G. F. von Franckenau’s *Satyra sexta* (1674) on Male Menstruation and Female Testicles

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The essay focuses on the German physician Georg Franck von Franckenau (1643–1704) and his *Satyrae medicæ* from the 1670s and 1680s. It illuminates Franckenau’s ideas on sexual difference based on his discussion of sex-specific bodily functions such as menstruation and male and female genital structure. In Franckenau’s satires, a woman is not simply opposed to or likened to a man, but she is also compared to and contrasted with a child, an animal and even a salt statue. Franckenau offers an interesting view of those conventional biases that were attached to women’s bodies and their physical functions. By following the logic of curiosity and by bringing together seemingly different categories, Franckenau objected to generalisations about male and female bodies and challenged conventional sexual groupings by offering counterexamples.

It has commonly been argued that medical authors from antiquity to the seventeenth century assumed that “women’s internal organs were structurally analogous to men’s external ones.”¹ And Thomas Laqueur and his followers insist that the two-sex model of the body developed only in the late eighteenth century, and before that period the bodies of the two sexes were thought to be structurally the same.² However, the pattern of biological similarity between the two sexes and the “one-

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2 See Karen Harvey 2004. *Reading Sex in the Eighteenth Century: Bodies and Gender in English Erotic Culture*. Cambridge: Cambridge University Press; 5; Thomas Laqueur 1990. *Making Sex: Body and Gender from the Greeks to Freud*. Cambridge: Harvard University Press. Laqueur’s main argument is that sexuality is historically determined. In his words, in the pre-modern period the two sexes were thought to be physiologically homologous and the female body was thought to be inferior and deviant from the male body. Anatomical difference helped justify female subordination, which was being threatened by the new claims for human equality introduced seriously in the seventeenth century.
sex model" has been called into question by many recent scholars who have, for example, studied the actual practices of early modern doctors. These scholars have stressed that anatomical and qualitative differences had already been observed much earlier, and further, that changes in the understanding of sexual differences are difficult to encapsulate in precise period-specific models. Since an understanding of male and female bodies was plural already in the early modern age, modern theories did not mean a radical break with the past nor did they simply replace older, narrow views of the human body.

In this essay, I will focus on one early modern medical author, Georg Franck von Franckenau (1643–1704) (fig. 1) in order to substantiate with a case study the above-mentioned hypotheses of a complex body. The aim is to illuminate Franckenau's ideas on sexual difference based on his discussions of sex-specific bodily functions such as menstruation and male and female genital structure. His medical satires are a good example of the type of contemporary medical writing in which issues of conception, the genitals and other bodily markers of sexual difference were frequently addressed. The themes of sameness and difference, although traditional, will dominate this essay, since they were also essential tools for comparison in the texts studied. In Franckenau’s satires, a woman is not simply opposed to or likened to a man, but she is also compared to and contrasted with a child and an animal;

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3 For the “one-sex model”, “two-sex model” and sexual difference, see, for example, Winfried Schleiner 2000. Early modern controversies about the one-sex model. Renaissance Quarterly 53, 180–191; W. D. Churchill 2005. The Medical Practice of the Sexed Body: Women, Men, and Disease in Britain, circa 1600–1740. Social History of Medicine 18, 3–22; Maria Eriksson 1998. Biologically Similar and Anatomically Different? NORA: Nordic Journal of Women's Studies 6, 31–38; Michael Stolberg 2003. A Woman Down to Her Bones: The Anatomy of Sexual Difference in the Sixteenth and Early Seventeenth Centuries. Isis 94, 274–299, and Michael Stolberg 2005. Menstruation and Sexual Difference in Early Modern Medicine. In Andrew Shail & Gillian Howie (eds.) Menstruation: A Cultural History. Hampshire: Palgrave Macmillan, 90–101, with further references. Schleiner discusses early modern ideas about the one-sex model and argues that the French physician André Dulaurens, who lived in the late sixteenth century, was the first real opponent of the “one-sex model”. Churchill focuses on the usefulness of the one-sex model for early modern Britain and shows how medical treatment of illnesses was based on the sex of the patient. Eriksson discusses Laqueur’s influential theory and argues that it is impossible to distinguish between the body and its historically and culturally determined symbols. Stolberg, Menstruation and Sexual Difference, and Stolberg, A Woman Down to Her Bones, is very critical of Laqueur’s arguments and claims that Laqueur relies on only a handful of vernacular texts although Latin was still the dominant language of science and medicine. According to Stolberg, already by 1600 physicians saw a fundamental difference between the male and female genitals and thus the one-sex model had already been rejected much earlier than the eighteenth century. For Stolberg, the need to counter Enlightenment views of female equality does not explain the shift towards anatomically-based sexual dimorphism, since this had already taken place before the Enlightenment. Instead one obvious explanation was the marked shift towards empirical science, which brought forth new anatomical discoveries (Stolberg, A Woman Down to Her Bones, 290). For Laqueur’s response, see Thomas Laqueur 2003. Sex in the Flesh. Isis 94, 300–306.

4 See, e.g., Harvey, Reading Sex, 4–6. It has been argued that male and female patients were already prescribed different treatments for the same illnesses in the early modern period. Thus “sex” was regarded as a category that influenced treatment. See Churchill, The Medical Practice of the Sexed Body. For sex, gender and medicine in different times, see, for example, Joan Cadden 1995. Meanings of Sex Difference in the Middle Ages: Medicine, Science, and Culture. Cambridge: Cambridge University Press (the Middle Ages); Ian Maclean 1999. The Notion of Woman in Medicine, Anatomy, and Physiology. In Lorna Hutson (ed.) Feminism and Renaissance Studies. Oxford: Oxford University Press, 127–155 (Renaissance); Ludmilla Jordanova 1989. Sexual Visions: Images of Gender in Science and Medicine between the Eighteenth and Twentieth Centuries. New York: Harvester Wheatsheaf (eighteenth to the twentieth century).
the relationship among these categories can at times be complex.\textsuperscript{5} This essay will also contribute to the recent discussion that has emphasised how gender and sexuality are both culturally constructed and historically determined.

Figure 1. Georg Franck von Franckenau (1643–1704).

\textsuperscript{5} Cf. Schleiner, Early Modern Controversies, 182.
The generic background to Franckenau’s Studia genitalia

Georg Franck von Franckenau was a seventeenth-century physician who made his main career as a professor of medicine at Heidelberg in 1672–1689. He was the rector of the university of Heidelberg in 1678 and vice-chancellor in 1680. Later in 1694 he became the personal physician of King Christian V of Denmark. His large scientific oeuvre consists of medical, botanical and theological texts. His Satyrae medicae (fig. 2) is composed of twenty-seven Latin studies and dissertations on different medical, anatomical and physiological issues. Many of the texts are dissertations that Franckenau supervised at Heidelberg, with different respondentes. He had a strong influence on the dissertations; in fact they probably were largely written by him. Included are issues as various as castration of women, eating glass, face punching, the effects of purgatives, the proper amount of sleep, etc. There are also several studies of different body parts. Some are clearly playful in tone, for example, one dealing with human ears and their mobility. Franckenau frequently turns his attention to ridiculous anecdotes and entertaining stories he has collected by reading. Satyrae medicae was edited posthumously by his son Georg Friedrich Franck von Franckenau in 1722; the texts themselves date from the 1670s and early 1680s.

Franckenau’s collection is a hybrid of diverse traditions. Franckenau assembles a mass of authorities regarding the subjects he discusses; sometimes his text is mere raw material composed of various source references and compendia of data mined from earlier written accounts. His principle of collecting is not restricted to one field of knowledge. He often uses biblical references and draws on religious authorities to back up his medical point. In addition to theological, medical and grammatical sources, he also takes examples from classical encyclopaedias, travel literature and folklore. Frequently, he relies on medical periodicals and town physicians’ compilations written in German. Usually he is content with second-hand evidence and book-learning, but occasionally he refers to his own empirical

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7 The professor who acted as praeses supervised the dissertation and chaired the disputation in which the respondens (the student) defended his arguments. As Neil Kenny 2004. The Uses of Curiosity in Early Modern France and Germany. Oxford: Oxford University Press, 33 notes, the contribution of the professor could be anything from actual authorship to a quick glance over the text. The dissertations and studies included in Franckenau’s collection are all clearly attributed to him and bear his name as the author. The respondents are only briefly mentioned in the list of contents of the book.

8 For Franckenau’s life and his medical works, see Bauer, Georg Franck von Franckenau; Johannes Mulenius 1705. Georgius Francus de Franckenau. In Heinrich Pipping (ed.) Sacer decadum septenarius memoriam Theologorum nostra aetate clarissimorum renovatam exhibens. Lipsiae, apud Thomam Fritsch, 1120–1134.
Figure 2. Title page of Satyrae medicae. Image courtesy of the National Library of Finland, Helsinki.
investigations, when, for instance, studying male anatomy or the medical benefits of eating glass.

Before considering the contents of Franckenau's work, I will briefly present the multiple generic backgrounds of the collection in order to contextualise the texts more specifically. The name of the collection – *Satyrae medicae* – deserves special attention. In his first satire, Franckenau discusses the word “satire”. According to him, it derives from the Latin *satur*, meaning full (for instance, *satura lanx* is a plate filled with various fruits and offered to the gods). In Latin the word *satura* also means a miscellany, a mixture composed of different things. Franckenau thus presents satire as a genre of abundance and variety. Accordingly, satirical fullness is realised in the variety of topics Franckenau’s satires deal with; he also calls his satires “a rhapsody”. Franckenau's idea about satire thus differs from the present conception of the term with its strong emphasis on critical humour and reminds us instead of the old Roman meaning of satire as a miscellany that does not necessarily imply a critical attitude. Franckenau is a collector of human wonders and ridiculous stories rather than a critical satirist in the modern sense.

On the other hand, Franckenau also follows another line of etymology, which interprets satire as an art form that deals with shameful subjects. By quoting Georgius Valla's commentary on Juvenal's satires from the late fifteenth century, Franckenau connects the word “satire” first with shameless satyrs and then with the Greek noun *sathê*, meaning the male member. Franckenau's source, Valla, relies here on the late ancient philosopher Macrobius, who associates the word *sathê* with the god Saturn and the satyrs. Through this etymological explanation, Franckenau shows us the sharp connection between the medical, satirical and erotic in his work. Some of Franckenau's satires focus directly on male and female genitals with the anatomical intention of displaying the organs’ structure and functions, but there is also an erotic sense of secrecy. The impression left by his *studia genitalia* is plural: although they are anatomical surveys, the texts also had a

9 Franckenau, Georgius Franck de 1722. *Satyrae medicae XX*. Quibus accedunt Dissertatiores VI. Varii simulque rarius argumenti, una cum oratione de Studiorum noxa, editae ab alteris filio, Georgio Friderico Franck de Franckenau. Lipsiae, apud Maur: Georg. Weidmann, Satyra prima, §1, note 1. The etymology of the term was first discussed by the fourth-century grammarian Diomedes in his *Ars grammatica*. According to him, the noun *satura* derives either from the noun *satyrus* ("satyr") or from the adjective *satur* ("full"), which was used in reference to an abundant plate, a type of sausage stuffed with many ingredients and a law containing many regulations ("lex saturae or lex per saturam"). All three connote fullness and abundance. See Diomedes, *Ars grammatica*, Heinrich Keil (ed.) 1857. *Grammarici Latini* I. Leipzig: B. G. Teubner, 485–486. Before coming to denote a literary genre with certain characteristics that we understand as “satiric”, the word was also used in the sense of “a collection of miscellaneous poems”. Franckenau uses the term “satire” mainly in this sense here, as a medley of heterogeneous things. The etymology is discussed in nearly all introductions to the Roman satire; see, for example, Charles August van Rooij 1965, *Studies in Classical Satire and Related Literary Theory*. Leiden: Brill; Kirk Freudenburg (ed.) 2005, *The Cambridge Companion to Roman Satire*. Cambridge: Cambridge University Press.

10 Franckenau 1722, *Satyra prima*, §1, note 1. The word rhapsody (Gr. *rhapsôdia*, Lat. *rhapsodus*) is thought to be based on the Greek verb *rhaptein*, “to stitch”. It refers to a text or song that is composed by stitching or stringing different lines and passages together.

11 Macrobius, *Saturnalia* 1, 8, 9
potentially erotic effect on their male audience, and this with a peculiar connection to satire through etymology.\textsuperscript{13}

It is also necessary to read Franckenau's medical satires in the context of seventeenth-century curiosity collections.\textsuperscript{14} Printed curiosity collections, which usually contained short descriptions of the marvels of nature – including human beings – were popular in the early modern age. In addition to nature, the issues discussed included the supernatural, the occult and sexuality – the secret corners of the world and the human being. Medical miscellanies comprising curious physical items and strange medical cases were particularly common in the late seventeenth century.\textsuperscript{15} The composition of curiosity collections resembled miscellaneous satire due to the juxtaposition of strikingly different items and strange empirical fragments.\textsuperscript{16} The attitude towards curiosity was ambivalent: it was a positive sign of the human wish to know more and to explore the resources of nature, but at the same time it had become an unhealthy symptom of decline and excess. By going

\textsuperscript{13} Harvey, \textit{Reading Sex}, 147–148 distinguishes erotic writing from medical literature in that the former was more imaginative and less documentary, but both shared an interest in genitals, orgasm and conception.


\textsuperscript{15} Kenny, \textit{The Uses of Curiosity}, 186–188.

\textsuperscript{16} Curiosity was often also the butt of satire and comic anecdotes of scholars who collected strange objects or inquired what the Sirens sang, how many rowers Ulysses had, which foot Aeneas put first in Italy, etc. (Kenny, \textit{The Uses of Curiosity}, 62–63). Curious objects were also parodied in mock catalogues. Moreover, curiosity was described as an illness; its physical symptoms – facial pallor, trembling – were ridiculed, and they formed the basis, for example, of Rabelais' account of curiosi (Kenny, \textit{The Uses of Curiosity}, 322). Also the objectifying of women as curiosities by elderly collectors was ridiculed in eighteenth-century satirical plays (Kenny, \textit{The Uses of Curiosity}, 365). Kenny notes that satires parodied both the discourse of curiosity and curious activities. Parodic inventories of curiosities were used in political satire, for example, by referring to curious medical reports of politicians' brains being cut into small pieces. On satire and curiosity, see also Kenny, \textit{The Uses of Curiosity}, 295–299, 364–366.
beyond the limits of useful necessity, curiosity led people to despise normal things and ultimately meant a waste of the intellect. By the end of the seventeenth century, wonders were to a major extent expelled from educated literature, kept alive mainly in popular culture.17

Franckenau still shares the contemporary interest in human wonders and shows a certain attraction to the rare, exotic and remarkable. He frequently uses ancient and early modern curiosity collections as his sources and refers, for example, to works such as Polish naturalist Johann (Jan) Jonston’s (1603–1675) Thaumatographia naturalis (1630) and periodicals filled with strange medical cases.18 Franckenau’s own discussion contributes to this genre by singling out extraordinary objects and anecdotes. The phenomena he describes are marvellous (mirabilia), new, rare, uncommon, strange and nearly impossible – features characteristic of curious objects and frequently used in their descriptions. Immaculate conceptions, monstrous births, people coming into the world in an extraordinary manner, double fertilisation, the issue of restoring the prepuce, people living without vital organs such as a head or lungs, a man without any sense of taste and other miracles that had filled the pages of medical curiosity collections are well represented here.19

Especially before the late seventeenth century, medical miscellanies were full of prodigies. But whereas earlier the discourse of religion had intruded into the medical domain so that the wonders that resulted in the observation were considered divine omens or tokens of forthcoming epidemics,20 theology’s role in medicine now declined. Franckenau even deals with people who speak in tongues when stricken with high fever, and he tells us, for example, of an uneducated woman who was able to foresee the Saxon war and tell about it in classical Greek. Another patient without any elementary education proposed perfect syllogisms in German. A boy could express people’s secret thoughts in perfect German and French without opening his mouth or moving his tongue.21 However, these extraordinary cases listed by Franckenau are not considered divine or diabolic signs. Franckenau discounts the role of demons in causing miracles, diseases or producing anatomical curiosities, although he admits that the reasons for the strange cases are difficult to discern. He reflects the contemporary tendency to play down the prodigious character of

17 See Benedict, Curiosity; Swann, Curiosities and Texts; Park, Unnatural Conceptions, passim; see also below, note 22.

18 One important such periodical, Miscellanea curiosa medico-physica Academiae Naturae Curiosorum sive Ephemerides Germanicae, was launched in 1670. It contained different medical, anatomical and botanical observations made by German and other European physicians. Franckenau frequently refers to Ephemerides. For German curiosity collections and periodicals, see Kenny, The Uses of Curiosity.

19 Franckenau’s attitude towards Christian miracles as redolent of superstitious wonders falls outside the scope of this essay, but deserves study.


21 Franckenau 1722 (1675), Satyra nona, de vaticiniis aegrorum, note 2; Satyra decima, de linguis peregrinis, note 1.
uncommon phenomena; they were no longer interpreted as signs of divine wrath, but indications of nature’s fertility and richness or examples of medical pathology that had natural causes.\(^\text{22}\)

In Franckenau’s texts, the body in particular seems to be a place of miscellaneous stories that always produces some novelty. In the following, I will draw special attention to Franckenau’s sixth satire entitled *De sanguine menstruo per se non malo, in viris rarius, in mulieribus citius & tardius justo, imo numquam presente* (1674), where Franckenau discusses female and male menstruation from a medical perspective.\(^\text{23}\) I will present the main points of the dissertation and examine how the issue of sexual distinction between men and women is dealt with here. If not one of Franckenau's most original dissertations, nevertheless the *Satyra sexta* deserves to be introduced as representing the state of knowledge in his time.

**Satyra sexta on menstruation**

Franckenau’s sixth satire on menstruation consists of seven major arguments and accompanying detailed notes. The main points of his text are summarised as follows. First, Franckenau argues that menstrual blood was not bad as such (“sanguis menstruus per se non malus”).\(^\text{24}\) It was not poisonous, unclean or dangerous to men as some biblical and ancient authors had claimed when presenting the materiality of female bodies as a dreadful thing. Franckenau contests the belief that was most famously presented by Pliny the Elder in his *Naturalis historia*. Pliny’s Book 7 is devoted to the highest species among the animals – a human being and its biology, physiology and psychology – and it contains a large selection of human wonders. In this context, Pliny describes the remarkable phenomenon of the monthly flux of women as follows:

> Contact with it turns new wine sour, crops touched by it become barren, grafts die, seeds in gardens are dried up, the fruit of trees falls off, the bright surface of mirrors in which it is merely reflected is dimmed, the edge of steel and the gleam of ivory are dulled, hives of bees die, even bronze and iron are at once seized by rust, and a horrible smell fills the air; to taste it drives dogs mad and infects their bites with an incurable poison.\(^\text{25}\)

\(^{22}\) According to Park, Unnatural Conceptions, 24, by the early seventeenth century religious associations became more or less manifestations of popular ignorance and superstition, and prodigies as well curiosities began to withdraw to the realm of popular culture and the most popular forms of literature, including ballads, broadsides, religious pamphlets, etc.

\(^{23}\) The respondent of the dissertation was Johann Christian Heusch.

\(^{24}\) This first argument is discussed in Franckenau 1722, *Satyra sexta*, note 1.

Pliny’s passage is usually viewed as misogynistic, both by earlier and by modern authors. In Franckenau’s times and even earlier, with the development of scientific knowledge, Pliny’s work had become a mine of misinformation and mere fantasy, but he remained a popular source for many authors.²⁶ Pliny and Franckenau share an interest in oddities and collecting of marvels, and Pliny is one of Franckenau’s favourite sources, although he often rejects Pliny’s views as incorrect. Franckenau also draws upon other ancient encyclopaedic authors as having mentioned the impurity of menstruating women: Plutarch, Alexander Polyhistor and Solinus, for example, who quoted Democritus’ words, which were identical to Pliny’s.²⁷ From among medical doctors, Hippocrates, Galen and Cardano are mentioned.²⁸ Franckenau also relies on later encyclopaedic tradition, medical doctors and theologians. For example, an Italian Jesuit, cardinal and archbishop, Roberto Bellarmino (1542–1621), argued in his *Scalae ascensionis mentis in Deum* that anyone hearing a menstruating woman speak immediately contracts a severe headache.²⁹ Another author, Franciscus Zypaeus (Franz van der Zypen), a contemporary doctor and professor of anatomy and surgery at Brussels and Louvain, also referred to an old prejudice against menstruating women who, by their mere contagious breath, tainted meat and butter, and their kisses caused blisters. Likewise, when a menstruating woman went to the cellar for a bottle of wine, the rest of the wine in the barrels turned sour.³⁰

Taking a critical stance to these anecdotes, Franckenau argues that menstruating women are not dangerously powerful, nor was menstrual blood polluting or infectious. In his words, all possibly harmful effects of menstrual blood were merely coincidental.³¹ Moreover, menstruation did not expose women to diseases but was beneficial to their bodies. Menstruation functioned as a purgative that cleansed the

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²⁶ Cf. Monica H. Green 2005. *Flowers, Poisons and Men: Menstruation in Medieval Western Europe*. In Andrew Shail & Gillian Howie (eds.) *Menstruation: A Cultural History*. Hampshire: Palgrave Macmillan, 58–59, who claims that the Plinian tradition with its standard list of the menses’ ill effects had little impact on medieval medical writing. However, the idea of poisonous menses reappeared at the very end of the Middle Ages and was very common in Western Christian tradition.

²⁷ Franckenau refers to Plutarch (L. 3. *Sympos*. ca 8); Solinus (*polyhist*. ca 4); Alexander (*lib 2. probl. 78*); Columella (*Lib. 2. *rei rust*. ca 3*); and especially to Pliny *Natural History*, 19, 10; 28, 7; 7, 15. Some of his references differ from the locations of these passages in modern editions.

²⁸ Hippocrates, *Liber 1 de morbis mulierum*; Galen, *Liber de atra bile*, ca 8; Cardano, *Comm. in Hippocraten*.


³¹ Franckenau, notes to satire 6: “Sed rectius sentiunt, qui non per se benenatum aut malignum statuunt, & si quam malitiam induat, fiat istud ex accidenti”.
body of excess fluids, plethora and other superfluous and impure matter that might otherwise stagnate there and disturb the body's healthy balance. Menstrual blood thus protected women from many illnesses; this view was also maintained by many early modern doctors, such as Johannes Baptista Donatius (Giovanni Battista Donati, c. 1530–1591) whose commentary on Hippocrates' ‘De morbis virginum’ (1582) Franckenaus uses here.32

Second, although menstruation is also known by the name of *muliebria*, Franckenaus questions Pliny’s assertion that a woman is the only animal to have monthly periods (“Solum animal menstruale mulier est”).33 We learn that other species also menstruate: in Java, for example, menstruating female chimpanzees had been found.34 Also birds such as magpies and other female animals – mares, sows and lambs – had been found to menstruate. The legend of a menstruating magpie dates from the twelfth century (1189), and the cause of this miracle was attributed to God.35 Franckenaus also refers to a German physician, Michael Ettmüller (1644–1683), who mentioned menstruation in men and in animals in his *Institutiones medicae*.36 Franckenaus often mines contemporary travel accounts for his most unusual stories, but his examples are by no means confined to the exotic edges of the world; equally strange cases were observed in his own Germany.37

Third, Franckenaus shows that the sexual distinction between women, men and children is not unambiguous if judged on the basis of menstruation. He claims that

32 For the purifying purpose of menstruation, see Crawford, Attitudes to Menstruation, 50–51, and for the three major early modern theories of menstruation (the cathartic, the plethoric and the iatrochemical), see Stolberg, Menstruation and Sexual Difference. Cf. Macrobius, *Saturnalia*. Trans. Percival Vaughan Davies, VII, 6, 17–18: “A woman’s body is full of moisture, as appears from the smoothness and sheen of her skin, and above all from the repeated purgings which rid her body of the burden of superfluous fluid. The wine, then, that a woman drinks meets such an abundance of fluid that it loses its force and becomes diluted, and with its strength extinguished it does not easily attack the seat of the brain. The truth of this statement is supported by the further consideration that a woman’s body, being subject to frequent purgings, is provided with a number of outlets to open up channels and make ways for the exit of moisture that collects for evacuation, and it is through these outlets that the fumes of the wine quickly disappear”.

33 Franckenaus 1722, Satyra sexta, note 2; Pliny, *Natural History*, 7, 63.

34 Franckenaus’s sources here are Petrus Gassendi (1592–1655), 1655. *Nicolai Claudii Fabricii de Peiresc, senatoris Aquisextiensis Vita*. Hagae, lib. 5, 169; and Georgius Hornius (ca. 1620–1670) 1675. *Arca Mosis, sive historia mundi*. Lipsiae, 119. Gassendi tells us about a species of ape living in Guinea, which closely resembles men even to the extent that the apes learn to walk on two feet and make music. Their females have been found to menstruate. Hornius also mentions menstruating animals and claims that although the menstrual blood is poisonous it can help heal animals of many diseases: “[…] Sola mulier & simia & raja patiuntur menstrua, qvae habent venenum noxium, qvod tamen porcos in lepram vergentes & eqvos ex potu intempestivo laborantes propinatum exigua quantitate statim sanat”.

35 Franckenaus, *De sanguine menstruo*: “A.C. 1189 habuimus picam foeminam singulis mensibus in novilunio ad duos vel tres dies per inferiora sanguinem suo more sat copiose excernentem, cetera optime sanam. Cibis initio adscribimus, at ab ipsa experientia meliora edocti vidimus, quam mirabilis sit Deus in omni creatura sua”.


also a) men, b) very young children and c) old women sometimes menstruate. He first deals briefly with men, especially with Jewish men, who were commonly assumed to menstruate, although this was not considered a regular phenomenon as it was with women. Franckenau is very doubtful about Jewish male menstruation, and he also rejects biases such as the claim that Jewish men were immune to venereal diseases. He also observes — relying on such seventeenth-century medical authors as Joannes de Mey and Johann Jacob Harder — that women excrete more blood than men. This is explained by their moist temperament, dense skin, sedentary lifestyle or idleness of habits. Again these are not Franckenau’s own observations but notions culled from literary and medical sources.

Fourth, Franckenau discusses the age when menstruation first appears, usually thought to be fourteen or fifteen. This common notion is challenged by giving a systematically arranged list of rarer cases (rariora) of young girls, from twelve-year-olds to newborn babies, who have had menses. Among the earliest recorded cases of menstruation are a two-day-old infant and a neonate girl (“recens nata”). Here Franckenau once again bases his statements on the testimony of seventeenth-century medical doctors and their eye-witness reports, including the journal Ephemerides and books such as Jonston’s Thaumatographia.

After having dealt with men and children, as his fifth argument Franckenau discusses very old women as rare cases who also sometimes have their menses; this discussion opens with the exclamation “Et heic rara varietas!” Franckenau contradicts the belief — here attributed to Aristotle — that menstruation ceases at the age of forty or fifty. The oldest example ever known is a 103-year-old woman who

38 Franckenau 1722, Satyra sexta, note 3. When dealing with male menstruation, Franckenau refers to several early modern medical doctors, such as the renowned Italian anatomist Hieronymus Fabricius (1537–1619); a Jewish Spanish doctor, Andreas Lacuna (1499–1659); a famous Portuguese Jewish doctor, Abraham Zacutus Lusitanus (1557–1642); and Caspar a Reies (Gaspar de Los-Franco Reyes). Born in Lisbon at the end of the sixteenth century, Reyes worked in Andalusia and his most famous work was Elysius jucundarum quaestionum campus. See Biographisches Lexikon der hervorragenden Ärzte aller Zeiten und Völker, 1932. Bd. 4, Berlin: Urban & Schwarzzenberg, s.v. Reyes (Rejes). For Jewish male menstruation and its (often) anti-Semitic interpretations, see Beusterien, Jewish Male Menstruation; Green, Flowers, Poisons and Men, 60–1. For menstruating men, see Gianna Pomata 2001. Menstruating Men: Similarity and Difference of the Sexes in Early Modern Medicine. In Valeria Finucci & Kevin Brownlee (eds.) Generation and Degeneration: Tropes of Reproduction in Literature and History from Antiquity to Early Modern Europe. Durham: Duke University Press, 2001, 109–152.

39 Franckenau 1722, Satyra sexta, note 4.


41 Franckenau 1722, Satyra sexta, note 5.

42 In his On the Generation of Animals Aristotle maintained that menstruation was a sign of female inferiority (Delaney, The Curse, 45–6). It was also a matter of creation to which sperm gave the form. For the history of menstruation, see also Andrew Shail & Gillian Howie (eds.) 2005. Menstruation: A Cultural History. Hampshire: Palgrave Macmillan. Aristotle’s ideas about sex and sexuality are discussed in more detail, for example, by Dean-Jones, The Cultural Construct of the Female Body, and Mayhew, The Female in Aristotle’s Biology (on menstruation, see es 89–91).
menstruated until her death. This example is ascribed to the testimony of Hercules Saxonius (Ercole Sassonia, 1551–1607), who wrote extensively on medical practice, especially on syphilis, pregnancy and childbirth. Franckenau also quotes physician and philosopher Julius Caesar Baricellus’s (b. 1574) *Hortulus genialis*, which is a compilation of marvels and wonders dating from 1617. Baricellus argues that the age limits of menstruation proposed by Aristotle are challenged by the everyday experience of medical doctors. He tells of an honest and well-mannered woman called Victoria whose menses had stopped at the age of forty-five but returned when she was almost sixty. Her whole appearance, which had already been affected by age, changed so that her flat breasts were filled with milk and she could breast-feed a baby. However, Franckenau defends Aristotle by saying that the philosopher based his argument on usual cases, whereas Baricellus focused on rarities.

Following the logic of curiosity, Franckenau proceeds from old-age menstruating women even further to the realm of religious myths – and advises his readers to hold their laughter. He recollects a popular tale about Lot’s wife (cf. Genesis 19, 26), who still had menses even though she had turned into a pillar of salt.43 One of Franckenau’s sources here is the anonymous *Carmen de Sodoma* (verses 165–173), often falsely attributed to Tertullian (c. 160–240) and sometimes assigned to Cyprian:

She stood, herself an image of herself,
Keeping an incorporeal form: and still
In her unsHELtered station ‘neath the heaven
Dures she, by rains unmelted, by decay
And winds unwasted; nay, if some strange hand
Deface her form, forthwith from her own store
Her wounds she doth repair. Still is she said
To live, and, ‘mid her corporal change, discharge
With wonted blood her sex’s monthly dues.44

Franckenau also refers to a contemporary Danish physician, Thomas Bartholin (1616–1680), and the third chapter in this physician’s treatise *On Diseases in the Bible (De morbis Biblicis)*. Here Bartholin discusses Lot’s wife’s transformation and seeks to explain it scientifically.45 Bartholin claims that the salted pillar might be

43 Franckenau 1722, *Satyra sexta*, note 5.
45 Thomas Bartholin was a Danish medical doctor well-versed in theology and classical philology. He combined medicine and theology in his studies of biblical medicine. His book on the diseases of the Bible is a miscellany of subjects from the Hebrew Bible, the Talmud and the New Testament. He deals with issues such as Adam’s sleep, Jacob’s lameness, Moses’ withered hand, Job’s malady and King Asa’s arthritis. According to him, Jonah was not swallowed by a whale but a shark. Bartholin’s most important medical achievement was the discovery of the lymphatic system; the same discovery was also made by Olaf Rudbeck (1630–1702). Franckenau often uses Bartholin’s *Acta medica et philosophica Hafniensia*, the third oldest scientific periodical in the world. On Bartholin and the periodical he founded in 1673, see Schioldann-Nielsen’s and Sørensen’s preface to Thomas Bartholin 1994 (1672). On Diseases in the Bible: A Medical Miscellany. In Johan Schioldann-Nielsen & Kurt Sørensen (eds.) *Acta historica scientiarum naturalium et medicinalium*, vol. 41. Trans. James Willis. Copenhagen: The Danish National Library of Science and Medicine, 9–23.
explained by the sulphurous smoke and ash that came from the burning city of Sodom. The ash that covered the face and body of Lot’s wife had the effect of turning her to salt stone — “just as at Pozzuoli dogs [were] stifled by the powerful vapours in a sulphurous cave”.46 Bartholin also mentions a shepherd and his flock who had turned into stone in Bavaria and members of a wedding procession who suffered the same fate near the lake of Tie. Lot’s wife’s appearance and her menstruation are further explained by Bartholin as follows:

Whoever the author [of Carmen de Sodoma] is, I gather from the poem that damage to the statue of salt could be repaired by water flowing over it, which the mineral salt converts at once into its own nature, just as saltpits grow. But as for the other – the flow of menses in the statue as in a woman – that I do not understand, unless it be some liquefaction of the salt caused by humidity of the outside air.47

Ultimately, Bartholin leaves the myth as it lies; the flow of blood especially exceeds scientific explanation. Nor does Franckenau elaborate further on this; for him it is a ridiculous and exciting story that nevertheless challenges commonly accepted ideas related to menstruation.48 In the seventeenth century, Lot’s wife was also one of the female characters who served as an example of calamitous curiosity; this also partly explains Bartholin’s and Franckenau's interest in her story.49

In his sixth and seventh arguments, Franckenau deals with women who have given birth to children even though they have never had menses.50 He rejects Pliny’s opinion that if menstruation does not occur at all, women are unable to have children.51 In the collection, Franckenau devotes his whole fourth satire to virgin mothers found, for example, in Germany, Brazil and Greenland. He also deals with miraculous births. In his words, at times women have had children with their sons, and even two-year-old girls have given birth. Several cases mentioned had occurred in India, where, according to the testimony of Solinus, women gave birth at the age of five and died after their eighth birthday. Franckenau also recollects curiosities where stones have grown inside other stones and lemons inside lemons, thus recognising parallel structures between diverse organisms in nature. At times infants have been born from dead mothers. According to Valerius Maximus’ Factorum et dictorum memorabilium libri and Jonston’s Thaumatographia, a Roman, Gorgias Epirota,
was born during his mother’s funeral.\textsuperscript{52} In his fourth satire Franckenau also tells us of a woman who was raped, robbed and murdered by a cleric and left headless, yet she gave birth to twins. Another woman was already buried, when her tomb was opened and she was found holding a new-born baby in her arms.\textsuperscript{53}

Franckenau’s argument always begins with the familiar and the normal, but then gives way to examples that exceed the limits of the ordinary until he finally moves on to the most unusual cases in medical history. This preoccupation with variety and transgression of boundaries is characteristic of curiosity (as well as all satire). Curiosity is a process of accumulating fragments and particulars that are wondrous, something that remain for a moment alone, unsystematised and difficult to contextualise. However, when these fragments are attached to a chain and bound together, the story is given a plot that progresses towards extremes.\textsuperscript{54} Such a strategy, which implies not a mere collection of isolated items but a narrative, also characterises Franckenau’s text. In the accumulative narration the uncommon phenomenon becomes associated with the regular course of nature. Another mark of curiosity relevant here is the aim of contradicting generalisations and looking for the particular that exceeds or resists universal definitions and strict classifications. This aim was also the expressed principle in natural philosophy, the “fresh examination of particulars” that was essential to the inductive method.\textsuperscript{55}

**Exploring testicles**

Sex and gender issues are addressed in a number of Franckenau’s satires. In his fifth satire we find a discussion of men’s and women’s testicles.\textsuperscript{56} Here Franckenau not only passes on information from received sources, but presents news as the outcome of his own perception. He claims to be the first to propound some crucial piece of information on male testicles. His main argument is that men’s testicles are not to be considered glands since their structure is different, consisting of a globe of minute particles. First, he records his own anatomical examinations and tells us of a post-mortem he had performed on a thirty-year-old man in 1673. He dissected the dead man’s testicles looking for a source of sperm. He found that the testicles were resolved into very thin fibres so that finally nothing remained ("ut

\begin{itemize}
\item Valerius Maximus. *Factorum et dictorum memorabilium libri*. 1, 8, ext. 5, and Johannes Jonston 1633. *Thaumatographia naturalis*. Amstelodami, classis 10, caput 5, art. 11: “De quibusdam circa generationem miris”.
\item Franckenau 1722, *Satyra quarta, De Impuberibus generantibus et parientibus foetu in foetu, embryo in embryo, & foetu ex mortua matre* (1674).
\item Kenny, *The Uses of Curiosity*, 20.
\item Cf. Francis Bacon, who aimed to sever natural history from theory and book-learning and replace it with knowledge based on observation. Curiosities were important in this effort, since they deflected attention from the ordinary and generalised view of nature. See Swann, *Curiosities and Texts*, 60; Park, *Unnatural Conceptions*, 43–51. For narrative strategies and their effects in curiosity collections, see Kenny, *The Uses of Curiosity*.
\item Franckenau 1722 (1674), *Satyra quinta, De testibus virilibus* (§1), *De testibus muliebribus* (§2).
\end{itemize}
maneret reliqui nihil”). The discovery excited him – he describes how he presented it to his colleagues as a remarkable novelty, exclaiming in astonishment, “Eureka, eureka”.57 The description can even be read ironically; in Franckenau's medical satires we find many passages in which the male member is lacking owing to injury or for other reasons.

Anatomical dissections and physical experiments were part of the new, “curious” science, exploring hidden structures or causes that were difficult to observe. Here the anatomical dissection contradicts the traditional assumptions of male physiology but also clearly offers visually exciting finds and produces wonder and admiration; Franckenau satisfies his own curiosity by means of the post-mortem. Curiosity was characterised by the penetrating gaze, which pierced deeply into the secret of nature. The whole of eighteenth-century science and medicine has been described as being “preoccupied with depth” and as producing information based on “looking deep into the body”.58 Here the author also pokes fun at his empirical tests and his efforts to decipher the complexities of the human body.

After examining male physiology, Franckenau deals with female testicles (or ovaries as they are now called).59 He argues that the ovaries differ from male testicles in many respects, such as position, size, appearance, shape, substance, their relations to each other, etc. Although the word testiculus is the same for both sexes, the organs themselves are different. Here he departs from the old Galenic view, which had emphasised the similarity between male and female parts. If women’s testicles differ from male parts, there is a marked resemblance between the anatomy of women and birds, especially the chicken. Franckenau quotes authorities who dealt with the evolution of man from the egg, such as William Harvey’s (1578–1657) famous observation that “all that is alive comes from the egg” (“omnia ex ovis fieri”). Anatomists such as Theodore Kerckring (1640–1693) also maintained that all organisms are initially encased inside the egg rather than ascribing the crucial role to the sperm. Franckenau quotes Kerckring (1670), saying that “had there not been the anatomist's knife, who would believe that the origin of man is in the egg as it is with birds? Ex ovo enim homo producitur”. Franckenau clearly shares the view proposed by Harvey and others. But we also have here a portrait of a mad scientist when Franckenau describes how Kerckring actually appears to have boiled women’s eggs or their ovaries, making a kind of omelette and describing them as coagulating like hen’s eggs and tasting strange, foreign, and unpleasant.

Discussions of eggs were not only characteristic of medical treatises, but also of parodical eulogies that included encomia of eggs and hens. Parodical or paradoxical eulogies praised things usually considered trivial, such as insects, beards or

57 Franckenau 1722, Satyra quinta, note 2.
58 Jordanova, Sexual Visions, 57–58. For the curious, gendered gaze, see also Harvey, Reading Sex, 185–186. In Harvey’s words, an erotic element is clearly involved when the gaze of the medical examiner moves over the (female) body and progresses into its secret inside.
baldness; shameful such as vices; or annoying such as diseases. Sometimes the
eulogies also dealt with anatomical details and physiological wonders such as the
fart. Eggs, too, were eulogised in this genre, and following tradition, Franckenau
has among his satires a long dissertation on Easter eggs.\textsuperscript{60} Here he also refers to
Christian Friedrich Garmann’s dissertation called \textit{Homo ex ovo} (1682).

**Conclusion**

Franckenau’s medical satires dating from the 1670s and 1680s confirm the view that
early modern ideas about anatomical and functional differences between male and
female bodies were more complex than has been noted earlier. On the one hand,
Franckenau’s point about menstruating men seems to reinforce Laqueur’s thesis of
the one-sex model, since Franckenau shows that men and women shared similar
bodily functions. But on the other hand, Franckenau’s view of sexual difference is
much more complex. He explicitly argues that female testicles (ovaries) differ from
male testicles in many respects, that is, male and female anatomies are significantly
different. Moreover, by introducing exceptional human physiologies, he not only tests
the boundaries of the two sexes, but he also blurs the essential difference between
man and animal by showing the similarities in their bodily organs and physical
functions. By bringing together seemingly different categories that were usually
kept apart and by going beyond the limits of the ordinary, Franckenau suggested a
similarity between sexes and species that had been presumed to be different.

For Franckenau, menstruation was not an essential or even a defining feature of
womanhood, because the phenomenon was also found in men, children, animals
and even statues. Thus, menstruation was not an unambiguously distinctive feature
of women alone. Nor was it restricted to young women. However, Franckenau’s
examples do not suggest a simple one-sex model, since he openly claims that the
marvels he describes are exceptions to a natural law. In the background there is an
assumption that in general male and female can be separated by their biological
attributes even though the polarisation is not strict and similar external sexual
characteristics and bodily functions – such as menstruation – can be found in both
sexes.\textsuperscript{61} In Franckenau’s view, rigid sexual boundaries as well as a close similarity
between the sexes are both contradicted by the testimony of nature.

\textsuperscript{60} Franckenau 1722 (1682), \textit{Satyra decima nona, De ovis paschalibus, von Oster-Eyern}.

\textsuperscript{61} Stolberg, Menstruation and Sexual Difference, 97, claims that bleeding in a male patient did not
even automatically imply comparison with female menstruation, since it was mere surplus blood that
was evacuated from the body. According to McClive, Menstrual Knowledge and Medical Practice,
78, the notion of menstrual bleeding as an essential signifier of the female sex was introduced in
the mid-eighteenth century. Before that period menses were regarded as one flux among others in
the system of bodily fluids: “[B]lood was not sexed within the humoral economy of fluids, but was
held to ebb and flow in both male and female bodies. Excess humour caused ill-health in male and
female bodies and a body naturally tended towards the evacuation of such superfluous matter”.
(McClive, Menstrual Knowledge and Medical Practice, 79.) Male menstruation was thus explained
as the body’s healthy reaction to plethora.
The strange facts and rarities recorded by Franckenau thus helped him to object to generalisations, to distinguish essential from incidental properties and, if not to redraw the sexual boundaries or unravel the categories, at least to challenge the hard-bound and conventional groupings with counterexamples. Francis Bacon (1561–1626) had the same advice: to study wonders in order to correct conventional wisdom by means of exceptions. Deviations helped men to seek more comprehensive principles and also to judge the difference between the normal and its opposite.62

Franckenau’s arguments are determined by his curiosity and his attempts to find rare medical cases that test the earlier archetype of male and female bodies. He does not aim to change an understanding of the sexes but to object to the generalisations and normative views of human anatomy and physiology proposed by Aristotle and other earlier authors. Furthermore, Franckenau offers an interesting view of those conventional biases that were attached to women’s bodies and their physical functions. The explanations of menstruation were often constructed in terms of female inferiority, but Franckenau did not consider menstruation a disease nor did he regard menstruating women as dangerous. He took a critical stance towards his sources and wrote against those medico-theological views that proposed that menstruation was to be taken as a sign of women’s inferiority or that its absence was pathological. On the other hand, this was the general tendency of his times since by the end of the seventeenth century the views of polluting menstruation presented, especially in the Bible and Pliny’s *Natural History*, were no longer regarded as being reliable.63 Franckenau was emphatically critical of such views that maintained the prejudices about menstruation’s harmful effects. Here his arguments also took a truly satirical tone, showing how ridiculous and wrong such biases could be. Thus he participated in reducing those irrational fears, beliefs and superstitions that earlier were related to female menstruation, and were also used to justify women’s inferior position in society.64

After all, perhaps the chief reason that Franckenau collected unusual stories was to satisfy his interest in the extraordinary. Nature was not something serious for him, for serious nature would have meant uniform nature, something that did not surprise or astonish. The *lusus naturae* also had a structuring effect on Franckenau’s thinking. Curiosities distinguished the unusual from the quotidian and showed the process of diversification and ever-flexible playfulness in the richness of nature.65


63 Stolberg, *Menstruation and Sexual Difference*, 92 and Stolberg, *A Woman Down to Her Bones*, 294 argues that already by 1600 the pathological view of menstruation and its harmful effects were widely rejected as fictitious.

64 For social roles sustained by beliefs about menstruation, see Crawford, *Attitudes to Menstruation*.

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