack mutable ideas in medicine, chemistry, and other sciences. Two decades later, the Scots philosopher Adam Smith (1723-1790) wrote an apology for fashion, supposing it was an inevitable feature of all practices, a supposition that perhaps was important for his innovative idea of writing the history of science, treating of the ways ideas came and went in science as in other areas. Such confluences of science and fashion always carried gendered connotations. Across the eighteenth century, critics of fashionable clothing and ideas condemned them as feminine or attacked women as being too caught up with fashion to be proper philosophers. These opinions followed naturally from the oppositions established between sober dress and thought in the Restoration and an assumption that only men could attain either. Yet women did not accept this new attitude uncritically. A third case study considers the work of late seventeenth-century moralist Mary Astell (1666-1731). Astell accepted a contrast between fashion and good sense, but insisted that women were not lesser beings for having an interest in fashion. If the attention they gave to clothes were redirected to learning, then they would be the equal of men.

### *Fashions in Definitions*

The meaning of fashions and the terms used to describe them changed and evolved leading up to the eighteenth century. The word fashion began as a more general term for “way,” or “manner.” Circa 1380, the Middle English poem *Pearl* included the phrase “alle of þe same fasoun.”<sup>248</sup> This term related to demeanour, as found in philosopher Thomas More’s *Memorare Nouissima*: “With som good grace and pleasant fashion.”<sup>249</sup> Fashion came to mean prevailing customs, “especially one characteristic of a place and time,” according to the *Oxford English Dictionary*.<sup>250</sup>

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<sup>248</sup> "fashion, n.". OED Online. June 2018. Oxford University Press. <http://www.oed.com/view/Entry/68389?isAdvanced=false&result=1&rskey=fYDyje&> (accessed July 10, 2018).

<sup>249</sup> Ibid.

<sup>250</sup> Ibid.

Fashion in clothing remains one of the most immediate indications of place and time. Often it is one of the most trusted methods of dating a portrait in art history.

Fashion as a term for characteristics of a place and time soon became specific to the clothing of a place and time. According to the *Oxford English Dictionary*, the definition of fashion meaning “conventional usage in dress, mode of life, etc.” first appeared in Shakespeare’s *Hamlet* in 1604: “The glasse of fashion, and the mould of forme.”<sup>251</sup> However, another similar definition, “The mode of dress, etiquette, furniture, style of speech, etc., adopted in society for the time being,” appeared earlier in 1569. Richard Grafton, King’s printer to Henry VIII and Edward VI published a work *A chronicle at large and meere history of the affayres of Englande and kinges of the same* which included the phrase “A scarlet Robe with a hoode (as the fashion then was).”<sup>252</sup> Soon after the word fashion started to specifically refer to clothing and décor, the phrase “in fashion” and “out of fashion” began to appear. In 1603, a translation of French philosopher Michel de Montaigne’s essays by John Florio included the phrase “the Hungarians did very auaillefully bring them into fashion.”<sup>253</sup> By the beginnings of the seventeenth century, a language to describe fashion was forming.

In the seventeenth century, the attribute “fashionable” began to appear. As early as 1609, “fashionable” was used to describe a person observant of fashion, or more specifically “dressing or behaving in conformity with the standard of elegance current in upper-class society.”<sup>254</sup> This meaning of “fashionable” appeared twice in 1609. One instance was in Shakespeare’s *Troilus and Cressida*, in which Time was described as “a fashionable hoast / That slightly shakes his parting guest by th’ hand.”<sup>255</sup> The second instance was in a less well known book, *The man in the moone*,

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<sup>251</sup> Ibid.

<sup>252</sup> Ibid.

<sup>253</sup> Ibid.

<sup>254</sup> ‘Fashionable, Adj. and N.’, *OED Online* (Oxford University Press), accessed 21 July 2018, <http://www.oed.com/view/Entry/68392>.

<sup>255</sup> Ibid.

*telling strange fortunes; or, The English fortune-teller*, in which a “finicall fellow” was described as “very fashionable.”<sup>256</sup>

“Mode” was another term frequently used in England in the early modern era to describe current fashions in clothing. This term was derived from the French equivalent word, and began to appear in the mid-seventeenth century, a time when the English court was in exile in France. The earliest known usage was by Anglo-Welsh historian James Howell in 1642, the year the Civil War began. In *Forraine Travell*, he described a man “who savoureth of no affectation, or strangenesse, of no exotique modes at all.”<sup>257</sup> From then, many examples of “mode” or “the mode” can be found. William Cavendish, husband of Margaret Cavendish, is listed in the Oxford English Dictionary as the first user of “the mode” to mean “the fashion in dress, manners, etiquette, etc.” when he wrote, “Wee are governd by the mode, as waters by the moone,” in the comedy *Country Captaine* in 1649. Margaret Cavendish used “mode” frequently. She is credited with the first use of “mode” without a preceding article. Her play *Bridals* included the line, “Be you in the Torrid Zone of Mode, in Speech, Behaviour and Accoutrements, and let your Garments be so rich, as to shine in Gold and Silver.”<sup>258</sup> The Cavendishes, then, not only used fashion as a form of political argument but helped establish the vocabulary used to describe it in English.

The emergence of these modern uses coincided with anxieties about credibility. The changes in dress discussed in the previous chapter were a symptom of fashion becoming related to a person’s lack of credibility. The need to appear unconcerned with fashion grew from the normalisation of puritanical tropes, but by the Restoration, experimental philosophers presented modest attire not as a sign of religious dogmatism, but as a sign of a measured and unenthusiastic mind. It is perhaps rather significant that these modern uses of the words came about during a

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<sup>256</sup> Ibid.

<sup>257</sup> ‘Mode, N.’, *OED Online* (Oxford University Press), accessed 21 July 2018, <http://www.oed.com/view/Entry/120575>.

<sup>258</sup> Ibid.



time when discussions about consumption meant there was much at stake in fashionability or inconspicuous consumption.

Before this chapter moves on to the languages surrounding fashion, it is necessary to understand what the fashions in clothing were. The previous chapter has already alluded to men's fashion becoming increasingly sparse. However, looking at the fashions that men donned during the eighteenth century, it may be difficult to perceive their clothing as unadorned. Men's clothing did have decoration and luxurious adornment, such as gilt thread accents and embroidery. These adornments were fewer and farther between than those of the previous century, when flounces, ribbon and lace prevailed. The cut of men's clothing changed much less dramatically and less frequently in the eighteenth century than it had in the seventeenth. The breeches, waistcoat, and coat that had been introduced by Charles II and adopted by Samuel Pepys, John Evelyn, and Robert Boyle remained the dominant structure of men's garb throughout the eighteenth century. The jacket cut was the one point of greatest variance, aside from accessories such as neckerchiefs or wigs. (Fig. 41) One example of an ensemble, at the Costume Institute, of the Metropolitan Museum of Art, shows that the waistcoat was the main garment on which ornament was displayed, but that men's fashion was tending to utilise darker colours such as sombre brown.

After the turn of the eighteenth century, French and English women's clothing began to change more rapidly. Eighteenth-century women's fashion broke away from that of the seventeenth with the introduction of the *robe volante*.<sup>259</sup> (Fig. 42) A rare extant example of a *robe à volante* can be found in the Costume Institute. Sometimes

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<sup>259</sup> The dominance of French taste in eighteenth-century fashion is evident in the French terms. Sources on eighteenth century fashion and women's clothing include Ribeiro, Aileen. *Dress in Eighteenth-Century Europe : 1715-1789*. (London: Yale University Press, 2002); Ribeiro, Aileen, and Valerie Cumming. *The Visual History of Costume*. (London: Batsford, 1989); Delpierre, Madeleine. *Dress in France in the Eighteenth Century*. (New Haven: Yale University Press, 1997); Boucher, François. *A History of Costume in the West*. (London: Thames and Hudson, 2004); Cunnington, C. Willett, and Phillis Cunnington. *Handbook of English Costume in the Eighteenth Century*. (London: Faber & Faber, 1972).

referred to the “sack” or “sack-back” gown in English, the *robe volante* featured a loose gown draped in large pleats over the bodice and petticoat. The pleats would extend all the way to the floor. These *robes* were sometimes open in the centre to reveal the skirts underneath, or sewn at the centre, or tied loosely at the side of the waist. The *robe volante* became increasingly structured by the 1730’s to 1740’s with the pleats becoming thinner and the bodice shrinking to fit the torso. This version of the “sack” gown became known as the *robe à la française*, which was to dominate fashion throughout the mid-century. (Fig. 43) Many examples of these garments survive, as illustrated by two such dresses in the Costume Institute from about 1750-1760. The *robe à la française* developed the volume of the *robe volante* into a more structured shape: an overgown with elbow length sleeves (or *engageantes*), tight through the bodice contrasting with voluminous pleats running down the full length of the back of the body, and an opening in front exposing a stomacher and petticoat.<sup>260</sup> The edges of the overgown could be trimmed with intricate lace and ribbons, and the exposed stomacher and petticoat would often be richly decorated with bows. The *robe à la française* was worn with *panniers*, structures of hoops worn on the side of each hip to elongate the horizontal silhouette. Though the distinct shape remained largely the same throughout its popularity, *robes volantes* and *robes à la française* were flexible designs that could be ostentatious or austere depending on the wearer’s means.

In the second half of the eighteenth century, fashionable women’s clothing took on a greater variety of forms. The *robe à l’anglaise* became the most popular, in which the bodice was sewn closed and a stomacher was no longer used. (Fig. 44) An example from 1785-1787, preserved in the Metropolitan Museum’s Costume Institute, illustrates the subtle differences from the *robe à la française*. The skirt of the *robe à l’anglaise* was raised above the ground so that the feet peeked out under the hem. By the 1780’s, the *robe à l’anglaise* was the commonest style worn by women of means. Another more elaborate style was the *robe à la polonaise*, supposedly influenced by Polish dress. It was a closed-bodice ensemble in which the skirts were drawn up and draped dramatically. A third popular style was the “round

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<sup>260</sup> Boucher, *A History of Costume in the West*, 296.

gown,” which sought to emulate the simplicity of classical Greek and Roman gowns.<sup>261</sup> As we shall see, some of the anxiety around fashion throughout the century was centered around how quickly it changed, materially emulating the fleeting qualities of culture.

*Fashion as an Accusation: Fashions of Physick, History of Chemistry*

The need to disguise conspicuous consumption meant that credibility could be emphasised by critiquing fashion. Experimental expertise and the anti-fashion of the three-piece suit became interwoven. Similarly, in that process, there emerged a common opposition between the idea of “fashion” and the idea of reliable knowledge. This opposition has become an enduring element in the credibility of scientific practice. “The fashionable world” was accused by an anonymous writer in 1792 of being “so much in love with their own stupidity, that, though they were capable, they could not command time for disinterested reflection.”<sup>262</sup> Stupidity was associated with following fashion. Conversely, the appearance of rationality required the erasure of fashion: “Remove the Excrescences of Affectaton, Fashion, Party and Passion, and the Man will of himself subside into Common Sense.”<sup>263</sup> A fashionable person was neither virtuous nor intelligent.

Fashionability became an accusation. The term “fashionable theory” became a common accusation directed at a rival intellect. A review of a study on volcanic eruptions crowed that “the fashionable theory of modern philosophers ...receives here a check, which must set them somewhat more upon their guard.”<sup>264</sup> Experimental philosophy was not immune to this rhetoric: scholar Benjamin Malkin

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<sup>261</sup> Lydia Edwards, *How to Read a Dress: A Guide to Changing Fashion from the 16th to the 20th Century* (London: Bloomsbury Academic, 2017), 49.

<sup>262</sup> An Address to the Associated Friends of the People (Edinburgh: printed for the author, 1792), 29–30

<sup>263</sup> *Common Sense Weekly*, 1737, quoted in Christoph Henke, *Common Sense in Early 18th-Century British Literature and Culture* (Berlin: De Gruyter, 2014), 36.

<sup>264</sup> Anon., “Foreign Literature,” *The Monthly Review* 71 (1785): 301-310, 307.

noted that “it is the fashion of the day, to encourage the pursuit of experimental philosophy; but it would be difficult to prove its utility.”<sup>265</sup> An idea that became fashionable became suspicious.

Dennis De Coetlogon was a physician born in France who emigrated to England.<sup>266</sup> His best known achievement was the authorship of a two-volume encyclopedia entitled *An Universal Dictionary of Arts and Sciences*, published in 1740.<sup>267</sup> In 1739, he published a less well-known criticism of his profession, entitled *Physick is a Jest, a Whim, an Humour, a Fancy, a Mere Fashion, even Full as Much as Dress or Dancing*.<sup>268</sup> In this book, De Coetlogon traced the history of science as it degraded from ancient purity to modern frivolity. The book hinged on an analogy between medicine and dress, such that the terms used to describe the fleeting changes of dress, i.e. fashion, could also be applied to medicine. He began a discussion of dress by showing that he was aware of the incongruity behind asserting that physic was similar to dress: “what Comparison (says my inquisitive Reader) can there be betwixt that and *Physick*?”<sup>269</sup>

De Coetlogon began with the physick of the “*Chaldeans*” and “*Aegyptians*” whose sobriety and intellectual credit he praised. He described their dress, writing that they

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<sup>265</sup> Benjamin Heath Malkin. *Essays on Subjects Connected with Civilization. By Benjamin Heath Malkin, Trinity College, Cambridge.* (London, 1795).

<sup>266</sup> ‘Coetlogon, Charles Edward de (Bap. 1747, d. 1820), Church of England Clergyman | Oxford Dictionary of National Biography’, accessed 22 July 2018.

<sup>267</sup> Seth Rudy, *Literature and Encyclopedism in Enlightenment Britain: The Pursuit of Complete Knowledge* (Springer, 2014), 83; Jeff. Loveland, *An Alternative Encyclopedia?: Dennis de Coetlogon’s Universal History of Arts and Sciences*, SVEC 3 (Oxford: Voltaire Foundation, 2010); Jeff Loveland, ‘Encyclopaedias and Genre, 1650-1750’, *Journal for Eighteenth-Century Studies* 36, no. 2 (1 June 2013): 159–175.

<sup>268</sup> Dennis De Coetlogon, *Physick Is a Jest, a Whim, an Humour, a Fancy, a Mere Fashion, Even Full as Much as Dress or Dancing. To Which Is Added, a Discourse or Letter on the Degree of Doctor, in This Profession* (London: Printed for T. Cooper, at the Globe in Paternoster Row, 1739).

<sup>269</sup> De Coetlogon, *Physick is a Jest*, 13.

“wore *long Robes*, Caps, and long Beards, &c. all in the simplest and plainest manner, as well as that their Dress was solemn and grave,” a description which echoes the aspirations of the Royal Society as described by Thomas Sprat in the previous chapter.<sup>270</sup> De Coetlogon asserted that the dress of the ancient Chaldeans and Aegyptians “[corresponded] to their Customs, and Ceremonies,” including their knowledge-making; “thus Physick was seemingly at that time in its primitive state, plain and undivided.”<sup>271</sup> The comparison implied that plain dress was a way to tell that the ancient society’s customs were also plain, and therefore this plainness and sobriety extended to their science and medicine. Though this science was “primitive,” it was also “undivided,” an unsophisticated yet uncorrupted version of knowledge. Just as English authors like Bacon and Hooke praised the knowledge of Adam in the Garden of Eden as simple and uncorrupted, so De Coetlogon imagined ancient dress, and knowledge, as simple and honest.

De Coetlogon next traced physick to Greece. Writing in the full swing of the Enlightenment, De Coetlogon compared ancient Greece to the modern intellectual powerhouse of France. He called Greece

that inquisitive stirring Nation: who may justly enough at that time, be said to have been the active bustling Travellers, the polite People; in a word, the real *Frenchmen* of that early time, thus running about and teaching their Knowledge both at home and abroad, to the more barbarous, or in short to all the other Nations around them.<sup>272</sup>

The knowledge imported into and exported out of Greece reflected the way that the Greeks disseminated their customs and dress, according to De Coetlogon. The Greeks remade dress just as they refashioned knowledge:

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<sup>270</sup> Ibid.

<sup>271</sup> Ibid.

<sup>272</sup> Ibid.

Dress was there again re-modell'd. And though still retaining the plain and grave, and that of the long *Robes*, *Beards*, and *Caps*, with that of their own native Language only, &c. yet Physick was still in great measure new-fashion'd by them, even as much as the other. In a word, it was now thrown into a much better Order, and *Decorum*, far more properly cut out: or better digested, particularly in the time of *Hippocrates*.<sup>273</sup>

Decorum circled back to the comparison to Frenchmen, in which De Coetlogon implied that the way Greeks cultivated knowledge and dress was the beginning of sophistication. However, the sophistication of the Greeks was not all positive:

It was however there, and even about that time, the many extravagant Whims, or fantastical Fashions, Modes, and Opinions, of idle, vain, Philosophers, or others, creep'd in, and were introduced into this Profession.<sup>274</sup>

Here De Coetlogon began to use the derogatory connotations of fashion to criticize medicine. This was, according to De Coetlogon, the beginning of a problem. Physick “split into sects, or fashions... according to the luxuriant Fancies of such its Practitioners.”<sup>275</sup> These fashions were the different approaches of physicians to Greek philosophy: “the *Empirical*, the *Gymnastic*, and *Bathing Practitioners*, the *Dogmatists*, or Reasoners, the *Methodists*, the *Episenthetics*, or Trimmers, the *Eclecticks*, who were for picking or culling from all, with the *Pneumaticians*, for the Spirits, &c.” This diversity of approaches reflected the differences that fashion brought to dress. Thus, “the Method of the Practice of Physick alter'd in its Fashion accordingly, in the like manner becoming more confused, &c.”<sup>276</sup>

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<sup>273</sup> Ibid.

<sup>274</sup> Ibid., 14.

<sup>275</sup> Ibid.

<sup>276</sup> Ibid.

De Coetlogon next tackled physick in the Roman Empire, “where, though the Greek Masters and Fashions were all the Mode ... this Learning, and Doctrine, was still in some, or a great measure, mixt with the *Roman Customs and Fashions*.”<sup>277</sup> De Coetlogon identified some similarities to Greece, particularly in that Rome “kept to somewhat of the *Grecian Dress and Customs*,” but eventually Roman dress and customs “became vastly more vain, pompous, and showy: particularly after the *Africk and Eastern conquests*, especially in the *imperial time*.”<sup>278</sup> Particularly indicative of Roman excess was that “for a considerable time, the Gravity of *Beards* were laid aside,” and “Garments were so much bedaub’d with Gold, such as those of *Chains, Rings, Bracelets, or Bullae*, as well as ornamented with all sorts of *precious Stones*, whether plain, or more artfully cut, by the nicest and most curious Workmen.”<sup>279</sup> De Coetlogon insisted that vanity in dress was analogous to vanity in knowledge:

It was then in this time, much like, and in the same manner, that the Practice of Physick became very perplex’d with that *boundless Superfluity, Vanity, Pomp and Show*. It was now also that *Galen*, tho’ a *Greek* (then in *Rome*) introduced that infinite Variety of Medicines, that numberless Farrago of Compounds, so greatly since used and followed. Thus it was that *Luxury, Show, and Superfluity*, went hand and hand, in Physick, as in Dress: Rather still losing, than gaining any or the least Ground amongst *that idle, extravagant, ambitious, and so highly luxurious People*.<sup>280</sup>

A civilisation’s morality could be judged by the appearance of its dress, and thus the dress was an indicator of the worth of that civilisation’s physick. Excessive luxury in dress was an indicator of poor knowledge-making.

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<sup>277</sup> Ibid., 14-15.

<sup>278</sup> Ibid., 15

<sup>279</sup> Ibid.

<sup>280</sup> Ibid., 15-16.

Next, physick was taken up by the Islamic Empire, where “it was again new re-modell’d, and afresh *vamp’d up*, and thus thrown into a very different Dress from any of the foregoing.”<sup>281</sup> De Coetlogon approved of the Arab dress, noting that “these people resumed again the *Beards* with the *Turbans*,” which was a good indicator of modesty and sobriety. However, the Arab physicians also wore “different Habits, greatly variegated, and of gay Colours, as the Reds, Greens, &c.”<sup>282</sup> This was less positive, because “here *precious colour’d Stones* became greatly fashionable likewise.”<sup>283</sup> The elaborate stone-covered attire was reflected in elaborate rituals that were, according to De Coetlogon, attached to physick: “the highest *Superstition* was so, in Matters of Religion, and that of the Cabalistic, and magical Art. It was now also, that *Chymistry* was introduced with all its *mystical* and *whimsical Doctrine*.”<sup>284</sup> Just as with Chymistry, so physick was “likewise alter’d, according to the *Taste, Fashion, Time* and *Place*, of that rough Nation.”<sup>285</sup> Here, De Coetlogon wrote that the materiality of fashion and dress merged with the materiality of physick through the use of precious stones. He argued that “*colour’d precious Stones* became in that great use amongst them for *Dress and Ornament*, and so they were in the like manner introduced, and used, in the *medicinal way*.” This way, physicians began to use superstitious methods, including “many different Forms of *Amulets*, with some *conjuring Inscription on them*.”<sup>286</sup>

Turning away from ancient history to modern times, De Coetlogon described the “return” of physick to Europe: “T’was then that it was again re-modell’d, changing likewise its Language ... It took to the *Latin* Language, and Popish Forms.” Taking on the modern failings as well as maintaining the problems of the Greeks, Romans, and Arabs, the profession of physician now found itself “entirely and blindly submitting itself to be transform’d, remodell’d, approved, and the

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<sup>281</sup> Ibid., 16.

<sup>282</sup> Ibid.

<sup>283</sup> Ibid.

<sup>284</sup> Ibid., 16-17.

<sup>285</sup> Ibid., 17

<sup>286</sup> Ibid.



Practitioners thereof dignified with Honours, *Titles*, &c. as the sovereign Pontiff was pleased to determine, or approve.” The “popish” European societies subjected physicians to what De Coetlogon accused of being a “*modish Education*,” in which Physick ... required this sort of fashionable Learning.”<sup>287</sup> In his own times, fashion had moved from dress to entirely rule the profession of physician. Whereas the failings of fashionability in dress had been a marker for poor knowledge-making, now the knowledge-making itself was subjected to modes and fashions. This was the greatest indictment of all. De Coetlogon had been arguing that the merits of knowledge were reflected in modesty of dress, not by an individual practitioner but by a collective, an entire society. Social norms were an indicator of intellectual worth. Now his own society had the worst social norm of all: fashionable knowledge.

De Coetlogon’s disdain for fluxations in knowledge was especially apparent in a footnote on the fashions of Chymistry. Here De Coetlogon layed out how fashions and developments changed the practice of a science.

At first simple Medicines were the fashion, after which it came to the *Galenics*; now Chymistry was all in vogue, so Alkalies are one time much in fashion, another time ‘tis Acids. Antimony was formerly in great use, now it is in little use. Thus Bleeding is greatly in vogue at certain times ... So sometimes the best Regimen is the fashion, and at another time the cold. Some depend on Systems, some on Mathematicks, whilst others depend only on Observation, probably the safest to be relied on. Sometimes Simplicity is the fashion, as falshood, Ornament or Show is in times of Luxury and Iniquity.<sup>288</sup>

De Coetlogon’s critique of chemistry condemned the discipline’s mutability over the course of time. Nature should not have been subject to trends or change at all, therefore changes in the study of nature meant that the study was incorrect. Thus, since nature could not change like physick and chemistry did, according to De

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<sup>287</sup> *Ibid.*, 18.

<sup>288</sup> *Ibid.*, 16.

Coetlogon, this meant physick and chemistry had no legitimacy. He exposed the fashions in knowledge to accuse that knowledge of being illegitimate.

### *Adam Smith and Moral Vestments*

The writings of Scottish philosopher and political economist Adam Smith on *The Theory of Moral Sentiments*, first published in 1759, show that eighteenth-century attitudes toward fashion and fashionability were more complex than De Coetlogon's writings might suggest at first glance.<sup>289</sup> Rather than seemingly taking for granted that fashion was a vice incongruous with reason, Smith unpacked the role of demographics, eras, and upbringings in the perception of fashionability. Smith dealt with the social mechanics of taste and fashion particularly in his chapter of "Of the Influence of Custom and Fashion upon the Sentiments of Moral Approbation and Disapprobation."<sup>290</sup> We have seen that many moralists attributed the impermanent nature of fashions in clothing to the fickleness of fashionable people. Unlike those writers, Smith connected the quick changes in fashions of dress and furniture to the ephemerality of the materials involved in making dress and furniture. The more delicate and easily worn through the materials were, he said, the quicker the fashions changed.

Clothes and furniture are not made of very durable materials. A well-fancied coat is done in a twelve-month, and cannot continue longer to propagate, as the fashion, that form according to which it was made. The modes of furniture change less rapidly than those of dress; because furniture is commonly more durable. In five or six years, however, it generally undergoes

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<sup>289</sup> Adam Smith, *The Theory of Moral Sentiments; or, an Essay towards an Analysis of the Principles by Which Men Naturally Judge Concerning the Conduct and Character, First of Their Neighbours, and Afterwards of Themselves.*, 6th ed., vol. 1 (London: printed for A. Strahan and A. Cadell in the Strand, 1790).

<sup>290</sup> Smith, *The Theory of Moral Sentiments*, 6th ed., vol. 2 (London: printed for A. Strahan and A. Cadell in the Strand, 1790).

an entire revolution, and every man in his own time sees the fashion in this respect change many different ways.<sup>291</sup>

The materiality of the object dictated the speed of its fashions. Those things that were made of more durable materials, such as buildings that could stand for centuries, or immaterial things such as poetry or music, could support slower fashions. As Smith said, “The productions of other arts are much more lasting, and when happily imagined, may continue to propagate the fashion of their make for a much longer time.”<sup>292</sup> The prescribed taste and fashion were determined by the social standing of the people setting the fashion, not by the actual beauty or ugliness of the clothing.

Smith went on to assert that there were fashions in all things, whether perceived as virtue or vice. He argued against contemporaries that believed certain arts and forms of learning were governed by reason rather than fashion. “Few men have an opportunity of seeing in their own times the fashion in any of these arts [music, poetry etc.] change very considerably.”<sup>293</sup> Smith wrote that not only were these changes imperceptibly slow, but also the history of the changes in these arts were not necessarily noticed by his contemporaries. The result was the illusion of permanence:

Few men therefore are willing to allow, that custom or fashion have much influence upon their judgements concerning what is beautiful, or otherwise, in the productions of any of those arts; but imagine, that all the rules, which they think ought to be observed in each of them, are founded upon reason and nature, not upon habit and prejudice.<sup>294</sup>

Though moralists seemed to overwhelmingly believe that permanence in the arts was founded upon reason, and that arts were the way they were because of natural rules,

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<sup>291</sup> Smith, *The Theory of Moral Sentiments*, 2: 5.

<sup>292</sup> Ibid.

<sup>293</sup> Ibid., 2: 6.

<sup>294</sup> Ibid.

Smith debunked the prevailing theory. Instead, he demonstrated that “The influence of custom and fashion over dress and furniture, is not more absolute than over architecture, poetry, and music.”<sup>295</sup>

It is perhaps not surprising that Smith was more accepting of temporal changes than De Coetlogon, when one considers Smith’s interest in historicising science. Smith wrote a trio of treatises published in a posthumous volume titled *Essays on Philosophical Subjects*<sup>296</sup>. The three essays concerned “The Principles Which Lead and Direct Philosophical Enquiries” and each brought an historical perspective to the sciences, specifically a history of astronomy, ancient physics, and ancient logic and metaphysics. Smith’s work was part of a larger interest in historical enquiry in the mid-eighteenth century, including Joseph Priestley’s *The History of Present State of Electricity*. The question that Smith and his contemporaries were investigating was concerned with changes in knowledge over time. The first and most substantial of Smith’s historical essays, “The Principles Which Lead and Direct Philosophical Enquiries Illustrated by the History of Astronomy,” began with Smith discussing positive attributes of novelty: “What is new and singular, excites that sentiment which, in strict propriety, is called Wonder; what is unexpected, Surprise; and what is great or beautiful, Admiration.”<sup>297</sup> Smith asserted that the pursuit of these pleasant reactions to novel experiences was what drove the history of sciences. Novelty was often a topic covered by social critics. In 1794, satirist Edward Moore, writing under pseudonym Adam Fitz-Adam, wrote in his magazine *The World*,

Not only the improvements of every invention for the convenience and ease of life, but even of those which constitute its real ornament, are owing to this desire of novelty. Yet here we too may grow wanton; and nature seems to have set us bounds, which we cannot pass without running into great

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<sup>295</sup> Ibid., 2: 6–7.

<sup>296</sup> Adam Smith, ‘Essays on Philosophical Subjects’, in *The Glasgow Edition of the Works and Correspondence of Adam Smith*, ed. W. P. D. Wightman, J. C. Bryce, and I. S. Ross, vol. 3, 6 vols (Glasgow: Oxford University Press, 2014).

<sup>297</sup> Smith, ‘Essays on Philosophical Subjects’, 33.

absurdities. For the very principle which has contributed to the perfection of the finer arts, may become the cause of their degeneracy and corruption. The search of the SOMETHING NEW has step by step conducted mankind to the discovery of all that is truly beautiful in those arts; and the same search (for the desire of novelty never stops) already begins to urge us beyond that point to which a just taste should always confine itself.<sup>298</sup>

To Moore, novelty drove innovation, but also tempted humans too far. This tension held true in Smith's enquiries into the motivations of philosophical enquiries throughout history. Smith traced astronomy, from the same origins that De Coetlogon attributed to physick, up to Isaac Newton. Though less explicitly stated than De Coetlogon, Smith concerned himself with the novelties, trends, and fashions that drove knowledge.

This is not to say that Smith was forgiving of what he perceived to be obsessions with novel fashion. Smith asserted that the highest classes set the fashions not because they had refined taste, but because they had the greatest social influence: "It is from our disposition to admire, and consequently to imitate, the rich and the great, that they are enabled to set, or to lead what is called the fashion. Their dress is the fashionable dress; the language of their conversation, the fashionable style; their air and deportment, the fashionable behaviour."<sup>299</sup> Fashions in behaviour affected perceptions of right and wrong, virtue and vice. Smith noted that if a vice was fashionable, it would be perceived as virtuous because those of high social standing had incorporated it into their fashionable behaviour. This resulted in moral corruption in "the greater part of men" who "are proud to imitate and resemble them in the very qualities which dishonour and degrade them."<sup>300</sup> Smith argued that unnaturally succumbing to vice was perhaps against men's instinct:

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<sup>298</sup> The World. By Adam Fitz-Adam. In Four Volumes. A new edition., vol. 3 (London, 1794), 80.

<sup>299</sup> Smith, *The Theory of Moral Sentiments*, 1: 165.

<sup>300</sup> Ibid.

Vain men often give themselves airs of a fashionable profligacy, which, in their hearts, they do not approve of, and which, perhaps, they are really not guilty. They desire to be praised for what they themselves do not think praise-worthy, and are ashamed of unfashionable virtues which they sometimes practise in secret, and for which they have secretly some degree of real veneration.<sup>301</sup>

Smith critiqued those blindly following the vices of their social superiors without necessarily condemning them as being immoral to the core. He merely suggested that they were misguided by the excesses of those with greater means: “He assumes the equipage and splendid way of living of his superiors, without considering that whatever may be praise-worthy in any of these, derives its whole merit and propriety from its suitability to that situation and fortune which both require and can easily support the expense.”<sup>302</sup> Following fashionable vice was not necessarily a moral shortcoming, but rather a shortcoming of reason.

### *Fashion and Virtue: Mary Astell*

The program of anti-fashion had gendered repercussions and the last section of this chapter steps back to the seventeenth century to consider a writer whose work makes this clear. Because Charles II had proscribed only a male form of inconspicuous consumption, women were left as default consumers of fashion. The three-piece suit signalled specifically male thrift, modesty and credibility, but there was no equivalent fashion signal for women. This could be detrimental to feminine credibility.

What was at stake when someone was called fashionable? In the late seventeenth and early eighteenth centuries, fashionability became increasingly damaging to intellectual credit. Knowledge-making, like proper levels of

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<sup>301</sup> Ibid. 1: 166.

<sup>302</sup> Ibid.

consumption, required legitimacy. Historian of early modern women, Ingrid H. Tague, has identified problems for the social elite arising from a decline in sumptuary regulation in her book *Women of Quality: Accepting and Contesting Ideals of Femininity in England, 1690-1760*. Since “clothing as a symbol of rank was no longer strictly regulated” a longstanding mark of elite status was eroded.<sup>303</sup> People’s self-representation had to be re-negotiated and this had especially gendered consequences. Tague identifies women’s agency in a growing consumer culture as another cause for male gentlemanly anxieties: “growing numbers of women sought to follow fashionable trends in dress, thus making it even more difficult to distinguish “legitimate” from “illegitimate” display.”<sup>304</sup> David Kutchka argues that the question of male sartorial legitimacy was “a redefinition of gentlemanly masculinity.”<sup>305</sup> Fashion was one of the most important strategies used in this redefinition. As noted in chapter two, Kuchta proposed that after the changes that Charles II began by introducing the new model of thrifty masculinity, the moralistic condemnation of fashionability and conspicuous luxury was “the gentlemanly response” to contemporary anxieties and identity politics.<sup>306</sup>

Virtue and intellectual credibility were folded together. With this in mind, it is important to understand the role that fashion played in perceptions of virtue. The equation of fashionability with absent virtue was particularly prominent in the writings of Puritans. Joseph Hall (1574-1656), the Puritan Bishop of Norwich, said in 1624, “They are vain heads, that think it an honor to be the founders of fashion: they are servile fools that seek only to follow the fashion once devised.”<sup>307</sup> According to Hall, creating or following fashions was a sign of stupidity and arrogance. This

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<sup>303</sup> Ingrid H. Tague, *Women of Quality: Accepting and Contesting Ideals of Femininity in England, 1690-1760*. (Boydell and Brewer, 2002), pg. 50.

<sup>304</sup> Tague, *Women of Quality*, 50.

<sup>305</sup> David Kuchta, *The Three-Piece Suit*, 118.

<sup>306</sup> Ibid.

<sup>307</sup> Joseph Hall, “The Fashions of the World: Laid Forth in a Sermon at Gray’s Inn, on Candlemas-Day,” in *The Works of the Right Reverend Joseph Hall, D.D.* (Oxford: Oxford University Press, 1863), 5: 286.

perspective was shared even by courtiers. Walter Raleigh, a favourite of Queen Elizabeth I, advised that “and no man is esteemed for gay Garments, but by Fooles and women.”<sup>308</sup> This sort of argument continued throughout the eighteenth century. A collection of moralistic essays published in 1793 took for granted that “there have been of late, and indeed at all times, many men of fashion totally destitute of moral honesty.”<sup>309</sup> The eighteenth century saw an increase in the leisurely pursuit of knowledge among non-elites.<sup>310</sup> Thus the propagation of knowledge fell under accusations of fashionability. A moral essayist wrote that “to excel in different parts of human science is very desirable,” but “a taste for reading is the fashion of the day,” and this reading “is often rendered useless, or worse, by being principally directed to such compositions as are at best superficial, frequently sinful.”<sup>311</sup> Reading would have been beneficial had it not been so fashionable. This is but one example of moralist literature laying derision on fashionable knowledge. As Ingrid H. Tague notes in *Women of Quality*, moralistic writings had targeted luxury in clothing, particularly for women, from the beginning of the genre. These writings also targeted consumption of knowledge. In the eighteenth century, Tague identifies two new aspects: “One was the sheer volume and stridency of such attacks; the other was the conviction that this slavish adherence to the latest modes was both natural to women and a grave threat to (natural) female chastity.”<sup>312</sup> In 1722 John Essex warned that “there is nothing brings a young lady’s Virtue sooner in Question, than too fond a Compliance with the Extravagant Modes of the World.”<sup>313</sup> In order to protect women’s credibility, virtue needed to be maintained at all times. Part of this was an

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<sup>308</sup> Walter Raleigh, *Sir Walter Raleighs Instructions to his Sonne and to Posterity* (London: Benjamin Fisher, 1632), 75.

<sup>309</sup> Vicemius Knox, *Essays Moral and Literary*. vol. 2, 3 vols. (London, 1793).

<sup>310</sup> Geoffrey V. Sutton, *Science for a Polite Society: Gender, Culture, and the Demonstration of Enlightenment*. (Oxford: Westview Press, 1995).

<sup>311</sup> *Moral Essays, Chiefly Collected from Different Authors*. vol. 1 (Liverpool, 1796), 69.

<sup>312</sup> Tague, *Women of Quality*, 50.

<sup>313</sup> John Essex, *The Young Ladies Conduct: Or, Rules for Education, Under Several Heads; With Instructions Upon Dress, Both Before and After Marriage. And Advice to Young Wives* (London: John Brotherton, 1722), 74–5.



education that bolstered resistance to fashion: “[it] is not enough, that we are cautious in training up Youth in the Principles of Virtue and Morality, and that we entirely debar them from those dangerous Diversions in Fashion, which have been the Ruin of so many.”<sup>314</sup> Fashionability was a way to imply that a woman had no virtue, and therefore could not be credible.

We have seen in previous sections how knowledge could become “fashionable” and therefore illegitimate if the groups who were conspicuous consumers of luxury also consumed knowledge. The accusation of fashionable knowledge was often a coded way of criticising an unworthy class or person’s access to learning, making it a solution to the gentlemanly male anxieties. This was one of the key ways of preventing women’s knowledge-making from being legitimised. One way that this happened was to assert that women could not have access to knowledge because they cared too much about fashion. This is apparent in an article on “The Education of the Fair-Sex” that appeared in *The Lady’s Magazine* in 1773 which said that while women were increasing their intellectual pursuits, and displaying reason, this reasonability did not translate to modesty in fashion:

women of this age pique themselves on account of their reason and judgement more than ever they did, but they shew very little of either in their conduct with respect to fashions, with which they are more infatuated than ever.<sup>315</sup>

It was considered a failing of the fair sex that they followed fickle fashion. The temporal nature of fashionability seemed to reflect poorly on those who followed trends, making them seem inconstant and unreliable. “Caprice and fantasticalness are the parents of fashion, which is a great prejudice in its disfavour,” wrote the author of “The Education of the Fair-Sex.”<sup>316</sup> That caprice spread from fashion to the fashionable: “If a lady of elevated rank, or of a remarkable fantasticalness, should

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<sup>314</sup> *The Female Spectator*, vol. 15 (1745), 178.

<sup>315</sup> ‘The Education of the Fair-Sex’ in *The Lady’s Magazine*, April 1773, 199.

<sup>316</sup> *Ibid.*, pg. 30.

take it into her head to dress herself in a particular manner, all the rest of the sex would adopt her *ton* of dress, however ridiculous, or uneasy it should appear.”<sup>317</sup> One fashionable person could cause a foolish trend in all the members of her gender. This criticism implies that women were too irrational and unreasonable to resist fashion.

Another way to bar women from legitimacy and credibility was the inverse of the above. The claim was that the kind of knowledge that interested women was merely fashionable, and therefore not legitimate knowledge. As historian of science Ann B. Shteir notes in *Cultivating Women, Cultivating Science*, at the height of botany’s popularity two words for the practice of the science distinguished between legitimate knowledge and fashionable knowledge: “botany” or “botanizing.” Women “botanized,” men practiced “botany.”<sup>318</sup>

The contrast between the above criticisms reveals that the problem with such knowledge was not fashionability. Rather, the problem was that women’s access to equal credibility in knowledge-making upset gender norms. Elizabeth Carter (1717-1806), woman of letters, recorded how women’s pursuits of natural knowledge and literary learning could emasculate men: “Learning is now grown so fashionable amongst the ladies, that it becomes every gentleman to carry his Latin and Greek with him whenever he ventures into female company.”<sup>319</sup> Furthermore, the learned woman threatened the prestige of institutions such as universities: “our scholars from the university, when they come to their father’s houses, are foiled at their own weapons, and vexed to the heart to find their sisters as wise as themselves.”<sup>320</sup> These examples show how women’s learning could be seen as disruptive in mixed company. Carter concluded by noting that “all this is the natural consequence of the present system of education, as practised by the two sexes.”<sup>321</sup> Though this might have been a

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<sup>317</sup> Ibid.

<sup>318</sup> Ann B. Shteir, *Cultivating Women, Cultivating Science: Flora’s Daughters and Botany in England, 1760-1860* (Baltimore ; London: Johns Hopkins University Press, 1996).

<sup>319</sup> Elizabeth Carter, “Poems on Several Occasions” *Critical Review*, Vol. 13, (1762)

<sup>320</sup> Ibid.

<sup>321</sup> Ibid.

natural consequence, what she made clear was the displeasure that men felt at the cultivation of learning in women.

Published in the late seventeenth century, moralist Mary Astell's writings illustrate the complex relationship between an intelligent woman and the accusations of fashionability and vice that were beginning to become so prevalent.<sup>322</sup> Astell was no apologist for fashions: in the beginning pages of her 1697 work *A Serious Proposal to the Ladies, for the Advancement of their True and Greatest Interest*, she proclaimed "let us learn to pride our selves in something more excellent than the invention of a Fashion."<sup>323</sup> Her disapproval of fashion was rooted in the idea that it occupied time and energy better spent by women on learning. She wrote that "twou'd be more genteel to give and take instructions about the ornaments of the Mind, than to enquire after the Mode" and in a better society "a Lecture on the Fashions would become as disagreeable as at present any serious discourse is."<sup>324</sup>

However, her disapproval of fashion did not translate to a disapproval of women as fickle, or deprived of virtue. Instead, her perspective was more nuanced. She knew the role of fashion in a woman's self worth:

When a poor Young Lady is taught to value her self on nothing but her Cloaths, and to think she's very fine when accoutred; When she hears say, that 'tis Wisdom enough for her to know how to dress her self, that she may become amiable in his eyes, to whom it appertains to be knowing and learned; who can blame her if she lay out her Industry and Money on such

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<sup>322</sup> Jacqueline Broad, *The Philosophy of Mary Astell: An Early Modern Theory of Virtue* (Oxford: Oxford University Press, 2015); Alice Sowaal, 'Mary Astell's Serious Proposal: Mind, Method, and Custom', *Philosophy Compass* 2, no. 2 (2007): 227–43; Michel Michelson and William Kolbrener, eds., *Mary Astell: Reason, Gender, Faith* (Aldershot, UK: Ashgate, 2007).

<sup>323</sup> Mary Astell, *A Serious Proposal to the Ladies, for the Advancement of Their True and Greatest Interest. In Two Parts. By a Lover of Her Sex* (London: printed for Richard Wilkin, 1697), 10.

<sup>324</sup> Astell, *A Serious Proposal to the Ladies*, 89.

Accomplishments, and sometimes extends it farther than her misinformers desires she should?<sup>325</sup>

Her claim was that fashionability was one of the primary ways that women were conditioned to value themselves. Thus, while men were encouraged to be “knowing and learned,” women’s energies were diverted to cultivating their appearance. Then, if women did pay too much attention to fashion, who could blame them?

Astell also noted the social pressures to conform to fashion. She wrote that “we think it an unpardonable mistake not to do as our neighbours do,” and so great was the need to fit in that many people “part with our Peace and Pleasure as well as our innocence and Virtue, meerly in compliance with an unreasonable Fashion, and having inur’d our selves to Folly, we know not how to quit it.”<sup>326</sup> This reluctance to divert from fashion is reflected in a 1709 letter written by Lady Mary Pierrepont (1689-1762) to the woman who would become her sister in law, Anne Wortley:

It is with some regret I follow it in all the impertinencies of dress; the compliance is so trivial, it comforts me: but I am amazed to see it consulted even in the most important occasions of our lives; and that people of good sense in other things can make their happiness consist in the opinions of others, and sacrifice every thing in the desire of appearing in fashion.<sup>327</sup>

Both Mary Astell and Mary Pierrepont expressed the complexity of feelings that women experienced in the pursuit of fashion. It was not uncommon to be both drawn to and repulsed by the continuous flow of fashionable society.

Some manuals on the education of women, such as *An Enquiry into the Duties of the Female Sex*, encouraged moderate fashionability. Gisborne assumed that women had an innate “fondness for the arts of dress and exterior decoration,” which

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<sup>325</sup> Ibid. 30.

<sup>326</sup> Ibid., 28.

<sup>327</sup> Mary Pierrepont, later Mary Wortley Montagu, *The Complete Letters of Lady Mary Wortley Montagu*, ed. Robert Halsband, vol. 1 (Oxford: Clarendon Press, 1965), 6.

could be encouraged in moderation.<sup>328</sup> This desire to appear well dressed was not vanity, according to Gisborne, but a need “to call in every adventitious aid to heighten [women’s] native elegance and beauty.” The way that virtue and intellect could be compromised was when that “inherent bias” was overly “stimulated and cherished in the years of childhood; and instead of being sedulously taught to restrict itself within the bounds of reason and Christian moderation prescribe.”<sup>329</sup> This caused the instinct to turn into vices, as young women were “trained up to fill whatever measure of excess shall be dictated by pride, vanity, or fashion.”<sup>330</sup> Gisborne laid the blame not on the young women but on those who raised them poorly: “There are well – intentioned mothers who urge the necessity of taking pains to encourage in their daughters a certain degree of attachment to dress, of solicitude respecting the form and texture of their habiliments, lest they should afterwards degenerate into slatterns.”<sup>331</sup>

While some moralists used women’s seeming preoccupation with clothing as evidence that they could not aspire to learning, Astell argued the opposite using the very same evidence. According to Astell, women’s capability of following fashions was actually an indication that they could meticulously follow philosophy and apply themselves to learning. Astell noted that those who had been taught to cultivate fashion specialised in the mode just as a cleric specialised in Religion, “thus we may account for that strange insensibility, that appears in some people when you speak to them of any serious Religious matter. They are then so dull you’ll have much ado to make them understand the clearest Truth: Whereas if you rally the same persons, or chat with them of some Mode or Foppery, they’ll appear very quick, expert, and ingenious.”<sup>332</sup> Expertise and ingenuity could be turned toward learning rather than

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<sup>328</sup> Thomas Gisborne, *An Enquiry into the Duties of the Female Sex*. By Thomas Gisborne, M.A., (London, 1797) 82.

<sup>329</sup> Gisborne, *An Enquiry into the Duties of the Female Sex*. By Thomas Gisborne, M.A., 82–83.

<sup>330</sup> Gisborne, *An Enquiry into the Duties of the Female Sex*. 83.

<sup>331</sup> *Ibid.*, 82–83.

<sup>332</sup> Astell, *A Serious Proposal to the Ladies*, 67.

fashion. In her time, there was a fashion for all things French, which she suggested turning to the uses of learning:

Since the *French Tongue* is under-stood by most Ladies, methinks they may much better improve it by the study of Philosophy (as I hear the *French Ladies* do) *Des Cartes, Malebranche* and others than by reading idle *Novels* and *Romances*. 'Tis strange we shou'd be so forward to imitate their Fashions and Fopperies, and have no regard to what really deserves our Imitation! And why shall it not be thought as genteel to understand *French Philosophy*, as to be accoutred in a *French Mode*?<sup>333</sup>

Her argument was that if a woman has the capability to follow fashions in clothing closely, it followed that she had the energy and dedication needed to cultivate philosophical learning just as closely.

Male educational writers did notice that women were trained to turn their energies and virtuosity to the cultivation of fashion. This was a waste, according to Gisborne. He gave women credit for genius, but bemoaned the use to which it was put:

To vie in ostentatiousness and in costliness of apparel; to be distinguished by novel inventions in the science of decoration; to gain the earliest virtuosity respecting changes of fashion in the metropolis; to detect, in the attire of a luckless competitor, traces of a mode which for six weeks has been obsolete in high life; these frequently are the points of excellence to which the whole force of female genius is directed.<sup>334</sup>

His writings utilised a particularly apt metaphor: he cast the pursuit of novelty in fashion as an almost intellectual pursuit. He even called it a science of decoration. This implied a similar attitude as Astell's writing: that women's ability to be clever in

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<sup>333</sup> Ibid., 51.

<sup>334</sup> Gisborne, *An Enquiry into the Duties of the Female Sex*, 131.

dress meant that they could put aside fashion and take up learning. Astell, however, was more explicit.

However, learning for its own sake could be just as much of a vice as fashion, according to Astell. She felt it necessary to assure her readers that she would not lead them astray: “I am therefore far from designing to put Women on a vain pursuit after unnecessary and useless Learning, nor wou’d by any means persuade them to endeavour after Knowledge cou’d I be convince’d that it is improper for ‘em.”<sup>335</sup> She illustrated propriety with yet another clothing-based analogy, writing “I know very well that tho a thing be never so excellent in it self, it has but an ill grace if it be not suitable to the Person and Condition it is apply’d to. Fine Cloaths and Equipage do not become a Beggar.”<sup>336</sup> Furthermore, “a Mechanic who must work for daily bread for his family, wou’d be wickedly Employ’d shou’d he suffer ‘em to starve whilst he’s solving Mathematical Problems.”<sup>337</sup>

### *Conclusion*

This chapter has discussed three examples of the language of fashion that emerged in the late seventeenth and early eighteenth centuries. Physician Dennis De Coetlogon accused his own profession of being susceptible to fashions. To him, mutable ideas in medicine, chemistry, and other sciences destabilised the credibility of those forms of knowledge. Adam Smith was more forgiving. His *Theory on Moral Sentiments* offered an apology for fashion, tying the change in material forms to the historical progress of time. Finally, Mary Astell, writing in the late seventeenth century just a few years after the new model of gentlemanly sobriety, resisted the gendered accusations levelled against women of fashion. Women in the seventeenth and eighteenth centuries frequently contended with critics who accused their sex of being excessively interested in fashion. An opposition had been firmly established

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<sup>335</sup> Astell, *A Serious Proposal to the Ladies*, 325.

<sup>336</sup> *Ibid.*

<sup>337</sup> Astell, 325–26.

between fashion and knowledge, where fashion was frivolous and feminine, and knowledge was sober and masculine.

“Fashion” became “nonsense” in the eighteenth century. While this is the case, the three writers discussed that there was no straightforward relationship between fashion and knowledge. It was generally the case that an opposition became a prominent theme in moral writings. This is not to say that the critique of fashion articulated in the late seventeenth century and throughout the eighteenth century was new. Clothing and luxury had been tied to excesses or other moral failings by many earlier moralists. However, this chapter argues that the specific language that developed around fashionability had consequences for the relationship between fashion and knowledge.

The next two chapters will explore women’s responses to this new opposition. Some women continued to use clothing as a space for display, and continued to adorn their garments with natural knowledge. Chapter four will examine the works of Anna Maria Garthwaite, a silk designer, whose floral designs illuminate the integration of botany into women’s domestic and interpersonal practices. Chapter five will look at women who grappled with the questions of fashionability in the public sphere, and look at the role that clothing played in the lives of those women who organised salons of the great intellectuals of their age.



## Chapter Four:

### Anna Maria Garthwaite and Aesthetic Botanizing

Mary Astell's criticisms rejected the emerging opposition between fashion and sensible knowledge that had its roots in the new "sober" experimental philosophy and dress of the Restoration era. Astell's writings suggest women did not accept the new, and increasingly common, position that women's interest in fashion excluded them from being legitimate makers of natural knowledge. The remaining two chapters of this thesis examine cases that illustrate women's further resistance to the new culture of fashion and science. This chapter explores the work of textile designer Anna Maria Garthwaite (1688-1763), and argues that in her practical work, Garthwaite reasserted old traditions of using the body and dress as displays of natural knowledge. The body was understood as a feminine place to display natural knowledge and skill, especially through embroidery depicting nature. Embroidery, long sidelined as a lesser craft, was a method through which women understood and participated in natural knowledge. This chapter, and the following chapter, will seek to open up avenues of inquiry into feminine participation of knowledge-making. The following and final chapter turns to the salons of the later eighteenth century as sites where women expressed themselves and in which dress helped establish the credibility of both men and women.

Garthwaite has been little-studied but appears occasionally and briefly in the literature, for example in historian of Atlantic exchange networks Zara Anishanslin's *Portrait of a Woman in Silk*, a 2016 close study of a colonial American portrait showing a woman wearing a Garthwaite design.<sup>338</sup> Anishanslin ties four historical figures - Garthwaite, the weaver who commissioned her design, the painter of the portrait, and the woman depicted - to the larger context of imperial trade, both of *naturalia* and textiles. Another important source on Garthwaite's work is that of Natalie Rothstein, former curator of silks at the Victoria and Albert Museum, who

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<sup>338</sup> Zara Anishanslin, *Portrait of a Woman in Silk* (London: Yale University Press, 2016).

published *Silk Designs of the Eighteenth Century* in 1990.<sup>339</sup> It is a close study of Garthwaite and her contemporaries whose designs and textiles are also housed in the Victoria and Albert Museum. Rothstein was able to unearth the few remaining biographical details about Garthwaite's life and work, but the study is not focussed on placing Garthwaite within a cultural context. Clare Browne, curator of furniture, textiles and fashion at the Victoria and Albert, has built on Rothstein's work and developed further insights into Garthwaite's designs. In 2000, she published "The Influence of Botanical Sources on Early Eighteenth-Century Silk Designs," on the connections between natural knowledge and silk design.<sup>340</sup> She has demonstrated that there was an influential relationship between published botanical illustrations and textile botanical designs. This chapter seeks to develop on this argument by demonstrating that the relationship between natural knowledge and textiles was especially meaningful in the lives of women such as Garthwaite.

As broader context for Garthwaite's design practices, this chapter turns to studies of women's domestic work in eighteenth-century England. Art historian Ann Bermingham's studies *Learning to Draw: Studies in the Cultural History of a Polite and Useful Art* and "The Aesthetics of Ignorance: The Accomplished Woman in the Culture of Connoisseurship" have demonstrated that women's domestic making practices are rich sources for historians of early modern women's lives.<sup>341</sup> Building on this, early modern historian Amanda Vickery's studies of women's daily lives such as *The Gentleman's Daughter: Women's Lives in Georgian England*, published 1998, and *Behind Closed Doors: At Home in Georgian England*, in 2009, have

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<sup>339</sup> Natalie Rothstein, *Silk Designs of the Eighteenth Century in the Collection of the Victoria and Albert Museum, London*. (London: Victoria and Albert Museum, 1990).

<sup>340</sup> Clare Browne, "The Influence of Botanical Sources on Early 18th-Century English Silk Designs," in *18th-Century Silks: The Industries of England and Northern Europe*, ed. Regula Schorta et al. (Riggisberg: Abegg-Stiftung, 2000) 925-935. See also Clare Browne, *Silk Designs of the Eighteenth Century: From the Victoria and Albert Museum, London* (London: Thames & Hudson, 1996).

<sup>341</sup> Ann Bermingham, *Learning to Draw: Studies in the Cultural History of a Polite and Useful Art* (London: Yale University Press, 2000); Ann Bermingham, "The Aesthetics of Ignorance: The Accomplished Woman in the Culture of Connoisseurship," *Oxford Art Journal* 16, no. 2 (1993): 3-20.

argued that the home was not a prison that restricted women, but rather a space where they were able to cultivate control and agency.<sup>342</sup> Historian of science and medicine Elaine Leong's 2014 article on women's recipe books, "Herbals She Persueth: Reading Medicine in Early Modern England," demonstrates the close studies of botany that was needed to be a successful homemaker in the early modern era.<sup>343</sup> Finally, historian of early modern women Ann B. Shtier's 1996 study *Cultivating Women, Cultivating Science* has tied women's practices to the fashion for botany in the eighteenth century.<sup>344</sup>

The first chapter of this thesis demonstrated that clothing was a medium for the collection and display of natural knowledge. Garthwaite continued this practice of display with her textiles. As clothing was losing its place as a legitimate medium for natural knowledge, as we saw in chapters two and three, men avoided ornament in order to avoid losing credibility. Women such as Astell agreed. However, not all women accepted the new rules of display. Some women, such as those who wore silks designed by Garthwaite, still used clothing and other textiles to display their natural knowledge. Even if male-dominated circles of knowledge-making did not recognise it, women recognised their own bodies and the bodies of others as vehicles for the legitimate display of natural knowledge. This chapter will use the works of Anna Maria Garthwaite to show that historians interested in scientific participation should include floral textiles as a mode of contemporary natural knowledge. It will demonstrate how Garthwaite's work can be understood as part of women's botanical practices, and as part of the ways that botany fitted into women's lives. In this way, the history of textile consumption will add complexity to narratives of scientific

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<sup>342</sup> Amanda Vickery, *The Gentleman's Daughter: Women's Lives in Georgian England* (London: Yale University Press, 1998); Amanda Vickery, *Behind Closed Doors: At Home in Georgian England* (London: Yale University Press, 2009).

<sup>343</sup> Elaine Leong, "Herbals She Peruseth': Reading Medicine in Early Modern England," *Renaissance Studies* 28, no. 4 (2014): 556–578. See also Elaine Leong and Alisha Rankin, eds., *Secrets and Knowledge in Medicine and Science, 1500-1800*, History of Medicine in Context (Farnham: Ashgate, 2011).

<sup>344</sup> Ann B. Shtier, *Cultivating Women, Cultivating Science: Flora's Daughters and Botany in England, 1760-1860* (London: Johns Hopkins University Press, 1996).

participation. Despite the increased attention to material expressions of scientific interest, histories of science have remained largely unaware of such expressions found in textiles and clothing. Clothing, dress, and fashion were ignored and kept separate from scientific understanding. Fashion was understood as detrimental to credibility and associated with frivolity, as outlined in the previous chapter. But, as my following chapter will show, clothing can help historians understand the way that crafts and accomplishments reveal women's knowledge networks.

### *The Life and Works of Anna Maria Garthwaite*

Anna Maria Garthwaite's work reveals a history of women's consumption of both fashion and nature. The world in which Garthwaite lived and worked was one where the pursuit of botanical knowledge was a scientific endeavour and a leisure activity. The case of Garthwaite, and her designs, reveals a complicated interwoven relationship between consumers, artisans, the natural world, and the practice of studying it. Anna Maria Garthwaite's floral silk designs became some of the most fashionable English textiles of her time. Though little is known of her personal life, this chapter will argue that her designs and their fashionability point to ways that women such as Garthwaite incorporated their botanical knowledge into their daily practices. The pursuit of naturalism in Garthwaite's patterns, and the demand for naturalism by her consumers, connected the consumption of textiles with the consumption of natural knowledge. For her clients, there was meaning in the wearing of these clothes: purchasing this fabric was consuming the knowledge that went into their creation. Choosing Garthwaite's floral textile designs was choosing to adopt the naturalistic botanical representation into one's physical identity. Wearing the fabric was wearing the knowledge. It cannot be assumed that every consumer of floral textiles knew the latest botanical discovery about the flowers in their dress. However, what is most significant is that naturalistic botanical representations had a meaning for consumers – they wanted to buy accuracy in silken botanical representations and wear these representations on their bodies. Wearing botanical decoration is part of what art historian Marcia Pointon, writing in *Strategies for Showing: Women, Possession, and Representation in English Visual Culture*,

1665-1800, calls “a signifying practice” employed by women who wanted to be seen as botanically knowledgeable.<sup>345</sup>

Garthwaite was the daughter of a Leicestershire clergyman. Ephraim Garthwaite (1647-1719), himself the child of a well-connected and highly educated clergyman, was born in Barkston, Lincolnshire, and educated at Grantham Grammar School and Cambridge. He kept a library and had several important literary and intellectual connections. Though he held many different positions as vicar and rector in the surrounding towns, his primary position from 1672, to his death in nearly fifty years later, was rector of Harston, on the border of Lincolnshire and Leicestershire. It was here that Anna Maria Garthwaite and her two sisters were born to Ephraim and his wife, Rejoyce.<sup>346</sup> Mary (d. 1762), the eldest, and Dorothy, the youngest, both married clergymen. Anna Maria, however, never married.

The three sisters seem to have had a thorough but unremarkable education. As a girl, Garthwaite had learned embroidery and practiced creating cutwork paper landscapes. It is likely she also learned watercolour painting and drawing. As we shall see later in this chapter, these practices were normal for young genteel women: there is nothing to suggest she had artisan training. Beginning in 1728, Garthwaite designed patterns that were to be woven into silks, largely for dresses. Her first designs are simple, though elegant. At the age of 40, Garthwaite moved to Spitalfields with her widowed eldest sister, Mary Danye. Spitalfields silks were some of the most expensive and coveted textile goods available in England. These silks were designed and produced mainly for fashionable clothing for elite men and women. Garthwaite’s extant work shows that she did work on men’s waistcoats, but the majority of her work appears to have been for women’s dresses.

Garthwaite’s work is preserved in her original watercolour designs as well as corresponding textiles, most of which are held in the Victoria and Albert Museum in

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<sup>345</sup> Marcia R. Pointon, *Strategies for Showing: Women, Possession, and Representation in English Visual Culture, 1665–1800* (Oxford: Oxford University Press, 1997), 164.

<sup>346</sup> Anishanslin, *Portrait of a Woman in Silk*, 30.

the Prints and Drawings collection and Clothworkers' collection respectively. (Fig. 45) The drawings span across her career, from the early series of simple works marked "before I came to London" through the height of her career, when she produced fifty to eighty drawings a year, and into the later years, when her style of silk design waned in popularity. The designs are watercolour and pencil on papers ranging from 30-40 cm in height, to 60 cm in height, with a width of about 26cm in most cases. The paper appears to have been hand-lined with a grid system, and the initial sketches where Garthwaite drew out the general shapes of her designs are still apparent. Most of the designs were arranged by year, with Garthwaite's own handwriting noting which master weaver had commissioned the drawings and how many shuttles were to be used. The extant textiles, some in scraps half a metre long, some still in full dresses, show how successfully Garthwaite's designs transferred over to woven fabric. The successful transfer of a design from paper to drawloom required great skill on the part of the designer. Garthwaite understood the workings of the latest technologies in silk weaving and was able to communicate such details that would direct the master weaver and his drawboy. The paint and pencil on the grids of her paper directed the lifting of warp threads, the flight of the shuttles, the transformation of threads into fabric.

The material survival of Garthwaite's silks takes many forms. The variety of these forms shows us how the design of these botanical silks was prized during Garthwaite's lifetime, later in the eighteenth century, and by subsequent generations. Many of the extant silk that corresponds to Garthwaite's designs are not in the form of complete ensembles. Take, for example, a scrap of cloth in the Clothworker's collection, which depicts a winding design of holly, honeysuckle, and lilies with nasturium and variegated leaves.<sup>347</sup> (Figs. 46 and 47) This piece of cloth corresponds directly to a design labelled with the date "Aprill 3, 1745" and the names of master weavers "Mr. Palmer" and "Mr. Vautier," who were likely the clients who commissioned the work. The cloth survived because it was reused as a bag in the

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<sup>347</sup> Rothstein, *Silk Designs of the Eighteenth Century*, 231.

nineteenth or twentieth century.<sup>348</sup> The salvage of small portions of dresses was a common practice when the full garment was no longer useable, but the material still had value.

One of the most luxurious and best-preserved gowns made from a design by Garthwaite depicts two clusters of flowers linked by trailing pink berries and rose buds. (Figs. 48 and 49) This design is a characteristic example of Garthwaite's use of form and balance in her compositions. Sprays of similar colours - blues with oranges and whites with lilacs - were placed diagonally opposite each other in the original design, which gave the silk the sense of symmetry while maintaining visual interest. The repeating segments of the design utilised shape just as effectively: falling flowers spilled out over the silk in contrasting and complementary colours. One spray included blue morning glories contrasted with orange and vibrant auriculas. Another spray included bright orange trumpet vines contrasted with another blue flower, possibly nigella, cornflower, or felicia.<sup>349</sup> The corresponding design includes notes in Garthwaite's hand on the correct colour for the flowers depicted. The design is labelled "Mr. Gregory. Aprill 22. 1744." (Fig. 50) Though the silk was originally woven in 1744, the form of the dress is currently in a shape fashionable in the 1780's. The extant garment bears signs of alterations to update the shape as fashions changed. Originally, the dress had been in the style of a *robe à la française*, with voluminous pleats cascading from the shoulders to the floor. These were later taken in to hug the torso after the *robe à la française* fell out of fashion in favour of the *robe à l'anglaise*. The bodice appears to have been an open front, which would have originally displayed a stomacher, but, by adding two additional panels, (possibly taken from the fabric removed from the back) the bodice was closed. The sleeves formerly had ruffles at the elbow, but these were removed. The alterations demonstrate that Garthwaite's designs were reshaped as fashionable silhouettes changed, extending the life of the design. There is evidence that the 1780's alteration may have even been the second time this dress had been reshaped.

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<sup>348</sup> Anna Maria Garthwaite, *Dress Fabric*, 1745, Brocaded silk satin, 615 mm x 298 mm, 1745, T.392-1988, Victoria and Albert Museum.

<sup>349</sup> Rothstein, *Silk Designs of the Eighteenth Century*, 231.

Garthwaite was by no means the only eighteenth-century designer using botanical motifs in silks. James Leman (1688-1745) was a contemporary of Garthwaite's whose designs, also housed in the Victoria and Albert collections, show that he was equally as prolific and made extensive use of florals. (Fig. 51) Spitalfields designers and weavers, mostly male, also specialised in flowered silks. Many extant silk garments not linked to any particular designer depict florals in similar styles to Garthwaite. Flowered silks were twice as expensive as plain silk and extremely prized.<sup>350</sup> There was a fashion for flowers in the eighteenth century, a fashion that propelled Garthwaite to success.

As *Portrait of a Woman in Silk* by Anishanslin shows, silks corresponding to Garthwaite's designs are depicted in portraits as items of prestige.<sup>351</sup> Such was her popularity that contemporaries described her as 'our Incomparable Countrywoman' who, "by the force of mere natural taste and ingenuity," had so improved English brocades that they were coveted items across Europe and the colonies.<sup>352</sup> It is clear that Garthwaite's work was valued in her time. The fashion for floral textiles that were, in contemporary terms, 'true to nature' shows how Garthwaite excelled at depicting botanical forms. Eighteenth-century botanical illustration sought to capture the essence of the specimen, to be 'true to nature.'<sup>353</sup> Garthwaite's work was equally as observant as contemporary botanical illustrations.<sup>354</sup> This chapter will suggest that these designs, though commodities intended for textiles, could be thought of as knowledge production and dissemination in the same way as botanical drawing. Garthwaite's output brings the element of gender into the material history of botanical representations.

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<sup>350</sup> Anishanslin, *Portrait of a Woman in Silk*, 27

<sup>351</sup> Anishanslin, *Portrait of a Woman in Silk*, 30.

<sup>352</sup> "On an Academy for Drawing." *Gentlemen's Magazine*, July 1749, 317-18.

<sup>353</sup> Lorraine Daston and Peter Galison, "Truth-to-Nature," in *Objectivity* (New York: Zone Books, 2007), 55-113.

<sup>354</sup> For the relationship between botanical drawings and silk designs, see Browne, "The Influence of Botanical Sources on Early Eighteenth-Century English Silk Designs."



## *Eighteenth-Century Natural Knowledge and Narratives*

In order to understand how Garthwaite's designs figure into women's culture of natural knowledge in the eighteenth century, it is necessary to discuss the current historiographical picture of her times. The practice of natural philosophy has been considered, but for rare exceptions, a masculine pursuit performed in exclusive academies by the elite.<sup>355</sup> Early modern intellectuals and modern historians alike have valued and credited those elite men and their forms of knowledge-making more than any alternative practices addressing natural knowledge. The published writings of these men are prized as the best indicators for what was known and how the knowledge was disseminated in the early modern period. Recently Sachiko Kusukawa has challenged the prominence of these published accounts, asserting that such focus on the written text ignores the importance of images in experimental reports.<sup>356</sup> Dependence on published academic writing also cannot account for the more domestically located botanical knowledge practices of women, whose works are vastly underrepresented in preserved publications, nor can they account for those who were not literate, not elite, and not socially valued.<sup>357</sup> To account for all forms of engagement in natural knowledge present in the early modern world, historians must look beyond the traditional published works.

Histories of eighteenth-century natural knowledge are dominated by men such as collector Hans Sloane (1660-1753) in Britain, and botanist Carl Linnaeus

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<sup>355</sup> Schiebinger, Londa L. *The Mind Has No Sex?: Women in the Origins of Modern Science* (London: Harvard University Press, 1989). For the exclusion of non-elite and women, see especially chapter 1.

<sup>356</sup> Kusukawa, Sachiko. "Picturing Knowledge in the Early Royal Society: The Examples of Richard Waller and Henry Hunt." *Notes and Records of the Royal Society* 65 (2011): 273-94.

<sup>357</sup> For a discussion on women's works in publication, see Eger, Elizabeth. *Women, Writing and the Public Sphere, 1700-1830*. (Cambridge: Cambridge University Press, 2001); and Cheryl Turner, *Living by the Pen: Women Writers in the Eighteenth Century* (London: Routledge, 1992). On the erasure of women's writings, see Catherine Gallagher, *Nobody's Story: The Vanishing Acts of Women Writers in the Marketplace, 1670-1820* (Berkeley: University of California Press, 1994).

(1707-1778) in wider European circles. Later, explorer and naturalist Joseph Banks (1743-1820) travelled around the world, bringing back exotic plants to be propagated in English soil. A fleeting glance at *naturalia* merchant and botanical trader Peter Collinson's (c. 1694-1768) list of "The Most Celebrated Botanists Living in My Time Since 1709-1768" makes apparent that men gained credit in botany more often than women.<sup>358</sup> Women's knowledge was not unrecognised, but it was only appropriate in the home and was denied credibility outside of domestic settings.

Collecting plants was a significant part of seventeenth century natural history.<sup>359</sup> By the seventeenth century, plants had become one of the most vibrant international exchanges. It was at this time that nurseries and gardens providing botanical *naturalia* to collectors began to appear in London. One of the first was Gurle's Ground, located just steps away from Garthwaite's own home in Spitalfields.<sup>360</sup> The plants and objects of *naturalia* available at these nurseries could be bought to signal the consumer's participation in contemporary knowledge-making as well as the vast networks across the British Empire. A major undertaking that was fashionable in intellectual circles was adapting foreign plants, often from vastly different climates, to English gardens. The novel plants carried with them the exoticism of the new world and were collected and exchanged with zeal.

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<sup>358</sup> O'Neill, Jan and Elizabeth P. McLean. *Peter Collinson and the Eighteenth-Century Natural History Exchange*. (Philadelphia: American Philosophical Society, 2008); appendix A.

<sup>359</sup> For the networks trading in plants and botanical specimens, see Patricia Fara, *Sex, Botany & Empire: The Story of Carl Linnaeus and Joseph Banks* (London: Icon Books, 2017); and Schiebinger, Londa L. *Plants and Empire: Colonial Bioprospecting in the Atlantic World*. (London: Harvard University Press, 2004). See also Sarah Easterby-Smith, "Selling Beautiful Knowledge: Amateurship, Botany and the Market-Place in Late Eighteenth-Century France," *Journal for Eighteenth-Century Studies* 36, no. 4 (2013): 531-43; Sarah Easterby-Smith, *Cultivating Commerce: Cultures of Botany in Britain and France, 1760-1815*, Science in History (Cambridge: Cambridge University Press, 2018). For these networks and their relationship to the textile industry, see "Designing the Botanical Landscape of Empire: Curious Plants, Indian Textiles, and Colonial Consumers." in Anishanslin, *Portrait of a Woman in Silk*.

<sup>360</sup> John H. Harvey was one of the few historians to publish on Leonard Gurle. See John H. Harvey, "Leonard Gurle's Nurseries and Some Others." *Garden History* 3, no. 3 (1975): 42-49; and John H. Harvey. *The Nursery Garden*. (London: Museum of London, 1990); 2.

Horticulturalists in Garthwaite's time travelled around the country to renowned gardens and plant collections to exchange knowledge and *naturalia*.<sup>361</sup> Botanical specimens, both living and preserved, were prized collectors' items in seventeenth and eighteenth-century gardens and homes. This collecting phenomenon tied natural history to aesthetic sensibilities.<sup>362</sup> 'Striped' plants, now called variegated plants, were a vogue in the baroque aesthetic of the late seventeenth century, while pastel flowers, such as those depicted in Garthwaite's drawings, were fashionable in rococo gardens.<sup>363</sup> Gardens burst into a variety of forms and meanings in the eighteenth century: kitchen gardens, public pleasure gardens, town gardens, and expansive landscape gardens.

The first chapter of this thesis demonstrated the relationship between the cabinet of curiosity and the display of natural knowledge on clothing. The strategies for displaying natural knowledge on the body that women used in the eighteenth century echoed the logic of the cabinets of curiosity and Renaissance clothing. It is often taken as granted that assembling cabinets of curiosities, wonders, and *naturalia* died down in the eighteenth century, as the ardent appreciation for nature associated with the practice clashed with the pursuit of rationality in the Enlightenment.<sup>364</sup> Historian of early modern science Simon Werrett has

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<sup>361</sup> O'Neill and McLean. *Peter Collinson and the Eighteenth-Century Natural History Exchange*, 45. See also Andrea Wulf, *The Brother Gardeners: Botany, Empire, and the Birth of an Obsession* (New York: Alfred A Knopf, 2009). Jonathan Conlin, ed., *The Pleasure Garden: From Vauxhall to Coney Island*, Penn Studies in Landscape Architecture (Philadelphia: University of Pennsylvania Press, 2013); Stephen Bending, *Green Retreats: Women, Gardens and Eighteenth-Century Culture* (Cambridge: Cambridge University Press, 2013); *The Genius of the Place: The English Landscape Garden 1620–1820* (Cambridge, MA: MIT, 1988); Beth Fowkes Tobin, *Colonizing Nature: The Tropics in British Arts and Letters, 1760-1820* (Philadelphia, Pa.: University of Pennsylvania Press, 2005).

<sup>362</sup> Michel Baridon, "Understanding Nature and the Aesthetics of the Landscape Garden," in *Experiencing the Garden in the Eighteenth Century*, ed. Martin Calder (Oxford: Peter Lang, 2006), 65-86.

<sup>363</sup> Woudstra, Jan. "'Striped Plants': The First Collections of Variegated Plants in Late Seventeenth-Century Gardens." *Garden History* 34, no. 1 (2006): 64-79.

<sup>364</sup> Lorraine Daston and Katherine Park, *Wonders and the Order of Nature, 1150-1750* (London: Zone Books, 1998) 361.

problematised this, arguing in “Wonders Never Cease: Descartes’s *Météores* and the Rainbow Fountain” that it was merely the language of marvels that underwent a shift; the practice of collecting and display continued.<sup>365</sup> By the eighteenth century, collecting had diversified into a larger, more complicated variety of forms. Cabinets may not have been as formally articulated, but collections of books, *naturalia*, and instruments were consumed with equal enthusiasm, and sometimes in greater quantities. Elite homes in metropolises and the countryside became celebrated as places where curiosities were collected, some specialising in antiquities and others in *naturalia*.<sup>366</sup> Catalogues of these collections were published such as Thomas Martyn’s (1735-1825) guide *The English Connoisseur: containing an account of whatever is curious in Painting and Sculpture in the Palaces and Seats of the Nobility and Principal Gentry of England*, demonstrating the popular interest in learning about the variety of homes and art to be found within by the mid-eighteenth century.<sup>367</sup> In the interior of these homes, elite collectors displayed any type of rarity to elicit delight. Perhaps, as Werrett asserts, the language of wonders had disappeared, but the practice of collecting for enjoyment and display continued. Thus the thread of collecting extended into eighteenth-century consumer culture, and expanded outside of the cabinet into the entirety of the home. Outside the home, on the grounds, rare plants served the same function.<sup>368</sup> The landscapes of country homes became spaces to display botanical erudition. Women who made their homes in great country houses found that they could patronise great botanists,

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<sup>365</sup> Simon Werrett, “Wonders Never Cease: Descartes’s *Météores* and the Rainbow Fountain,” *British Journal for the History of Science* 34 (2001): 129-147.

<sup>366</sup> John Brewer, *The Pleasures of the Imagination: English Culture in the Eighteenth Century*. (London: Routledge, 1997); 180-181.

<sup>367</sup> Thomas Martyn, *The English Connoisseur: Containing an Account of Whatever Is Curious in Painting, Sculpture, &c. In the Palaces and Seats of the Nobility and Principal Gentry of England, Both in Town and Country*. (London: L. Davis and C. Reymers, 1766).

<sup>368</sup> Mark Laird, *A Natural History of English Gardening, 1650-1800*. (Philadelphia: University of Pennsylvania Press, 1999) and Mark Laird, *The Flowering of the Landscape Garden, English Pleasure Grounds, 1720–1800* (Philadelphia: University of Pennsylvania Press, 1999). See also Conlin, *The Pleasure Garden*. Stephen Bending, *Green Retreats*. Esther Helena Arens, “Flowerbeds and Hothouses: Botany, Gardens, and the Circulation of Knowledge in Things,” *Historical Social Research / Historische Sozialforschung* 40, no. 1 (151) (2015): 265–283.

horticulturalists, and landscapers to create curiosities in their grounds. Stephen Bending has demonstrated that, while traditional historiography of gardening has focussed on the “idea of male genius and the conceit of the male designer transforming a female Nature,” the garden was actually a space where women could cultivate their own spaces and sense of identity.<sup>369</sup> Badminton, the Gloucestershire home of Mary Somerset, Duchess of Beaufort (1630-1715), was renowned for its magnificently curated hothouses.<sup>370</sup> In his “Lives or Memoirs of the most eminent virtuosos in Gardening,” Stephen Switzer, himself a gardener trained at Brompton nursery, praised the Duchess of Beaufort’s skills: “What a Progress she made in Exoticks, and how much of her Time she virtuously and busily employed in her Garden, is easily observable from the Thousands of those foreign Plants (by her as it were made familiar to this Clime) there regimented together, and kept in a wonderful deal of Health, Order, and Decency.’<sup>371</sup> Collection and display of botany in the garden became a practice where women’s virtuosity was recognised by contemporaries.

### *Women’s Practices and Botanical Knowledge*

Women in the eighteenth century had been marginalised and segregated from legitimate knowledge-making spaces by the accusations of an obsession with fashion, as outlined in the previous chapter. While male-dominated society demeaned women’s interest in fashion, some eighteenth-century women cultivated knowledge through their seemingly less legitimate practices. Women’s practices, such as embroidery, shellwork, or featherwork have not only been dismissed as lesser arts but also have hardly been treated as serious participation in scientific endeavours by historians of science. Botanical knowledge could be cultivated, shared, and enhanced

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<sup>369</sup> Stephen Bending, *Green Retreats*, 8-15.

<sup>370</sup> Munroe, Jennifer. “My Innocent Diversion of Gardening’: Mary Somerset’s Plants.” *Renaissance Studies* 25, no. 1 (2011): 111-23. See also Douglas Chambers, “Storys of Plants”: The Assembling of Mary Capel Somerset’s Botanical Collection at Badminton,” *Journal of the History of Collections* 9, no. 1 (January 1, 1997): 49–60.

<sup>371</sup> Stephen Switzer, “Lives or Memoirs of the Most Eminent Virtuosos in Gardening,” in *Ichnographia Rustica: Or, the Nobleman, Gentleman, and Gardener’s Recreation*, vol. 1 (London, 1741), 72.

through women's accomplishments. Buying and wearing silks derived from accomplishment practices, such as those created by Anna Maria Garthwaite, was similarly a women's practice that can help understand women's participation in knowledge-making. Anna Maria Garthwaite's creations were materials by which women could display their appreciation for and understanding of nature.

In order to understand how Garthwaite's works fit into women's botanical practices, it is useful to understand more traditional narratives of women's participation in scientific knowledge-making. Historians of science, namely Londa Schiebinger, have thoroughly documented the disenfranchisement of women in early modern knowledge-making.<sup>372</sup> Histories that privilege publishing, experiments, and academies can only account for masculine forms of engagement in natural knowledge. In order to understand the role of natural knowledge in the work of Anna Maria Garthwaite, it is helpful to look to better known examples of women involved in natural history: Maria Sibylla Merian (1647-1717), Margaret Cavendish Bentinck (1717-1785), and Mary Delany (1700-1788). Each of these women is acknowledged by historians to have been deeply entrenched in the practices of natural history prominent during Garthwaite's lifetime.

### *Maria Sibylla Merian: A Woman Who Published*

Any discussion of women engaged in early modern natural history is incomplete without Maria Sibylla Merian. Merian was one of the few women who published her botanical and entomological works and became an internationally lauded naturalist in her own lifetime. (Fig. 52) The most active part of her career overlapped with Garthwaite's youth, and Clare Browne has written on the possibility

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<sup>372</sup> Schiebinger, *The Mind Has No Sex?: Women in the Origins of Modern Science* and Schiebinger, Londa L. *Nature's Body : Gender in the Making of Modern Science*. (Boston: Beacon Press, 1993).

that Spitalfields silk designers such as Garthwaite were influenced by Merian's publications.<sup>373</sup>

Born in 1647 to a family of artists and printers, Merian pursued natural knowledge at an early age by drawing the caterpillars in her stepfather's studio.<sup>374</sup> Later she reflected on her taste for entomology: "'From my youth onward I have been concerned with the study of insects. I began with silkworms in my native city... then I observed the far more beautiful butterflies and moths that developed from other kinds of caterpillars. This led me to collect all the caterpillars I could find in order to study their metamorphoses.'" This love of nature fuelled her skill in art, "to work at my painter's art so that I could sketch them from life and represent them in lifelike colours."<sup>375</sup>

Merian's first works were published by her family and were intended to be used by women for embroidery patterns.<sup>376</sup> (Fig. 53) The role of women's work, especially embroidery, in the dissemination of botanical knowledge would become especially important in Garthwaite's time. Natalie Zemon Davis argued that Merian's work reflects the "pictorial requirements of the decorative arts" that "would come to

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<sup>373</sup> Browne, "The Influence of Botanical Sources on Early 18th-Century English Silk Designs," 933.

<sup>374</sup> Davis, Natalie Zemon. *Women on the Margins : Three Seventeenth-Century Lives*. (London: Harvard University Press, 1995). See also Maria Sibylla Merian, *Maria Sibylla Merian: 1647-1717: Artist and Naturalist*, ed. Kurt Wettengl (Ostfildern: Hatje, 1998); S. Ulenberg, *Maria Sibylla Merian & Daughters: Women of Art and Science* (Zwolle, 2008). Janice Neri, "Stitches, Specimens, and Pictures: Maria Sibylla Merian and the Processing of the Natural World," in *The Insect and the Image: Visualising Nature in Early Modern Europe, 1500-1700* (London: University of Minnesota Press, 2011), 139-180; Catherine M. Nutting, "Crossing Disciplines: The Fruitful Duality of Maria Sibylla Merian's Artistic and Naturalist Inheritance," *Dutch Crossing* 35, no. 2 (2011): 137-47; Kay Etheridge, "Maria Sibylla Merian and the Metamorphosis of Natural History," *Endeavour* 35, no. 1 (2011): 16-22; T. Kinukawa, "Natural History as Entrepreneurship: Maria Sibylla Merian's Correspondence with J. G. Volkamer II and James Petiver," *Archives of Natural History* 38, no. 2 (2011): 313-27.

<sup>375</sup> Qtd in Davis, *Women on the Margins*, 144

<sup>376</sup> Neri, "Stitches, Specimens, and Pictures: Maria Sibylla Merian and the Processing of the Natural World," 140.

play an important role in Merian's illustrations, in particular her approach to representing relationships between insects and plants."<sup>377</sup>She prefaced some of her publications with hopes that her work would "be of use and pleasure to people who know and love art as [models] for drawing and painting and to women for sewing."

Merian's many publications illustrating life cycles of plants and insects mark her as unusual for a woman. Merian's work met with disapproval from male translators. Her artistic work had merit, but to James Petiver (c. 1665- c. 1718), apothecary and fellow of the Royal Society, it needed taxonomic method. The ecological relationships it showed were not part of the contemporary, context-less method of describing. Male botanists and entomologists studied single specimens, dead and dried, taken out of the ecology to which they belonged. Her own sense of taxonomy came from her lifetime of observations: without training, she was able to independently develop an order of natural history based on behaviour and habits of insects. She was interested in their *lives*: when Petiver sent her preserved specimens, she returned them with a request that he, as Zemon Davis put it, "not send her any more dead insects."<sup>378</sup> Merian's approach echoes the criticisms made by Margaret Cavendish about the Royal Society in the last chapter: isolating nature in the new experimental way could not account for the full picture of nature and its ecological relationships.

Though other women published botanical works, Merian was one of the few to be truly successful. After Merian's era, English women found some recognition in the publishing of herbals. Elizabeth Blackwell (1707-1758) published a 1730 work based on the Chelsea Physick Garden to get her husband out of debtor's prison. With the encouragement of the garden's curator, Isaac Rand (1674-1743), she took lodgings near the garden and drew plants directly from the apothecaries' collection.<sup>379</sup> (Fig.

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<sup>377</sup> Neri, Janice. *The Insect and the Image: Visualizing Nature in Early Modern Europe, 1500-1700*. (Minneapolis: University of Minnesota Press, 2011).

<sup>378</sup> Zemon Davis, *Women on the Margins*, 181.

<sup>379</sup> "Elizabeth Blackwell - the Forgotten Herbalist?" *Health Information and Libraries Journal* 18, no. 3 (2001): 144-52.



54) Her publication, entitled *A Curious Herbal*, was issued in 125 weekly instalments of four plates each from 1737-1739. The herbal was so successful that it was republished three times in folio editions, in 1739, 1751, and 1782.<sup>380</sup> It was successful enough to release her husband, though he quickly ran up further debts following his release.<sup>381</sup> Later, Lady Anne Monson (1726-1776) helped eminent nurseryman James Lee (1715-1795) with his 1760 work *An Introduction to Botany*, which included translations of Linnaeus's *Philosophia Botanica*.<sup>382</sup> James Lee was also connected to botanist and artist Mary Lawrence (d. 1830), whose illustrated monographs included *A Collection of Roses from Nature* in 1799, and *A Collection of Passion Flowers Coloured from Nature* in 1802.<sup>383</sup> Her work on roses was dedicated to Queen Charlotte (1744-1818), who was a prominent patron of Georgian botany.<sup>384</sup>

The problem with focusing on women who were able to publish is that they are exceptions. As exceptions, they are seen in history of science as women who broke free from the barriers of femininity and were able to participate in masculine, more legitimate, botanical engagement. This poses a problem: such histories ignore women's practices and the ways that botany figured into those practices, thus perpetuating the eighteenth-century idea that their forms of knowledge were lesser. Though published women's achievements must not be ignored, it is equally important to understand and value what other kinds of botanical engagement were more usually available to women.

### *Margaret Cavendish Bentinck: Collecting and Decoration as Epistemic Practice*

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<sup>380</sup> Anishanslin, *Portrait of a Woman in Silk*, 59.

<sup>381</sup> Elizabeth Blackwell, *A Curious Herbal Containing Five Hundred Cuts, of the Most Useful Plants, Which Are Now Used in the Practice of Physick*. (London: printed for C. Nourse, 1782).

<sup>382</sup> Shteir, Ann B. *Cultivating Women, Cultivating Science*, 18.

<sup>383</sup> *Ibid.*, 45.

<sup>384</sup> *Ibid.*, 48.

Most women did not publish their findings but found other ways to cultivate their interest in botany, such as collecting. Margaret Cavendish Holles Harley Bentinck, second duchess of Portland, was an immensely powerful and wealthy aristocrat whose fortune allowed her to amass one of the finest collections of *naturalia* of her time. Her status and wealth allowed her to participate in the collecting networks of eighteenth-century botanists and natural philosophers.<sup>385</sup> While she did not travel to collect specimens or publish her observations like Merian, she transformed her homes, mostly into hubs of knowledge exchange, gathering around her the finest botanists, entomologists, and other naturalists.<sup>386</sup>

For someone so well connected and influential in the world of eighteenth-century natural knowledge, the Duchess of Portland has had precious little attention from recent scholars. She is usually a character in the biographies of her male friends, such as Joseph Banks and Hans Sloane. However, Rebecca Stott and Beth Fowkes Tobin have both published biographies of Margaret Cavendish Bentinck, bringing her to the forefront of collecting culture in the eighteenth century.<sup>387</sup>

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<sup>385</sup> Grolier Club, *The Duchess of Portland's Museum. By Horace Walpole. With an Introduction by W. S. Lewis.*, (Miscellaneous Antiquities. No. 11.) (New York ; Windham, Ct.: printed by Edmund Burke Thompson at Hawthorn House, 1936). John Lightfoot, *A Catalogue of the Portland Museum, Lately the Property of the Duchess Dowager of Portland, Deceased* (London: J. Bell, 1786). Madeleine Pelling, "Collecting the World: Female Friendship and Domestic Craft at Bulstrode Park," *Journal for Eighteenth-Century Studies*. 41, no. 1 (2018) 101-120.

<sup>386</sup> On the circle of naturalists gathered around the Duchess of Portland, see A. Cook, "Botanical Exchanges: Jean-Jacques Rousseau and the Duchess of Portland," *History of European Ideas*. 33, no. 2 (2007): 142-156.

<sup>387</sup> Tobin, Beth Fowkes. *The Duchess's Shells: Natural History Collecting in the Age of Cook's Voyages*. New Haven: Yale University Press, 2014; and Rebecca Stott, *Duchess of Curiosities: The Life of Margaret, Duchess of Portland*. (Pineapple Press, 2006). See also S. Sloboda, "Displaying Materials: Porcelain and Natural History in the Duchess of Portland's Museum," *Eighteenth-Century Studies*. 43, no. 4 (2010): 455-472; Sally Festing, "The Second Duchess of Portland and Her Rose," *Garden History* 14, no. 2 (October 1, 1986): 194-200.

Margaret Cavendish Bentinck's wealth meant that she was able to take advantage of the consumer culture around *naturalia* in the eighteenth century. Displaying a physical collection of *naturalia* in the home or garden displayed apparent intellectual understanding of that *naturalia*: one possesses both the object and the knowledge it symbolises.<sup>388</sup> Early modern collectors brought plants into their homes and gardens from all over the world in order to display their understanding of the new knowledge being funnelled in through global botanical networks. In eighteenth-century London, plants, seeds, and natural samples were not only prized for their botanical value, but also for their fashionability.<sup>389</sup> As one of the wealthiest members of the aristocracy, Margaret Cavendish Bentinck was able to fully participate in this fashionable activity. She was a collector, a patron of explorers both in England and abroad, and kept a variety of gardens and glasshouses on her properties. An engraved illustration of her collection, accompanying the auction of her entire collection after her death, depicted the variety of objects in her possession.<sup>390</sup> (Fig. 55) The engraving shows a tower of coral, shells, trees, ceramics, and mounted insects. Though the collection dispersed during this auction (rather than forming a museum like Hans Sloane's) this engraving is a portrait of Margaret Cavendish Bentinck's lifetime project of collecting and displaying natural knowledge.

One of the most sociable forms of botanic consumption was the practice of travelling to wild places in groups to identify plants and collect them: this was known as "herborizing" or "botanizing."<sup>391</sup> Going on botanizing trips could be a day out or a long holiday. Sometimes, these trips were led by experts. A 1777 advertisement for a trip led by William Curtis (1746-1799), keeper of the Chelsea Physick Garden, invited

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<sup>388</sup> Bredekamp, Horst. *The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art and Technology*. (Princeton: Markus Wiener Publishers, 1995); 20-21.

<sup>389</sup> Beth Fowkes Tobin, ed., "Domesticating the Tropics: Tropical Flowers, Botanical Books, and the Culture of Collecting," in *Colonizing Nature, The Tropics in British Arts and Letters, 1760-1820* (University of Pennsylvania Press, 2005), 168-97.

<sup>390</sup> John Lightfoot, *A Catalogue of the Portland Museum, Lately the Property of the Duchess Dowager of Portland, Deceased*.

<sup>391</sup> Tobin, *The Duchess's Shells*, 60.

“such Gentlemen as wish to acquire a knowledge of the plants growing wild about town, or of Lineaeus’s System of Botany” to the “fields and meadows about Battersea.”<sup>392</sup> While this advertisement mentions exclusively men, it demonstrates the demand for botanical field trips in the eighteenth century. Margaret Cavendish Bentinck funded many botanical excursions and was fond of bringing visitors on a botanizing tour of her gardens. Beth Fowkes Tobin’s descriptions in *The Duchess’s Shells* paint a picture of the Duchess’s excursions: “in the company of friends and fellow amateur naturalists, she wandered about the countryside, carrying nets, shovels, baskets, and boxes to gather specimens.”<sup>393</sup> The Duchess of Portland’s constant companion and fellow botanist Mary Delany recorded many such days with Bentinck, showing the daily presence of botany in the domestic spaces of Bulstrode. Bentinck employed John Lightfoot (1735-1788), who took them “out in search of curiosities in the fungus way, as this is now their season,” before returning to read to the ladies “a lecture on [fungi] an hour before tea, whilst her Grace examines all the celebrated authors to find out their linnean classes.”<sup>394</sup> Fungi, along with shells, were a particular love for Bentinck. Delany reported the transformation the house underwent when it was the season for fungi:

“Her Grace’s breakfast-room, which is now the repository of sieves, pans, platters, and filled with all the productions of *that nature*, are spread on tables, windows, chairs, which with books of all kinds, (opened in their useful places), make an agreeable confusion; sometimes, notwithstanding twelve chairs and a couch, *it is indeed a little difficult* to find a *seat!*”<sup>395</sup>

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<sup>392</sup> Qtd. in Shteir, *Cultivating Women, Cultivating Science*, 241.

<sup>393</sup> Tobin, *The Duchess’s Shells*, 62.

<sup>394</sup> *Ibid.*, 48.

<sup>395</sup> Delany, Mary. *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*. 3 Vols. London: Richard Bentley, 1861. See also Lisa Lynne Moore, “Queer Gardens: Mary Delany’s Flowers and Friendships,” *Eighteenth-Century Studies* 39, no. 1 (October 18, 2005): 49–70.

The collections of the Duchess of Portland served more than merely a static, decorative function. They were wholly interactive, to be shared and delighted in together.

### *Mary Delany: Accomplished Woman*

The letters and art of Bentinck's close friend Mary Delany allows us to look at the ways women's practices and handmade arts could enable women to express botanical interest and knowledge.<sup>396</sup> Delany gained note in eighteenth-century botanical networks through feminine practices that expressed her botanical knowledge. She "invented a new way of imitating flowers" through detailed "paper mosaics," a kind of botanical illustration firmly entrenched in the accomplishment craft of paper cutting.<sup>397</sup> (Fig. 56) These works, now housed in the British Museum, were made of colourful paper, cut into shapes and arranged with paste on black backgrounds. Delany began to dedicate serious effort to paper mosaic work at the age of 72, after having enjoyed creative pursuits such as paper cutting throughout her life. According to her first biographer, Lady Llanover, Delany sourced paper from Chinese traders and paper strainers, "from whom she used to buy pieces of paper in which the colours had run and produced extraordinary and unusual tints."<sup>398</sup> Delany thought that the accidental running of ink on paper more accurately resembled colour on petals. Her results were so accurate that the noted botanical collector, and

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<sup>396</sup> On Mary Delany's life and works, see Mary Delany and Lady Llanover, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 3 vols. (London: Richard Bentley, 1861); Mark Laird et al., *Mrs Delany & Her Circle*. (New Haven, Conn.: Yale University Press, 2009); Ruth Hayden, *Mrs Delany: Her Life and Her Flowers*, 2nd ed (London: British Museum, 2000); Verna Linney, "The Flora Delanica: Mary Delany and Women's Art, Science, and Friendship in Eighteenth-Century England" (ProQuest Dissertations Publishing, 1999); Dorota Babilas, "From Female Accomplishment To Botanical Science: Mary Delany's 'Paper Mosaicks,'" *Literature Compass* 10, no. 8 (2013): 631–42.

<sup>397</sup> Delany, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 1:469.

<sup>398</sup> Delany, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 3: 97.

Delany's close friend, the Duchess of Portland mistook one of Delany's mosaics for a real specimen.<sup>399</sup>

King George III (1738-1820) and Queen Charlotte commissioned paper mosaics of interesting specimens from Kew Palace, "greatly desiring" that their growing botanical collection be rendered in Delany's craft. So great was their admiration for Delany that after the Duchess of Portland died, the king and queen provided Delany with a salary and house in Westminster. Joseph Banks was reported to have said Delany's paper mosaics were "the only imitations of nature that he had ever seen from which he could venture to describe botanically any plant without the least fear of committing an error."<sup>400</sup> To Banks and other admirers, Delany's accomplishment-based illustrations were an excellent medium for botanical expertise.

Delany's success in botanical illustration came from her lifetime of craft practices considered appropriate pastimes for women. In both Delany's and Garthwaite's social stratas, women were trained in a group of skills known as "accomplishments" as part of their education. Accomplishments, or crafts that middling to noble women created to occupy their minds and decorate their spaces, have often been ignored or derided. The problem, as Amanda Vickery states, is that they are "neither useful nor truly art:" they were crafts that the feminine hand was relegated to because they were excluded from more legitimised fine arts.<sup>401</sup> Historians such as Anne Bermingham have shown how accomplishments "went along with the domestic confinement of women," as they exercised creative control over the only space they were not excluded from.<sup>402</sup> Contemporary attitudes were conflicted about accomplishments, seeing them as either the proper place for women

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<sup>399</sup> Ibid.

<sup>400</sup> Ibid., 95.

<sup>401</sup> Vickery, *Behind Closed Doors*, 231.

<sup>402</sup> Ann Bermingham, 'Elegant Females and Gentlemen Connoisseurs: The Commerce in Culture and Self-Image in Eighteenth-Century England' in *The Consumption of Culture, 1660-1800, Image, Object, Text*, ed. J Brewer and A Bermingham (London: Routledge, 1995), 509.

or the pithy tasks to which they were relegated. In the early modern world, accomplishments were frequently dismissed by women who longed to reach out of their assigned sphere, and by men who sought to depict their own sphere as distinctive. Mary Wollstonecraft wanted to liberate women from being “rigidly nailed to their chair” and forced to embroider.<sup>403</sup>

Conversely, accomplishments were defended by women who saw their private crafts as skills to be celebrated. Attitudes towards accomplishments were and are central to uncovering attitudes towards women’s abilities.<sup>404</sup> Vickery, Bermingham, and historians such as Roszika Parker have argued that there is more to see in accomplishments than exclusion.<sup>405</sup> By training in accomplishments, women learned to draw, paint, and embroider flowers. These accomplishments were expressions of feminine observation and knowledge-making. Just as histories of science privilege male practices, histories of fine art are dominated by male creators. Histories of accomplishments present an alternate, feminine way knowledge was created and disseminated through visual, artistic practices.

Historian Amanda Herbert’s book *Female Alliances* demonstrates how women’s domestic production practices were tools to forge and strengthen relationships.<sup>406</sup> Women would create crafts for each other, whether they be fruit marmalades or embroidered textiles. Creating domestic projects together served to further strengthen relationships. Accomplished women practiced shellwork, in which collected or purchased shells were formed into patterns on walls or furniture, and the

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<sup>403</sup> Mary Wollstonecraft, *Thoughts on the Education of Daughters: With Reflections on Female Conduct, in the More Important Duties of Life* (Cambridge: Cambridge University Press, 2014), 25-7.

<sup>404</sup> For a breakdown of attitudes towards accomplishments, see Vickery, *Behind Closed Doors: At Home in Georgian England*, 231-34.

<sup>405</sup> Roszika Parker, *The Subversive Stitch: Embroidery and the Making of the Feminine*. (London: I.B. Tauris, 2010).

<sup>406</sup> Amanda E. Herbert, “Noble Presents: Gender, Gift Exchange, and the Reappropriation of Luxury,” in *Female Alliances: Gender, Identity, and Friendship in Early Modern Britain* (London: Yale University Press, 2014), 52–77.

similar craft featherwork. Delany and Bentinck spent many hours together creating designs with shellwork and collaborated on a shellwork room, or “grotto” at Bulstrode.<sup>407</sup>

The private production of objects was a significant portion of feminine gentility, and a space where women would hone and display her natural knowledge.<sup>408</sup> Like collecting and display, accomplishments signalled the feminine practice of creation and display. Embroidery, thought in the early modern world as the most appropriate craft for women, was often used as an expression in botanical interest. Surviving samplers, or pieces of embroidered textile used for practice and decoration, show the enduring interest in flowers and plants that accomplished women expressed throughout the early modern era.<sup>409</sup> The Victoria and Albert museum has a vast collection of embroidered samplers made by women in the seventeenth and eighteenth centuries. These samplers, many of which include botanical motifs, were created to hone the skills of embroidery and would be displayed in the woman’s home or given to friends. One sampler that was likely displayed in a home was completed by Sarah Brignell at the age of ten, in about 1780. Brignell’s design includes a religious verse surrounded by an intricate floral border including carnations and honeysuckle, two flowers frequently used by Garthwaite. (Fig. 57) Some women copied from books on natural knowledge when designing their samplers. A 1787 sampler by Elizabeth Knowles shows not only botanical decorations but also the text of an almanac. (Fig. 58) To aid their needlework, women purchased printed herbals and traced the illustrations. This was a common practice from at least the sixteenth century when Grace Sherrington wrote,

every day I spent some time in the Herball or books of phisick, and in ministering to one or another by the directions of the best phisitions of myne

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<sup>407</sup> Lisa Lynne Moore, “Queer Gardens: Mary Delany’s Flowers and Friendships,” *Eighteenth-Century Studies* 39, no. 1 (October 18, 2005): 49–70, 61. Pelling, “Collecting the World,” 101.

<sup>408</sup> Vickery, *The Gentleman's Daughter*, 161.

<sup>409</sup> Clare Browne and Jennifer Wearden, eds., *Samplers from the Victoria and Albert Museum* (London: V&A Publications, 1999).



aquaintance; ...Also every day I spent some tyme in works of myne owne invention, without sample or patterns before me for carpett or cushion worke, and to drawe flowers and frutt to their lyfe with my pulmmett upon paper.<sup>410</sup>

Herbals served to inspire women such as Sherrington, Knowles, and Brignell to observe the world themselves and draw or embroider their own botanical findings.

Delany was a prolific embroiderer. Her proficiency in designing ensembles was noticed by royalty. Mary Delany “dressed [herself] in all [her] best array” to attend the celebrations at court for Queen Caroline’s birthday with Lady Carteret. Queen Caroline, consort to George II, was an ardent botanist and collector of art, and appears to have recognised similar sensibilities in Mary.<sup>411</sup> Mary recorded that the Queen greeted her warmly:

she told me she was *obliged to me* for my pretty clothes, and admired my Lady Carteret’s extremely; she told the Queen that they were my fancy, and that I drew the pattern. Her majesty said that she had heard that I could draw very well.<sup>412</sup>

Court dress was an effective way for women to display botanical knowledge through textiles. The mantua, the standard feminine court gown, was a gigantic canvas for embroidery. Hanging off whalebone *panniers*, structural undergarments which were shaped like upside down baskets, the skirt could stretch as wide as two metres. One such mantua, in the Victoria and Albert collection, illustrates the potential for botanical display in women’s court clothing. The border of the skirt at the very

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<sup>410</sup> Grace Sherrington qtd. in Parker, *Subversive Stitch*, 85.

<sup>411</sup> For more on Queen Caroline’s collecting and botanizing practices, see Joanna Marschner, *Queen Caroline: Cultural Politics at the Eighteenth-Century Court*. (New Haven: Yale University Press, 2014).

<sup>412</sup> Delany and Llanover, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 1:3.

bottom is decorated with shells, from which a forest of flowers grows. Many flowers were realistically embroidered and can be identified: roses, peonies, poppies, anemones, auriculas, jasmine, morning glory, honeysuckle, carnations, cornflowers, tulips and daffodils. It gives the impression of looking directly at a garden from the ground level. (Fig. 59) The relationship between garden and textile was so interwoven that Mark Laird has posed the question: “Did Mrs Delany and her circle draw upon embroidery in dress as a source of horticultural effect? Or were their textiles influenced by changes in professional garden design?”<sup>413</sup> Fragments of Delany’s court dresses that have survived are arrayed in botanical designs.<sup>414</sup> They appear to have anticipated her style of botanical illustration developed decades later: bright colours on black backgrounds, with a particular attention to texture. A surviving petticoat, now in private hands, is covered in delicate flowers identified by Delany’s biographer Lady Llanover as “bugloss, auriculas, honeysuckle, wild-roses, lilies of the valley, yellow and white jessamine.”<sup>415</sup> Other surviving fragments of this ensemble, some of which were repurposed into decorative objects such as fire screens, show Delany’s attention to texture was so masterful that she was able to evoke the flouncy petals of stocks with remarkable accuracy. Other flowers, such as nigella, dog rose, lilies of the valley, and lilac, were depicted with such detail that they would have been identifiable at first glance. Llanover declared that Delany’s embroidered work “deserve framing and being put under glass, as a visible proof of what embroidery can and ought to be.”<sup>416</sup> (Fig. 60)

Of all the crafts that were associated with women’s accomplishments, it is that of papercutting which would be most significant for Mary Delany’s botanical expressions. These works involved cutting shapes, usually silhouettes of people or objects, in one colour of paper and mounting them on a board or paper in

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<sup>413</sup> Laird, *Mrs Delaney and Her Circle*, 150.

<sup>414</sup> Clare Browne, “Mary Delany’s Embroidered Court Dress,” in *Mrs. Delany and Her Circle*, ed. Mark Laird and Alicia Weisberg-Roberts (London: Yale University Press, 2009), 66–79.

<sup>415</sup> Delany and Llanover, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 1:504.

<sup>416</sup> *Ibid.*

contrasting colour. Delany developed an interest in this skill very early on and recalled the delight that her teachers would find in her work. Remembering an instructor named Lady Jane Douglass, Delany wrote that “she would pick up the little flowers and birds I was fond of cutting out in paper, and pin them carefully to her gown or apron that she might not tear them by putting them in her pocket.”<sup>417</sup> These little paper crafts, created by the child Delany, indicate that the delight found in producing and observing cutwork could bond women together: though she never encountered Douglass after her time at the school, “I have heard of her preserving them for many years after.”<sup>418</sup> This connection between feminine friendships and botanical craftwork continued throughout her life. It is notable that, decades later, Delany’s papercut botanical illustrations would be circulated among her friends, including the Duchess of Portland and the Queen of England.

### *Aesthetic Botanizing*

In 1707, at the age of 17, Garthwaite completed a papercutting that survives at the Victoria and Albert museum. (Fig. 61). The work demonstrates Garthwaite’s interest in expressing botany through the medium that Delany would use for the same purpose decades later. Up to 30 different types of trees are distinguishable in the large silhouetted landscape.<sup>419</sup> This pastoral scene is an early indicator that Garthwaite, like Delany, had an eye for botanical detail and expressed her observations in paper cutting.

This aesthetic botanical practice was especially important for the signifying of credibility in women’s social circles. Mary Delaney’s letters document how often women who were interested in botany recognised botanical expertise in one another’s clothing choices. Delany wrote many letters to her sister Anne Granville (b. 1707) in which they exchanged observations on both gardens visited and clothing

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<sup>417</sup> Delany and Llanover, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 1: 3.

<sup>418</sup> Ibid.

<sup>419</sup> Anishanslin, *Portrait of a Woman in Silk*, 43.

seen at social events. Delany recorded one extraordinary ensemble, worn by Catherine Douglas (1701-1777), the Duchess of Queensbury, which appeared to have a botanical landscape on it:

white satin embroidered, the bottom of the petticoat brown hills covered with all sorts of weeds, and every breadth had an old stump of a tree that run up almost to the top of the petticoat, broken and ragged and worked with brown chenille, round which twined nasturtiums, ivy, honeysuckles, periwinkles, convolvuluses and all sorts of twining flowers which spread and covered the petticoat, vines with the leaves variegated as you have seen them by the sun, all rather smaller than nature, which made them look very light : the robings and facings were little green banks with all sorts of weeds, and the sleeves and the rest of the gown loose twining branches of the same sort as those on the petticoat : many of the leaves were finished with gold, and part of the stumps of the trees looked like the gilding of the sun.<sup>420</sup>

The Duchess of Queensbury was a good friend of Delany's and appears to have also shared her interest in botany. Both women were subscribers to *Twelve Months of Flowers: From the Collection of Robt. Furber, Gardiner at Kensington*.<sup>421</sup> The Duchess of Queensbury's remarkable ensemble does not exist any longer, but the Victoria and Albert museum owns a dress with a comparable landscape. (Fig. 62) The botanical motifs include peonies and cedar trees with details of cones. Like the Duchess of Queensbury's dress, this dress displayed a landscape of pavilions, cottages, and a ruined abbey as the centrepiece. As noted above, recent histories have acknowledged the role that gardens and landscape played in eighteenth-century knowledge-making practices, especially those in which women were allowed to

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<sup>420</sup> Delany and Llanover, *The Autobiography and Correspondence of Mary Granville, Mrs. Delany*, 1:147–48.

<sup>421</sup> Mark Laird, "Mrs. Delany's Circle of Cutting and Embroidering in Home and Garden," ed. Mark Laird and Alicia Weisberg-Roberts (London: Yale University Press, 2009), 156.

participate.<sup>422</sup> This dress, and that of the Duchess of Queensbury, represent landscapes and display those spaces of women's natural knowledge. The account by Mary Delany shows how these representations were keenly observed by women. Worn by the Duchess of Queensbury, seen by Mary Delany, and described to Ann Granville, scenic ensembles embroidered with flowers and trees show the many ways that botanical images on one garment could be enjoyed by networks of women.

Botanical displays on fashionable clothing may have been a way for women to appreciate expertise in feminine friendships and acquaintances, but male circles did not have a similar appreciation for fashion, aesthetics, and botany. Joseph Banks was satirised as a "botanical macaroni," in a slight to his credibility.<sup>423</sup> The term macaroni denoted an overly foppish man, particularly with connotations of pretentious and effeminate mannerisms. A caricature, drawn in 1772 by Matthew Darly, illustrated the ridicule that a natural philosopher could attract if his intellectual pursuits were too related to fashion. Botany took on a sexual and fashionable connotation, due to the Linnean system's methods and the subject's popularity with women such as Delany and Bentinck. Neither connotation aided the credibility of Banks among his male peers. The implication of the caricature and the epithet "Botanic macaroni," as Fara notes, is that Banks was a "botanical libertine" rather than a scholar of nature.<sup>424</sup> His associations with the potentially sexual, potentially feminine practice of botany was used by his detractors to decrease his credibility. The associations with effeminate natural knowledge practices was not ultimately able to destroy his career, but the display of botanical knowledge and its association with fashion was detrimental to him in the male-dominated model of credibility. The association between clothing, nature, and knowledge was only positive among women's circles.

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<sup>422</sup> Stephen Bending, *Green Retreats; The Genius of the Place: The English Landscape Garden 1620–1820*; Mark Laird, *The Flowering of the Landscape Garden, English Pleasure Grounds, 1720–1800* (Philadelphia: University of Pennsylvania Press, 1999).

<sup>423</sup> Fara covers Banks's macaroni caricature in *Sex, Botany, and Empire*, 5-7. It is also addressed, and compared to other portraits of Banks, in Fara, Patricia. "Benjamin West's Portrait of Joseph Banks," *Endeavour* 24, no. 1 (2000): 1-3.

<sup>424</sup> Fara, *Sex, Botany and Empire*, 5.

With the examples of Maria Sibylla Merian, Margaret Cavendish Bentinck, and Mary Delany, it is possible to glimpse a feminine style of botanical practice: one couched in aesthetic sense and sociable experience. These examples, though elite, show how botany was present in women's daily lives through their making practices. These material practices worked alongside immaterial exchanges: while women embroidered together, botanized together, or shared recipes, they were making and strengthening their social bonds. Women's accomplishments intertwined the aesthetic with the epistemic.

Marcia Pointon has connected women's creation of botanically-embellished textiles with the purchase of Garthwaite's botanically-embellished silks in *Strategies for Showing*: Garthwaite's work showed that "women did not only purchase and wear flowered silks, they also designed them and wove them. This was an area, commensurate with flower painting and portrait painting, where women professionals worked."<sup>425</sup> Women consumed and worked with flowers, whether in recipes, needlepoint, paint, or textile. This allowed them an avenue to explore the natural world.

### *The Laboratory*

Peter Thornton argued in 1958 that Anna Maria Garthwaite had in fact left written evidence of her practice.<sup>426</sup> He asserted that she authored an essay on silk design found in Godfrey Smith's *Laboratory; or, School of the Arts* published exclusively in the 1756 edition. The essay is a short offering of instructions on "designing and drawing of ornaments, models and patterns, with foliages, flowers &c. for the use of the flowered-silk manufactory, embroidery, and printing."<sup>427</sup> The

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<sup>425</sup> Pointon, *Strategies for Showing*, 164.

<sup>426</sup> Peter Thornton, "An 18th Century Silk-Designer's Manual," *Bulletin of the Needle and Bobbin Club* 42, nos. 1–2 (1958): 7–31.

<sup>427</sup> Godfrey Smith, *The Laboratory; or, School of the Arts*. (London, 1756).

author of this essay was anonymous, and though he or she may not have been Garthwaite herself, the essay reveals the perspective of someone in Garthwaite's profession. For the designer of floral silks, a knowledge of botany combined with taste and aesthetic. The beauty of nature was of the utmost importance and the greatest inspiration, since the natural world produced more plants and flowers "as afford far greater varieties than we are able to imitate."<sup>428</sup> This adoration of nature is reminiscent of Garthwaite's French contemporary Nicholas Joubert de l'Hiberderie, whose manual *Le Dessinatuer pour les étoffes d'or, d'argent et de soie* advised developing a love for drawing flowers. Joubert's favourite was the rose: 'sa forme me séduit; son coloris m'en impose; et comme la Reine des fleurs, elle me captive.'<sup>429</sup>

The author of the essay in *Laboratory* listed the marvels of each season and how they should be incorporated into the fashions of the year. Spring appears to have been a particular favourite of the author, as he or she described in detail the many flowers to be found:

The spring opens her bountiful treasure every year, and clothes and enamels the earth with endless charms of beauty; she invites us to imitate her as near as possible in all her splendour. Here the sweet blossoms of the almond, the peach, the apple, the pear, plumb, cherry, and innumerable other trees and shrubs, afford us subjects without number : the green meadows, fields and gardens, abound with the greatest variety of flowers: the tulip, hyacinth, ranunculas, etc. etc. are now in their greatest beauty; and what should be the reason manufacturers should not exert their skill in furnishing ladies with dresses suitable to the spring, and garnish them with the sweet blossoms and flowers that season affords.<sup>430</sup>

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<sup>428</sup> Ibid., 37.

<sup>429</sup> Nicholas Joubert de L'Hiberderie, *Le Dessinateur, Pour Les Fabriques, d'étoffes, d'or, d'argent et de Soie* (Paris: Sébastien Jorry, 1765).

<sup>430</sup> Smith, *The Laboratory; or, School of the Arts*, 43.

Summer, autumn and winter also offered botanical features to be “well combined by the artist, and distributed to the best advantage, will charm the eye, and raise the admiration of a curious beholder.”<sup>431</sup> Winter, especially, afforded the opportunity to “visit the green-houses, stowed and crowded with fast varieties of exotic plants of surprising oddness and beauty, and give a silk manufacturer abundantly more fresh objects than he shall have occasion for, to introduce a new and admirable taste for the fashion of the Winter season.”<sup>432</sup> The admiration of nature evident in these words shows how it helped a designer to delight in nature’s forms.

A designer needed imagination, and “the excellent genius of an artist,” because consumers wanted to “see extravagant varieties, or admirable novelties in patterns; the eye is charmed, the mind is filled with pleasure and delight, and our judgement is persuaded that the produce did not derive from the compass of a narrow conception.”<sup>433</sup> The excellent genius came in the arrangement of nature’s inventions; it would be wrong to “exceed the conceived possibilities or beauties of nature.”<sup>434</sup> While chimera designs were sometimes deployed with taste, the author warns against giving “the size of a cabbage to a rose, nor that of a pompkin to an olive;” as this would be a dishonest representation of nature.<sup>435</sup> It was counter-productive to “plague and torture our brains, for whims of our own, when nature so bountifully has furnished us with endless varieties of subjects, which only want to be well composed, by a bright imagination and an artful hand.” It was tasteful to play with nature’s forms, not to invent from scratch.<sup>436</sup>

Though there are many similarities between the design practice described in *Laboratory* and the work of Anna Maria Garthwaite, the potential authorship of the

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<sup>431</sup> Ibid., 44.

<sup>432</sup> Ibid.

<sup>433</sup> Ibid., 38.

<sup>434</sup> Ibid.

<sup>435</sup> Ibid.

<sup>436</sup> Ibid., 43.



essay is not necessary to legitimise Garthwaite's epistemic and artisanal practice. Her surviving designs and the extent that fabrics correspond to them demonstrate the essential role of botany in her aesthetic work.

### *Gardens and Garthwaite's Designs*

As the article in *Laboratory* shows, flowers had long been a motif in early modern textile designs, but in the early to mid-eighteenth century, a fashion for botanical accuracy in these designs coincided with the fashionable interest in natural knowledge. Geoffrey Sutton's work demonstrates the importance of public presentation, circulation, and engagement in the legitimacy of experimental science.<sup>437</sup> Experimental demonstrations in the home would have been an erudite entertainment. Botany was one of the most widespread interests, as evidenced by the popularity of herbals, the exchange of seeds and samples, and the abundance of botanical themes in feminine crafts discussed above. Fashionable elites showed their erudition by collections of scientific instruments and specimens to display in the home.<sup>438</sup> These fashionable elites were the same demographic as the clients of Garthwaite's weavers. It is no wonder then that these same fashionable circles appreciated botanical designs on silks. Naturalism fused with highly stylised rococo: the shapes of flower petals were adapted into rococo design structures of soft curves and ruffles, while the pastel hues of a garden blended into fashionable colour schemes.<sup>439</sup> This reinforced the silken textiles as both aesthetic and epistemic objects. Displaying the height of rococo design and displaying the most accurate

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<sup>437</sup> Sutton, *Science for a Polite Society*, 10.

<sup>438</sup> Adriana Craciun and Simon Schaffer, eds., *The Material Cultures of Enlightenment Arts and Sciences*, Palgrave Studies in the Enlightenment, Romanticism and Cultures of Print (London: Palgrave Macmillan, 2016); Jan Golinski, *Science as Public Culture: Chemistry and Enlightenment in Britain, 1760-1820* (Cambridge: Cambridge University Press, 1992).

<sup>439</sup> Patricia Crown, "British Rococo as Social and Political Style," *Eighteenth-Century Studies* 23, no. 3 (April 1, 1990): 269–282. See also Katie Scott, *The Rococo Interior: Decoration and Social Spaces in Early Eighteenth-Century Paris* (New Haven: Yale University Press, 1995).

patterns in one object was a powerful signifier that the wearer of Garthwaite's designs was both fashionable and knowledgeable.

Some of the most prized botanical specimens appear in Garthwaite's designs. Aloe, which would have been on display in the hothouses of specialised gardens in London, was included in at least two designs. In eighteenth century medicinal advice, recommended exotic aloe for use as purgatives and stimulants. John Aiken's *Manual of Materia Medica* gave recipes for a dozen simples using aloe.<sup>440</sup> Aloe was an exotic plant as well as utilitarian: its origins around the global trade routes and diverse array of varieties made it a valued plant in a hothouse collection. Philip Miller wrote in *The Gardener's Dictionary* that the most "curious Sorts" of aloe from the Cape of Good Hope were the most highly prized.<sup>441</sup> In John Abercrombie's manual on plant propagation, special attention was paid to the propagation of aloe and other curious succulents such as sedum and houseleek, by "root-suckers" or "top suckers."<sup>442</sup> These curious plants could be shown off for both their exotic look and the expertise involved in their care.

Many other exotic plants figured into Garthwaite's work. Just one year after Peter Collinson began selling the newly imported turk's cap lily from the new world, Garthwaite included its flowers in a design and it would become one of her most favoured flowers.<sup>443</sup> The quick inclusion implies that Garthwaite was actively gathering news of the latest botanical discoveries and used them to expand her repertoire of flowers for her designs. Anishanslin equates this with contemporary garden practices: both Garthwaite and garden enthusiasts adapted New World plants into the landscape of the English soil and silks.<sup>444</sup> Cultivating plants from around the

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<sup>440</sup> John Aiken, *A Manual of Materia Medica* (London: Joseph Johnson, 1785).

<sup>441</sup> Philip Miller, *The Gardener's Dictionary*. 5th ed. (Dublin: S. Powell, 1741), 32.

<sup>442</sup> John Abercrombie, *The Propagation and Botanical Arrangements of Plants and Trees*. 2 vols. Vol. 1, (London: J. Debrett, 1784) 76 & 82.

<sup>443</sup> For a discussion of colonial plants as indicators of Garthwaite's interest in imperial botany, see Anishanslin, *Portrait of a Lady in Silk*, particularly the chapter "Designing the Botanical Landscape of Empire."

<sup>444</sup> Anishanslin, *Portrait of a Woman in Silk*, 91.

world was a widely accepted epistemic practice. The image of a turk's cap lily among the other, more traditionally English flowers is reminiscent of the visual product of that practice.

Garthwaite's most naturalistic works held by the V&A are from t.391-1971 to 5989. These contain fashionable flowers that appear often in eighteenth-century silks: nasturium, honeysuckle, apple blossom, carnations, roses, lilies of the valley, wild daisies. There are at least two designs that include root systems, further linking her designs to botanical illustration. Historians such as Clare Browne and Zara Anishanslin have shown that the flowers that can be identified in Garthwaite's designs were being cultivated in several London gardens that Garthwaite would have been able to visit. The plant nursery closest to Garthwaite's Spitalfields home was Gurle's Ground, a nursery of about twelve acres begun by Leonard Gurle after he took a lease for the plot in 1656. Gurle's Ground backed directly onto Garthwaite's own neighborhood of Princelet Street. The nursery specialised in shrubs and fruiting trees, especially nectarines. An inventory of Gurle's stock published by John Harvey shows that honeysuckle, one of the flowers used most frequently by Garthwaite, was a specialty of Gurle's nursery.<sup>445</sup> It is also possible that Garthwaite had access to the Chelsea Physick Garden, just as Elizabeth Blackwell had when compiling her *Curious Herbal*. Apothecary Vincent Bacon, a friend and relative of Garthwaite's by her sister Dorothy's marriage, was a member of the Chelsea Physick Garden, as well as the Royal Society and John Martyn's Botanical Society.<sup>446</sup> Only members of the Chelsea Physick Garden could access the grounds. Membership was restricted to apothecaries and apprentices (or invited scholars such as Blackwell), but members such as Vincent Bacon could bring guests. As Anishanslin points out, John Haynes's 1751 map of the Chelsea Physic Garden depicted many such women guests (in very fashionable dress) strolling the botanical gardens.<sup>447</sup> (Fig. 63) Mary Delany was known to have visited the garden as a guest to collect the "spoils of the Botanical

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<sup>445</sup> Harvey, "Leonard Gurle's Nurseries and Some Others," 43.

<sup>446</sup> Anishanslin, *Portrait of a Woman in Silk*, 57.

<sup>447</sup> *Ibid.*, 58.

Garden” for her paper cutting illustrations.<sup>448</sup> It is feasible that, like Delany and Blackwell, Garthwaite visited the garden for her own botanical designs.

### *Conclusion*

The fashionability and consumption of Garthwaite’s knowledge fits into and reveals fashionable women’s knowledges of botany and the role that botany played in their daily lives. The presence of botanical images - the consumption and making of these images - was as ubiquitous as clothing, and clothing was part of its ubiquitousness. Though Garthwaite left few written documents we can be certain of, her material work speaks volumes about botany as an epistemic and aesthetic practice. Garthwaite’s designs show how women could use making practices to express their botanic interest and expertise, both at home as Mary Delany and Margaret Cavendish Bentinck did, or professionally as Garthwaite did. Throughout the early modern world, women cultivated botany through the ‘accomplished’ practices of embroidery, shellwork, and drawing or painting. The fruits of these creative practices, at once aesthetic and epistemic, would adorn women’s homes and those of their friends. Garthwaite’s designs similarly could adorn the bodies of women who appreciated botany. Garthwaite’s consumers and clients could wear her silk designs, collect botanical samples and herbals, and create their own accomplished botanical works - all part of the cultural interest in botany in the early modern world.

Men had ejected ornament and display from natural knowledge, as shown in the previous chapters. Fashion became an indicator of low virtue, or of feminized vice. Fashion and ornament became a rhetorical strategy deployed to eject women from legitimate pursuits of natural knowledge. This chapter has argued that women recognised clothing as a space to display *naturalia*. Their connection to fashion and clothing had been strengthened by the feminization of fashion, so they were able to use it as indicators of botanical interest among themselves. This was a form of

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<sup>448</sup> Mary Delany qtd. in Anishanslin, *Portrait of a Woman in Silk*, 58.

credibility not normally recognised by men, but appreciated in networks of women. The next chapter will explore the role of clothing in multi-gendered spaces, the salons of England and France.

## **Chapter Five:**

### **Fashionability and Sociability Among Women in Salons**

Clothing played a role in other spaces of knowledge-making that women participated in. The last chapter showed how women's interpersonal circles were a space where an aesthetic form of botanical knowledge flourished. Women used material making practices, called accomplishments, to cultivate both their knowledge and appreciation of the natural world. The argument of the previous chapter was that a specifically feminine understanding of botany was practiced in the eighteenth century, one that remained tied to the traditions of display described in chapter one. This chapter will now turn from strictly feminine relationships to look at the role that clothing played in public, multi-gendered spaces. In eighteenth-century spaces where women factored into more masculine, legitimate knowledge-making, women adopted visual strategies to advocate their credibility. As this chapter will show, some of those strategies echoed those indicators of modesty incorporated into the visual strategies of Robert Boyle and the Royal Society outlined in the second chapter. Other strategies employed by women utilised allegorical emblems of knowledge

This chapter deals with two networks of intellectual women who were prominently visible in the eighteenth century, English bluestockings and French *salonnières*. Whereas in the previous chapter, clothing helped to form an intellectual identity through material means this chapter will demonstrate the role that clothing played in public images, through portraiture and contemporary accounts. Much was at stake for women in the seventeenth and eighteenth centuries. As chapter three demonstrated, the language of fashion and moral questions of consumption was part of the ostracising of women from the new science. Mary Astell was not the only woman who objected to the accusations that moralists levelled against women's intellectual capabilities. The women of the Bluestocking circle and the salon networks advocated for women's education. Their portraits, and the clothing chosen to display in those portraits, were part of the pursuit of feminine credibility.

Frances Burney published *The Memoirs of Doctor Burney*, about the life of her father, in which she described an evening at the home of hostess Elizabeth Montagu (1718-1800):

At Mrs Montagu's, the semi-circle that faced the fire retained during the whole evening its unbroken form, with a precision that made it seem described a Brobdignagian compass. The lady of the castle commonly placed herself at the upper end of the room, near the commencement of the curve, so as to be courteously visible to all her guests; having the person of rank, or consequence, properly, on one side, and the person the most eminent for talents, sagaciously, on the other; or as near to her chair, and her converse, as her favouring eye, and a complacent box of the head, could invite him to that distinction.<sup>449</sup>

The role that Montagu played in this scene was a central guiding figure conducting the collaborative conversation of men of status. This role is a sharp contrast from the gendered rejection that Margaret Cavendish had experienced in the institutional setting of the Royal Society. In the eighteenth century, a form of knowledge exchange developed away from courts or institutions that accepted and even championed women. This chapter will examine the role that clothing played in the complex construction of feminine credibility in these circles.

Bluestockings, now a (sometimes derisive) term for feminist intellectuals, originated as a colloquial name for groups of literary, artistic, and philosophical women and men who met in the eighteenth and early nineteenth century at the home

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<sup>449</sup> Frances Burney, *Memoirs of Doctor Burney, Arranged from his own Manuscripts, from Family Papers, and from Personal Collections*, 3 vols. (London, 1832), 2: 27.

of several hostesses.<sup>450</sup> The name most associated with Bluestockings is the literary hostess Elizabeth Montagu, purportedly lauded as “Queen of the Blues” by guest Samuel Johnson (1709-1784), but other members included hostesses Frances Boscawen (1719-1805) and Elizabeth Vesey (1715-1791). Guests included essayist Catherine Talbot (1721-1770), poet Anna Seward (1742-1809), novelist Frances Burney (1752-1840), moralists Hester Chapone (1727-1801) and Hannah More (1745-1833), classicist Elizabeth Carter (1717-1806), and historian Catharine Macaulay (1731-1791).<sup>451</sup> The Bluestocking women of the eighteenth century were contemporaries of Anna Maria Garthwaite, Mary Delany, and the Duchess of Portland whose material strategies for engagement in the natural world were the focus of the last chapter. In fact, Delany and Margaret Cavendish Bentinck, the Duchess of Portland, counted some of the most prominent Bluestocking hostesses as

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<sup>450</sup> Sylvia Harestark Myers, *The Bluestocking Circle: Women, Friendship, and the Life of the Mind in Eighteenth-Century England* (Oxford, New York: Oxford University Press, 1990); Nicole Pohl and Betty A. Schellenberg, eds., *Reconsidering the Bluestockings* (San Marino, Calif.: Huntington Library, 2003); Elizabeth Eger and Lucy Peltz, *Brilliant Women: 18th Century Bluestockings* (London: National Portrait Gallery, 2008); Elizabeth Eger, *Bluestockings: Women of Reason from Enlightenment to Romanticism*, Palgrave Studies in the Enlightenment, Romanticism and Cultures of Print (Basingstoke: Palgrave Macmillan, 2010); Elizabeth Eger, ed., *Bluestockings Displayed: Portraiture, Performance and Patronage, 1730-1830* (Cambridge, United Kingdom ; New York: Cambridge University Press, 2013); Deborah Heller, ed., *Bluestockings Now!: The Evolution of a Social Role* (London: Routledge, 2015).

<sup>451</sup> Judith Hawley, ed., *Elizabeth Carter*, *Bluestocking Feminism: Writings of the Bluestocking Circle, 1738-1785* (London: Pickering & Chatto, 1999); Elizabeth Eger, ed., *Elizabeth Montagu*, *Bluestocking Feminism: Writings of the Bluestocking Circle, 1738-1785* (London: Pickering & Chatto, 1999); Rhoda Zuk, ed., *Catherine Talbot & Hester Chapone*, *Bluestocking Feminism: Writings of the Bluestocking Circle, 1738-1785* (London: Pickering & Chatto, 1999); Jennifer Kelly, ed., *Anna Seward*, *Bluestocking Feminism: Writings of the Bluestocking Circle, 1738-1785* (London: Pickering & Chatto, 1999).



intimate friends.<sup>452</sup> Just as the public and private networks intertwined, so too did the sartorial strategies. This chapter does not suggest that their credibility strategies did not involve the collection and display of botanical images on clothing that were discussed in the previous chapter. This chapter will describe a second strategy of sartorial self-fashioning used by women to promote their credibility.

In order to understand the strategies used by Bluestockings, this chapter will also discuss the strategies used by contemporary women in France. Bluestockings such as Elizabeth Montagu even travelled to France and visited some of the salons, perhaps observing strategies employed by the French intellectual women. Like the Bluestockings, *salonnières* were women in seventeenth and eighteenth-century France who cultivated a circle of philosophers (*philosophes*, in French) around themselves for the purposes of curating their own education, personal intellectual stimulation and to improve their social standing.<sup>453</sup> Some of the most notable women to run salons were the ambitious bourgeois widow Marie-Thérèse Geoffrin (1699-1777) and Julie de Lespinasse (1732-1776), who rose from a lowly position to run one of the most intellectually progressive salons. Lespinasse had served as an assistant to the salon of Marie Anne de Vichy-Chamrond, Marquise du Deffand (1697-1780), an aristocrat and Geoffrin's great rival. Even King Louis XV's mistress,

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<sup>452</sup> For the relationship between the Duchess of Portland and the Bluestocking circle, see Sylvia Harcstark Myers, "The Importance of Bulstrode," in *The Bluestocking Circle: Women, Friendship, and the Life of the Mind in Eighteenth-Century England* (Oxford: Carendon, 1990). Elizabeth Montagu's practices of collecting natural history are covered in Beth Fowkes Tobin, "Bluestockings and the Cultures of Natural History," in *Bluestockings Now!: The Evolution of a Social Role*, ed. Deborah Heller, British Literature in Context in the Long Eighteenth Century (London: Routledge, 2015), 55–70.

<sup>453</sup> Works on *salonnières* include Dena Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment*. (London: Cornell University Press, 1994); Antoine Lilti, *The World of the Salons: Sociability and Worldliness in Eighteenth Century Paris*. Translated by Lydia G. Cochrane. Oxford: Oxford University Press, 2015; Craveri, Benedetta. *The Age of Conversation*. Translated by Teresa Waugh. (New York, N.Y.: New York Review Books, 2005); Brown, Hilary, and Gillian Dow. *Readers, Writers, Salonnières: Female Networks in Europe, 1700-1900*. (Oxford: Peter Lang, 2011); For seventeenth-century beginnings of salons, see Craveri, *The Age of Conversation* and Carolyn C. Lougee, *Le Paradis Des Femmes: Women, Salons, and Social Stratification in Seventeenth Century France*. (Princeton, N.J.: Princeton University Press, 1976.)

Jeanne Antoinette Poisson, Marquise de Pompadour (1721-1764), held a salon in Versailles. Past studies of both *salonnières* and Bluestockings have uncovered the important role women played in networks of knowledge-making in Europe and England. In the 1990s, historian Sylvia Harestark Myers published one of the first thorough studies of the Bluestockings, *The Bluestocking Circle: Women, Friendship, and the Life of the Mind in Eighteenth-Century England*. Her work opened up new interest in this group of women, and ushered in fruitful reconsiderations by historians of literature, networks, and women in the eighteenth century. Elizabeth Eger has taken up the baton from Myers, with publications such as *Women, Writing, and the Public Sphere, 1700-1830* in 2001, and *Bluestockings: Women of Reason from Enlightenment to Romanticism* in 2010.<sup>454</sup> Eger edited a volume in 2013 in which various historians examined the Bluestocking strategies for self-representation entitled *Bluestockings Displayed: Portraiture, performance and patronage, 1730-1830*. The essays collected in *Bluestockings Displayed* were papers first presented at a conference accompanying an exhibition at the National Portrait Gallery that brought together portraits of bluestockings. The exhibition was curated by Elizabeth Eger and Lucy Peltz. This exhibition, the accompanying papers, and its published catalogue, *Brilliant Women: Eighteenth Century Bluestockings*, demonstrated how the Bluestocking women were, as Eger put it, “profoundly conscious of the connection between reputation and representation.”<sup>455</sup> Representations of sartorial credibility in portraits helped to add credibility to the reputation of Bluestockings and *salonnières*.

Dena Goodman’s work, including *The Republic of Letters: A Cultural History of the French Enlightenment* (1994), has argued that the attendance of salons were an important element of the French *philosophe*’s identity. The essential qualities of the salon, *sociabilité* and *politesse*, were maintained by a central woman hostess, whose presence was thought to civilise the male *philosophes* and ensure rational

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<sup>454</sup> Elizabeth Eger, ed., *Women, Writing and the Public Sphere, 1700-1830* (Cambridge: Cambridge University Press, 2001).

<sup>455</sup> Eger, *Bluestockings Displayed*, 2.

discourse.<sup>456</sup> Goodman and historians of French culture such as Benedetta Craveri have argued that salons offer a means to study the roles that women played in making knowledge in this period. Craveri's book *The Age of Conversation* demonstrates different strategies that women used to participate in knowledge-making. For instance, she argues that such participation required that women had to be charming and playful, and this demanded a series of qualities including wit (*l'esprit*), and relatable demeanour (*honneté*).<sup>457</sup> While both Goodman and Craveri offer many insights into the qualities that women used to gain intellectual credit, the great majority of their analyses focuses on social qualities and overlooks the physical appearance of the women involved. As the previous chapters have done, this chapter takes seriously the notion that fashion and ideas about appearance were equally important as factors in determining the credibility of Bluestockings and *salonnières*.

This chapter will discuss the role that clothing played in the lives of women who pursued visible intellectual roles in eighteenth century society. Much was at stake for these women. Both networks in England and France were home to some of the most ardent advocates for women's education. The portraits discussed below were part of these arguments, as they sought to depict credible women scholars. Bluestockings and *salonnières* used established ideas about fashion and intellectual authority, and clothes themselves, to secure credit. On some occasions, being fashionable could serve to build credit, while on others it could hamper it. Women might have sought to identify themselves with, or to distance themselves from fashion in order to appear credible. How they appropriated or rejected current models of fashion to gain credit depended on changing circumstances.

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<sup>456</sup> Goodman, *The Republic of Letters*, pgs 4-5. Other works on *salonnières* by Goodman include Dena Goodman, "Enlightenment Salons: The Convergence of Female and Philosophic Ambitions." *Eighteenth-Century Studies* 22, no. 3 (1989): 329-50; and Dena Goodman, "Filial Rebellion in the Salon: Madame Geoffrin and Her Daughter." *French Historical Studies* 16 (1) (1989) : 28-47; and Dena Goodman, "Seriousness of Purpose: *Salonnières*, Philosophes, and the Shaping of the Eighteenth-Century Salon." *Proceedings of the Annual Meeting of the Western Society for French History* 15 (1988): 111-18.

<sup>457</sup> Craveri, *The Age of Conversation*, pg 10.

## *Costumes for Muses, Clothing for Women*

Some of the most powerful images of Bluestocking women used classical emblems to assert the credibility of its Bluestocking sitter. Painted circa 1735-1741, John Fayram's portrait of Elizabeth Carter depicts her in costume as Minerva, Roman goddess of wisdom. (Fig. 64) Now on display at the National Portrait Gallery, this portrait depicted Carter in Minerva's characteristic helmet and carrying her shield. She wore armour with golden accents and carries a volume of Plato in her hand. Samuel Boyse (writing under the pseudonym Alcaeus) composed an elegy to this painting titled "On Miss CARTER's being drawn in the Habit of Minerva, with Plato in her Hand:"

Well, Carter, suits thy mien this apt disguise,  
This mystic form to please our ravish'd eyes;  
Well chose thy friend this emblematic way,  
To the beholders strongly to convey  
Th' instructive moral, and important thought  
Thy works have publish'd, and thy life has taught,  
That all the trophies vanity can raise  
Are mean, compar'd to heav'nly Wisdom's praise!<sup>458</sup>

This "emblematic way" allowed Carter to align her credibility with that of classical wisdom. Women had been painted as allegorical images of classical characters before the eighteenth century. One need only look to Elizabeth I's allusions to muses or goddesses in the first chapter, or Margaret Cavendish's depiction with two gods in the second chapter to see ways that women had invoked ancient symbols of wisdom and art to bolster their credibility. In the eighteenth century, Bluestocking credibility could be expressed in a similar manner. This strategy worked: Bluestockings and British women writers became associated with muses. In 1798, the painter James Barry (1741-1806) suggested in his *Letter to the Dilettanti Society* that if one was

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<sup>458</sup> Samuel Boyse qtd. in *Bluestockings Displayed*, 60.

curious as to why the ancients had chosen women to personify knowledge one needed only look to women writers from his own time:

If any one should start a query, why the ancients, who reasoned so deeply, should, in their personifications of the sovereign wisdom, have chosen Minerva a female; why the Muses, who preside over the several subordinate modes of intelligence, &c. are all females; and why the conversation of the serpent was held with Eve, in order that her influence might be employed in persuading Adam; such queries could have been well and pertinently answered by the eloquent, generous, amiable sensibility of the celebrated and long- to-be-lamented Mary Wolstonecraft [sic] .<sup>459</sup>

Though Wolstonecraft had not been a central figure in the main Bluestocking meetings, her ardent championing of women's intellectual rights aligned her with the central role that Bluestockings played in knowledge-making.

A painting of the Bluestockings in a group may have taken the cue from the earlier portrait of Carter. Entitled *The Nine Living Muses of Great Britain*, this large allegorical composition by Richard Samuel was painted in 1778 and exhibited at the Royal Academy in 1779.<sup>460</sup> (Fig. 65) In this painting, nine bluestockings were depicted in classical robes. The women depicted on the left of the painting were Angelica Kauffmann (1741-1807), a prominent painter, Elizabeth Carter, who was depicted as Minerva by Fayram, Anna Aikin Barbauld (1743-1825), political essayist and poet. The centre depicted singer Elizabeth Ann Linley (1754-1792) saluting a statue of Apollo. The women on the right were Catharine Macaulay, historian, Elizabeth Montagu the hostess and patron, Elizabeth Griffith (1727-1793), poet, Hannah More, moralist and dramatist, and finally Charlotte Lennox (circa 1730-1804), author. This painting was apparently not painted with the women's knowledge, or with them sitting for the artist. Elizabeth Montagu had written to her

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<sup>459</sup> James Barry, *The Works of James Barry*, ed. Dr Edward Fryer, 2 vols (London: Cadell and Davies, 1809) 2: 594.

<sup>460</sup> Eger, *Bluestockings*, 1.

close friend Elizabeth Carter that she was not muse material. When Katharine Read had approached her with an idea for a series of portraits based on muses in 1765, Montagu declared herself unworthy to be one of the “select and sacred number nine, when to be sure there are in this Land nine thousand such sort of good women as I.”<sup>461</sup> This modest protestation was also a statement on women of British intellectual culture: there were nine thousand women who had the capabilities and merit to pursue knowledge, but they were not all as renowned as Montagu. Samuel’s work became an emblem of women’s merit, according to Eger. In *Bluestockings: Women of Reason from Enlightenment to Romanticism*, she said that the painting of the *Nine Living Muses* was “emblematic of Britain’s cultural status and also suggestive of the emergence of a new female and feminine republic of letters.”<sup>462</sup> An engraving of the original painting was published in the *Ladies New and Polite Pocket Memorandum-Book for 1778*. The publication of the painting widened the impact of this emblematic image, further enhancing its assertion of contemporary women’s credibility.

It is notable that these emblematic Bluestocking portraits that argued for their credibility dressed them in the garb of classical goddesses rather than showing them as contemporary women. In this way, they were free from the associations with fashionability and complications with negotiating appropriate, credible attire. However, some women found ways to negotiate the complex relationship between contemporary garb and credible appearance. These were the fashions that *salonnières*, contemporaries to the Bluestockings, used in their portraiture more often than allegorical costume. The *salonnières* used concepts that were as embedded in French intellectual culture as modesty and virtue were in English knowledge-making, such as *nonchalance*, *négligence*, and *goût*.

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<sup>461</sup> Elizabeth Montagu quoted in Myers, *Bluestocking Circle*, p. 246.

<sup>462</sup> Eger, *Bluestockings*, pg. 43.

## *Nonchalance and Fashion in French Salons*

French *salonnières*, contemporaries to the English Bluestockings, also played with tropes of fashion to gain credit as central figures in intellectual networks. The Bluestocking and salon networks are comparable, but they are not identical. Elizabeth Montagu herself visited France and recorded her observations in her letters home. Montagu visited the salon of Madame du Deffand and was much impressed:

I am much pleased with the Conversation one finds here, it is equally free from pedantry and ignorance. All the hours I have pass'd in mix'd company I have spent agreeably The men of letters are well bred and easy, and by their vivacity and politeness shew they have been used to converse with women. The ladies by being well inform'd, and full of those graces we neglect when with each other, shew they have been used to converse with Men.<sup>463</sup>

Her praise was not without criticism: she suggested that true sociability and rational conversation could not exist in a country that lived under an autocratic monarchy. “The principles which most elevate and ennoble the human character are piety and patriotism,” and though the French could aspire to these principles, they “can never exist in their genuine state in a Land of slavery & Superstition.”<sup>464</sup> While observing Deffand’s salon, Montagu would have had the opportunity to see how sartorial strategies benefitted women in France. The women of the Paris salons used *nonchalance*, a form of modesty, to visually indicate their credibility.

*Salons*, the French term for “room”, were not uniform and their nature depended on the individual women who ran them, but were typically networks of artists, intellectuals and patrons who came together to enjoy one another’s company and to make contacts for opportunities. Like bluestocking circles, most social

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<sup>463</sup> Elizabeth Montagu to John Burrows, 8 September 1776, Chaillot, Huntington Library MS, MO 671

<sup>464</sup> Elizabeth Montagu to James Beattie, November 1776, Huntington Library MS, MO 172.

meetings were centred in women's homes in Paris, but they could also take place in noble chateaux, and often had tangible ties to the Republic of Letters, spreading throughout Europe.

This section will explore interactions between French salons and fashion in the eighteenth century. Studying French women's strategies can help to understand the sartorial strategies among English women in public spaces of knowledge-making. Though some *salonnières*, such as Geoffrin, were painted in allegorical settings, most of them did not use the same strategy as the Bluestockings.<sup>465</sup> Most images of the *salonnières* depict them in contemporary garb, which helped to promote their credibility in the intellectual circles of France. Clothing was an important signifier that was understood among the guests of salons. Samuel Rogers (1763-1855) recorded an encounter while visiting the French salon networks in which clothing played an essential role in the visit that clergyman, philologist, and politician John Horne Tooke (1736-1812) paid to *philosophe* and mathematician Jean Le Rond d'Alembert, an intimate friend and loyal guest of Julie de Lespinasse. Horne Tooke dressed in his finest, most fashionable garb and arrived with a letter of introduction. He was "very courteously received by d'Alembert, who talked to him about operas, comedies, and suppers," not philosophical matters.<sup>466</sup> Horne Tooke was disappointed. Rogers recalled that when Horne Tooke went to leave, he received some advice:

he was followed by a gentleman in a plain suit, who had been in the room during his interview with d'Alembert, and who had perceived his chagrin. "D'Alembert," said the gentleman, "supposed from your gay apparel that you were merely a *petit maître*." The gentleman was David Hume. On his next

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<sup>465</sup> Geoffrin was painted by Jean-Marc Nattier in 1738. Nattier was well known for portraits that cast women of society as classical goddesses. Geoffrin's painting is in that style but no goddess was specifically alluded to. Jean-Marc Nattier, *Portrait of Madame Geoffrin, 1738*, Oil on canvas, 1450 mm x 1150 mm, 1738, Tokyo Fuji Art Museum.

<sup>466</sup> Ernest Campbell Mossner, *The Life of David Hume* (Clarendon Press, 2001), pg. 482.



visit to D'Alembert, Tooke's dress was altogether different; and so was the conversation.<sup>467</sup>

Appropriate attire, as suggested by Scottish philosopher David Hume (1711-1776), gained Tooke Horne access to the intellectual conversation with d'Alembert that he had hoped for. It was not enough to dress well: sociable dress needed to be tasteful, and that taste needed to appear to come naturally.

In the world of the French salons, the display of good taste was an essential component to credibility, much more so than in England. Throughout the eighteenth century, *goût* (taste) figured prominently in discussions of both philosophy and the role of knowledge in the public sphere. The Cartesian-dominated philosophy of seventeenth-century France had demeaned taste as a banal phenomenon along with most other physical experiences. The early decades of the eighteenth century began to see taste and sensibility somewhat rehabilitated along with an increased interest in the physical, the sensual and the pleasurable.<sup>468</sup> Physical experiences of sensibility and material expressions of taste became tied to human nature: to delight in the beautiful and the rational was a virtue. For women, this virtue could be expressed by the collection and display of tasteful objects in decor, art, and especially clothing.

In the eighteenth century, *goût* became intricately connected to the value of women and their place in society. Anne-Thérèse de Courcelles, the Marquise de Lambert, wrote extensively on *goût* as a feminine virtue. Her *Réflexions nouvelles sur les femmes* (1727) argued that "everything that is related to *goût* is properly [women's] province.... Certainly this is no contemptible advantage."<sup>469</sup> Even those who sidelined women to the realms of the frivolous noted their social position as

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<sup>467</sup> Mossner, *The Life of David Hume*, pg. 483.

<sup>468</sup> Hamerton, Katharine J. "A Feminist Voice in the Enlightenment Salon: Madame De Lambert on Taste, Sensibility, and the Feminine Mind ". *Modern Intellectual History* 7, no. 2 (2010): 209-38.

<sup>469</sup> Anne-Thérèse de Marguenat de Courcelles, marquise de Lambert, *New Reflexions on the Fair Sex*. (London: N. Prevost, 1729); 21.

arbiters of *goût*. Though he mostly demeaned the depths of women's intellectual capacity, doubting their grasp of abstract concepts, the Cartesian philosopher Nicolas Malebranche (1638-1715) conceded that women's proficiency in *goût* allowed them to "set fashions, judge language, discern elegance and good manners," in essence, to dictate the form and aesthetics of sociability.<sup>470</sup> He declared that women naturally had

great understanding of everything that strikes the senses....They have more knowledge, skill, and finesse than men in these matters. Everything that depends upon taste is within their area of competence.<sup>471</sup>

Even to those who doubted women's intellectual capabilities, displaying *goût* became more than just collecting and appreciating beautiful things: it meant being good at the best virtue that feminine minds could offer. The Marquise de Lambert, whose salon was one of the most formidable intellectual networks in the early decades of the eighteenth century, disagreed with Malebranche, and argued that the advantages of *goût* were "not mediocre."<sup>472</sup> She wrote and published extensively on *goût* as a sign of a woman's innate intellect. *Goût*, according to Lambert, was the result of "a very delicate sensation of the heart, and a just turn of the mind."<sup>473</sup> To her, *goût* was a mental capacity. Lambert established her salon in 1693, as the great seventeenth-century coteries were disappearing, and maintained a prestigious group of guests until her death in 1733.

Charles-Louis de Secondat, Baron de La Brède et de Montesquieu (1689-1755), one of Lambert's most prominent guests, argued that taste was a quality of the intellectual. In an essay "On the Pleasures of the Soul", Montesquieu connected taste to knowledge and the experience of making and sharing ideas. The pleasures and delights of *goût* were epistemic experiences, entailing "curiosity, the

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<sup>470</sup> Malebranche qtd. in Hamerton, "A Feminist Voice in the Enlightenment Salon," 221.

<sup>471</sup> Ibid.

<sup>472</sup> Lambert qtd. in Hamerton, "A Feminist Voice in the Enlightenment Salon, pg. 224.

<sup>473</sup> Lambert, *New Reflexions on the Fair Sex*, 21.

pleasure of embracing the whole of a general idea, that of viewing a multiplicity of objects at once, and that of comparing, joining, and separating ideas.”<sup>474</sup> The activities of an intellectual conversation were all to be found in the category of *goût*. Experiencing delight in fashion was the same innate sense as experiencing delight in knowledge. Furthermore, it was innate and could not be taught: “natural taste is not a theoretical knowledge; it is a quick and exquisite application of rules which we do not even know.”<sup>475</sup> For both Lambert and Montesquieu, the ability to delight in the correct styles of aesthetics was a sign that the mind and heart were attuned to correct intellectual thought.

Members of *le monde* could be considered deficient in *goût*. Mme du Deffand explicitly related intellectual credibility with physical appearance and identified inward ineptness with an external tastelessness. In a scathing description of one Duchess d’Aiguillon, Deffand wrote that, “her mind greatly resembles her figure; it is as badly drawn as her face.... She has no taste, no grace, no correctness; yet she often astonishes – but never pleases, much less interests.”<sup>476</sup> Deficiency in *goût* was a trait of vapid people who were unfit for sociable conversation. In a criticism of M. de Forcalquier, Deffand said:

The vanity of M. de Forcalquier is not supported by a sufficient degree of presumption; if he merely thought and decided in conformity to his own opinions, we could not avoid, even while condemning him, esteeming him, and we might often feel inclined to approve of his judgments; but owing to a sort of inexplicable distrust of himself, he never consults either his own taste or his own understanding, but chuses [sic] to adopt the ideas and the sentiments of those whom he thinks the most in fashion, or whom he

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<sup>474</sup> Charles-Louis de Secondat, Baron de La Brède et de Montesquieu, "Of the Pleasures of the Soul." In *Complete Works of M De Montesquieu*. (London: T Evans, 1777), 121.

<sup>475</sup> Montesquieu, "Of the Pleasures of the Soul," 123.

<sup>476</sup> Deffand, Marie Anne de Vichy-Chamrond, Marquise du. *Unpublished Correspondence of Madame Du Deffand*. 2 vols. Vol. 2, London: The Minerva Press, 1810, 352.

conceives to be the most listened to in the great world: this conduct degrades him in the opinion of others, and even in his own eyes.<sup>477</sup>

Deffand labeled M. de Forcalquier a “martyr to foppery.” Foppery was thus equally a term that applied to clothing, signalling excessively fashionable dress, and to the intellect, signalling too much reliance on intellectual fashions and a failure to think for oneself. Blindly following fashions in opinions without any personal taste or thinking of one’s own was, to Deffand, much less respectable than being wrong.

Historians are familiar with the idea that ‘politeness’ had a specific beginning in late seventeenth-century Europe, for example in post-Civil War England, in the work of Lord Shaftesbury.<sup>478</sup> It is well-known among historians of science that the new science was supposed to be a collective enterprise and therefore a social one, because individual knowledge-making was liable to lead to enthusiasm and dogmatism. In France, this air of ease was called *négligence*, or *nonchalance*, and was one of the most important aspects of salon culture. As this section will show, the avoidance of affectation and the cultivation of *nonchalance* was a key strategy employed by *salonnières*. Garish conversation and garish appearance both made for an undesirable salon attendee. A cultivated ease and casual demeanour gained a thinker entry into the salon environment, and a successful *salonnière* was expected to imbue the entire salon experience with *nonchalance*. The 1728 painting *A Reading of Molière*, by Jean-François de Troy, (1679-1752) is an apt rendering of these visual signals of *négligence* (Fig. 66). In the painting each figure reclines, almost lazily, while the great satirist’s words wash over them. The women wear indoor caps and *robes volantes*. *Négligence* matched the French mood of the early eighteenth century. The rigid decorum of Louis XIV’s reign loosed its hold over fashion during his waning years, and though court clothing remained opulent, a relaxed,

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<sup>477</sup> Ibid., 178.

<sup>478</sup> Lawrence Klein, “The Third Earl of Shaftesbury and the Progress of Politeness,” *Eighteenth-Century Studies* 18 (1984-1985): 186-214; Lawrence E. Klein, *Shaftesbury and the Culture of Politeness: Moral Discourse and Cultural Politics in Early Eighteenth-Century England* (Cambridge University Press, 1994).

comfortable style of clothing reflected the growing importance of life away from the rigid formalities of the court at Versailles. It was during this relaxing of court formality that the *robe volante* became fashionable. The *robe volante* was a style which had its origins in women's boudoir gowns.<sup>479</sup> As a kind of dressing gown, the *robe volante* was very clearly tied to *négligence* and *nonchalance*.

As in the case of taste, *négligence* was understood to be a feature of intellect in addition to dress. Molière (1622-1673) made the connection explicit in a discussion of *négligence*, clothing, and *goût* in *L'école des Maris*:

In clothes as well as speech, a man of sense  
Will shun all these extremes that give offense,  
dress unaffectedly and, without haste,  
follow the changes in the current taste.<sup>480</sup>

Molière's verses illustrate the connection between knowledge, social behaviour and clothing: anyone aspiring to intellectual credibility among his or her peers ought to be in tune with the style of contemporary society, but not to the point of affectation. To gain credibility from *goût*, in both clothing and "speech", one must deploy it with *nonchalance*.

The key to *nonchalance* was to appear as though one observed without wonder, created without effort, and learned without struggle. Hiding the artistry of self-presentation became one of the most important social requirements.<sup>481</sup> In the world of the salon, the highest praise that could be given was that a person had an air of "ease," "simplicity," or "naturalness": all qualities of a *nonchalant* person.

D'Alembert praised his friend Julie de Lespinasse by telling her that "this art [of

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<sup>479</sup> Delpierre, *Dress in France in the Eighteenth Century*, 21.

<sup>480</sup> Molière quoted in Domna C. Stanton, *Aristocrat as Art: A Study of the Honnête Homme and the Dandy in Seventeenth and Nineteenth Century French Literature*. (New York: Columbia University Press, 1980), 129.

<sup>481</sup> Mary D. Sheriff, *Fragonard: Art and Eroticism*. (Chicago: University of Chicago Press, 1990).

conversation,] though little common, is very simple in you.”<sup>482</sup> What he meant is that she was able to deploy with ease the talents other people struggled to cultivate. The descriptive qualities signalling *nonchalance* - such as ease, facility, simplicity - all indicated that a person was recognised as credible. Such naturalness was considered essential to a successful salon. *Philosophe* and *Encyclopédist* Jean-François Marmontel (1723-1799) criticized the salon of Claudine Alexandrine de Tencin (1682-1749) because among her guests, “the urge to take the stage did not always allow the conversation the freedom to follow its natural and easy course.”<sup>483</sup>

The literal meaning of *nonchalance* was “no heat”, and this suggested its opposition to a heated attitude or what early moderns referred to as “enthusiasm.” *Nonchalance* was seen as the right attitude to display when creating knowledge because of its sociable associations. *Nonchalance* was an important way to avoid the antisocial attitude, *enthousiasme*. *Enthousiasme*, the meaning of which was more akin to fervour or fanaticism, was defined in the *Encyclopédie* as “a kind of fury that seizes the mind and ... that fires the imagination.”<sup>484</sup> Knowledge from *enthousiasme* needed no social assent, no conversational critique, no civilised salon atmosphere because it was known with the assurance of the zealot.

In the seventeenth and eighteenth centuries, with political threats from extreme factions, *enthousiasme* came to mean a dangerous attitude adopted by fanatics. This fear of radical opinions translated into a general rejection of fervent rhetorical styles.<sup>485</sup> The radical religious connections invoked by *enthousiasme* made it a detrimental trait in what the court hoped would be a moderate society.

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<sup>482</sup> D’Alembert quoted in Lespinasse, Julie de. *Letters of Mlle. De Lespinasse*. Translated by Katharine Prescott Wormeley. (London: William Heinemann, 1903), 32.

<sup>483</sup> Jean François Marmontel, *Memoirs of Marmontel*, trans. Brigit Patmore, vol. 1, Broadway Library of Eighteenth Century French Literature (London: Routledge, 1930), 118.

<sup>484</sup> Cahusac, Louis de. "Enthousiasme." In *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc.*, edited by Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project.

<sup>485</sup> Michael Heyd *"Be Sober and Reasonable": The Critique of Enthusiasm in the Seventeenth and Early Eighteenth Centuries*. (Leiden: Brill, 1995).

Furthermore, the etymological connection to *entheos*, Greek for “inhabited by God’s spirit,” illustrates the association with religious possession.<sup>486</sup> The enthusiast did not need social assent to establish matters of fact: instead, they behaved as if matters of fact were revealed to them. This way of knowing truth was directly in opposition to the open conversational style in the collaborative spaces of salon culture.

A fiery disposition was a disadvantage in *sociabilité*. Hot-headed *enthousiasme* was seen as a kind of fever, in which heated rhetoric came from a choleric mind. Tempered speech and behaviour showed that an intellectual *savant* was not afflicted by *enthousiasme*. Hence the words of Marmontel in a recollection of Lespinasse’s salon in his *Mémoires*, “Nowhere was conversation more lively, more brilliant, or better regulated than at her house. It was a rare phenomenon indeed, the degree of tempered, equable heat which she knew so well how to maintain, sometimes by moderating it, sometimes by quickening it.”<sup>487</sup>

Not all temperamental associations with fire were detrimental to credibility: Julie de Lespinasse was praised by Marmontel for “the most inflammable imagination that has existed since the days of Sappho.”<sup>488</sup> This fire, “that circulated in her veins, and which gave to her mind such activity, brilliancy, and so many charms,” was also responsible for her downfall, according to Marmontel. After her death he said that it “has prematurely consumed her.”<sup>489</sup> So, while the fire of her imagination was a boon to her duties as *salonnière*, it was also potentially dangerous. This memory of Marmontel illustrates the duality of passionate temperaments in the salon culture. Attendees at salons considered garish or unfashionable dress in a similar manner to the way they responded to *enthousiasme*. To zealously reject

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<sup>486</sup> Lionel Laborie, *Enlightening Enthusiasm: Prophecy and Religious Experience in Early Eighteenth-Century England*. (Manchester: Manchester University Press, 2015), 2.

<sup>487</sup> Marmontel, *Memoires*, 120.

<sup>488</sup> *Ibid.*, 260.

<sup>489</sup> *Ibid.*

fashion, or to follow it with similar zeal, was unsociable. As Moliere claimed, unsociable dress and speech gave “offence.”<sup>490</sup>

### *Nonchalant Philosophes*

Portraits of male French intellectuals sought to project *nonchalance* to advertise their credibility. Around the same time that Pepys and Boyle were painted by Hayls and Kerseboom in banyans, as discussed in chapter two, Christiaan Huygens was painted in similar, though more refined, garb. (Fig. 67) The celebrity savant of the early *Académie des Sciences*, the French experimental institution patronised by King Louis XIV (1638-1715) Huygens (1629-1695) was a Dutch mathematician with connections to Parisian circles. Caspar Netscher depicted Huygens as a *nonchalant honnête homme* in his 1671 portrait of the mathematician. Painted in 1671, this portrait was created while Huygens resided in Paris at the invitation of Louis XIV’s minister of finance, Jean-Baptiste Colbert (1619-1683). Perhaps this portrait allied Huygens to the persona of the naturalised French *honnête homme*. Unlike the portraits of Boyle or Pepys, some flourishes in Huygens’ attire suggested fashionability more than modesty. Though he is in a form of *déshabillé* similar to the banyans worn by Boyle and Pepys, Huygens’s low-key fashionability is one way that this portrait combines French *nonchalance* with Huygens’s intellectual image. He leans toward the viewer of the painting, reclining his left elbow on a pillow. This is Huygens as he would be seen by his contemporaries conversing with him, perhaps about the possibilities of the cosmos. The portrait, therefore is not only of Huygens, it is of Huygens in the middle of creating and sharing knowledge.

The influence of salon sociability on Huygens’s rhetoric was clear in *Kosmotheoros*, his 1698 treatise on the possibilities of other planets similar to Earth. Written in the last years of Huygens’ life and published posthumously, *Kosmotheoros* is, in fact, a sort of dialogue written as if Huygens was discussing the

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<sup>490</sup> Molière quoted in Stanton, *The Aristocrat as Art*, pg. 129.



subject with a good friend.<sup>491</sup> Huygens even explained in the introduction that his purpose for writing and publishing the treatise was simply in order to share it with the reader, because

I find the saying of Archytas true, even to the Letter, That tho a Man were admitted into Heaven to view the wonderful Fabrick of the World, and the Beauty of the Stars, yet what would otherwise be Rapture and Extasie, would be but a melancholy Amazement if he had not a Friend to communicate it to.<sup>492</sup>

Huygens's literary style for communicating his natural knowledge was couched in the language of conversation. Huygens incorporated *sociabilité* and *nonchalance* into his credibility strategies. This sense of *nonchalance* had a marked visual element that could be signalled through deportment, grooming and again through clothing. He was not the only natural philosopher who adopted this strategy to promote his credibility in French circles.

In the writings of Bernard le Bovier de Fontenelle (1657-1757), knowledge was so conversational that it took place in the domestic sphere. His novel *Conversations on the Plurality of Worlds* was the most popular scientific book for generations and helped to popularise the sciences performed by the *Académie des Sciences*. It was a work created mainly to delight the reader with the wonders of the new science. The book was to be read for entertainment above instruction. Fontenelle used language that was welcoming, sociable, and conversational. The novel took the form of a dialogue between a knowledgeable savant and a curious Marquise as they discussed theories and speculations of contemporary science about Nature in her garden.

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<sup>491</sup> For more on the role of sociability in Huygens's writing, see Michael D. Gordin, 'The Importation of Being Earnest: The Early St. Petersburg Academy of Sciences', *Isis* 91, no. 1 (2000): 1–31.

<sup>492</sup> Christiaan Huygens, *The Celestial Worlds Discover'd, or, Conjectures Concerning the Inhabitants, Plants and Productions of the Worlds in the Planets Written in Latin by Christianus Huygens, and Inscrib'd to His Brother, Constantine Huygens* Early English Books, 1641-1700 73:24 (London : Printed for Timothy Childe .1698., 1698), 4.

Looking up at the stars, they discussed the theories and speculations of the contemporary scientific discoveries. The setting and language reflected the manners of *sociabilité*. Historian of science Paula Findlen described the savant whose dialogue elucidates the heavens: “His knowledge was no social liability that removed him from ordinary conversation, but the very reason that he held the attention of an aristocratic Marquise.”<sup>493</sup> The gentlemanly savant was presented as the typical *honnête homme*. *Conversations on the Plurality of Worlds* demonstrated how the charm of the *honnête homme* was a vehicle for disseminating natural knowledge. Its enduring popularity well into the middle of the eighteenth century demonstrates how effective *honnêteté* was to French readers.

Artist Hyacinthe Rigaud (1659-1743) painted a dramatic portrait in 1702 of Fontenelle, in which the sitter was presented in exaggerated *négligence*. (Fig. 68) Fontenelle’s style of undress, with cap and banyan, was rendered in windswept unkemptness. The effect was heightened by the sweep of the cap’s brim, the folds in his formless banyan and the cascade of the blue cravat string. Fontenelle’s banyan was depicted as a large ruby red gown, either of smooth satin or lustrous velvet. Fontenelle was almost swamped by its exaggerated, voluminous folds. The ribbon tying the collar of Fontenelle’s undershirt together would possibly be used to secure a cravat to the undershirt, and would normally have been black. Without an accompanying neckerchief or cravat of any type, the bright blue ribbon appears as a striking beam of colour against Fontenelle’s shirt. The emphasis on the undone blue ribbon draws the eye to the wrinkles of the fabric to emphasise the unkempt nature of this extremely *négligent savant*. Fontenelle’s expression almost smirks at the lack of care his clothing shows. Many portraits survive of Fontenelle, and the vast majority of them depict him in his banyan and cap, continually reinforcing his image as the *nonchalant savant*.

Portraits such as those of Huygens in 1671 and Fontenelle in 1702 established a connection between informal attire such as banyans and *nonchalance* in knowledge-

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<sup>493</sup> Paula Findlen, ‘Becoming a Scientist: Gender and Knowledge in Eighteenth-Century Italy’, *Science in Context* 16, no. 1–2 (2003): 60.

making practices. This trope was utilised by French *philosophes* and the artists who depicted them throughout the eighteenth century, just as English natural philosophers used modest attire in their portraiture. *Philosophes* who attended salons such as *Encyclopédie* editor Denis Diderot (1713-1784) and Jean-François Marmontel (1723-1799) were also depicted in banyans. *Négligence* was so important to Diderot that he wrote a eulogy for his old banyan. His new, replacement banyan made him look as unnatural as a “mannequin.”<sup>494</sup>

### *Nonchalant Salonnières and Bluestockings*

The avoidance of *enthousiasme* and desire for *négligence and nonchalance* can be seen reflected in the Bluestocking circle, where sociability and informal attire played a role in the story behind the name Bluestockings. It is significant that the colloquial term for a multi-gendered group of intellectuals was taken from an item of clothing. The term came from a kind of woollen stocking worn by working-class men, as opposed to the silk white stockings that elite men would wear to formal events. This was the style preferred by botanist Benjamin Stillingfleet when he attended Elizabeth Montagu’s gatherings. The history of the term was recorded in the 8 November, 1792 edition of the *Gazetteer and Daily Advertiser*:

The origin of the BLUE STOCKING CLUB is thus related, from the respectable authority of Mr. BOSWELL. The late Dr Stillingfleet, a man of extensive literature, and of great facility in the exertion of his powers, was much attached to the company of ladies of the higher class, both in talents and rank. The Gentleman happened to have one outward peculiarity – that of appearing constantly in blue stockings – and this was of course, much noticed... When his absence at such a meeting was once lamented, somebody happened to say, ‘Ah! we can do nothing without the bluestockings!’ The saying was often repeated and, afterwards, when many of his friends chose to

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<sup>494</sup> Denis Diderot, ‘Regrets on Parting with My Old Dressing Gown, or, A Warning to Those Who Have More Taste than Money’, in *Rameau’s Nephew and Other Works*, trans. Jacques Barzun and Ralph H. Bowen (Cambridge: Hackett Publishing Company, 2001), 309.

form themselves into society, this trifling peculiarity of their common tutor was so much remembered that they could take no other name than that of 'THE BLUESTOCKING CLUB'.<sup>495</sup>

The story told in the *Gazetteer and Daily Advertiser* was corroborated in *The Memoirs of Doctor Burney*. According to Frances Burney, Stillingfleet had warned Elizabeth Vesey, after she had invited him to one of her evening meetings, that his attire was not fit for a sophisticated gathering like hers. She replied, "don't mind dress! Come in your blue stockings!"<sup>496</sup> His preference for casual attire was not actually a detriment. Casual attire helped to signal that Stillingfleet was a modest, sober man: he owned no fine stockings, therefore he was not subject to luxury. Fortunately for Stillingfleet, Vesey saw that his sartorial informality helped her to cultivate an informal, sociable setting for the philosophical conversations she wanted to foster. Informality projected a sense of ease, and a deterrent to enthusiasm or dogmatism. As noted in chapter two, the avoidance of enthusiasm was of paramount importance to credibility in the late seventeenth century. At the beginning of the bluestocking meetings, this was still true. Bluestocking circles would become well known for their casual, easy setting.

*Nonchalance* and *négligence* were equally signalled by women's dress. The contemporaries of the *salonnières* regularly equated qualities of attire with qualities of the wearers, moralizing dress and giving it epistemic significance. Consider, for example, Jacques Antoine Hippolyte, the Comte de Guibert's description of Julie de Lespinasse's attire: "She was always simply dressed, but with taste. All that she wore was fresh and well assorted. It gave the idea of richness which was vowed by choice to simplicity."<sup>497</sup> Similarly, Marmontel described Marie-Thérèse Geoffrin: "She was simple in her taste, dress, and furniture, but nice in her simplicity; having the delicacies of luxury in all their refinement, but nothing of their brilliancy or their vanity; modest in her air, carriage, and manners, but with a touch of pride, and even

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<sup>495</sup> Qtd in *Bluestockings displayed*, 2-3

<sup>496</sup> Burney, *Memoirs of Doctor Burney*, 2: 262.

<sup>497</sup> Jacques De Guibert, "Eulogy of Eliza," in *Lettres of Mlle De Lespinasse*, 323.

a little vainglory.”<sup>498</sup> How a *salonnière* was to be judged was intimately connected to her dress and appearance. Simplicity in clothing was an attribute that increased Lespinasse and Geoffrin’s esteem and credibility in the eyes of her guests.

Simplicity or informality of attire in portraiture was a strategy deployed by many *salonnières*. The salons, and the Bluestocking gatherings, signalled the domestication of knowledge, by locating its production within a calm, sociable environment where dress and deportment signalled the absence of enthusiasm. Such domesticated knowledge could also be communicated in portraits of Bluestocking women. Sitting in a domestic scene while wearing indoor, casual attire was one way that members of the salons and Bluestocking circle could promote their domesticated sociability, thereby distancing themselves from *enthousiasme*. The domestic settings of many eighteenth-century portraits of intellectual women, both in England and France, point to the *nonchalant*, tempered knowledge produced by sitters.

Portraits signalled *nonchalance* through references to the domestic as a sign of the casual. Elise Goodman has drawn attention to the visual signals commonly used in portraiture of intellectuals: a sign of intellectual credibility was the depiction of a sitter reading or writing whilst sitting at desks.<sup>499</sup> In these portraits, *philosophes* often wore morning gowns, or banyans, accompanied by either caps or bare heads, just as Huygens and Fontenelle had. The casual ensemble was typically the way that eighteenth century men would appear while at home, thus inviting the viewer to see the man of letters as if the viewer were seated in the *philosophe’s* study, perhaps conversing with him about his latest work. In other words, these were intimate, *nonchalant* images of men creating and disseminating knowledge. The image of home attire was an essential element to the appearance of masculine *nonchalance*. Domesticated appearances signalled domesticated knowledge.

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<sup>498</sup> Marmontel, *Memoires*, 253.

<sup>499</sup> Elise Goodman, *The Portraits of Madame de Pompadour: Celebrating the Femme Savante* Discovery Series ; No.7 (London: University of California Press, 2000).

While women could not deploy well-known masculine signifiers of intellectual authority such as the banyan, they could represent themselves using masculine tropes of domesticated knowledge to assert feminine credibility. Some portraits of *salonnières* depicted women in indoor wear, just as men's portraits depicted them at home. Circa 1761, *salonnière* Suzanne Curchod Necker was painted by pastellist Jean-Etienne Liotard (1702-1789) seated with a book in her left hand, next to a still life spread of fruit, bread, and wine. (Fig. 69) The food was suggestive of hospitality, and the book suggestive of learning: two elements that were folded into Curchod Necker's salon.

Curchod Necker's right hand rests on a garment that appeared often in portraits of *salonnières*, Bluestockings, and other intellectual women of the eighteenth century: the fichu. A fichu was a light square textile, made of either muslin, lace, or linen, that would be wrapped around the shoulders and over the décolletage for warmth indoors. Fichus were so essential to women's attire that they were given an entry in the *Encyclopédie*:

*Fichu*, part of a woman's underclothing. It is a square or rectangular piece of muslin, or of another white or coloured cloth, or even silk, which is folded in two at the angles and covers the neck. The point of the *fichu* falls in the middle of the back and covers the shoulders; the extremities are crossed in front and cover the chest; but with white skin, curves, firm flesh and a bosom, even the most innocent peasant woman knows how to let just enough show by arranging the folds of her *fichu*.<sup>500</sup>

That the fichu was described as "underclothing" is significant: the garment was part of *déshabillé* the same way that the men's banyan was. It was a similar sartorial signifier of domesticity, which implied *nonchalance*. Elizabeth Montagu's visit to

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<sup>500</sup> Diderot, Denis. "Fichu." *The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project*. Translated by Malcolm Eden. Ann Arbor: Michigan Publishing, University of Michigan Library, 2007. <http://hdl.handle.net/2027/spo.did2222.0000.838> (accessed 7 July, 2018). Originally published as "Fichu," *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers*, vol. 6: pg. 678 (Paris, 1756).

France, mentioned above, may have influenced her choice of clothing in a portrait completed a few years later. This portrait, recently rediscovered by the Elizabeth Montagu Network, was painted by Frances Reynolds in 1778. (Fig. 70) In it, Montagu was depicted wrapped in a large, gauzy *fichu*.<sup>501</sup>

An important expression of *nonchalance* was to appear natural, because this was the opposite of artificial, or that which required effort. The visual culture of the eighteenth century glorified youth. François Boucher and other fashionable painters made successful careers by depicting carefree youths with rosy cheeks lounging in pastoral bliss. Portraits echoed this aesthetic, as did the fashion for applying makeup of white powder and heavy rouge to simulate the first flush of youth.<sup>502</sup> In clothing, the fashion for pastel textiles highlighted the idealised spring of youth. Material culture reflected the value placed on youth and attitudes towards age in the eighteenth century. Youth was particularly prized in women. In a letter to Sophie Volland, Diderot remarked,

Women seem to be destined solely for our [men's] pleasure. When they no longer have that attraction, they have lost everything.... Women's gentle, soft, plump, rounded nature, all qualities that make for charm in their youth, also cause everything to sag, flatten out, droop in advanced age. It is because they have much flesh and small bones when they are eighteen that they are pretty, and because they have much flesh and small bones that all the proportions that make for beauty disappear at eighty.<sup>503</sup>

To Diderot, one of the great tastemakers and writers on visual culture at the time, there was no such thing as a beautiful old woman. (Men, by comparison, could be

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<sup>501</sup> 'The Portrait – Elizabeth Montagu Letters', accessed 8 December 2018, <http://www.elizabethmontagunetwork.co.uk/the-portrait/>.

<sup>502</sup> Colin Jones, *Madame De Pompadour : Images of a Mistress* (London: National Gallery, 2002.)

<sup>503</sup> Denis Diderot qtd in Joan Hinde Stewart, *The Enlightenment of Age: Women, Letters and Growing Old in Eighteenth Century France*. (Oxford: Voltaire Foundation, 2010), 2.

handsome at old age due to their “denser flesh” and “firmer muscles.”)<sup>504</sup> The body, not the mind, of the woman dictated her use to society, so it was imperative that women seek to appear young. However, Geoffrin, Graffigny, and Deffand, among others, sought to portray *nonchalance* through the defiance of youthful artifice and the display of their natural old age. Though youthful appearance was attached to a woman’s perceived usefulness, a woman who attempted to prolong her youth and usefulness through artificial means was open to ridicule. Philosophe Pierre Jean Baptist Nougaret was horrified by a woman who attempted to maintain her beauty cosmetically: she “thought herself still pretty! Her skinny, dry body was in striking contrast with the paint and rouge that covered her yellow and livid complexion.”<sup>505</sup> Noticeable makeup was not *nonchalant*: it exposed artifice. Therefore, to be *nonchalant* meant to appear natural, even if one was old, and that some women made this choice is apparent in their portraits. In 1747, Geoffrin sat for a portrait by Pierre Allais (1700-1782) (Fig. 71). Geoffrin’s attire appears to be a fur-lined capelet over a *robe volante* in vibrant blue with gold embroidery at the centre where the sides of the dress meet. She was also depicted in a lace cap, an indoor garment much like the fichu described above. Allais’s rendering of Geoffrin’s wrinkled face was a way to signal that the sitter eschewed artifice in favour of naturalness.

Of all the strategies for projecting credibility in portraiture, the willing portrayal of old age was one that the Bluestocking women employed often.<sup>506</sup> That both the Bluestockings and *salonnières* were painted in old age was uncommon, according to Marcia Pointon, who notes that women rarely allowed their aged likenesses to be

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<sup>504</sup> Qtd in *ibid.*

<sup>505</sup> Pierre Jean Baptiste Nougaret qtd. in Morag Martin, *Selling Beauty: Cosmetics, Commerce, and French Society, 1750-1830* (Baltimore: Johns Hopkins University Press, 2009), pg. 80.

<sup>506</sup> Devoney Looser, ‘The Blues Gone Grey: Portraits of Bluestocking Women in Old Age’, in *Bluestockings Displayed: Portraiture, Performance and Patronage, 1730-1830*, ed. Elizabeth Eger (Cambridge: Cambridge University Press, 2013), 100-120.



recorded.<sup>507</sup> A 1796 letter by Bluestocking poet Anna Seward was somewhat positive about the depiction of old age:

As to an actual picture, which you express so fervent a desire to possess, it was always my resolve never to sit for one between the periods of forty and sixty, if I should live to attain the latter. A portrait, where any portion of youthful appearance can be preserved, may be pleasing, and it may be interesting in the mellow tints of venerable age; but the hardness of middle life is detestable on canvas, or ivory.<sup>508</sup>

It was the period of middle age, according to Seward, that was not credible to display. Old age, however, contributed to a woman's credit by showing her as venerable. Devoney Looser notes that "old age offered the promise of being admired as virtuous and noble."<sup>509</sup> Bluestockings such as Seward, Carter, and Hannah More all took advantage of this promise. In Carter's portrait, she adopts many of the garments that denoted domestic virtue and *nonchalance* that the *salonnières* did. (Fig. 72) Completed in 1789 by pastelist Sir Thomas Lawrence, Elizabeth Carter's portrait is quite different from her 1740's depiction as Minerva, discussed in the beginning of this chapter. However, the goal of the portrait is the same: to enhance the credibility of the intellectual woman represented.

### *Conclusion*

"See what an education I received!" exclaimed Julie de Lespinasse of her years in salon culture, "Mme. Du Deffand, President Henault, the Abbé Bon, the

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<sup>507</sup> Marcia Pointon, *Hanging the Head: Portraiture and Social Formation in Eighteenth-Century England* (New Haven: Yale University Press, 1993), 34. See also Herbert Covey, *Images of Older People in Western Art and Society* (New York: Praeger, 1991)

<sup>508</sup> Seward qtd. In Looser, "The Blues Gone Grey," 102.

<sup>509</sup> Looser, "The Blues Gone Grey," 103.

Archbishop of Toulouse, the Archbishop of Aix, M. Turgot, M. d'Alembert, the Abbé de Boismont – these are the persons who taught me to speak and to think, and who have deigned to consider me as something.”<sup>510</sup> The Bluestocking circle and Paris salons of eighteenth-century France were a rare multigendered intellectual space where natural philosophy and other intellectual knowledge was available to women. By spending time in the company of great intellects Lespinasse was able to immerse herself in a greater education than was available to most women of her time. She was taught to “speak and think,” rather than relegated to the *arts de plaisir*. In Lespinasse’s case as well as many other women of the salons and Bluestocking circle, this rare and stimulating opportunity was predicated on her ability to cultivate her credibility.

For women of the Bluestocking circle and salon networks, dressing the part was a key strategy to cultivating the credibility needed to participate in multigendered learned spaces. Women who wanted to become part of the networks of intellectuals in Enlightenment England and France had to signal with their clothing that they were the kind of woman who could govern a rational conversation.

This chapter has argued that eighteenth-century women such as Bluestockings and *salonnières* managed their credibility in intellectual circles through their dress. Garments of *nonchalant* domesticity, such as the *fichu*, helped to promote their intellectual contributions to salons. To be credible interlocutors among men indisposed to trust women as knowledge-makers, women in both England and France cast themselves as masters of *sociabilité* and *nonchalance*. Through their contributions to conversation, in their dress, and in the portraits they commissioned to represent themselves, women displayed the features that indicated a sociable attitude, namely taste, simplicity, naturalness and *nonchalance*. In male portraiture, informal domestic costume, such as the banyan, was established as a sartorial signal allied with a capacity to domesticate knowledge. Domestication was desirable due to the sociability of conversation that avoided the dangers of excess and enthusiasm associated with the individual, fanatical mind. Women borrowed signals of

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<sup>510</sup> Lespinasse, *Letters of Mlle. De Lespinasse*, 27.

domesticity, along with allegorical, emblematic costume, and *nonchalant* depictions of old age, to show that they, too, could be trusted to make knowledge.

## Conclusion

This thesis has explored the role of fashion and clothing in English natural philosophy in the seventeenth and eighteenth centuries. Using material evidence, such as museum objects and portraiture, in addition to archival and published sources, the preceding chapters traced the ways clothing and fashion were connected to issues of credibility among men and women during the years that experimental philosophy was establishing itself as the primary way to make knowledge about nature. Following on from the ideas of historians such as Shapin that credibility was linked to the state of the body and gentility in seventeenth-century science, this thesis has shown that clothing and fashion was one of the ways credit was communicated. The ways that clothing could be used as a signal of credibility underwent a transformation in the seventeenth and eighteenth century that privileged men as knowers of nature, because, in part, their costume matched the values associated with legitimate truth-telling such as modesty, sobriety, and simplicity. Changes in fashion, hand in hand with social attitudes, impacted the opportunities available to men or women who wished to engage in the sciences.

The first chapter argued that, prior to the inception of experimental knowledge, the pursuit of natural knowledge was compatible with the display of ornament. In the late sixteenth and early seventeenth century, clothing was a way that men and women of learning were able to display natural wonders, often through textiles and accessories either depicting or made of *naturalia*. The body functioned as a cabinet of curiosity. To explore this, the chapter examined a portrait of Elizabeth I in which she was depicted wearing a petticoat adorned with sea monsters, flowers and birds. The second chapter demonstrated that in the seventeenth century, members of the Royal Society, particularly John Evelyn, were involved in the introduction of the three-piece suit and the notion that men should dress in a sober fashion. Examining the Society's reaction to Margaret Cavendish, whose dress and philosophy they criticized, the chapter argued that the Society was complicit in positioning ornament and fashion in opposition to the sobriety associated not only with proper masculinity but also proper knowledge-making, since they urged a sobriety and plainness of knowers often analogized to sober and plain dress.

The third chapter then showed how this opposition became a commonplace in the eighteenth century, as various authors attacked those who engaged in fashionable dress as improper or unreliable thinkers, and allied forms of knowledge they disdained with fashions and fashionability. To eighteenth-century writers such as Dennis de Coetlogon, the strongest critique he could make of physick was that it was “a jest ... a mere fashion.”<sup>511</sup> The chapter also looked at Adam Smith’s apology for fashion, in which he argued that there are changes and fashions in all things. Finally, the chapter demonstrated that Mary Astell objected to the increasingly common view that an interest in fashion barred women from being legitimate knowers of nature.

The final two chapters considered contexts where women asserted their status as makers of natural knowledge through the limited opportunities they were faced with in the eighteenth century. Chapter four was a study of Anna Garthwaite, who used textile design to express her knowledge of nature, in highly accurate renditions of plants and animals on fabrics. Garthwaite’s use of botanical motifs in her silks showed how important flowers were to the consumption of fashion. The chapter also discussed Mary Delany’s embroidered and papercut works to understand the way that botany figured into women’s textile production. Chapter five examined the Paris salons and Bluestocking circle in London as a place where women manipulated their dress so as to cultivate credit among philosophical networks. The Bluestocking women used allegorical costumes to promote their credibility, but in portraits where they were dressed in contemporary attire they also used sartorial signals. Drawing on the example of the Paris salons, it is possible to understand the function of domestic attire such as fichus and the depiction of old age as strategies related to *nonchalance*, the absence of dogmatism and the skill most accredited in salon hostesses. Chapter five, as well as chapter four, demonstrated that even if female dress had been demoted from the same level of credibility as male costume in the eighteenth

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<sup>511</sup> Dennis De Coetlogon, *Physick Is a Jest, a Whim, an Humour, a Fancy, a Mere Fashion, Even Full as Much as Dress or Dancing*. (London: Printed for T. Cooper, at the Globe in Pater-noster Row, 1739).

century, women still worked to use it as a means to secure credit and express their knowledge of nature.

*Truth Telling, Matters of Fact, and Conspicuously Gendered Bodies*

This thesis was a cultural history of science that brought costume history into dialogue with the historiography of seventeenth and eighteenth-century science. The preceding chapters argued that a dialogue between histories of fashion and science can produce insights into both fields. Extant examples of clothing, museum objects and descriptive texts can shed insight into the way that credibility was established and maintained in natural philosophical circles. The argument was that clothing was one of the factors taken into account when establishing the credibility of individuals as makers of natural knowledge. This thesis demonstrated that, during the same years as the establishment of experimental science, men's clothing underwent a major change that sought to remove display. Men's unadorned clothing became the sartorial signal of credibility. This thesis also argued that women resisted these changes that privileged male credit and cultivated their own ways of using fashions to display and disseminate knowledge.

There have necessarily been limitations to this thesis. The geographical scope of this study was limited to England, with a case study touching on France. A further development for the arguments presented in this thesis would be to apply them to global contexts. The seventeenth and eighteenth centuries saw increased global exchange, which clothing figured into. Portraits of explorers depicted them in the costume of the lands they had visited: did this help to increase their credibility?<sup>512</sup> What of the native peoples encountering Europeans for the first time: was their

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<sup>512</sup> See, for example, Joseph Banks's attire in his 1773 portrait by Benjamin West. West, Benjamin. *Joseph Banks*. Oil on canvas: 1773. Usher Gallery, Lincolnshire.

clothing subject to scrutiny by explorers, and did they scrutinise explorers in return?<sup>513</sup>

Another way to expand the arguments made in the preceding chapters would be to follow the cultural changes into further centuries. This thesis has addressed the period 1600-1800, in which natural knowledge was forming into the practice of experimental science we might recognise. It was a period when many aspects of scientific authority began to germinate and take shape. Since 1800, science became increasingly professionalised and moved farther from the domestic setting of the home laboratory of the early modern natural philosopher. Werrett has made the home visible in the history of early modern science in *Thrifty Science: Making the Most of Materials in the History of Experiment* (2019).<sup>514</sup> The home was a space of “support and collaboration” between the man of science and “other members of the family and networks of exchange.”<sup>515</sup> In the nineteenth century, as Werrett points out, “Men of science’ sought to distinguish a new, autonomous experimental practice from the domestic thrifty experiment of the previous centuries.”<sup>516</sup> This removal of knowledge from the home was connected to the emerging rhetoric of separate spheres: the man’s sphere became the space where knowledge was produced, the woman’s sphere was not. As Tennyson wrote in 1849, “She knows but matters o the house, / And he, he knows a thousand things.”<sup>517</sup> This contributed to the even greater ostracisation of women from knowledge-making practices.

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<sup>513</sup> An especially interesting case to study is the portrait of Omai (with Joseph Banks and Daniel Solander) by William Parry. Omai, a native of Tahiti, was depicted in classical garb. See Jos Hackforth-Jones et al., *Between Worlds: Voyagers to Britain 1700-1850* (London: National Portrait Gallery, 2007), 52.

<sup>514</sup> Simon Werrett, *Thrifty Science: Making the Most of Materials in the History of Experiment* (London: University of Chicago Press, 2019).

<sup>515</sup> Werrett, *Thrifty Science*, 7.

<sup>516</sup> *Ibid.*, 21.

<sup>517</sup> Alfred, Lord Tennyson qtd. in David Knight, *The Making of Modern Science: Science, Technology, Medicine and Modernity: 1789 - 1914* (John Wiley & Sons, 2013).

The severance of science from the home and from fashion may be connected, as the contours of these historic changes occurred in the same era. Moreover, both culminated materially in the garment most associated with scientific authority: the lab coat. This austere, white jacket was comparable to the seventeenth and eighteenth century banyan. Eventually, the banyan would be replaced by the lab coat as the iconic garment imbued with the truth-teller's credibility. It is still a powerful social tool today.<sup>518</sup>

What were the longer-term consequences of the changes described in this thesis? As the introduction noted, it has remained a common assumption that science and fashion are separate and opposed. It is interesting to note that one of Donna Haraway's favourite images of modern science is the spaceman, a man in a white suit floating in nothingness.<sup>519</sup> The space suit can be seen as a full body version of the lab coat: the white icon of the credible scientist. For Haraway, the twentieth-century spaceman is an expression of the idea of science as a "god-trick" akin to Thomas Nagel's "view from nowhere", a supposedly objective view of the world that simply mirrors nature and bears no biases, prejudices or personal perspectives at all.<sup>520</sup> What Haraway is describing is the purest physical form of the credible human, the human who can be trusted to see the world and describe its phenomena. This credible human, however, is white, male, able bodied, cis gendered, and heterosexual: enfranchised in every way. He is not adorned - neither by fashion, nor by sex, class, race, any marker that would make him other than society's default man. That Haraway's spacesuit is (physically as well as implicitly white) male means that the white male body is accredited, while the other bodies have an automatic deficit of credit. Evidently the masculine form of clothing and credit whose emergence this thesis has traced has not gone away. This thesis explored the history behind women's

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<sup>518</sup> The lab coat has been subject to surprisingly little historical inquiry. However, Verena Straub has made some headway. Verena Straub, 'Science in Pictures: A Historical Perspective', in *New Laboratories: Historical and Critical Perspectives on Contemporary Developments*, ed. Charlotte Klonk (Berlin: Walter de Gruyter, 2016), 50.

<sup>519</sup> Donna Haraway, *Simians, Cyborgs and Women* (New York: Routledge, 1991), 221.

<sup>520</sup> Thomas Nagel, *The View From Nowhere* (Oxford: Oxford University Press, 1986).



experience of a credibility deficit, but what about others – those of different colour, sexuality, ability? A case similar to this thesis could be made for any demographic that does not fit into society’s image of a credible knowledge-maker. Clothing makes visible and material many of the markers of non-default status.

The trust placed in knowledge makers whose bodies enjoy default status has consequences that extend beyond the early modern period, beyond the eighteenth century, into the twenty first century. Women continue to experience criticism similar to the comments levelled at Margaret Cavendish in Chapter Two. Dismissal of women’s credibility in the sciences and other fields is frequently articulated through scathing critiques of their clothing choices. The issues surrounding clothing and credibility described in this thesis have developed into a struggle for credibility that women still face. Ten years ago, Rebecca Solnit published an essay “Men Explain Things to Me,” describing the credibility gap between genders that she had experienced as a woman in the twenty-first century.<sup>521</sup> It was and is socially accepted that the male body is the arbiter of truth and knowledge, so that “men explain things to me, and other women, whether or not they know what they’re talking about.” This is not harmless. “Credibility,” she asserts, “is a basic survival tool.”<sup>522</sup> Being heard when speaking the truth is a basic survival tool. Solnit’s essay described society’s epidemic inability to ascribe credit to women. There is a persistent problem in which we all, collectively, struggle to recognise expertise, worth and credibility in women. Women who cannot be perceived by others as credible cannot make matters of fact: not merely in science, but in all areas of academia, in law, in conversation, anywhere. Their testimony is dismissed as anecdotal, their evidence is hearsay: they are not, as Solnit says, “reliable witnesses to their own lives... the truth is not their property.”<sup>523</sup> Male arbiters of truth – the modest witnesses and their descendants – are credible enough to dictate experience to women.

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<sup>521</sup> Rebecca Solnit, ‘Men Explain Things To Me’, in *Men Explain Things to Me: And Other Essays* (London: Granta Books, 2014), 3.

<sup>522</sup> *Ibid.*, 5.

<sup>523</sup> *Ibid.*, 9.

But what is to be done about this? This history began with the rejection of a seemingly natural social norm: that fashion and science have nothing to do with each other. The preceding chapters have investigated the ways in which fashion and science have interacted and the gendered consequences for these interactions. This study exposed the historical roots of this widely-accepted social norm and demonstrated that the opposition has only been in place since the seventeenth century, hardly a constant in human history. The gendered consequences that this opposition brought about need not be treated as natural, innate, or unavoidable.

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