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Setse Bush

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Notions of the Biologically Inferior:  
Using 17<sup>th</sup> Century Medicine to Analyze the Early Modern Woman

Setse Bush

Spring 2019

Zoltan Markus

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For centuries now, historians have used resources, old and new, to imagine new models for understanding the female body in early modern England. Barbara Kiefer Lewalski, a Milton scholar and author of *Writing Women in Jacobean England*, uses previously unidentified texts by early modern English women to “question new historicist paradigms that...have been accepted too uncritically” (Kathryn Anderson 218). Gail Kern Paster, author of *Leaky Vessels: The Incontinent Women of City Comedy*, takes an entirely different approach, using Hippocrates’s humoral theory to contextualize the early modern ideal of excessive femininity. As we discover untapped resources, it is imperative that we reimagine the female body in new and improved contexts. In preserving the trend of questioning the constructs of early modern literature and culture, Anderson writes, “we may be led to recognize important aspects of early modern literature and culture that the overused new historicist formula, subversion and containment, may obscure” (218).

In this thesis, I show how early modern medical texts can provide useful context for understanding representations of female bodies in literature and culture. Through careful examination of medical texts, we can conceptualize the demands placed upon the female body in the gendered power hierarchy in early modern England. Nicolaas Fonteyn’s *The Womans Doctour*, which is the basis of this thesis, is an unexplored text that provides extensive explanations of women’s diseases and their causes. Embedded in his documentation of female illness is a detailed scrutiny of the humoral biomechanics of women’s bodies, which we can use to deconstruct female characters in the plays of that time. If Fonteyn’s explanatory work offers us a skeletal perspective of the early modern English conceptualization of the female body, Ben Jonson’s fictional *Bartholomew’s Fair* (1614) puts the flesh on the bones. In *Bartholomew’s Fair*, Jonson probes the relationship

between womanhood and sin. Because Jonson is known for his humoral comedies, wherein every character represents a specific humoral deficiency, *Bartholomew's Fair* contained subtle - and not so subtle - references to the same medical theories that Fonteyn deliberates.

### *I. Hippocrates, Galen, and the Emergence of Medicine*

Hippocrates of Kos, a Greek philosopher and physician, was the mastermind behind the humoral theory. Hippocrates grew up in a family of passionate medical professionals, and at a young age had already developed ideas about the human body and how it worked (Yapijakis 3). Yet, while Hippocrates has been the appointed ‘father of medicine’ since antiquity, medicine as a discipline did not exist in 300 BCE as it does now. Hippocrates was a thinker; first and foremost, he was a philosopher in his time, and his gifts to modern medicine blossomed out of a background of philosophy. His most popular treatises and ethical manuals on medicine include *The Hippocratic Oath*, *Embassy*, *On Airs, Waters, and Places*, and *The Book of Prognostics*. The ancient library at Alexandria contained the entire Hippocratic Corpus, a collection of over 70 of his works (Serageldin 396). In the thick of his insights into the nature of the human body and mind, his most popular theory of human physiology was born: the humoral theory.

In the humoral theory, the human body contains four essential fluids or humors: yellow bile, black bile, blood, and phlegm. Each humor exists on its own terms within the body, and contributes differently to the overall ‘health’ of the individual. Some modern-day physicians, including R. G. Macfarlane, have argued the possibility that the humoral theory refers simply to the four components of blood: plasma, red blood cells, white blood cells, and platelets (American Society of Hematology). In “English Waeta and the Medical Theory of the Humours,” Lois Ayoub posits that the four humors may resemble “blood taken from patients suffering from certain diseases [which] tend[s] to separate into

layers” (334). This proposition accurately reflects the practice of ancient Greek philosophers to utilize empirical observation in medicinal practice. From these early empirical observations of Hippocrates, the humoral theory took on other characteristics over time, some attributed to Hippocrates, and others to Galen of Pergamum and those that followed.

The core ideas that merged to form the humoral theory of 17<sup>th</sup> century England came directly from Hippocrates’s work. The other humoral variables, such as age and season can be traced to a number of outstanding Greek philosophers, including Galen of Pergamum. Galen of Pergamum was arguably the *second* father of the humoral theory; he created addendums to Hippocrates’s works that emphasized the relationship between humor and character. Galen of Pergamum was born almost three centuries after Hippocrates into a family that fully supported Galen’s medical and philosophical ventures, funding his attendance at one of the most prestigious schools in Alexandria, Egypt (Ludwig and Nutton 1). Galen was born into the Hellenistic period (323 BCE-31 BCE), a time of immense research into human anatomy and the development of new theories and ideas. Galen was an innovative scholar, and became known for his dedication to anatomy. His penchant for looking at medicine in terms of internal workings influenced Galen’s view of the humoral theory and changed forever how the world would see it thereafter.

Galen venerated Hippocrates for his contribution to physiology, and used the basis of the humoral theory for his own work. While Hippocrates presented the four humors in conjunction with specific temperaments (e.g. an excess of yellow bile made a man bilious), and medical conditions, Galen complicated Hippocrates’s ‘cause and effect’

mechanism by adding additional variables (e.g. age, seasons, time) that altered humoral composition. Most notably, Galen proposed a relationship between personality and humor that changed Hippocratic medicine profoundly. In *Greek Medicine from Hippocrates to Galen*, Jacques Jouanna writes that Galen intensified the “relationship between the humours and character, of which there is no trace in the *Nature of Man*, but which lies at the heart of the theory of the four temperaments” (339). After Galen’s death, the humoral theory became increasingly popular due in part to this physiognomic component. In fact, its acclaim was further enhanced by the accessibility of physiognomy to authors and artists alike. Yet, it is in the popularity of Galen’s texts that the ideas of Hippocrates and his humoral theory survived antiquity.

In “The Language of Medicine,” Henrik Wulff chronicles the movement of medicinal texts through the Greek era, the Roman conquest, the Middle Ages, and into early modern England. Galen’s texts not only survived the fall of the Roman Empire but gained popularity in the hands of Arab scholars. Around 1478 AD, Galen’s work was first published in Latin (Wulff 1), and to date, Galen’s texts comprise “more than ten percent of all Greek literature that has survived from Homer to the end of the second century” (Jouanna 1). As a renowned physician, Galen’s assertions, which were seamlessly intertwined with those of Hippocrates, “were widely quoted and summarized in later medical compilations” (Ayoub 335), as well as early modern literature. Galen’s contribution to, and subsequent popularization of, the humoral theory was paramount in the thinking of early modern English society because it pervaded not only medical practice but also culture. In particular, the physiognomic practices of the humors helped create and perpetuate social stigmas around certain groups of people.

Delineating the shift from Hippocrates's conceptualization of humors to Galen's is salient in our discussion of the humoral theory in city comedies, because it was the later Galenic tradition that associated the medicinal humoral theory with human character and temperament (Jouanna 339). In "On Hippocrates *On the Nature of Man*," Galen compares his understanding of humors with that of Hippocrates. For Hippocrates, the health of a man was so contingent on a perfectly balanced humoral body that even "if one of these things [humors] born into man were to fail, the man would not be able to live" (Galen 31). Here, Galen concurs with Hippocrates, but in an appendix asserts the importance of character when assessing the four humors. In Galen's view, not only are the four humors "shown to be instrumental in the origin of character suited to them" (Galen 95-97), but each individual humor is also responsible for different characteristics. Whereas "the sharp and intelligent character in the soul will be due to the bile-ish humour," stupidity and simplicity are due to excessive blood. Even still, "the steadfast and firm character [is] due to the melancholic humour," and phlegm has little to no hand in character formation (Galen 22). Galen created clear-cut relationships between each humor and types of human character; an achievement that over the next 1500 years would strengthen the social import of humoral theory, and cement the idea that people's characteristics, both good and bad, could be traced to their humoral imperfection and illness.

After the emergence of the Galenic humoral theory, the four humors became increasingly tied to characteristic temperaments as described above, and other persisting tetralogies, such as Empedocles's four base elements (earth, air, water, fire), the four temperaments (sanguinic, choleric, melancholic, phlegmatic), and the four primary

passions (pleasure, pain, desire, fear). As the humoral theory became more complex, so did the way it was used socially to label both groups and individuals. For example, the theory of the four primary passions developed by the stoic philosophers at the end of the Hellenistic period conceptualized a body in equilibrium, in which the body and soul successfully achieved homeostasis of its four passions and felt none to excess. This theorem worked to compartmentalize all human emotion into four main streams of pleasure, pain, desire, and fear (Ralph Soellner 549). Seneca the Younger, the first stoic philosopher, conceded in his writings that women were more likely to be overcome by these passions than men, a notion all too familiar in humor theories.

Like humors, passions persisted into early modern English medicine, and were often gendered. In his essay, *The Four Primary Passions*, Ralph Soellner helpfully elucidates the shared ideas between the four primary passions and the four humors. All perturbations, whether emotional or bodily, “are harmful and consist in movement of the soul devoid of reason or contrary to reason” (55). A change in passions meant an almost sinful lack of equilibrium in the body, and a kind of moral impairment in the soul. A change in humors meant the same. Despite the obvious difference in emotions and bodily functions, the two were often conflated. The addition of strong emotion as a characteristic of humoral states moved humor theory diagnosis away from pure physiognomy and towards a more socio psychoanalytic<sup>1</sup> perspective that gave 17<sup>th</sup> century writers such as

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<sup>1</sup> The definition I give to socio psychoanalytic is simpler to that of psychologist, Lynne Layton’s in her paper, *What Psychoanalysis, Culture and Society Mean to Me*: “a model for understanding the relation between the psychic and the social” and how they “account both for the ways that we internalize oppressive norms as well as the ways we resist them” (1).

Ben Jonson, Shakespeare, and Middleton, a framework for humoral characters in dramatic representations.

## ***II. Medicine in Early Modern England***

In 17<sup>th</sup> century England, 300 years before the humoral theory was eventually disenfranchised by fact-based medicine, the dependency of humoral theory on human character was key. In *The Unbearable Coldness of Female Being: Women's Imperfection and the Humoral Economy*, Gail Kern Paster explores the early modern idea that one's humoral makeup was a direct indication of their morality. Because the relationship between humor and morals was not empirical, it was almost completely impervious to any challenging theories (418). In addition, medical practice was such an ambiguous discourse in the 17<sup>th</sup> century, that the fallacy *post hoc, ergo propter hoc* would have been standard practice with poor diagnoses in any of the popular theories of the time. Thus, with no empirical measure to refute them, the humoral and passion theories remained popular and solidified their place in the common thinking of early modern England.

The pairing of humors with character in early modern England lent itself to a progressively more expansive view of the body (primarily, the male body) as a microcosm of the universe around it (Bos 37). In short, the state of a man's humor reflected his relationships, his soul, and his health. If a man had an excess of black bile, it did not simply mean that he was melancholic. Black bile was also indicative of his character (too much black bile indicated indolence or timidity), as well as his body's climate (black bile indicated coldness or dryness). In other words, the state of the soul and the state of the body were correlated with and intrinsically dependent on one another. The relationships between humor, character, and the soul were simultaneously complex

and unevidenced. While Galen had meticulously documented the manifestations of each humor, these relationships were not based on reliable factual evidence. They were unmeasurable and intangible, and were most often used as explanations for pre-existing characteristics or conditions. These propositions were the bases for the convergent view of humors and character we find in 17<sup>th</sup> century England.

The confluence of the humoral theory with character was most prominent in the hierarchical imbalance that disavowed women and their worth. These theories were not only derived from, but further perpetuated a schema that placed women as lesser than men in both mind and body. This schema was preserved not only in medicine but in the contexts of religion, philosophy, politics, art, and literature. Women were labeled as imbalanced and partial to illness because of their menstrual cycle (Paster (1987) 416). In the context of the humoral theory, consistent expulsion of blood from the female body meant a natural but crude imbalance of humors. The idea of menstrual blood as natural 'bloodletting' for women with excess humors was rooted in the assumed dysfunction of female organs. The manifestation of sexism in the humoral theory and medicine belittled women and their actions.

Lisa Wynne Smith articulates the gender bias of humoral imbalance in her article *The Body Embarrassed? Rethinking the Leaky Male Body in Eighteenth-Century England and France*. Smith posits that men were understood to have control of their own humoral composition, because "the ability to control one's body and mind was at the core of health and manhood" (Smith 26). Women, on the other hand, were not seen as capable of maintaining their own health. Although all humans were often privy to bouts of humoral inconstancy, female leakiness and excess "were readily explained in terms of pregnancy,

accidents of childbirth or the general wetness and inferiority of the female constitution” (29). This thesis focuses on the female body and the manifestations of societal impositions on portrayals of ‘the leaky woman’ in early modern England.

A medical treatise by the Dutch physician, Nicolaas Fonteyn, *The Womans Doctour, or, An exact and distinct explanation of all such diseases as are peculiar to that sex with choise and experimentall remedies against the same*, supports Smith’s argument. Translated into English in 1652 for “English doctors and lay readers (Valerie Traub 84)<sup>2</sup>, *The Womans Doctour* is dedicated to so-called ‘women’s diseases,’ and chronicles illnesses primarily pertaining to the breasts, the matrix (womb), and the courses (menstrual cycle). Medical manuals such as Fonteyn’s *The Womans Doctour* gives us unique insight into the societal construct of gender dimorphism as it pertained to the humoral theory.

The foundation of medical practice relies heavily on societal constructions. This is as true now as it was in the 17<sup>th</sup> century. As a self-proclaimed comprehensive text on the “explanation of all such diseases as are peculiar to that sex (women)” (A1r)<sup>3</sup>, Fonteyn’s *The Womans Doctour* provides an exploration of the relationship between womanhood and illness and gives us telling answers to powerful questions: What kinds of women were most likely to get sick? Did race, marital status, or specific physical characteristics

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<sup>2</sup> This quote is taken from Valerie Traub’s book, “The Renaissance of Lesbianism in Early Modern England”, in which she refers to Galen’s *The Womans Doctour* in passing when speaking about the role of the midwife in the necessary masturbation of unmarried women. In the footnotes, however, she contradicts herself when she states that the cited translation was “intended less for midwives or surgeons than women in general” (394, footnote 41). I would argue against Traub’s latter statement, as it is made clear in Fonteyne’s address of the audience in his proem of *The Woman’s Doctour* (“you may sooner find your patient dead” (A2v)), that the book was intended for male physicians (and some interested midwives, perhaps), but certainly not for the patients themselves.

<sup>3</sup> This signature is used from here to cite Fonteyn’s *The Womans Doctour*.

make a woman more susceptible to illness or humoral imbalance? How did illness factor into women's social status and hierarchical dependency on their husbands and fathers? These questions are expansive; however, as we begin to break down the image of womanhood in the wake of Fonteyn's medical manuscript, the importance of both the questions and the act of deriving an answer becomes transparent.

### *III. Fonteyn's The Womans Doctour: "choise and experimentall remedies" (A1r)*

How Fonteyn structured the text and categorized his ideas in *The Womans Doctour* is deliberate and choicefully done. *The Womans Doctour* is separated into four distinct books containing between six and eleven chapters, each of which characterizes specific ailments. The distinct themes of each book and its chapters seem carefully rendered, and give us insight into the intended nature of his work. His chapters often but not always include a detailed account of specific traits, both physical and social, that make a woman more susceptible to a particular disease. For example, a woman who had black hair was "more apt for venery [or lust]" (I8v), a bald woman was suspected to be barren, and a woman "merry and pleasant in their conversation" (I7v) was likely to be excessively fertile. In concordance with the diagnosis and possible physical markers for carriers of that disease, most chapters also have a list of recommended concoctions for the women to consume as well as particular rules for the women to abide by. The themes and organizations of books one through four are neither explicitly stated nor altogether clear. However, there are some trends that emerge when the book is broken down into its components, as can be seen in Figure 1.

**Book One** begins with diseases that are specific not only to women, but to their body parts. The focal points of the first book are the womb (referred to in the book and this essay as the matrix), the breasts and the menstrual cycle (referred to in the book and this essay as the courses). This first book has six chapters, each of which outlines a specific ailment, ranging from "the diseases of the matrix" (A4r) to the "hard swellings in

the breast" (A4v) (Fig. 1). With **Book Two**, Fonteyn takes an even closer look at the matrix and its illnesses. Throughout the ten chapters, Fonteyn expounds the role of the matrix in humoral imbalances and why it is the cause of most diseases in women. **Book Three** moves from the diseases of female body parts to the diseases of childbearing (e.g. infertility and pregnancy). It has eleven chapters, nine of which focus on illnesses caused by pregnancy, such as stomach pain and swelling. **Book Four** is essentially a continuation of Book Three in that its eleven chapters chronicle diseases that most readily effect pregnant women, as well as diseases that are most likely to impact postpartum mothers. For the most part, the four books and thirty-eight chapters of Fonteyn's *The Womans Doctour* differ from each other in the *types* of disease they cover. However, for a work that is meant to be entirely exhaustive of women's illnesses, *The Womans Doctour* is narrow and repetitive with regards to the causes of illness.

According to Fonteyn, the most common cause of disease is an unbalanced humoral composition, which most often starts in the matrix and the breasts; two parts, which are ironically also unique to womanhood and reproduction. Fonteyn presents the matrix not only as "the cause of all those diseases which happen to women" (A7v), but also as the most central and accumulative part of a woman's body. The humoral exchange that the "*Matrix* hath...with all the parts of the body" (A7v), involves the head, the spine, the heart, the stomach, and ultimately results in a collection of humoral excess collected in the breasts and the matrix. The second most commonly cited cause of illness in women is their marital status/level of fecundity; women who were not married or fertile (e.g. barren women, widows, and virgins) were more apt to retain humors and contract diseases.

According to Fonteyn, there are four distinct categories of women's diseases. The first category is all encompassing, and is explained as the "diseases that are common to all women" (A8r). The second and third categories of women's disease are less inclusive, and focus on the states of women that Fonteyn later unravels as the most humorous and unhealthy. The second category describes diseases that only affect widows and virgins: two states of womanhood that are irrevocably yoked together throughout the entirety of *The Womans Doctour* because they were not fortified with the male seed. The third category looks at "those affects that concern barren women, and such as are fruitfull" (A8r). The emphasis on fertility (and infertility) in the third chapter is complemented by the fourth, which examines "deseases as befall Women with Childe, and Nurses" (A8r). Fonteyn's overall compartmentalization of women and their diseases is indicative of a stigmatized and biased relationship between womanhood and illness. In his initial division of womanhood and throughout *The Womans Doctour*, Fonteyn highlights specific states of women that are associated with the diseases he unpacks, and are consequently more susceptible to humoral imbalance: widows, virgins, and pregnant women. These distinctions will become paramount to our exploration of Fonteyn's *The Womans Doctour* as well as our discussion of Ben Jonson's *Bartholomew's Fair*.

Table 1 allows us to visually examine the implications of Fonteyn's compartments of womanhood. The columns showcase each book's chapters (ascending down the column), and illuminate possible trends in the chapters as well as in the books as a whole. For example, although Book One looks at courses (menstruation) and Book Two focuses on the matrix (the womb), both of the books emphasize the isolated women's anatomy pertaining to childbearing and reproduction. The chapters on

*Barrennesse* in Book Three and on pregnancy in Book Three and Book Four are a continuation of Fonteyn's focus on the woman's body as a vessel for reproduction. The themes interwoven in all of the chapters (table 1) have to do with fertility-related, pregnancy-related and postpartum diseases. This physical obsession with infertile/unmarried women, and the supposed manifestation of that in the breasts and matrix is a motif throughout Fonteyn's work.

According to Fonteyn, the matrix holds an excess of putrid female blood that gestates between the breasts and the matrix, and is eventually expelled in its diseased form (menstrual blood), or its purified form (breastmilk). Breastmilk is seen as the necessary part of a woman's excess liquid, and nowhere in his commentary does Fonteyn caution men from making contact with breastmilk. Menstrual blood, on the other hand, is regarded as the impure portion of the blood, and is thought to be expelled out of the body almost as if it had not belonged there in the first place. Humor flowing between the matrix and the breasts was observed as the primary reason for the evils of women and supported the idea that any female bodily liquid in excess was a sign of physical and moral illness (A8r).

**Figure 1.** A comprehensive list of the chapters belonging to each of the four books in Nicolaas's Fonteyn's *The Womans Doctour*, as listed in the index of Fonteyn's work (A4v - A6v). The vertical columns descend in chapters in each book, with column 1, row 1 being the first chapter of the first book, and column 1 row 2 being the second chapter of the first book, etc. Chapters are capitalized in the fashion they were found in *The Womans Doctour*.

	<b>First Book</b>	<b>Book Two</b>	<b>Book Three</b>	<b>Book Four</b>
<b>First Chapter</b>	the consent of the Diseases of the <i>Matrix</i> , with the other parts	the Mother	Barrenesse, both Absolute and Respective	Natural Birth, and of Abortiveness
<b>Second Chapter</b>	the suppression, or staying of the Courses	Epilepsy in the <i>Matrix</i>	<i>Mola</i> , or shapeless lump of Flesh	hard Labour
<b>Third Chapter</b>	immoderate running of the Courses	Melancholy proceeding from the <i>Matrix</i>	Womens longings	After-Birth
<b>Fourth Chapter</b>	coming away of the Courses by Crops	cold Distemper, and windy humours in the <i>Matrix</i>	bad stomach, proceeding from vomiting	Dead Childe
<b>Fifth Chapter</b>	Complication of the Courses	hard swelling in the <i>Matrix</i>	Pain in the belly, the Passion of the Heart, and of sounding Fits	Paines, and the suppression of the Courses, after the woman is delivered
<b>Sixth Chapter</b>	hard swelling in the Breasts	Dropsey in the <i>Matrix</i>	Cough in great bellied Women	Immoderate flowing of the Courses, after the woman is delivered
<b>Seventh Chapter</b>		falling down of the <i>Matrix</i>	swelling of womens legs, when they are with Childe	Diseases which commonly befall a woman, after her delivery
<b>Eighth Chapter</b>		Itch, Chaps, and an Inflammation in the <i>Matrix</i>	Costiveness in Women with Childe	Inflammation in the <i>Matrix</i> after her delivery
<b>Ninth Chapter</b>		Cancer, and an Ulcer in the <i>Matrix</i>	bloud which commeth away from the <i>Matrix</i> of a woman with Childe	too little, and too much milke
<b>Tenth Chapter</b>		Wormes, and the Stone in the <i>Matrix</i> , and of the Piles	Water which cometh away from the <i>Matrix</i> of a woman with childe	sore Breasts
<b>Eleventh Chapter</b>			acute diseases, which happen to women with Childe	wrinkles remaining in the <i>Matrix</i> after a womans delivery, of the meanes to contract the <i>Matrix</i>

Throughout this book, there is an eerie attachment between a woman's humors, her matrix, and her general character. According to Fonteyn, the "crude, and melancholy humours" (D5r) that flow inside the female body are evil and unstable. The matrix is qualified as the "sinke of all humours" (H7r), and it is as, if not more, problematic than the liquid it holds. Keeping this in mind, the assumption that existed in early modern England was that the women were inexplicably yoked with the sinfulness of their internal organs. The rudimentary association that Fonteyn's treatise creates between humors and the female body also suggests that women are more unstable than their male counterparts. The parallels between the matrix and the women are distinct: if not careful, both can lose humoral stability, in which case, the help of an external force, a husband, father, or brother, is needed. Both the woman and the matrix are simultaneously infantilized as children who cannot maintain themselves, and demonized for their lack of control over their own character.

Fonteyn's negative portrayal of the matrix is made more complex by his personification of its apparent 'monstrous' properties. He presents the matrix as a body within the body; a monster within the woman. In the second chapter of the third book, Fonteyn writes on the "*Mola*, or shapeless lump of flesh" (K7v), found in the matrix. The mola is only found in women, Fonteyn writes, "because women onely have an abundance of this *monstruum*, more then other creatures, and that their bodies are full of grosse, thick, and tenacious humours" (K8r). The idea that early modern women were capable of great evil by both their body and their mind is one that is exemplified through the diction Fonteyn uses to speak about the matrix as if it were itself a monster or a living being. Fonteyn visualizes the matrix as alive, as a breathing mechanism that needs constant

upkeep. In regard to the disease of “The Suppression of the Courses,” or the lack of menstruation in women, Fonteyn prescribes an “issue in her leg,” so that the matrix can “exhale, and the thick humours may be purged out” (G3r). An issue, in this case, means letting blood, or cutting the leg so that blood can be discharged. The cause of this disease then, is that the matrix has lost its equilibrium between evil and good, creating so much pernicious liquid that it has come to suffocate itself. Like an animal - or a monster - the matrix must breathe again through purges prescribed by Fonteyn.

Another disease that superimposes the matrix’s state onto the state of the woman’s character is the disease of *The Mother*, more commonly known as hysteria. The etymology of *The Mother* takes first root in the Latin term, *Passio Hystericus*, or “suffocation of the uterus”, and manifests itself in women through fits, fainting, and weakness (Jorden B2r). While *The Mother* was a disease suspected to have risen upwards in the body from the matrix, *The Mother* was also used as a term for the womb (Oxford English Dictionary). It is worth noting here that the mothering entity, the woman’s body, is historically and inaccurately woven into disease. The rhetoric used to define disease was not the only thing that linked motherhood and illness together; as we will see later, the pregnant body and the pregnancy state were considered together as sickly, imbalanced, and unreasonable. The explanation of the disease of *The Mother* relies so heavily on the personification of the matrix as a monster that Fonteyn references “the ancients” who believed that the matrix was a grotesque creature of “phantastical” proportions who spent its time “wandring too and fro thorough severall parts” (D8v). The unforeseeable movement of the “animall faculty” (E5r) of the matrix paired with its manic tendencies, points to the unified fear of the ‘monstrous’ unknown present

throughout early modern England, as well as the collective fear towards the female body and its excessive nature.

Gail Kern Paster points out that women were seen as vessels for humorous and unpure liquid: “incontinent, over-productive, and requiring patriarchal disciplines” (1998, 420). Fonteyn subtly but surely demonstrates this in his medical treatise through his juxtaposition between the male seed and the female seed. In discussing the key differences between wives, widows, and virgins, Fonteyn writes “wives are more healthful then widows, or virgins, because they are refreshed with the mans seed, and ejaculate their own, which being excluded, the cause of the evil is taken away” (A8v). The significance of this statement is twofold. Firstly, women are dependent on men’s semen for achieving a sort of temporary *eucrasia*<sup>4</sup>. This justifies sex for a woman who does not *seek* it but may *need* it, while perpetuating the image of the woman as an overly passionate, sexual fiend that existed both in early modern England and much later. In the second part of this statement, Fonteyn confirms that a man’s liquid is *refreshing* and equalizing, and that a woman’s liquid is diseased and must be expelled. Fonteyn emphasizes the imperfect nature of the woman’s seed in the context of the female body’s cold character: “the womans seed, I confess, in regard of the small quantity of heat, is more imperfect than the seed of a mans” (A8v). The uselessness of the ‘female seed’ is partially responsible for the lacking in woman’s character, and is a far cry from the life-giving, baby-making rejuvenation that the male seed offers.

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<sup>4</sup> In his article, *Pharmacogenetic Principles in the Hippocratic Writings*, Dr. Gerasimos P. Sykiotis, MD, PhD, defines the term *eucrasia* used as a perfectly balanced humoral body “that maintains health” (1219). Conversely, the term *dyscrasia* pointed to humoral imbalance and imperfection.

In the chapter on *Barrennesse*, Fonteyn's instructions for women to stay fertile are entrenched in obedience and dependency on their male counterparts. Although we are now equipped with the scientific context to understand infertility and its biological causes, Fonteyn uses gendered social behaviors to create the double standard on what men and women had to do to become fertile. Fonteyn writes that a fertile man is "ever frequenting the young company of Maids, and Virgins, being excited by the flagrancy of their eyes to *Venereous dalliances*" (46). In short, a man's fecundity was reliant on his "lustfull speculations" (46); the more zealous his overt, unfiltered sexual advances were, the greater a father he would be to his future kin.

It is horrifying, but perhaps unsurprising, that the ability of an early modern man's social advances comes at the cost of female objectification and unsought propositions; one of the many things the 17<sup>th</sup> century and the 21<sup>st</sup> have in common. Contrarily, an ideal fertile woman had to be "gentle of behaviour" (I6v) and could not be "luxuriant, and [part of] the whorish crew" (K1r). Women who wished to conceive were not required, like men were, to show their femininity by lusting after available men. Instead, they were relegated to silence, obedience, and chastity. In fact, Fonteyn deemed women who had "frequent cohabitation with men" (K1r) infertile, due to the fact that the "neck of the *Matrix* is made so slippery, that it cannot retaine the mans seed" (K1r). The double standard applied by Fonteyn to infertile women and men is emblematic of the social requirement that women were quiet and obedient.

In *A Godly Form of Household Government: for the Ordering of Private Families, According to the Direction of God's Word* (1561), John Dod and Robert Cleaver deem female subservience as necessary for any household in which "God's glory

may be advanced.” Whereas “the duty of the man is, to be skilfull in talke,” the responsibility of the wife is “to boast of silence” (Dod and Cleaver, L4r). The double standards of gendered expectations are common threads found in Fonteyn as well as Dod and Cleaver’s work. The very existence of a female in early modern England was dependent on blind obedience: an idea that is reminiscent of a larger early modern norm that denied women autonomy in their homes and with their bodies.

Not only were women seen as dependent on men for their fertility in early modern England, but also for the quality of the pregnancy. In Fonteyn’s depiction of conception, male semen was the only ‘seed’ that held the whole substance of a child. The woman is only relevant because of her matrix, which works only to “aptly retain” and “fully perfect” (I6v) the progeny that the male gives it. Female dependency on men for the creation of their child was part of the popular early modern English notion that women were too uncivilized to be given agency in any part of their lives. In other words, women had to be under the guidance of men because their excessive tendencies rendered them incapable of caring for themselves. Because pregnancy was a state of natural excess for women’s humors, Fonteyn emphasizes the importance for physicians to reign in their pregnant patients; particularly those who are “extravagant and preposterous in their appetite” (L4v). The affiliation between pregnancy and the invasion of “dangerous, direfull, and pernicious symptoms” (L7r) sheds light on the complex power roles that were at play regarding a woman’s body and her humoral temperament.

The 17<sup>th</sup> century principles of the female body are perfectly summed up in Fonteyn’s approach to pregnancy. Pregnancy was merely an extension of the ‘imperfect woman’ and emphasized the negative attributes of women that early modern medicine

held as truth. Women were naturally leaky, but pregnant women were leakier; women had excessive appetites, but pregnant women had “inordinate longings” that resulted in sickness and abortion; women had humoral imbalances, but pregnant women did not have “a free vent for their crude and indigest aliments” (M2v), and were thus inflicted to a larger extent. Women's’ lack of independence during the childrearing process is drenched with biases against the female sex, stigmas that were born out of and into the idea of humoral imbalance.

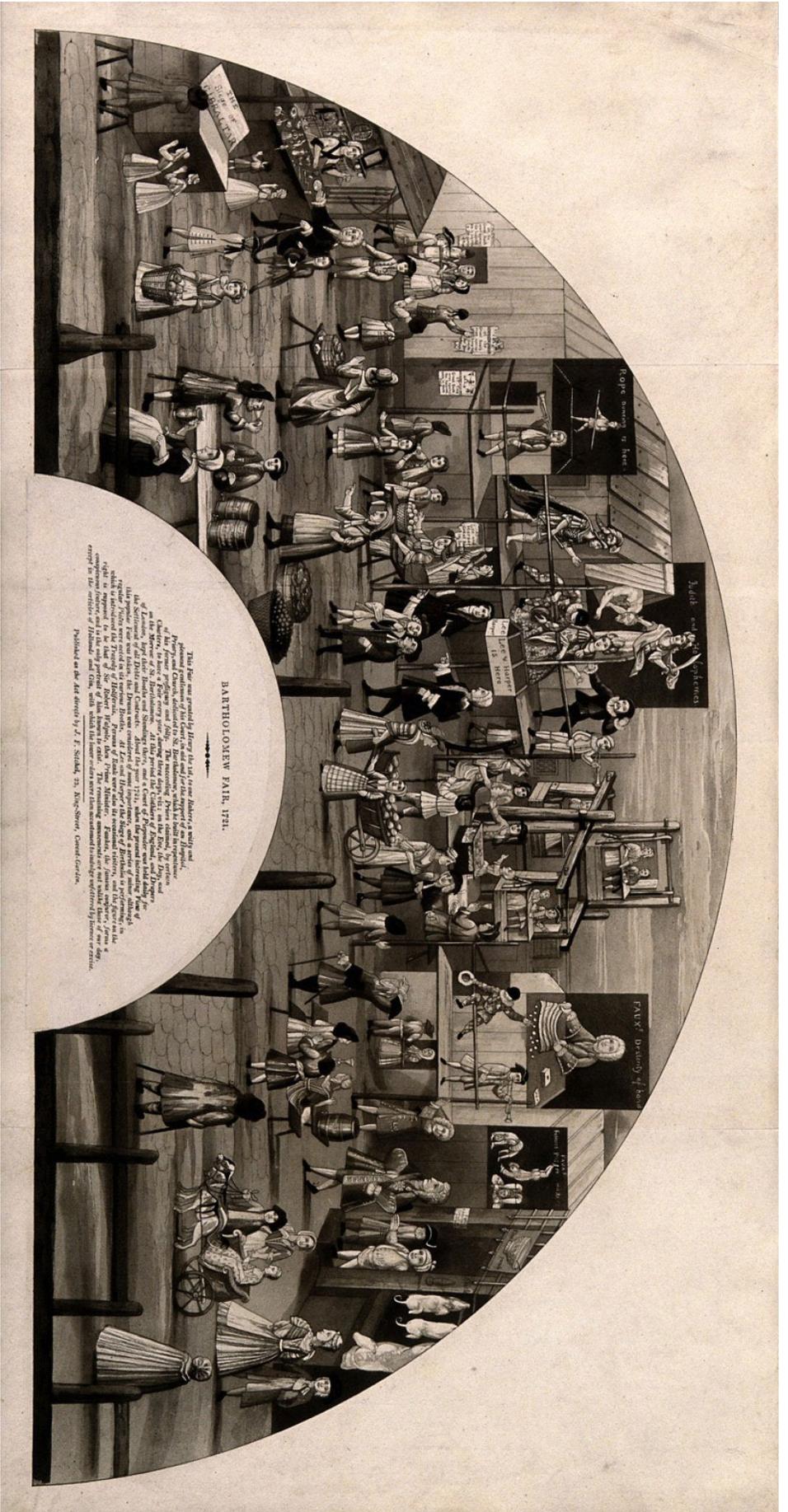
Just as an early modern English woman's dependence on a man’s seed rendered her deficient and flawed, so did the unborn child’s nutritional dependence on the mother play into the mother’s natural weakness. The popular theory of pregnancy during the Renaissance was that the unborn child received “the sweetest part of the bloud for its own nourishment” (P6r), and left the most heinous, evil portion to its mother. Not only does this theory clearly give the child the authority in the relationship, but it asserts, again, that pregnancy is simply an amplified version of an already lacking woman. Through fertility, conception, and pregnancy, Fonteyn’s *The Womans Doctour* disavows the value of the female body, particularly in situations when it is not an accessory to masculinity. Widows and pregnant women, in particular, were thought to “be oppressed with an abundance of ill humours” (B2v). Fonteyn’s *The Womans Doctour* gives us insight into the early modern social critique of woman and the connotations of ‘weakened’ states of womanhood. If individual disease theories violently perpetuated the belief of feminine inadequacy, expansive medical treatise such as Fonteyn’s unwittingly altered the fabric of society for generations to come.

*IV. A Physician and a Puritan Walk into a Bar; Using Medical Concepts to Analyze Literature*

In *The Womans Doctour*, Fonteyn chronicles the vast number of diseases with which a woman can become infected. Fonteyn's work revolves around the humoral theory and its applications in women's bodies. His assumptions and self-proclaimed 'facts' epitomize a vivid image of a diseased woman. The pictures Fonteyn paints for his audience gives us an early modern framework in which to understand the female body as it was conceptualized in the 17<sup>th</sup> century. Through the juxtaposition of a medical text and a comedic play, we begin to acknowledge and better understand the relationships between unexplored historical mediums and 'popular' early modern drama. Medicine and playwriting have no obvious relationship with one another. There is, however, a profound connection between the two works that allow them to parallel each other in extraordinary and meaningful ways. The one-dimensional, historical paradigms of oppression and obedience commonly used to analyze early modern women are not false, but can only get us so far. We need novel, invigorating resources that will not only contextualize the works of interest, but push us toward new horizons of understanding. Fonteyn's *The Womans Doctour*, engenders social stigmas around the female body and provides us with the tools to properly analyze Ben Jonson's comedic play, *Bartholomew's Fair*.

Jonson's depiction of the notorious early modern social event, Bartholomew's Fair, is jarring, to say the least. Indeed, Jonson's play is so chock full of thieves and prostitutes that the Puritan character, Zeal-of-the-land-Busy, deems the fair, "the tents of

the wicked” (1.6.70). In his representation of the infamous fair, Jonson compares the immorality of the Romish fair and the supposed piety of the Puritan characters; this dichotomy is integral to the play’s satire on religious and social hypocrisy. Despite the unmitigated obscenities that occur in Jonson’s Fair, historically, Bartholomew’s Fair was not always a cesspool of sin. In its beginning, Bartholomew’s Fair was a Romish charter-fair requested by King Henry I, in honor of the patron Saint, Bartholomew the Great (Allen 260). Immediately upon its founding in 1123 A.D., the Bartholomew’s Fair was at once a keystone of London society and entertainment (Allen 262). The Romish fair was consistently celebrated on August 24th, St. Bartholomew’s Day, up until 1855 and represented the festivities of Catholicism both to those who attended it and those who opposed it (Allen 260).



**Figure 2. An artistic representation of Bartholomew's Fair.** Taken from Ricky Jay's "Jay's Journal of Anomalies." The commotion of fair festivities is omnipresent in the image. On the far right, Bartholomew's Fair pigs are hung up in the stall for sale.

Jonson's satirical representation of Puritans attending the intensely Romish Bartholomew's Fair is representative of the tension between the two churches. By the time Jonson's play was first performed in 1614, Puritans had already come to represent a resistant force against both the monarchy (at the time, James I) and the Catholic church that it represented (Lake 490). The Puritans's unwillingness to accept Anglican control continued until King James I death in 1625 and into the English Civil War of 1642. Although *Bartholomew's Fair* is indeed a comedy, the hostile relationship between the sins of the fair and the Puritans that visit it is indicative of the civil unrest occurring in early modern England. Through the hypocrisy of his characters, Jonson calls for religious acceptance and greater responsibility to practice what one preaches. For example, Zeal-of-the-land-Busy is regarded both by himself and the female character Purecraft as a particularly pious Branbury man (Branbury was seen as a place of "Puritan extremism" (Pinciss 346)). Despite his outward devotion to Christ, he is found as "an excellent right hypocrite" (III.vi.45). Upon arriving to the fair, he eats the very Bartholomew-pig that he once called "the spice of idolatry" (I.vi.53), and indulges in a 'pailful' of ale. The hypocrisy of Busy's Puritan character in the wake of temptation symbolizes Jonson's idea of the hypocrisy of Puritanism. Jonson creates satirical perceptions of religion through his characters and gives the audience insight into the challenges and importance of religious acceptance.

Despite the overt abundance of male characters in *Bartholomew's Fair*, it is the female characters in the play, Win, Purecraft, and Ursula that advance the plot. The three women, each in their own way, are integral components to the movement of Jonson's narrative: Win's alleged pregnancy is the catalyst in moving the Puritan family into

Bartholomew's Fair; Purecraft motivates the female characters Quarlous and Winwife to attend the fair and to act on their fickle love for both her and Grace; and Ursula's raucous pig-stall cum brothel places emphasis on the immorality of the Fair and its attendees. Besides their role in advancing the plot, the three women also embody three female conceptualizations of sin. This creates an ironic relation between the Puritan body and the female body; a juxtaposition that fits well into Jonson's satirical narrative.

The innately sinful female body is an icon central to Jonson's *Bartholomew's Fair*. Win, Purecraft, and Ursula diverge from the three most important elements of womanhood: chastity, obedience, and silence. They move beyond the customary female position of subjectivity and into a more liberating, masculine narrative; in addition to this, or because of it, they are deemed as diseased and excessive. To better understand the relationship between the sinful female body and the implications of Jonson's female character, I use Fonteyn's *The Womans Doctour* as a tool to interpret the characters and the play itself. Fonteyn's anatomical treatise ultimately offers more than an in-depth analysis of physiology and illness, it also offers a social critique of women and their bodies. Fonteyn contextualizes women in the gender biases of the 17<sup>th</sup> century, which allows us to better understand Jonson's larger schema for *Bartholomew's Fair* and the role of female characters in it.

***V. Win: "be womanly, Win!" (1.3.39)***

In Jonson's *Bartholomew's Fair*, Win's pregnancy, whether feigned or real, is the catalyst that instigates their journey to the fair and the overall commotion that ensues. After the first act, Win's pregnancy is not mentioned often. However, her generally excessive demeanor and cravings for specific foods continuously remind the audience of pregnant women's proclivity towards leakiness and unreasonable actions. In Fonteyn's book on "all such diseases as are peculiar to that sex (women)," the last half of the book is dedicated entirely to pregnant women and their ailments. Within this narrative, Fonteyn urges everyone to be wary of what he deems "a known truth, that most dangerous, direfull, and pernicious symptoms invade women with childe" (L7r). Fonteyn's emphasis on pregnancy as a sickened state is a far cry from the healthy, glowing ideal of pregnancy today, and speaks to the 17<sup>th</sup> century conception of pregnancy as an imbalanced state of health for a woman. Throughout the latter half of his work, Fonteyn accents the negative consequences of pregnancy, and how women "great with childe, are oppressed with an abundance of ill humours" (B2r). In this context, his word choice of 'oppressed' is curious in that it resembles a framework commonly used to think about women and pregnant women; that they are - by nature - destitute, abused, and inadequate.

Win's pregnancy craving for Bartholomew's Fair pig is deemed by Busy as a "natural disease of women call'd, 'a longing to eat pig'" (1.6.46)<sup>5</sup>. At first glance, Busy's

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<sup>5</sup> All further citations to Ben Jonson's *Bartholomews Fair* will be in the form of (Act. Scene. Page #), and will be taken from the 1964 print, published by the University of Nebraska Press, and edited by Edward B. Partridge.

reference to pregnancy cravings as a legitimate disease seems to be a satiric jab at Puritans and their prude and solemn nature; a Puritan with stringent morals would take even the smallest of symptoms and prescribe to it a larger notion of morality. What this analysis overlooks, however, is that in the 17<sup>th</sup> century, women's longing was *actually* characterized not as a minor symptom of pregnancy, but as a critical disease that threatened both mother and child. Fonteyn devotes a whole chapter on the disease "of women's longings," and explains why women like Win "are sometimes so extravagant and preposterous in their appetite, that they refuse wholesome meat, and long after coales, chalk, a piece of an old wall" (L4v) and other disgusting substances. Fonteyn's use of words such as 'preposterous' and 'refuse' makes it seem as if women are actively seeking out cravings and illness. This perpetuates the idea that women cannot care for themselves as men can and are at fault for having caused their own ailments.

The narrative is not directed at individual women; rather, it is a blanket responsibility that all women must endure based on the historical idea of women as sinful, not unrelated, perhaps, to the Judeo-Christian myth of Eve and original sin. With Fonteyn's assistance in analysis, a literary reference that may have seemed like an ever so slight affront to Puritanism can be expounded as the grave view of pregnancy as an illness, or 'lacking' state of a woman. Using both Fonteyn and Jonson's narratives, we become privy to the debilitating early modern conclusion that womanhood is an illness, in and of itself.

It is a decisive choice that Win's longing is for a Bartholomew pig, rather than wine, cheese, or other sustenance. The sinfulness of a Bartholomew pig is particularly potent for those with Puritanical leanings because consuming a Bartholomew pig requires

a necessary journey into the heart of the sin-filled fair. It is fitting that such an abundance of evil actions by the Puritans is initiated by pregnant woman, Win. An aspect of Win's situation that is easily overlooked is the cyclic nature of her pregnancy longings.

Although deemed as a natural disease for pregnant women, Fonteyn makes it clear that such "depraved appetites and continuall intemperance in their diet...pollute the body, and introduce a cold distemper" (N1v). Here, Fonteyn suggests that if pregnant women give in to their indecent cravings in lieu of being purged, they run the risk of becoming more imbalanced and ill. In *Bartholomew's Fair*, Win demonstrates this by taking an ill-favored journey to fulfill her craving, which launches her and her family into deeper misfortune, evidenced perhaps by her movement into prostitution near the end of the play.

In addition to the implications of Win's pregnancy and barbaric longings for Bartholomew pig, the characters surrounding Win often refer to her as a leaky and excessive woman. Jonson must have been familiar with the stereotype of pregnancy as a state of leakiness, because his characters often comment on Win as a 'leaky' female body. In a conversation between John Littlewit, a proctor, and Humphrey Wasp, a second man, Win is brought in not as a contributor to the interaction, but as a verbal accessory that defines the use of her leakiness. Wasp tells Littlewit that his "little wife" will "spit" and "stale" in the box that Littlewit has been hiding (1.4.60, 54, 61). In this case, *stale* is synonymous with *urinate*, and reduces Win to a body full of unclean liquids that must be expelled. Wasp's expectation that Win, as a pregnant woman, cannot control the liquids within her illustrates pregnant women as barbaric, sinful, and out-of-control.

Win's leakiness does not end with Act One. Near the end of the play, in Act Five, Win is tricked into prostitution by none other than pig-woman Ursula, another one of Jonson's vile female characters. Ursula and Whit urge her to take up the luxuries of prostitution, which gives "a finer life.... than to be clogg'd with a husband" (5.4.56). Whit's use of the verb "clog" to explain Win's married state is comedic because of the crude suggestion of vaginal penetration. Less obviously, 'clog' is a subtle nudge towards Win as a pregnant woman filled with pernicious humors. The pairing of pregnant Win with the verb "clog" creates a slightly disturbing visual argument that women in weakened states were too humorous and needed to be periodically emptied. The rudimentary metaphor of women as 'overfilled vesicles' is crude, but nonetheless acts as a visual aid to propel Jonson and Fonteyn's agenda of curing weak and diseased women. Despite the subtlety, the choice diction and rhetoric that other characters direct at Win label her as woefully filled with poisonous liquids, a concept that is also illuminated by Fonteyn. Fonteyn's book is based on the physiognomic and humoral 'facts' of the time', and consequently gives us some clarity into Win's character.

In *Bartholomew's Fair*, Win's pregnancy is more than a narrative accessory to advance the plot; for Jonson, pregnancy implies inadequacy. Whereas a non-pregnant Win may have been obedient enough to appease Jonson's idea of a healthy woman, a pregnant Win is swept up in the crudeness of her weakened state. Fonteyn offers a social narrative on pregnancy that gives us valuable insight into Win's character as a pregnant and consequently, diseased, woman. Moreover, his criticisms provide useful acumen with which to contextualize Win's actions and relationships with other characters.

***VI. Purecraft: "but what shall we say concerning widows, who lye fallow, and live sequestred?" (B1r)***

Pregnancy is not the only state of womanhood that Fonteyn brands as excessive and ill-prone. Like pregnant women, widows were surrounded by the oppressive stigmas of early modern England. According to Fonteyn, widows were apt to become sick due to their lack of intimacy with men and reception of semen. This stigma that surrounded widows and the sinfulness of their man-less state is explained in *The Womans Doctour*, which illuminates why widows like Purecraft were predestined to excessive illness. In his work, Fonteyn presupposes that widows are in the same class as youthful virgins simply because they are not often "refreshed with the man's seed" (A8v). Indeed, Fonteyn claims that the absence of semen allows the women's seed, the supposed "cause of evill" (A8v), to fester and ruminate in humors and consequential illness. Despite their similarity, it is likely that widows were more readily looked down upon than virgins because they had already been 'used' and were inclined to have "venerous conjunctions" (B1v). Without male guidance and "the honest instrument of procreation" (1.3.72), widows were viewed as lacking the obedience and fertility that wives were celebrated for.

In Fonteyn's work, widows and virgins were prone to ailment simply by virtue of being without constant access to the 'glory' of the male seed. In particular, the disease of *The Mother*, or "of melancholy proceeding from the *Matrix*" (F2r), was an ailment found especially in "lusty widowes" (E2r). The cause of the disease was humoral excess, and the cure - according to Hippocrates and Fonteyn- was "the evacuation of that excrement" (F3r). Exactly *how* women were meant to get rid of the humoral 'excrement' in their

matrices was never explicitly uncovered, but other portions of Fonteyn's work suggest orgasm and marriage as effective cures. Fonteyn writes that even the fatal disease of *The Mother* could be prevented or cured in "married women that enjoy [sic] the company of their husbands" (E2r). Fonteyn's conflation of widows and disease created a portrayal of widows as innately sinful and imbalanced, and affirmed women's dependence on men for livelihood and health.

These supposed causal links between unmarried status, humoral deficiency and women's illnesses carry over into Jonson's portrayal of Dame Purecraft in *Bartholomew's Fair*. In Act One, Quarlous attempts to convince Winwife not to pursue Dame Purecraft due to her being "so old as no chaste or married pleasure can ever become 'em" (1.3.70-71). According to Quarlous, widows were not far from a virulent plague; easy to catch but hard to cure. Such a devastating and ultimately fatal union between a bachelor and a widow was sure to result in the "quartan ague and the black jaundice" (1.3.80-81). In early modern England, both a quartan ague and jaundice could be seen as fairly feminine ailments. The quartan ague was a 72-hour (quartan) fever characterized by paroxysms or epileptic-like fits (1.3.80). At that time, such symptoms would have been diagnosed as female hysteria or *The Mother*, two female diseases, like the quartan ague and black jaundice, thought to be caused by excess humors. These 'leaky' diseases were strongly associated with widows and provided a framework in which widows were sickly by nature. At first glance, Jonson's presentation of Purecraft as a Puritan is prudish and restrained; a far cry from the sickly implications of widowhood we would expect from Quarlous's rhetoric. The dichotomy between the

‘sickly widow’ and Purecraft is curious but upon closer analysis it seems to allow Jonson’s satirical portrayal of Puritans to be pronounced in the fullness of his work.

Widows who lacked semen were not only thought of as sickly, they were also surrounded by a stigma of venery and lust. In *The Womans Doctour*, widows are often brought up as a prime example of the lustful dispositions of women. Fonteyn’s tenets on widows and their disposition towards lust help contextualize Purecraft’s position as an excessive widow in *Bartholomew’s Fair*. Fonteyn claims that widows cannot help but desire sex because they must “live sequestred from these venerous conjunctions” (B1v). Fonteyn asserts that widows - like all women - need penetrative sex to live a healthy life. Without the more acceptable avenue of sex with a husband, widows have no choice but to succumb to their barbaric inhibitions and pleasure themselves: a ghastly sin for the pious women of early modern England. Married women, on the other hand, desire sex from their husbands and benefit from male penetration “by reason of the opening of the veines, and the comming away of the superfluous bloud” (B2r). That is, it is fortuitous to be a married woman having sex with a male partner because male penetration helps unclog the matrix and loosen female humors. Fonteyn’s notion that widows have “frequent titillation” (B1v) and an unfulfilled appetite for sex that is not necessarily penetrative is one that connotes judgment of sin and immorality. In his view, for a widow to lust after sex when they do not have a husband is utter heresy. In *Bartholomew’s Fair*, as in the work of Fonteyn, the lustful speculation of a woman is disgraceful and unseemingly; it removes the man from the situation, eliminating benefits of the ‘male seed,’ as well as any chances of reproduction.

The Fonteyn-like rhetoric that classifies widows as lascivious and animalistic comes up in Jonson's characterization of Purecraft in *Bartholomew's Fair*. Purecraft, being a Puritan, has a fairly prude outlook on life. Despite her moral dependency on Busy's piety and her perpetual fear of "the wicked Tempter...and its foul temptations" (1.6.13-15), Purecraft is often defined by others as carnal and undomesticated. When Winwife articulates his love for Purecraft, Quarlous persuades him to "leave thy exercise of widow-hunting," most likely to men less qualified and more desperate than him. Likening the pursuit of Purecraft to 'widow-hunting' is a particularly poignant comparison and reduces widows to feral beings with illogical inclinations and a need to be restrained. The metaphor continues throughout the conversation until Winwife is sufficiently convinced to "leave the chase of my widow" (1.5.132-133) and come "off that scent now" (1.3.104.).

Using Fonteyn's narrative to explore the negative implications of widows elucidates how the presence or absence of men's sexual company can impact the health of women. The causal view of semen as a prime mover in women's health bring clarity to our understanding of Jonson's character, Purecraft, and ties together a social view of widows that at once sees them as sickly and sinful. Most curious of all is that Jonson, in spite of his moralistic stance, develops unmarried female characters of strength. In being unrestrained by a male partner, their male counterparts view the unmarried women as cryptic, uncontrolled, and outside of the realm of full understanding. As we see in Winwife's desire for Purecraft, this mysterious and out-of-reach quality also makes unmarried women attractive and desirable, a conflict in Jonson's portrayal of women that at the close of his play remains unresolved.

***VII. Ursula and the Gender Binary: "out upon her, how she drips!" (2.5.102)***

Although Jonson does not constrain her to the role of virgin, whore, widow or the like, the character Ursula embodies the most animalistic and sinful features of womanhood: she is unmarried and uncourted; leaky and excessive in character; she not only *eats* Bartholomew pig, but produces and sells it. Fonteyn's categories of women's illnesses seem lost on Ursula as she is not symptomatic of any specific disease; she simultaneously fits into none of Fonteyn's specific categories and into all of them. In a way, Ursula's hyper femininity allows her the status of a superwoman: all of her traditionally female characteristics - leaky, demanding, arbitrary - are exaggerated. To the modern reader, it is unfortunate that Ursula's 'superwoman' characteristics, rather than portraying her as a powerful woman, are so overdone that they become negative and masculine. In other words, Ursula's characteristic feminine complexities become increasingly more ludicrous as the plot continues. She becomes so raucous, authoritative – unapologetically so – that she moves into a traditionally masculine territory of personality traits. Her heightened sense of agency coupled with her authoritative roles at the fair allows her to tread the line of the gender binary as an undefined body that represents both an enemy and a temptation for both men and women.

Ursula presents a strange dichotomy: she is excessively leaky and sinful, as well as crude and authoritative. To unpack the symbolism brought forth by Ursula's character and individual plot, it is important to analyze her through the lens of hyper femininity as well as masculinity. Throughout the play, Ursula's womanhood is often referred to in the context of sin and excess by the characters around her. In her first scene, she demands "a

bottle of ale," and claims that if she is not quenched, she shall "melt away to the first woman, a rib, again" (2.2.50-51). Her incessant need for alcohol not only in the morning, but throughout the fair, illustrates her blatant and unveiled embodiment of immorality. Ursula's claim that she will become "a rib, again" is a blanket explanation for her sinful nature, and indicates that she is as innately dissolute as Eve and Eve's sins. This statement accomplishes two tasks: it reminds the audience that the bare state of a woman is not only slightly sinful but innately and irrevocably so, and it suggests that Ursula is Jonson's portrayal of the prototypic woman. While Purecraft and Win fight to maintain a level of purity and dignity, Ursula's self-proclamation of sin instantly indicts her as an ultra-sinful embodiment of what womanhood represents.

The idea of 'sinful womanhood' is perpetuated by the labels that other characters thrust on Ursula. Simple diction used to describe her poignant actions as immoral are also used to siphon the dignity from her womanhood. The ways in which other characters criticize Ursula often reference basic attributes of the female body. When Justice Overdo encounters Ursula cheating the men out of their drinks, he is appalled at "the very womb and bed of enormity! Gross, as herself" (2.2.106-107). The likening of an immoral act to the womb reflects a strongly held cultural belief of the time: that the most feminine parts of the body were also the most corrupt. Jonson illuminates this view when he speaks to Fonteyn's blatant characterization of the womb and female anatomy in general as "an abundance of... monstrum" (K8v). Not only does Justice Overdo liken Ursula and her actions to the sinful nature of the womb, but he also attributes Ursula's actions to her womb, or her womanhood. When Justice Overdo equates Ursula's sinful actions with womanhood and then equates both entities with Ursula, "gross, as herself", Jonson has

created a synonymous relationship between Ursula, sin, and womanhood. This relationship between sin and womanhood not only remains inextricable throughout the play but as is demonstrated by Fonteyn's work, is prevalent in the cultural beliefs of the time.

Like Win and Purecraft, Ursula exhibits a characteristic womanly 'leakiness' that pervades into all areas of her life. Jonson makes this clear when Quarlous, Knockem, Winwife and others refer to her with degrading names that refer to her body as an imbalance of humors and excessive liquid. In her scenes, Ursula is named "juicy and wholesome" (2.5.78), a "plain plump soft wench" (2.5.77), "an inspir'd vessel of kitchen stuff" (2.5.74). Each of these names places Ursula in the category of womanhood and implicates her body as a vessel for excessive liquid, a physical characterization akin to that offered by Fonteyn. Additionally, the verb 'dripping' is often used in conjunction with Ursula when describing actions that have nothing to do with wetness and liquid. When Ursula yells at Quarlous before the fight, he refers to her jeering as 'dripping' and tells people to notice "how she drips!" (2.5.102). Using the visually aesthetic verb 'dripping' in place of 'speaking' is a pointed choice by Jonson, and implies that women are somehow leaky in all their behaviors and actions. Even Ursula's belonging is referred to as the "dripping pan" (3.6.123-124), which cements the idea that Ursula is indeed a woman, and that her immoral womanhood impacts the environment – and the inanimate objects - around her.

Despite Jonson's characterization of Ursula as excessively leaky and feminine, she maintains an aspect of agency and authority that Win and Purecraft do not. The intense power that Ursula carries, coupled with her inclination to involve herself in

traditionally masculine activities (e.g. drinking and smoking) allows her to toe the line between male and female, effectively surpassing the gender binary. The grievance that other characters make about Ursula is not that she is constantly drinking ale and smoking her pipe, but that she is constantly talking about it. The majority of her interactions with her feeble servant, Mooncalf, are comprised of him taking care of her needs, “quickly, a bottle of ale to quench me, rascal" (2.2.49)"/"fill again, you unlucky vermin" (2.2.75)"/"where's my pipe now? Not fill'd?" (2.2.82-83), much like a traditional early modern wife would have done for a husband. In these ways, Ursula's authority and undeniable agency in her interactions differ from Purecraft and Win's more feeble jests. Because masculinity and authority went hand-in-hand in early modern England, those characteristics of Ursula that are neither traditionally masculine nor traditionally feminine pervert the nature of her presence in *Bartholomew's Fair*, and move her out of the gender binary, in which the other women reside. In the latter half of the play, when Ursula is working at a brothel with “the velvet woman within" (4.5.18), she refers to her own sexuality with contempt and disregard. She claims that her “vessel is employed...I have but one, and 'tis the bottom of an old bottle" (4.4.198-199). Here, Ursula creates a play on words: On one hand, she may be implying that her matrix is unappealing and disagreeable to suitors, much like the bottom of an old bottle; on the other, she could be saying that she has male genitalia, claiming that she physically does not have a matrix and the only *vessel* she has is that of her trusty bottle of ale. In both of these possible interpretations, Ursula lends herself to a more masculine narrative through denying her sexuality.

Ursula is neither truly masculine nor truly feminine, and she is constantly toying with the idea of sin across the gender binary. Her feminine sin (leakiness and excess) melds into her more masculine sin (authority and crudeness) to create ungendered characteristics. This, of course, makes superimposing Fonteyn's distinct categorizations onto Ursula's character particularly difficult. There is, however, a specific noun mentioned by both Jonson and Fonteyn that is intricately connected to humoral theory and thus might help us tease greater clarity of meaning from Ursula's character: *vapor*. The word *vapor* has an extensive etymology, and has been defined in a multitude of ways over the past centuries. Although the word is varied in definition and application, it is most often used in conjunction with an exhalation of some sort (OED). The OED suggest that *vapors* has a negative connotation, and was used to "denote something unsubstantial or worthless" and "to have an injurious effect on the health" (OED: *vapor*). In the 1600s, *vapors* were commonly referred to as a disease in and of itself: a form of hysteria, hypochondria, and depression of spirits.

Jonson presents humors and vapors as complementary, if not entirely analogous. According to James E. Robinson, *Bartholomew's Fair* is merely a "comedy of vapours": the definition of vapors being an intangible medium of madness and delusion. Robinson provides a complex model wherein humors are the cause and vapors are the disease: "the vanities feed the humors that burn in vapours that produce madness and vanities" (77). Robinson's model is a cyclic perpetuation of madness, with the act of vanity existing as both the substrate and the product. With this in mind, we can see that the characters in Jonson's *Bartholomew's Fair* are largely enveloped in a cloud of vanity for their own righteousness and self-interest. The vapors, which Robinson suggests proceed from the

humors, are used in *Bartholomew's Fair* ubiquitously to describe a character's emotions or intention ("hang your vapours, they are stale, and stink like you" (3.2.103-104)), a separate entity or fact ("He must not know you, nor you him; theres the true vapour" (5.4.47-48)).

The idea that the use of vapors in *Bartholomew's Fair* is deeply connected with the humoral theory is evidenced by the use of vapors in Fonteyn's *The Womans Doctour*. Throughout *The Womans Doctour*, the word vapor is used 27 times over. In some parts of his work, Fonteyn uses the concept of vapors and humors interchangeably in a variety of scenarios. He claims that epilepsy in the matrix occurs when the "*animall* faculty (or matrix) strives to expel that humour, or vapour from it selfe" (E5v). In this description, Fonteyn presents humors and vapors as identical to one another. In other parts of *The Womans Doctour*, the word vapor is used negatively, as the *cause* of an illness. Women who felt "themselves molested with such vapours" (Q4r) were most likely to succumb to humoral imbalance and illness. In the female body, such vapors were often the precursor to humors, and were only thought to arise "when the humor invades either the body, or the minde" (E5v). Fonteyn's conceptual framework around *vapors* brings clarity to the incessant use of the word in *Bartholomew's Fair*, and reaffirms the correlation between humoral excess (in the form of vapors) and the characters of *Bartholomew's Fair*.

Ursula - the maddest, or the most powerful of them all - is so in part because she is overcome by the vapors that surround her. Given that vapors and humors are closely linked, it is not surprising that the word *vapor* is used excessively in scenes with Ursula. When Ursula and Knockem fight, Knockem attempts to reconcile their relationship by having "a fresh bottle of ale, and a pipe of tobacco; and no vapours" (2.4.55-56). In this

particular scenario, while Knockem's meaning is most surely *animosity*, he uses instead the word *vapors*. However, in the next scene, he references his kindred relationship with Ursula by toasting to "health to Urs'la, and a kind vapour" (2.4.64). In his toast, Knockem reverses his meaning of the word simply by placing "kind" in front of it. The excessive use of the concept of vapors and the malleable nature of it in *Bartholomew's Fair* is enticing, and again points to the presence of the humoral theory and idea of excess liquids in Jonson's understanding of his female characters.

It is also at Ursula's pig bar where the infamous *game of vapors* is played. This game is relevant to our discussion of the early modern female body because vapors "arise from bilious humors" (Robinson 66), which, as we know from both Fonteyn and Jonson's accounts, were understood to be found most readily in and amongst women. The game occurs *because of* Ursula's ale and *in* Ursula's stand; she becomes entangled in the dysmorphic truths of the game, despite her protests. Ursula is portrayed as unstable in vapors *and* in humors, and is developed as the most sinful character in *Bartholomew's fair*. It is logical, then, that Jonson would link Ursula to the *game of vapors*, which is almost as convoluted as Ursula herself and has but one rule: "every man to oppose the last man that spoke, whether it concern'd him, or no" (Jonson 119)<sup>6</sup>.

In this game, Jonson plays with the malleability of truth; each character has his or her own reality that depends on the reality of the character that spoke before them. The *game of vapors* is nonsensical, but hints at the tendency for humans to be deluded by themselves and what they stand for. This delusion of the human race is also exhibited by

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<sup>6</sup> This is a stage direction in Act 4, Scene 4, directly after line 27.

Jonson in his characters: the plot revolves around the falsities of Win's pregnancy and longing; Busy decidedly swears off the fair, but ends up indulging the fair's sins; hypocrite Justice Overdoo pompously tries to convict people for their own deceits, but in doing so deceives others by disguising himself as one of them; Ursula cheats her customers out of alcohol and money. In a way, every character in *Bartholomew's Fair* is playing their own version of the *game of vapors*. Amidst the fair, each character's truth is perverted from reality with a fleeting hypocritical tendency. According to Robinson, the "impassioned humors of their lower nature" (Robinson 66) is a direct cause of the vapors of the fair that engender madness and delusion. The intent behind Jonson's *Bartholomew's Fair* is to break the human race out of their delusional vapors of self-love and hold them accountable for their sinful actions. In *The Womans Doctour*, Fonteyn ties both humors and vapors to the idea of illness in women; Jonson also uses vapors to suggest a sort of sickly delusion that pervades both Ursula and other characters as well.

Representations of the female body in early modern England are complex and varied, but the techniques used to explore these representations have not been exhaustive. Using medical manuscripts as an analytic tool gives us insight into how biases against the female body can be manifested in early modern plays. Fonteyn's *The Womans Doctour* offers more than a commentary on female physique and illness; it presents a social critique of the female body as an individual entity. Without the anatomical treatise that Fonteyn provides, the breadth of Jonson's discourse and strategy in *Bartholomew's Fair* would be lost in a 21<sup>st</sup> century narrative.

Whereas Fonteyn delineates the illness of the female body, and Jonson delineates the illness of female behavior, they share a general desire to correct womankind. Women

were perceived as pets or children, who “were made to stay at home and to look after household employments” (A7r). As such, women's reliance on male-guided instruction was a cornerstone of early modern society in England. Fonteyn’s work is no exception; he presents his medical work in a fashion of patriarchal benevolence: in his proem, he gives thanks to “the ancients...in favour of that sex” and “modern men,” who “have been stirred up to their [women’s] defence” (A2v). The need to correct the female race in its sins can also be seen in Jonson’s work, wherein he presents female characters who do not live up to his standard: pregnant and desirous Win who is asked to “be womanly” (1.3.39) when she will not kiss her husband’s friend on his command; Purecraft who is referred to as a “tomb” (1.3.74) and a “carcass” (1.3.68) because she is an older widow; and Ursula whose foot is found covered with diseases of “the mallanders, the scratches, the crown scab, and the quitter bone” (2.5.165-166). Both Fonteyn and Jonson readily depict the female race in a negative light, with the implication that their close instruction will help women become the least sinful versions of themselves. In doing so, the texts define the demands of an early modern woman and give us fodder with which to consider how the female body was understood in early modern England.

In a 21<sup>st</sup> century framework, Purecraft’s fickle passion for men (e.g. *Trouble All and Quarlous*) seems pitiful at worst and hopeful at best. In the wake of Fonteyn’s analysis, we now understand more clearly that Purecraft’s excessive unpredictability has much more to do with her status as a widow. Her impulse to marry every man she encounters likely stems, from Jonson’s perspective, from her inability to expulse the humors inside her body, which are - as Fonteyn claims - the “cause of evill” (A8v). As a widow, Purecraft’s plight is much more harrowing as the state of her humoral imbalance

is so precarious that Fonteyn's suggestion is to masturbate with "the hand of a skilful midwife...that the use of *venerary* is wholesome" (B1v). When analyzed with Fonteyn's reality, it becomes clear that Purecraft's excessive actions and her widow status are not mutually exclusive. Rather, Jonson's decision to make Purecraft a widow is riddled with underlying themes of gender bias powered by ideas of female dependency and the 'leaky' woman. Indeed, Fonteyn's 'truth' is alarming and far removed from the more liberated feminist narrative of the 21<sup>st</sup> century. However, embracing his medical manuscript as a tool of contextual analysis is an irreplaceable step in meeting the expectations of rigorous and accurate historical inquiry.

The medical texts from early modern England are highly understudied, but have the potential to reveal new and provocative information about literature from that time. Medical texts from the 17<sup>th</sup> century are particularly useful because, unlike 21<sup>st</sup> century medicine, they rely almost completely on unevidenced theories that contain unmitigated social biases. Thus, exploring the social theories common to that era can bear implications for the female body and the historic scrutiny of womanhood. To this point, another application of "the biological detailing of female inferiority" (Paster, 1998, 421) that Fonteyn's work provides us with is the study of early modern plays by the global theater community. As it is imperative that actors are learned in the government and educational politics of their character's period, it is equally as important that they understand the body politics associated with their character's identity. An actress playing Ursula may read her as an elderly woman with incontinence issues; however, upon reading Fonteyn's work, the actress may discover that the 'leaky vessel' of Ursula meant something more radical; that she was not only physically, but also morally unkempt.

Character research is a necessary component of the theater for producers, directors, and actors alike; the expectation is that they understand their characters at all levels of socio psychoanalysis. How better to do this than to understand the fundamental social biases and norms governing human bodies? And for early modern English theater, what better resource than the medical texts of the day?

Imagine a scenario in which we, as 21<sup>st</sup> century historians, were playing *the game of vapors* with Fonteyn and Jonson. The single rule: “every man to oppose the last man that spoke” (Jonson 119)<sup>7</sup>. We would be required to disagree with the realities that they present. Indeed, we do. However, unlike the characters in *Bartholomew’s Fair*, we cannot simply disavow the realities that came before our own. Neither can we analyze historical works without utilizing new contexts presented in innovative texts. It is our burden as scholars to analyze and learn from old dogmas that support outdated structures of sexism, racism and misogyny; it is our job as historians to lay out new historical paradigms with which to contextualize the realities of Jonson, Shakespeare, and Milton; mostly, however, it is our duty as citizens to use historical contexts to examine the doctrines under which we work and to question the truths of our time. Only then can we step out of the cloud of vapors that lies around us and achieve a Jonsonian enlightenment in which we acknowledge our analytical shortcomings and use innovation to contextualize relevant historical dogmatic thoughts about the early modern woman.

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<sup>7</sup> This is a stage direction in Act 4, Scene 4, directly after line 27.

## Bibliography

- Anderson, Kathryn M. "Editing and Contextualizing Early Modern Women in England." *College Literature*, vol. 23, no. 1, 1996, pp. 217-225, <https://www.jstor.org/stable/25112239>.
- Ayoub, Lois. "Old English Waeta and the Medical Theory of the Humours." *The Journal of English and Germanic Philology*, vol. 94, no. 3, 1995, pp 332-346, [www.jstor.org/stable/27711180](http://www.jstor.org/stable/27711180).
- Bispham, Edward, et al. *The Edinburgh Companion to Ancient Greece and Rome*. Edinburgh University Press, 2010.
- Bos, Jacques. "The Rise and Decline of Character: Humoral Psychology in Ancient and Early Modern Medical Theory." *History of the Human Sciences*, vol. 22, no. 3, 2009, pp. 29–50, <https://doi.org/10.1177/0952695109104422>.
- Cates, William and Woodward, B. B. "Encyclopaedia of Chronology, Historical and Biblical." London Longmans, Green, and Co. Lee and Shephard. 1872.
- Cleaver, Robert, et al. "A Godly Forme of Houshold Gouernment: for the Ordering of Priuate Families, According to the Direction of Gods Word. Whereunto Is Adioyned in a More Particular Manner, the Seuerall Duties of the Husband towards His Wife: and the Wiues Dutie towards Her Husband: the Parents Dutie towards Their Children ; and the Childrens towards Their Parents: the Masters Dutie towards His Seruants ; and Also the Seruants Dutie towards Their Masters. First Gathered by R.C. and Now Newly Perused, Amended, and Augmented, by Iohn Dod and Robert Cleuer." Printed by the Assignes of Thomas Man, and Are to Be Sold by Iohn Clarke, Vnder St. Peters Church in Cornhill, 1630.
- Edelstein, Ludwig, and Nutton, V. "Galen of Pergamum, 129-216 CE." *Oxford Classical Dictionary*, 2015, <https://doi.org/10.1093/acrefore/9780199381135.013.2778>.
- Fonteyn, Nicolaas. *The Womans Doctour*. London: Printed for John Blague and Samuel Howes. 1652.
- Foster, George M. "Humoral Traces in United States Folk Medicine." *Medical Anthropology Newsletter*, vol. 10, no. 2, 1979, pp. 17–20, <https://doi.org/10.1525/maq.1979.10.2.02a00130>.

Gowland, Angus. "The Problem of Early Modern Melancholy." *Past & Present*, vol. 191, no. 1, 2006, pp. 77-120, <https://doi.org/10.1093/pastj/gtj012>.

Galen. *Galen on the Elements According to Hippocrates*. Translated by Lewis, W.J. Ancient Medicine/Medicina Antiqua, 1998.

Jay, Ricky. *Jays Journal of Anomalies: Conjurers, Cheats, Hustlers, Hoaxsters, Pranksters, Jokesters, Impostors, Pretenders, Sideshow Showmen, Armless Calligraphers, Mechanical Marel, Popular Entertainments*. Quantuck Lane Press, 2003.

Jouanna, Jacques. "Galen's Reading of Hippocratic Ethics." *Greek Medicine from Hippocrates to Galen*, 2012, pp. 259–285, [https://doi.org/10.1163/9789004232549\\_014](https://doi.org/10.1163/9789004232549_014).

Jorden, Edward. *A Briefe Discourse of a Disease called the Suffocation of the Mother, Written upon Occasion Which Hath Beene of Late Taken Thereby, to Suspect Possession of an Evill Spirit, or Some Such like Supernaturall Power. Wherin is Declared that Divers Strange Actions and Passions of the Body of Man*. 1603. Print

Layton, Lynne. "What Psychoanalysis, Culture and Society Mean To Me." *Mens Sana Monographs*, vol. 5, no. 1, 2007, pp. 146-157, <https://doi.org/10.4103/0973-1229>.

Manning, C. E. "Seneca and the Stoics on the Equality of the Sexes." *Mnemosyne*, vol. 26, no. 2, 1973, pp. 170–177. [www.jstor.org/stable/4430213](http://www.jstor.org/stable/4430213).

McCabe, Richard A. "Ben Jonson, Theophrastus, and the Comedy of Humours." *Hermathena*, no. 146, 1989, pp. 25-37. [www.jstor.org/stable/23041093](http://www.jstor.org/stable/23041093)

Meyer, Adolf. "The Tradition of Ancient Biology and Medicine in the Vitalistic Periods of Modern Biology and Medicine." *Bulletin of the Institute of the History of Medicine*, vol. 5, no. 9, 1937, [www.jstor.org/stable/44438360](http://www.jstor.org/stable/44438360).

"Mother, n.1 (and int.)." *OED Online*, Oxford University Press, 2018, [www.oed.com/viewdictionaryentry/Entry/122640](http://www.oed.com/viewdictionaryentry/Entry/122640).

Paster, Gail Kern. "Leaky Vessels: The Incontinent Women of City Comedy." *Renaissance Drama*, vol. 18, 1987, pp. 43–65, <https://doi.org/10.1086/rd.18.41917222>.

Paster, Gail Kern. "The Unbearable Coldness of Female Being: Womens Imperfection and the Humoral Economy." *English Literary Renaissance*, vol. 28, no. 3, 1998, pp. 416–440, <https://doi.org/10.1111/j.1475-6757.1998.tb00760>.

Robinson, James E. "Bartholomew Fair: Comedy of Vapours." *Studies in English Literature, 1500-1900*, vol. 1, no. 2, 1961, p. 65-80, <https://www.jstor.org/stable/449340>.

Serageldin, Ismail. "Ancient Alexandria and the Dawn of Medical Science." *Global Cardiology Science & Practice*, vol. 2013, no. 4, pp. 395-404. 2013, <https://doi.org/10.5339/gcsp.2013.47>.

Smith, Lisa W. "The Body Embarrassed? Rethinking the Leaky Male Body in Eighteenth-Century England and France." *Gender & History*, vol. 23, no. 1, 2011, pp. 26-46, <https://doi.org/10.1111/j.1468-0424.2010.01622.x>.

Soellner, Rolf. "The Four Primary Passions: A Renaissance Theory Reflected in the Works of Shakespeare." *Studies in Philology*, vol. 55, no. 4, 1988, p. 549-567. JSTOR, [www.jstor.org/stable/4173253](http://www.jstor.org/stable/4173253).

Sykiotis, Gerasimos P. et al. "Pharmacogenetic Principles in the Hippocratic Writings." *The Journal of Clinical Pharmacology*, vol. 45, no. 1, 2005, pp. 1218-1220, <https://doi.org/10.1177/0091270005281091>.

Traub, Valerie. *The Renaissance of Lesbianism in Early Modern England*. Cambridge University Press, 2002.

Wulff, H. R. "The Language of Medicine." *Jrsm*, vol 97, no. 4, 2004, pp. 187-188, <https://doi.org/10.1258/jrsm.97.4.187>.

Yapijakis, Christos. "Hippocrates of Kos, the Father of Clinical Medicine, and Asclepiades of Bithynia, the Father of Molecular Medicine." *In Vivo*, vol 23, no. 4, 2009, pp. 507-514, [iv.iiarjournals.org/content/23/4/507.long](http://iv.iiarjournals.org/content/23/4/507.long).