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The Good, the Bad, and the Bloody Conceptualisations of menstruation across genders and languages

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Submitted in fulfilment of the requirements for the Degree of Doctor of Philosophy

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Abstract

Menstruation is a particularly prominent aspect of the life of the many bodies that experience it. From menarche in adolescence to menopause in later life, the implications are not only biological and medical, but also social, cultural and political. Myths, religions, cultures, medicine, and scholarship from diverse fields have concerned themselves with this event for decades, indeed centuries, creating the complex interplay that now informs the menstrual experience and discourse. Yet, beyond anthropologically exploring the status of 'taboo' that keeps menstruation hidden, the metaphors in this discourse remain to be fully analysed from a cognitive linguistics perspective. Furthermore, there has been little acknowledgement of gender and linguistic variance within that discourse, particularly of trans individuals and speakers of Arabic and its dialects. There is a wealth of metaphorical expressions that were born within this complex landscape, and that are now used to think and speak about menses, particularly in some types of language and among certain populations.

This project aims to fill this gap as it focuses on uncovering the conceptual metaphors of menstruation that exist in everyday language, while including menstruators and non-menstruators alike, as well as speakers of Arabic and its dialect, using a Conceptual Metaphor Theory-based investigation of these metaphors. For this purpose, a survey of participants is first used to gather data which is examined through a semantic tagger, the Historical Thesaurus, and the Mapping Metaphor online tool. This analysis results in the identification of several conceptual metaphors pertaining to the domains PART OF NATURE Or NATURAL PART OF LIFE, SOMETHING DIRTY OR UPKEEP, PURIFICATION, A PERIOD OF TIME OR A PERIOD OF THE HEALTH CYCLE, A HABIT, BLOOD, BLESSING AND TORMENT, A VISITOR, and THE COLOUR RED. Menstruators and non-menstruators rely on those domains and engage in creative coinages of new expressions to create a linguistic point that is informed by their purposes in communication and from which they are able to communicate exactly what and how they want, whether it is to comply with or to defy convention and taboo. Therefore, the usage of menstrual metaphors, beyond its tabooed background and its reflections of societal constraints, is first and foremost a strategic tool for menstruators in particular to be able to accomplish any communicative goal they have in a manner that they deem safe and suitable.

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Author's declaration

I declare that this thesis is entirely the result of my own work. I have referenced sources from the work of others where necessary. This thesis has not been submitted for any other degree at the University of Glasgow or any other institution.

1. Introduction

"I needed a way to tell the world how crappy I was feeling! I wanted to inspect, and defy, the stigmas that make me reticent to speak openly about my period and how it makes me feel [...] It sucks that the world thinks menstruation is too gross to exist, and that complaining about it — and, for that matter, acknowledging its existence in any way — is forbidden... It's disorienting to have to pretend that such an essential function of my body doesn't exist. [...] I wanted to create images that were honest, maybe even graphic, in their depiction of what's going on behind all the codewords. [...] Goofy euphemisms can be good for a laugh, but we should be able to tell people we're on our periods, too. Plain and simple" (Ehsan, 2015).

In 2015 artist Layla Ehsan, at the time an illustration student at the Rhode Island School of Design, was interviewed by Augusta Falletta from BuzzFeed Life about a series of artwork she created and named "Menstruisms." This series of illustrations (see figures below) was started by Ehsan to reflect on her own menstrual experience, to question the obvious stigma that persists to the present day, to bring forth something that is always kept in the dark, to give life to many "codewords" while having a laugh and enjoying the humour infused in those cleverly and creatively coined "menstruisms" that are used every day.

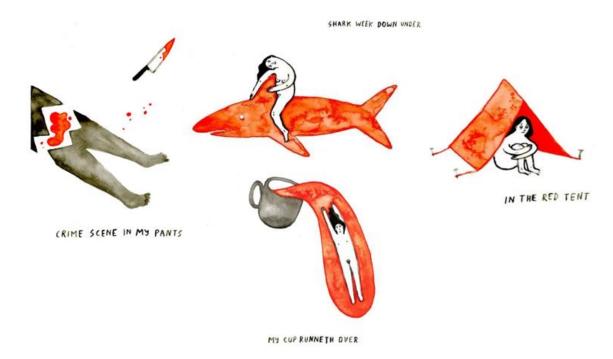


Figure 1 – Illustrations of menstruisms (crime scene in my pants, shark week down under, my cup runneth over, in the red tent), Layla Ehsan (2015).

This research project was born out of a similar desire to that of Ehsan, but also to understand where those "codewords" come from and why they are used. It is striking to know that these "menstruisms" exist in a staggering number of languages and take on different and sometimes eerily similar nuances and attributes depending on which subgroup and subculture is using them. The cycle tracking app, Clue, which allows users to track their menstrual cycles and offers other options and information, has shown a measure of this variety in their "international period survey" asking various people worldwide about their own "menstruisms." For example, in this same research project, three out of the six euphemisms illustrated by Ehsan are present in the data and discussed at length in the following chapters (Chapters 6 and 7 particularly). However, even though the other three ("in the red tent, my cup runneth over, riding the cotton pony") have not been mentioned by the 147 participants of this study, there are still conceptually similar or close expressions that were recorded. For instance, riding the cotton pony might be an older expression that is no longer used, however, many participants mentioned the expression of being on the rag or ragging, which is close as it also focuses on the menstrual materials used to manage the bleed, and upon which one 'sits.'



Figure 2 - Illustrations of menstruisms (surfing the crimson wave, riding the cotton pony), Layla Ehsan (2015).

Different, yet similar, then what is a *period*? Or menstruation? What does it mean to bleed? It is crucial to first take into consideration the definition of the terms *period* and *menstruation*. In fact, the use of the term *period* by itself or without

¹ https://helloclue.com/articles/culture/top-euphemisms-for-period-by-language. This is discussed in the next chapters of this research project as well.

a preceding 'monthly' appears to only have emerged in 1752, in William Smellie's A treatise on the theory and practice of midwifery. Subsequent uses of period vary and appear in conjunction with different terms, creating such expressions as 'lunar period.' Etymologically, the word period finds its roots in 'peri' and 'hodos,' Greek words that mean respectively 'around' and 'traveling, journey' or 'a way, path, road,' combining into the word periodos, which means a 'cycle, circuit' and 'a period of time.' A Latin origin also locates this term in 'periodus,' meaning a complete sentence or a 'recurring cycle.' Perhaps it is this sense of cyclicality and recurrence that made the term period the most popular way to refer to one's menstruation in the present day (Section 6.4 discusses this in more detail).

Not unlike the word *period*, *menstruation* seems to have a lengthy history, starting from the classical Latin 'menstruum' although the more popular form used at the time to denote specifically the menstrual discharge was the plural 'mēnstrua.' This plural form is thought to have its origin in the ancient Greek καταμήνια (katamenia, see Section 2.2 for a detailed account) or 'catamenia,' as it appears in Smellie's work in 1752. It also denotes the sense of 'menstruus' meaning 'monthly' or 'menses' and 'mensis' meaning 'month,' with a usage recorded in 1597 by the herbalist John Gerard. In post-classical Latin, 'menstruatio' is found starting from the late 12th century in British sources, as well as in the pseudo-Albertus Magnus. As for *menstruation* itself, the Oxford English Dictionary locates the earliest usage in the works of the military physician John Pringle (1754), while The Historical Thesaurus of English contextualises the usage of this term from the late 1700s to the present day. Along with the great variety found in the origins of certain terms referring to the menstrual event, the very definitions of what it is also differed, though they centred around a similar core, which is the regularly discharged blood or blood-like fluid from the normative female body.

In fact, further highlighting this linguistic and euphemistic variety that exists, but also to illustrate just how significant the usage of the term *period* has become, the menstrual tracking app Clue launched an online campaign titled #justsayperiod in 2017, which was followed by an advertisement campaign in the form of ad posters hung up at Rosenthaler Platz U-Bahn station in Berlin, with a goal to break the taboo and to create an opportunity for an open dialogue about menstruation (Mahrdt, 2017). This movement was prompted by an international

survey that Clue launched in 2016, as mentioned earlier, in conjunction with the New York based advocacy group International Women's Health Coalition, gathered over 5,000 'period' euphemisms from 90,000 respondents from roughly 190 countries. Interestingly, the very term *period* is used in this context as a synonym to *menstruation*. Similarly, the Scottish Government started a campaign called 'Let's Call Periods, Periods' aimed at 16-24-year-olds with the goal of highlighting the avoidance of using the word *period* and the stigma surrounding the menstrual event.



Figure 3 – Some posters of the 'Let's call periods, periods' campaign launched by Communities Secretary Aileen Campbell, Scottish Government (2020).

Similarly, in an interview conducted by Anna Druet and Lisa Kennelly (2017), Chris Bobel, Professor of Women's, Gender and Sexuality Studies and past president of the Society for Menstrual Cycle Research, upon being asked about her views on the impact of period euphemisms, pauses and responds that *period* is a euphemism itself. This prompts the article authors to reflect on their own unconscious usage of euphemistic menstrual language, pointing out the pervasiveness of certain expressions. Furthermore, following my own preliminary survey in 2015 for a different yet similar research project, which consisted of posting the question "what are some of the names/expressions you use to refer to your menstruation?" on social media, a trend seemed to emerge from the cross-linguistic data obtained, despite the reduced size of the population surveyed.



Figure 4 - Some illustrations of menstrual euphemisms realised in partnership with the Scottish Government 'Let's call periods, periods' campaign, Kitty Pressland (2020).

This trend of referring to menstruation with a variety of expressions, many of which are euphemistic, while not conclusive by itself, helped in informing and further consolidating the main driving hypothesis behind this current research project, and that entails the existence of shared metaphorical references and therefore of overarching conceptual metaphors² across languages.

1.1 Research questions

These suggestions emphasise the purposes of this research project as it seeks to answer the following fundamental questions:

- 1. How is menstruation construed and conceptualised metaphorically?
- 2. What are the most common metaphors and themes? To what extent can the existence of conceptual metaphors be established?

² For instance, we frequently speak about time in terms of money when we use expressions such as 'time-saving,' 'what a waste of time,' 'investing too much time,' 'living on borrowed time,' 'spending days travelling,' as well as when we structure our world in such ways as having hourly wages, having hotel night rates, and having prisoners serving time to repay their debt to society. These expressions point to the existence of the conceptual metaphor TIME IS MONEY, and such expressions are mappings within this bigger system. This is explained in more detail in Chapter 4 section 4.2.1.

3. What is the role and purposes of these metaphors? How can the conscious or subconscious choice of certain metaphors be explained in relation to social and gender norms?

4. What are the implications of these menstrual conceptualisations for the menstruators and the non-menstruators in their embodied and social experiences of and with menstruation?

To begin examining those questions, however, there is a need to understand how and why this so-called stigma that many seem aware of and often refer to, emerged and is still in existence. Rather than tackling these questions one after the other, it is much more useful to consider them together as they are interlinked and inform one another. For instance, where a specific metaphoric expression is identified in the data, it is often given some context for its usage by the participant who shares it, then it is examined in conjunction with other expressions to determine the overarching theme, while taking into consideration the individual and the general context of its usage to determine what purpose this expression serves, how it is viewed by the participants, and what the very existence of such an expression implies for the participants and society at large. Chapter 4 of this thesis outlines further the theoretical framework within which the research is carried out and summarises the overall methodological approach that is taken to answer those questions. As it stands, questions 3 and 4 will form a loop and play a role in the answers we find for questions 1 and 2. It is clear that to scrutinise those "menstruisms" and menstrual metaphors, there is a need to understand the larger context within which those expressions were coined and are still being used, and this is why this research project was drawn to the medical and cultural history of menstruation.

This loop appears even more starkly when considering that, although it is unfortunately well-known, perhaps even "normal," to be "feeling crappy" when "that time" starts, to the point where it is now an accusation, indeed an insult, to throw at someone who is not in a good mood, there is no reason to believe it has always been so. In the medical context, although the interest and almost obsession with menstruation by ancient and Victorian physicians alike has been extensively documented, menstrual pain has been rendered to nothing but cramps that one just needs to endure and is more often than not 'catastrophised' and

exaggerated, echoing outdated ideas of 'female hysteria.' Following these rather contradictory aspects of menstruation and equally polarised stances that various people seem to take depending on their own beliefs, benefits, and goals, the question then begs to be asked: is it important or is it not? Is it acceptable to talk about or not? Is it allowed to acknowledge it or is it not?

There is no one answer for any of these questions, much like there is no one explanation why and how the stigmatisation of menstruation even happened. The best way to answer such questions is to take a nuanced approach and refer to the history of menstruation in medicine and in culture in order to depict as full a picture as possible to begin understanding the dynamics that govern the existence of this phenomenon, especially its linguistic boundaries and creative manifestations. Several of the earlier questions are particularly confusing for menstruators and non-menstruators alike, yet many seem to intuitively know the boundaries of their various menstrual freedoms. Over time, menstruation acquired the attributes of noxiousness and dangerousness (mostly for the normative male bodied men of the past), and so began a campaign of taboo and stigmatisation. Despite the fact that this is, as Ehsan (2015) puts it, "an essential function" of the body, it is now very difficult to talk about, and "complaining about it — and, for that matter, acknowledging its existence in any way — is forbidden."

In fact, menstruation is given precisely delineated spaces where it can be discussed, but acknowledgement outside of these would be an immediate social transgression for which one can be punished in a variety of ways. Notoriously, it is one's character that is immediately attacked, one's morals, upbringing, and ability to show respect and behave in society, although more extreme forms of punishment do exist. Naturally, different cultures and peoples will have their own requirements to define one of those areas of pseudo-freedoms, and although negative associations related to menstruation can be found in many of these cultures, it is not to say that this negativity is universal and inescapable - on the contrary, this research project strives to bring nuance to these seemingly dominant narratives, and to show what kinds of imaginative and indeed affirmative modes of resistance exist in the languages and practices of menstruators. However, many cultures, over time, come to share some ground rules, notably that of keeping 'menstrual talk' between 'girls and women.' For example, in a typical Algerian context, should one even acknowledge the

existence of a menstrual pad, by simply referring to it as a "pad," in front of or directly to a man, it is all sorts of character questioning that will be unleashed as one is called rude, "mal élevé[e]," "ماتشيش" [ma taḥshmish - you have no shame]. Their transgression is also immediately put into context by mentioning a lifetime's worth of being shielded by normative women who have taken it upon themselves to dutifully abide by the ground rule of not speaking about it in any context (aside from medical) where there are men present. In other contexts, the punishments for an attempt either to be simply matter-of-fact about a quite normal manifestation of the body (much like sneezing or tearing up which require using a tissue) or to push back at those arbitrary boundaries, one will once again be given a variety of labels loaded with negative connotations in order to degrade, alienate, and dismiss, namely "such an activist," "one of those," and "feminazi." In other words, there seems to be no respite afforded here as silence is interpreted as accepting in the stigma, and acknowledgement or actual reference is actively repressed and punished.

With such repercussions, it is quite understandable to rather want to uphold those 'stigmas,' if only to have some peace. This is the context within which "menstruisms" have emerged and continue to be coined to this day, and this is the context which allowed for the formulation of these research questions. Those menstrual metaphors seem to exist at the crossroads of the medical and cultural history of menstruation and the social dynamics and arbitrary taboo boundaries mandated by the patriarchy. This is more complicated by the nevertheless very real need to speak about menstruation and its tangible consequences for daily life and overall health, and the acknowledgement that there is therefore a dire need "to inspect and defy" and effectively push back to secure certain rights for about half the world's population. Adding more complexity to this context, there is the recognition that menstruation is a manifestation of the body's functions rather than an inherent link to one's femininity, particularly since the social dynamics have been articulated around the hitherto binary of the sexes and genders used to perpetuate oppression and keeping "women and their problems" in very clearly defined spaces.

1.2 Structure of the thesis

This research project seeks to situate itself in a very similar position and has been developed and structured in a way that allows a survey of all those areas. This study also strives to remain aware of these issues to address the research questions and better understand their implications, while keeping its participants and the precious menstrual knowledge that they shared at the very centre of these converging forces. Surveying the medical history of the menstrual event from antiquity until modern times, in the West and in more Eastern areas of the world, Chapter 2 opens this research project with an overview that features the gradual development of the various understandings of menstruation through time while highlighting the persisting influences of the ancient tradition of defining and articulating medical practices that are not entirely detached from cultural assumptions. Chapter 3 builds upon the previous historical biomedical background and expands upon these cultural assumptions. It presents an outline of how menstruation has been perceived, researched, and written from Western antiquity to more recent times, in various Western and Eastern cultures, and in religions. Chapter 3 further highlights the research gap within which the present project fits as it surveys the existing literature on the meanings and implications of bleeding, most of which has concerned itself with anthropological and attitudinal approaches, rather than cognitive linguistics ones, restricted the discussion to normative female bleeding, and never included speakers of Arabic and its dialects.

Subsequently, informed by the histories and the literature of the previous chapters, and shaped by the methodology and theories described in Chapter 4, Chapter 5 serves as an introduction to the participants who responded to the survey while respecting their anonymity. This chapter begins the examination of the first two research questions as it establishes the commonalities in the menstrual language of all participants by exploring their semantic basis, and as it demonstrates the definite metaphorical aspect of the specific language related to menstruation, while contextualising the usage of this language historically and socially.

Finally, Chapters 6 and 7 further present the core analysis of the data volunteered by participants relating specifically to the euphemistic and to the metaphorical language surrounding the menstrual event, and proceed to interrogate how

menstruation is construed and conceptualised metaphorically. Chapter 6 focuses on addressing this question as it examines each aspect of meaning tied to blood and time. Chapter 7 examines those conceptualisations related to evaluative language, to visitors and people, the colour red and to more general manifestations of humour and "goofy euphemisms" that "can be a good laugh" as Ehsan (2015) puts it. Chapter 8 concludes this research project with a summary of each part of this thesis and with ideas for how this study could be expanded upon in future research.

2. Historical background: An overview of menstruation in medical history

2.1 Introduction

Even though modern medical practice no longer operates within the ancient humoural system and has far better understanding of what dwells within the human body, many fundamental precepts persist. Indeed, the impact of the Hippocratic tradition on the shaping of contemporary medical practice is undeniable and can be glimpsed through the still relevant Hippocratic Oath. Not only Hippocrates, but many of the classical key figures of medicine and philosophy left their fingerprints on the development of medical practices in general and of gynaecology in particular, and on the very understanding of menstruation, its physiological relevance, and its biosocial role.

This chapter takes this documented persistent influence as its core and offers an overview of the development of the understanding of the phenomenon of menstruation throughout ancient, medieval, and contemporary medical history in the Western and Eastern worlds. This influence has endured throughout the centuries and not only dominated the medieval scholarly discourse of logic and science, but also medical education in the West during the 18th and 19th centuries, and thus the understanding of menstruation. Therefore, surveying the historical background of menstruation in medicine is crucial in building the full context within which the menstrual event has been constructed.

Finally, this chapter offers an overview of the understandings of menstruation and its ramifications for the bodies that bleed and their social lives at the time of the Renaissance in the Western world and up until recent times. This overview features the gradual development of menstrual understandings through time while highlighting the persisting influences of the ancient tradition of developing so-called medical principles and practices that were not completely divorced from cultural assumptions.

2.2 From Hippocrates to Aristotle

The medical, biological, and evolutionary interest in the human menstrual function is long-standing and might pre-date the Ancient Greeks, although most of the still influential historical texts recorded seem to originate from the Ancient Greek practices. While menstruation today is mostly understood as the shedding of the superficial lining of the uterus in the form of monthly bleeding, it was a very different phenomenon for the Hippocratic physicians, for Aristotle, and for Galen. Before delving into what menstruation is, how it happens, and what purpose it serves, it is useful to outline its shifting medical understanding since the classical era. Highlighting the beliefs and practices of certain times, as well as the theories and writings of key figures is crucial to a more comprehensive depiction of the menstrual event as it is known in the present day, including its socio-cultural and political ramifications. The influence of ancient thought and assumptions extended throughout the centuries; they not only dominated the medieval scholarly discourse of logic and science (Atkinson, 1991, p. 29), but medical education in the West during the 18th and 19th centuries referred to such texts as well, although those were times when the previous authority of ancient medicine had started to decline (King, 2007, pp. 7-8). It is also worth mentioning that the scientific explanations of the ancient Greeks were not completely divorced from cultural assumptions. Therefore, even if this results in theories that seem more unusual to us than the very myths or phenomena they were trying to account for, there is still valuable insight into what those cultural and social assumptions were, particularly regarding the female body (Dean-Jones, 1994, pp. 2-3), particularly since many of those survive as traditions, myths, "old wives tales" or embedded into current cultural practices and attitudes (discussed more in chapters 6 and 7). Similarly, looking into those earlier Greek medical texts and their depictions of health and disease can reveal images of and overlap with an earlier time. A striking instance of this is the traces of ancient Egyptian medicine that can be found within some Greek works. While Jouanna (2012) is careful not to rush towards identifying similarities as direct influences, he understands the appeal of comparisons as those at the very least attest to some sort of exchange. Nevertheless, evidence of the prestige of Egyptian medicine, which is described in texts dating from c.1550 BC, was still found within the writings of many early and late ancient Greek physicians and philosophers (pp. 4-20).

To situate the beginnings of the understanding of blood and bleeding in the western world, it is particularly important to examine the works on human physiology and medicine of some of the most influential figures of classical Greece (Dammery, 2016, p. 1). Among such works are the sixty or so treatises assembled between the second half of the 5th century BC and the first half of the fourth in a collection that falls under the name of the Hippocratic Corpus, even though it is impossible to determine which, if any, of those treatises were authored by Hippocrates himself. Betraying a great deal of interest in the body which exhibits all the attributes and functions of the normative female body as it is identified today, ten of the treatises in the Hippocratic Corpus are gynaecological in nature (Dean-Jones, 1994, pp. 5-10). In fact, the Hippocratics, who were more likely to be identified as normative men given what we now know about the likely population to have access to medical education, wrote about 'women' as they understood them in relation to their reproductive capabilities, most often in such gynaecological texts where there is great emphasis on those very reproductive organs and their functions. This is proven more prominently by the fact that, when describing injuries of other parts of the body, such as the head or the feet, Hippocratic texts tend to be restricted to the male patient (Atkinson, 1991, p. 27). This is the case most likely because the Hippocratic writers believed that there were major differences between the male and the female bodies (discussed in further detail in Section 2.2.5). This sexual difference was attributed to the nature of the flesh and to the innate heat of the body, and it was more noticeably revealed through "continuous accumulation and evacuation of blood" (Dean-Jones, 1989, p. 225).

As far as ancient gynaecology or, more generally, medicine is concerned, most of what was known at the time was constructed through extrapolations from and comparisons with dismembered animals since human dissection was not practiced. Because there was no evidence to prove the extent to which the male and the female bodies differed from each other, the Hippocratic authors relied on the external and observable physiological phenomena exhibited by the bodies, particularly menstruation. The occurrence of menses and examining their frequency, amount, and consistency were considered vital to health in general (Arata, 2005, p. 21), and to some extent, still is to this day (see Section 6.4). As Arata (2005) explains, insofar as knowledge about the internal hormonal processes

that are behind the occurrence of menstruation was not available, the Hippocratic physicians relied on the physiological model developed at the time to account for this "otherwise inexplicable phenomenon" (ibid, p. 21). According to the Hippocratic texts, the entirety of the flesh of the female body is as soft and absorbent as wool. It was believed to be spongy, loose, and porous - or "one big gland" ('glands' being described as "spongy, porous, and plump" and if cut, they would bleed profusely) (Dean-Jones, 1994, p. 56). This texture, along with the sedentary lifestyle of women, explained the existence of menses. Since a woman is significantly less active than a man, there would be absorbed but unused nourishment which is converted into blood in the stomach, and such excess blood must be discharged in the form of menstrual bleeding (Dean-Jones, 1989, p. 179).

The assumption that menses originate from an excess of nourishment can constitute a logical cause for the first appearance of menstrual bleeding in young girls, or menarche. While still growing, there is no issue as most nourishment is used and whatever is left does not constitute much danger if it stays within the body. However, after the natural growth slows or stops, there is an accumulation of unused food that creates an excess of blood which has nowhere to go in the body but to flow out of it (Dean-Jones, 1994, p. 48). Furthermore, another one of the authors behind the gynaecological text titled *Diseases of Women* posited that the first occurrence of menses coincided with the widening of vessels leading to the uterus which would allow blood to flow through (Arata, 2005, p. 15). This continuous cycle of accumulation and evacuation not only shows how the female body was understood in terms of blood-hydraulics (Dean-Jones, 1994, p. 225) (see Section 6.3.1 for persisting imagery of flow and water) but was also thought to endanger women's health to a greater extent due to the risk of interrupting this cycle being heightened by the fragility of the womb. The womb is the organ that was believed to be responsible for ensuring balance in the body (King, 1998, pp. 33-35), and which was also described as 'wandering' around the body, reaching the lungs, the liver, and the head, causing various diseases when lodged somewhere it did not belong (Lefkowitz, 1981, p. 16).

Health, as far as women were concerned, was heavily dependent on reproductive functions, though classicist Helen King (2005) argues that while conception and childbirth meant health, it was still recognised and accepted that the body could still be healthy even if the womb was not (pp. 156-158). The appearance and then

the regular return of bleeding were also regarded as a sign of health (see Section 7.2 for a discussion of MENSTRUATION AS A HEALTH INDICATOR). In a society which considered that complete womanhood is achieved through childbirth, the occurrence of menses signalled the end rather than the beginning of puberty (Dean-Jones, 1994, p. 48), and demonstrated the young girl's readiness for marriage, conception and eventually motherhood. This is what led to the compression of those significant events into the shortest time possible as menarche was expected at the age of 13, and marriage was recommended for girls aged 14 (King, 2004, p. 51). If a young girl passed the age of 14 with no signs of menses, it was believed that her health was in danger as the reason behind this absence of menses was an obstruction to the vessels rather than the immaturity of the body (Dammery, 2016, p. 3; Dean-Jones, 1994, p. 48). The trapped blood, with no way out, was believed to travel up the body and toward the heart, causing mental disturbance, symptoms comparable to those of epilepsy (referred to as "the sacred disease" in *De morbo sacro*), and potentially leading to suicide, particularly by drowning or hanging (Dean-Jones, 1994, p. 50; King, 2004, p. 50). This further highlights the importance of menstrual bleeding in Hippocratic health, particularly considering the significance of assisting girls to bleed through such means as marriage (and thus, defloration)³, a cure which classicist Mary R. Lefkowitz (1981) refers to as "social conformity" (p. 15), or simply applying warmth to dilate the vessels enough for blood passage (King, 1998, p. 77; Dean-Jones, 2001, pp. 50-51; Dammery, 2016, pp. 3-4). In fact, the Hippocratic physicians were concerned with regularity as well as with quantity, for a healthy woman needed to menstruate a certain amount ("about two Attic kotyls or a little more or less") and for the duration of a fixed number of days ("in two or three days"); any longer or shorter period of time meant, as suggested in the text De morbis mulierum 1.6 (L. VIII.30), that the woman "is unhealthy and infertile." (quoted in Dean-Jones, 1989, p. 180). Two Attic cotyles equals about one pint, which King (1985) describes as "an excessively large amount by modern standards" (p. 135). This is further complicated by the expectation of it being discharged in

³ There exists evidence within the Hippocratic corpus pointing to the confusion of menarchal and hymenal blood. Hanson (1992) argues that defloration was to break an imperforate hymen and thus that intercourse was a way to bring menstruation about. However, King (1983, p. 112) points out that the ideal is preceding marriage and defloration by menarche, and Rousselle (1980, p. 1105) indicates that marriage before puberty was practised by the Romans, as confirmed by Durry (1955, p. 87), rather than by the Greeks. Sissa (1984, pp. 1133-1134) further disagrees, arguing that defloration, and more importantly pregnancy, were to loosen the narrow vessels and to dilate rather than to open a previously sealed vagina.

two to three days, which would imply heavy bleeding in a short period of time. However, while the abundant bleeding would be consistent with the Hippocratic female physiology and its excessive moistness, the wording in *De morbis mulierum* might suggest that the length of two or three days corresponds only with the heaviest days of the flow of the menses and is thus preceded and concluded by lighter days (Dean-Jones, 2001, pp. 87-93; Arata, 2005, p. 16). Furthermore, as previously mentioned, the bleeding was not only expected to be quite heavy but also regular and recurring every month. Arata (2005) suggests that, even though explicit data about duration is missing, the monthly aspect of menses can easily be found in the Greek terms for it: 'epimēnia' and 'katamēnia' both containing the word 'mēn', which means 'month' (see Section 6.4). This, again, was explained both by the moist nature of the flesh and the temperature fluctuations happening monthly and that would influence the humours (fluids)⁴ of the normative female body (pp. 16-17).

Although Aristotle himself wrote, in the second half of the fourth century BC, extensively on the biology and anatomy of various species, as well as on reproduction and the process behind the generational conservation of physiology, he did not dedicate a separate treatise to the normative female body and functions. Instead, he wrote on issues of sexual difference as they arose within the biology-focused treatises (Dean-Jones, 1994, pp. 13-19). As opposed to the Hippocratic physicians, Aristotle did not consider women to be quite as different from men as to be regarded as almost a different species. Despite his belief that women are naturally inferior, weaker, "more cowardly" (Lefkowitz & Fant, 2016, p. 306) and a sub-standard or, as Aristotle put it, an "infertile male... on account of inability of a sort" (Generation 728a, p. 103), he still considered both to be of the same species, and thus regarded women to be more like men than previously theorised (Dean-Jones, 1994, p. 38). Just as is the case for the Hippocratic physicians, Aristotle's main basis for the elaboration of his sexual difference was also the occurrence of menstruation. However, where the Hippocratic Corpus does not seem to reach a definite consensus on the female body's temperature,

⁴ Humoural theory first appeared within the Hippocratic treatise titled The Nature of Man, whose author is identified as a student of Hippocrates, Polybus (Jouanna, 2012, p. 335). According to the Hippocratic corpus, the human body is constituted of four humours: blood, phlegm, yellow bile, and black bile (Nat. VI, p. 262). Good health is dependent on those four elements remaining balanced; any imbalance would inevitably result in disease (Lloyd, 1978, p. 26).

Aristotle bases his concept of difference in physis on his belief that women's bodies are colder than men's (Ibid, pp. 45-46), which is the case on account of the blood flow that happened at the colder time of the month, with the waning of the moon (Generation 738a, p. 181). Indeed, Aristotle refutes the previously suggested theory that women are hotter because their menses are due to an excess of blood and heat. Instead, he insists that menstruation, which is less blood and more of a fluid that is bloodlike in colour, in its abundance, is proof of "coldness and inability" (Generation 765b, p. 387). Philosopher Gabrielle Hiltmann (2005, p. 27) goes further when locating the core of Aristotle's sexual difference in the heart, the hottest part of the body, and the organ which ferments blood and contains the soul (Dean-Jones, 1994, p. 185). Since men have more rational abilities, Aristotle theorised that their souls are thus more active. Consequently, this brings more active energy to the blood, successfully converting it into sperm. Therefore, by opposition, female bodies having less active souls and lacking heat evidently means less or incomplete fermentation of blood, which then leaves the female body with no pure sperm concocted and only abundant menstrual blood (Hiltmann, 2005, pp. 27-28). This is one major point of disagreement with the Hippocratic writers that Aristotle makes clear in his work. While the Hippocratic corpus seems to be comparing semen with 'female seed' more than with menses and posits in many instances that the female body contains both menstrual fluid and a 'seed' (Dean-Jones, 1994, p. 49), Aristotle explicitly states that such a thing is impossible as there cannot exist two seminal fluids in one single animal, and asserts instead that menstrual blood itself is the 'seed,' which he describes as being "semen, not indeed semen in a pure concoction, but needing still to be acted upon" (Generation 728a, p. 103). However, it is not so much a refutation of the existence of an additional fluid which appears if the female experiences pleasure as it is the rejection of this fluid being the seminal residue that is important for conception. For procreation, it is the menstrual fluid that constitutes the matter upon which the semen acts by contributing the principle of the form, in a process likened to that of rennet setting milk (Saïd, 1983, pp. 116-117; Dammery, 2016, p. 4). Nevertheless, to achieve conception,

⁵ While Aristotle was aware of the existence of a liquid the normative female body would secrete when aroused, he argued that it was not of the same nature as male semen because the site of its emission differed from that where pleasure was felt (Generation 728b, p. 105). Dean-Jones (1994, p. 177) points out that, for Aristotle, female pleasure was not a requirement for generation, and this further confirms that this second liquid and semen were not analogous.

both seminal residues need to reach their reproductive potential, which only happens at puberty. While Aristotle seems to accept the social norm of menarche taking place at age 14, he does not recommend marriage right away for young girls, as pregnancies tend to be difficult. Since he posited that a boy's semen remains infertile until age 21, Aristotle believed that young women should also marry at 21, despite being ready for conception since the beginning of menstruation. Because Aristotle considered women to be more like men than the Hippocratic writers did, and attempted to parallel male and female puberty, he argues that menarche is the beginning rather than the end of the transition from girlhood to womanhood (Dean-Jones, 1994, pp. 53-54).

2.3 From Soranus to Galen

Holding a similar belief that menarche started around the time of puberty rather than at the end of it (Dammery, 2016, p. 5), Soranus, a physician who practised in early second century Rome, was the author of almost twenty works, the most important of which is titled Gynecology (Temkin, 1956, p. xxiv). In this gynaecological text, Soranus' ideas about the normative female body and its functions differ slightly from those formulated before his time because dissection of human bodies had been performed from the third century to the first century BC in Greece and Rome (Edelstein, 1935, p. 248). Although there is no conclusive evidence that Soranus himself had the opportunity of dissecting human cadavers, he most likely relied to some extent on anatomical knowledge provided by those before him (Temkin, 1954, p. xxxix). Much like Aristotle and the Hippocratic writers, Soranus ascribes the purposes of menstruation, conception, and pregnancy to the uterus. Menstrual blood is both a necessary "purgation" (or "katharsis," the very word used by Aristotle in *Generation* as well) of an excess of blood in the body (see Section 6.3.1.3), and the nourishment of the embryo during pregnancy (*Gynecology* IV, pp. 16-17). Perhaps the clearest addition that appears in Soranus' account of menses as a natural occurrence in women's bodies is his acknowledgement of individual differences. The physician allows variation in the quality of the blood, which can be pure blood or a bloody fluid; in the duration of the bleeding, that can be anywhere between one day and over a week without it being the cause of a disease; and in the quantity of the blood excreted, the maximum of which is the previously set amount of two cotyles, although this can vary according to the nature of the woman, her age, body weight, lifestyle, and

seasonal change (ibid, pp. 17-19). Not only are variations considered normal, but so also is not menstruating at all, even for women who are neither children nor in their old age. Highlighting his understanding of menstrual fluid as unused excess, Soranus writes that it is natural for women who are "engaged in singing contests" not to bleed as the fluid is "forced to move around" and is thus completely exhausted (ibid, p. 19). While we can see an echo of the Hippocratic and Aristotelian precepts here, it is important to point out that, for Soranus, health for women was not entirely dependent on menstruation and conception as he considered those events to be disruptive instead (Clark, 1993, p. 77). Furthermore, while Soranus points out the monthly aspect of menses by reiterating the terminology used hitherto ("epimenion" and "katamenion") (ibid, p. 16), he rejects the previous theory that menstrual flux is influenced by the lunar cycle, particularly by the waning moon, demonstrating that there is also great variety in the recurrence of the menses, appearing on the twentieth day for some, before then, or when the moon is waxing for others (ibid, p. 18) (see Section 5.3 for representations pertaining to cyclicality and time). Menarche is no exception when it comes to considering individual variation. Soranus writes that the first appearance of menstruation takes place "around the fourteenth year," (ibid, p. 17, italics added) which is also the time of puberty and physical changes (such as breast development). Echoing the Hippocratic tradition of assisting young girls to bleed, Soranus recommends preparation ahead of the natural menarche and of defloration (Dammery, 2016, p. 5). He first describes the signs identifying the imminent onset of bleeding, then proceeds to the prescription of the "proper care" of thirteen-year-old girls, and which is accomplished through several methods: walking, swinging or rocking, massages, daily baths, and finally occupying the mind as much as possible (Gynecology IV, p. 21). The emphasis on gentle, passive exercises, and on the reasonable relaxation of the body and the mind can perhaps explain why Lefkowitz (1981) qualifies Soranus' principles as more "sensible and humane" (p. 12).

Often considered a contemporary of Soranus despite being born around the time of his death, Galen is another renowned physician and prolific writer who practised during the second century AD. Galen's work, although much of it was destroyed in a fire, managed to hold a strong influence over medicine for centuries after its author's death. These works covered a variety of subjects, particularly

anatomy and physiology, pathology, medical practice and treatment, and commentary on ancient writings such as the Hippocratic corpus (Brain, 1986, pp. 1-2). Galen's interest in the Hippocratic texts was apparent in his own precepts; perhaps because by Galen's time, Hippocrates had gained such a renown as to be referred to as a "legend" and Galen took great care to paint him as a hero, as "the discoverer of the right path" (Temkin, 1973, pp. 62-63). Consequently, Galen's principles and understanding of menstruation were based on Hippocratic thought. The physician used the same previously posited humoural model to understand the body and health in general, which meant the four humours remaining in balance. Since, to be healthy, balance is key, it can be deduced that any accumulation and retention of residues that are supposed to be rid of were a threat to health, and the best example for that was menstruation, a natural evacuation of matter (Brain, 1986, p. 13). For Galen, menstruation is a necessity on account of the sedentary and less active lifestyle of "the female sex," as this inactivity causes an accumulation of blood that can cause serious illness if retained within the body (On venesection against Erasistratus K164, p. 26), which strongly echoes the Hippocratic "correlation between female health and perfect menstruation" (Flemming, 2000, p. 338). He writes that it is one of nature's ways of preserving balance, further exemplifying this phenomenon with the "cleansing" that occurs after childbirth, and the development of milk which is the exact same substance as menstrual blood (On venesection against Erasistratus K164, p. 26). The periodic evacuation of blood occurring in the normative female body formed at least part of Galen's argument in favour of bloodletting, which was not a popular practice in Rome at the time (King, 2004, pp. 73-76). Within Galen's theory and practice of letting blood as a cure to many ailments, which itself is operating within the humoural body, menstrual fluid is a necessary "purgation" (On treatment by venesection K283, p. 83) and a "catharsis" (ibid K291, p. 87), and any menstrual suppression constituted very serious illness and ought to be treated as quickly as possible. In another treatise, Galen details the possible causes of this pathology; it could be a weakness of the womb, which is too stiff, it could also be that the channels are too narrow to allow blood passage, or the very quality of the menstrual fluid as it is too "thick" or "sticky," or more generally because of a predisposition to retention which could be the result of a light diet combined with too much physical activity (King, 2004, p. 70). The opposite of this latter cause is also correct: if a woman has a rich diet and too

much leisure, more blood will be lost (ibid), which in itself suggests that Galen, not unlike the physicians before him, thought that there was a standard amount compared to which one could tell if the blood was retained or evacuated too abundantly. To treat menstrual suppression, Galen recommended first and foremost letting blood, usually from the ankle in order to draw the blood down the body, to the womb and not any further up; heavy menses were, perhaps surprisingly, also treated through bloodletting, but the site for this was the elbow, so that blood was encouraged to go up the body (ibid, pp. 76-77). Galenic principles not only mirror Hippocratic and early antiquity understandings of the menstrual process, but they also perpetuate the long-standing ancient Greek tradition of assisting the normative female to bleed, as any absences or deviances from the norms constructed by both society and physicians constituted cases of pathology in need of often male-provided medical treatment.

2.4 Beyond Western menstruation

2.4.1 Menstruation in Chinese medical tradition

Interest in human physiology, health, and medical treatment was not an exclusive feature of Western thought and philosophy. Being over two thousand years old, it is expected for Chinese medicine to also be documented and passed down through some medium, particularly if we consider the popularity of this medicine in the present day. The essence of Chinese medical theory was indeed collected, between 300 and 100 BCE, by unknown authors, and assembled into what medical researcher Ted Kaptchuk (2000) refers to as the "Chinese equivalent of the Hippocratic corpus" (p. 25), the Huang-di Nei-jing (translated as Inner Classic of the Yellow Emperor), more commonly known as the Nei Jing. This ancient text, not unlike the ancient Greek works, has remained relevant throughout time, and that is because, while the original text itself would be unclear and quite unintelligible by modern standards, numerous additional commentaries, interpretations, and clarifications have been layered over it by each of the dynasties it has lived through (ibid, pp. 25-26). Highlighting the key difference in the medical understanding of the body, Kaptchuk (ibid) explains that while Western medicine has traditionally been more analytical in nature, always concerned with identifying the cause through the symptom of the disease, and with narrowing it down as much as possible, Chinese medicine is more synthetic.

It looks at relationships between phenomena happening at the same time within the body and attempts to find ties between the symptoms and all other aspects and characteristics of the body affected. It generally understands parts in relation to the whole, focusing on the functions of such parts which is itself a practice based on Yin Yang theory⁶ (ibid, pp. 4-7). The Chinese term for uterus itself, which literally translates as "palace of the child" highlights the main functions associated with it (Dammery, 2016, p. 8). In terms of anatomy, Chinese medicine does not seem too concerned with the locations or the actual structure of the organs inside the body; rather, *Organs* are defined by their functions. The primary functions of the uterus, a Yang Organ in form but a Yin one in function, appear to be menstruation and gestation (Kaptchuk, 2000, pp. 351-352). However, because the uterus is thought to be a 'curious' or peculiar Organ, and of little importance compared to primary Organs, menstruation and conception are dependent upon those Organs and other aspects of physiology, such as Meridians. Consequently, treatment for menstrual disorders would not target the uterus itself but the major Organs thought to govern it, such as the Kidney, Spleen, or Liver (ibid). The Kidney in particular seems to be a key Organ as far as the development of the normative female body is concerned. The *Nei Jing* explains that Kidney-qi becomes increasingly abundant in young girls aged 7, the external physiological evidence for that being adult teeth and hair growth. It is at age 14 (in sui, which is age counted starting from conception instead of from birth) that the reproductive substance, much like a hormone in Western terms, referred to as tian gui, is fully developed. Coupled with a healthy and smooth circulation in two particular Meridians which are said to "both come out of the uterus" (Ellis, Wiseman & Boss, 1989, p. 309): Rèn, the conception vessel and Chong, the penetrating vessel (Shaw, 2014, p. 282), this is what results in a regular and 'normal' menstrual cycle (Can, 2008, p. 310). Not unlike its Western counterpart, ancient to early medieval Chinese medical thought did set a socially acceptable age for menarche, and was equally preoccupied with regularity and quantity, since an irregular or painful

⁶ In Chinese medicine, physiology is understood, not unlike humoural theory, in terms of three fundamental substances or textures: *qi* (a complex substance in between matter and energy), *blood* (which originates from consumed food and is transformed by *qi*) and *jing* (or the essence of reproduction and development), and operates within a yin yang system (Kaptchuk, 2000, pp. 46-51). Always understood in relation to those substances and function, Organs (which differ from organs as we know them) work together to preserve balance and harmony in the body, through their complementary oppositional functions of yin and yang. Therefore, there are Yin Organs and Yang Organs; the former produce, transform and store while the latter receive, process and absorb (ibid, pp. 75-78).

menstrual cycle spelled a disharmony in the movement of the *Liver Blood*, and an excessive, insufficient or a lack of menstrual flow indicated some sort of deficiency (Kaptchuk, 2000, pp. 81, 192). Furthermore, menstrual blood was also thought to be nourishment for the foetus that becomes milk for the new-born (Dammery, 2016, p. 8). Indeed, this preoccupation with menstruation was more prominent in the early medieval Chinese medical texts since menstruation was thought to be the indication for the "ideal female normality," of which fertility is an intrinsic part (Furth, 1999, p. 6) (see Section 7.2 for a discussion of MENSTRUATION AS A HEALTH INDICATOR).

2.4.2 Menstruation in Ayurvedic medical tradition

Ayurveda is another significant classical set of medical teachings that originated in South Asia in the 5th century BC, and which remains relevant today. Not unlike the previously cited Western and Chinese medical texts, these manuscripts were likely written by predominantly male scholars, and were transmitted in such form until Sanskrit printing was further developed and became widespread. These Sanskrit manuscripts, that are still preserved in private collections and libraries to this day, effectively form a unified compendium of thoughts and practices in the field of formal medicine and describe "a structured method of theorising the human body, illness, therapy, and the healthy lifestyle" (Wujastyk, 2009, p. 202). The Ayurvedic theory of how the body is constructed has the transformation of nourishment or food into a vital essence at its core, much like ancient Chinese medical thought. In Suśruta's Compendium food is 'cooked' and reduced to this essence (or rasa) through the digestive force, which is referred to as "fire," and this essence is dyed red, and eventually transformed through another principle of heat in the body to blood, and into menstrual blood in women (Wujastyk, 2001, p. 113). These transformations take place one after the other, producing flesh, until the highest body essence, semen, is finally achieved (Wujastyk, 2001, p. 5). However, this physiological description of the body is based on a normative male body as there seems to be no direct or definitive equivalent to semen, and the chain of tissue transformations does not fit the normative female body. Wujastyk (2001) points out instances where breastmilk is cited as the counterpart of semen, and where this highest essence could originate from intercourse between two female bodied individuals, but eventually concludes that "female" blood and "male" semen are the basic necessary components for conception (ibid). Despite

the recognised inconsistency of the texts regarding the status of menstrual blood as either regular blood or a form of semen in itself, which is not further addressed (Wujastyk, 2001, pp. 113-114), it is the menstrual blood that is retained during pregnancy that, together with semen, constitutes the material from which the child's body is produced. Further advising on women's and children's diseases, particularly on miscarriages and infant death, Kaśyapa's Compendium dedicates a section to the mythological fable woven around the goddess Revatī, or the childkilling Lady Opulence. She was given the title of child-killer or *Childsnatcher* because, according to Indian mythology, she would transform herself into a disease in order to chase after the demons that escape into human and animal wombs so that they can be reborn (Wujastyk, 1999, p. 268). This myth particularly highlights the notion that disease occurs as a consequence of evil or bad conduct, and explicitly leads to the conclusion that miscarriages befall bad or unrighteous women. A passage describing those whom Lady Opulence attacks says, "...Childsnatcher kills the menstrual blood" (ibid). Given the centrality of fertility and conception, it is logical that the absence of menstruation or menarche constitutes a disease caused by Lady Opulence (see Section 6.3.2 for more mythbased representations of menstruation in the present day). One passage gives a harsh description of the young girl who does not experience menses, stating that she is to be labelled "Parched Opulence Lady" if she has reached sixteen years of age without menstruating, her arms are skinny, and she has no breasts. This is the kind of *Childsnatcher* that is also described as a "destroyer of menstruation" and that is pronounced incurable (Wujastyk, 2001, p. 219) (see Section 7.2 for conceptualisations pertaining to health and illness). While the translated Ayurvedic texts do not elaborate further on the fate of those girls, nor do they provide any more details on the specificities of menstrual fluid, it is still possible to conclude that the socially and medically accepted age for the onset of menstruation lies between the ages of 12 and 16. Despite the geographical distance and the different fundamental ideologies and cultural understandings of the anatomy of the human body and its various functions, a more or less common core seems to exist between this body of medical literature and the earlier surveyed ones.

2.5 Throughout the Middle Ages

2.5.1 Menstruation in Arabic medical tradition

In the Middle Ages this shared core is much easier to determine given the more direct relations existing between the various prominent medical writings of the time. This is the case of medieval Arabic⁷ medicine, the deeper roots of which can be found in the Greco-Roman medical tradition. Indeed, from about the 8th century to the 14th, much of the body of ancient medical literature was translated into Arabic, and was commented, built, and improved upon by a number of prominent Arabic-speaking scholars, most notably Rhazes, Al-Jazzar, Avicenna, Haly Abbas, and other contemporaries and later comers. The most important earlier figures at the core of much of the Arabic medical corpus are Hippocrates, Aristotle, Galen and the Byzantine Greek physician Paul of Aegina, an experienced surgeon who lived in Alexandria in the 7th century, and who was popular in the Arabian regions he travelled to for his knowledge and practice of obstetrics (Campbell, 1926, p. 12), and for establishing the medical encyclopaedia as a genre in the field (Pormann, 2004, p. 297). In fact, the peak of Arabic medicine and its scholars' "foster-parenting" of the great Greco-Roman writings is often linked to the decline of this medical tradition (Campbell, 1926, p. 12).

Al-Razi (c. 900 AD), known as Rhazes in the Latin-speaking world, was a Persian physician practitioner and a prolific writer, whom Meyerhof (1935) describes as "the greatest physician of the Islamic Period" (p. 321), and whose medical writings were deeply rooted in the Hippocratic and the Galenic corpora. One of the major works of Rhazes, entitled *Al-Kitab al-Mansori* or *Liber ad Almansorem*, is effectively a compilation of Greek writings, predominantly of Hippocrates, whose theory he followed, and Galen, whose practice he adopted (Campbell, 1926, p. 68). The importance of this massive work is perhaps further highlighted by the fact that its ninth book would become part of the regular curriculum of medicine of Western medical schools for hundreds of years (ibid, pp. 67-68). While this previous work lacks in original writing, *Al-Hawi* or *Liber Continens* is a posthumous medical encyclopaedia which contains the writings of the former authorities while

⁷ Referring to this body of medical literature as 'Arabic' here does not only implicate the medicine that was developed during the 'Golden Age' of Islamic civilisation, and which roughly spans from the 8th century to the 14th. Arabic was indeed adopted as the lingua franca of the Islamic medieval period.

including chapters of the author's own experiences, opinions and commentaries, and which is considered to be the most important of Rhazes' rich corpus, as it was translated into Latin in 1280 in Italy, and thus became influential in Europe. It was particularly significant in the field of contraceptive medicine, as several later physicians would prescribe treatments and methods that appeared in the Continens; for instance, the most dominant technique of creating a physical barrier by introducing a suppository or a tampon whose contraceptive effect is heightened by the use of honey or oil into the vagina remained the most effective compared to other chemical contraceptives in the 20th century - Dr Marie Stopes was recommending the use of "olive oil on a rubber sponge" to less wealthy English women in 1932 (Musallam, 1983, p. 63). Within this prominent encyclopaedia, the cases described do not seem to have been chosen for any specific reason other than to illustrate a variety of internal and ocular disease, and of "women's maladies" (Meyerhof, 1935, p. 331). In medieval Arabic medical writings, as far as these so-called 'women's maladies' are concerned, it is generally matters of the reproductive organs and those related to child conception, birth, and rearing that are discussed. While there seems to be great interest in such disorders as womb inflammations, retention of the menses and uterine suffocation, as well as in menstruation in general, Pormann (2009) comments that most writers of the time do not offer much insight into the experiences of female patients (nor of practitioners for that matter), and cites one case described by Rhazes and that provides a "rare glance" at how women's diseases were discussed and treated (p. 1598). The symptoms presented during this case were confused speech, excessive laughing, and redness in the face, which led to the diagnosis of melancholy, a disease similar to madness (or hysteria), the cause of which was determined to be an excess of black bile (ibid). Rhazes further carries the long-standing ancient tradition of considering menstruation to be paramount in a woman's health as he draws a direct connection between the quality and quantity of menstrual discharge and breast cancer in his Continens (Tabatabaei & Ali Tabatabaei, 2014). Furthermore, according to King (1993), Almansorem contained a chapter dedicated to uterine suffocation, the description of which is Galenic in essence as it mentions the retention of menses and of seed, the fainting of the patient and her stillness as if she died, and scent therapy, with Rhazes' own additional treatment consisting of rubbing the opening of the womb with an oiled finger by a midwife (p. 51). While Rhazes does not explicitly state that the uterus is prone

to wandering around the body, he writes about a sensation that he describes "as if something is pulled up," in addition to his referring to the Hippocratic text *Diseases of Young Girls*, which identifies virgins as the primary victims of the nefarious effects of uterine suffocation (ibid, p. 53) (see Section 6.3.1 and Section 7.2 for present-day juxtapositions of concepts of health, illness, procreation, physical and mental suffering, and medical support and lack thereof).

This particular Hippocratic treatise, and more generally Hippocratic elements relating to women's illnesses, have been an influence on yet another prominent physician of the 10th century, the Persian Al-Majusi, known in the west as Haly Abbas (Green, 1987). In his one recognised publication that is considered as one of the most impressive medical works of the Middle Ages, Kamil al-sina'ah altibbiya or Liber Pantegni, Haly Abbas also outlines his Hippocratic aetiology and Galenic practice of medicine (Musallam, 1983, p. 64). Unlike Rhazes, Haly Abbas adheres completely to the Hippocratic notion of the wandering womb, maintaining that the membranes keeping it in place are weak and susceptible to breakage, which would leave the uterus unanchored and free to move around the body. More than that, the womb is believed to be "more or less an independent living being" that craves conception and prefers pleasant smells (see Section 6.3.1.2 for representations pertaining to anatomical parts like the uterus). As a result, one treatment prescribed was to apply foul smells to the nose so that the womb would move back down, and so that the unpleasant smells could warm and dissolve the "cold vapours" (King, 1993, pp. 51-52). In addition to this remedy, the author also recommends sexual intercourse (Shatzmiller, 2013, p. 223) because large quantities of seed or retained menstrual blood will cause the innate heat of the body to become extinguished in the absence of sexual activity. This recommendation is particularly addressed to virgins as their strong sexual desire and their thick menstrual fluid makes them more susceptible to this disease; alternatively, though described as having the same effect as sex, the author advises a midwife to rub pleasant-smelling oils on the opening of the uterus so that the seed is warmed and thinned and is then evacuated (King, 1993, p. 52).

Also practising and writing in the 10th century was the influential Tunisian physician Ibn Al-Jazzar. Due to his geographical proximity and to the translation of his most widely known work, *Zad al-musafir wa-qut al-hadir* (Provisions for the Traveller and Sustenance for the Settled), from Arabic into Latin as the *Viaticum*

by Constantine the African in Salerno and Monte Cassino during the late 11th century, Al-Jazzar gained great fame and influence across medieval Europe. In fact, the medical handbook that is the Zad was also translated into Greek and Hebrew and formed the basis of one of the famous Trotula texts, Conditions of Women, in addition to later being included within the compendium of medical textbooks used in various European medical schools and universities (Bos, 1993, p. 297; Green, 2001, p. 11). Al-Jazzar, as all the great Arabic-speaking physicians, was no exception when it comes to Galenic influence; he too operated within Galen's system of humours and of balance, and within his gynaecology. The age of menarche, set between 12 and 14, is explicitly stated in chapter 9 of the *Viaticum*, which is devoted to the retention of menses. Accordingly, menstruation is a consequence of the cold and moist nature of the normative female body, and if retained causes an imbalance of the humours, ultimately inducing diseases; this understanding of menstruation yet again attests to its centrality to women's health in the Arabic medical corpus too. The formalism of the Viaticum in stipulating the aetiology of menstrual retention appropriately follows the Galenic humoural system; this disease could be caused by a naturally or accidentally occurring bad temperament; by a disorder of the substance of the womb or its veins; by the too small quantity, the too thick quality or the wrong movement of the menstrual fluid; or by a continuous psychical affliction such as anxiety, sorrow, or fear and anger. Similarly, the symptoms of this disease are also very much Galenic: poor appetite, nausea, a craving of bad foods (such as charcoal), pain in the loins and in the neck, head, and eyes, high fevers, and dark and reddish urine. In terms of the treatments recommended by Al-Jazzar, it is a mixture of venesection and cupping in the foot and ankle area, drugs, decoctions, suppositories, and the like (Bos, 1993, pp. 300-301). Predictably, the next section discusses the matter of excessive menstrual blood loss, which is caused by the bad quality of the blood, triggering a series of symptoms: paleness, swelling of the feet, difficulty digesting, poor appetite, and withering of the body. The first recommendation for heavy menstrual bleeding is again in accordance with Galen's own: venesection of an upper body part. Other treatments are also prescribed, such as the cupping of the area underneath the breasts which reflects the Hippocratic notion of the uterus-breasts connection, as well as a variety of other remedies (ibid, p. 302). Uterine suffocation, or as it is called in this handbook, "hysterical suffocation" is also outlined in the Viaticum, though it is not associated

with a moving uterus; rather, it is caused by an excess of corrupted retained 'female sperm' or retained menses when the patient does not have sexual intercourse and it affects widows and virgins especially (Bos, 1993, pp. 303-304). King (1993) explains that this corrupted retained substance creates a vapour that will rise to the diaphragm, which is connected to the uterus, and will finally reach the throat, causing suffocation (p. 52). This disease is identified by a loss of appetite, a coldness of the body, fainting, and a weak pulse, and the remedies to cure it prescribed by the author include massages, fumigations, foul smell sniffing, and application of pleasant smells to the opening of the womb by a midwife. Al-Jazzar recommends those last two treatments despite his non-adherence to the concept of womb displacement and without any further comments nor explanations, because this inconsistency has been passed down in Galen's writings from Hippocrates' own (Bos, 1993, pp. 304-305).

Unlike Al-Jazzar, the Persian Ibn Sina or Avicenna (c. 980-1037 A.D), known as 'the Prince of Physicians' and identified as the most well-known Muslim Arabicspeaking physician and philosopher (Campbell, 1926, pp. 77-78), also posited that the womb did move around the body, despite this belief not being definitely solidified in the Galenic corpus. It is worth mentioning that Soranus' work, which was chiefly on gynaecology, is never cited in the Arabic writings, despite being the only one that vehemently attacked and refuted the theory of womb displacement. It is, however, entirely possible that this physician's corpus was never translated into Arabic and thus remained unknown to the Arabic-speaking world (Bos, 1993, p. 299). Avicenna's seminal work titled Al-quanun fil-tibb or the Canon of Medicine was translated into Latin during the 12th century in Toledo by Gerard of Cremona, and was printed over thirty times during the 15th and 16th centuries, remaining the standard textbook in medicine in Europe throughout the 17th century (McGinnis, 2010, p. 228). In his *Canon* Avicenna writes about the importance of menstruation as necessary purification of the female body (see Section 6.3.1.4) and is consequently as concerned as his predecessors and contemporaries with the retention of menses and with uterine suffocation. To be sure, Avicenna devotes four chapters to uterine suffocation, and discusses issues of menstrual blood regulation and of the role of menses in generation. Again, his description of this suffocation is Galenic in essence, and so are his prescriptions of phlebotomy and pleasant-smelling oils to be rubbed on the mouth of the womb,

and bad smells to be sniffed (King, 1993, p. 52). On the matters of menstrual retention and of provoking menstruation or simply regulating its flow, the author also prescribes venesection and cupping but mostly covers these issues in the chapters he devotes to purgation and coitus (Avicenna, 1973, pp. 328-509), which would also point to the author's prescription of sexual intercourse as a possible treatment (Park, 2013, p. 89). The author warns not to use cupping directly on the breasts as that would cease the menses; following the idea that there are special veins or channels between the womb and the breasts, he asserts that menstrual blood does not only constitute the nutrients of the embryo, but also becomes milk after parturition (Avicenna, 1973, pp. 365).

2.5.2 Menstruation in Western and European medical tradition

While early Medieval Latin medical texts were also of importance, it was generally through Arabic encyclopaedias and surveys of various aetiologies and therapeutics that the majority of those essentially Galenic medical practices were reintroduced to Europe, especially in the case of the texts of the famous *Trotula* ensemble. The Trotula is a compendium of three major texts, Conditions of Women, Treatments for Women, and Women's Cosmetics, that was composed during the 12th century in Salerno and that soon became the most influential book in the field (Green, 2013, p. 346). Of those three texts, the first and third are believed to have been anonymous, while the second, *Treatments for Women*, is commonly yet unusually attributed to Trota or Trocta, a Salernitan woman who was a practitioner of medicine herself and a Magistra of Medicine at the medical school of Salerno according to Campbell Hurd-Mead (1930, p. 349). Given the influences implicated in the genesis of these texts, it is not surprising that women are said to be cold, moist, and weak as they go through multiple pregnancies and are susceptible to uterine disorders (Dammery, 2016, p. 12). Menstruation, referred to as 'flowers' (see Section 5.3 for a more comprehensive set of metaphors used throughout time), is a direct consequence of this heat-lacking and weak nature of women, and understandably, regular purgation becomes a crucial part of remaining healthy (Green, 2001, p. 73). Menarche is expected to take place at about 13, some age variance is allowed depending on the heat and cold of the body, and menstrual cycle thereafter is expected to be regular in occurrence and in quantity as demonstrated in the discussion of menstrual irregularities, including a series of symptoms that could lead to serious health concerns (ibid, p. 21) (see Section

7.2.1) for a discussion of physical and mental suffering). The first of the *Trotula* texts contains long sections detailing the issues of the retention of menses, the paucity of menses, the excessive flux of menses, as well as other uterine pathologies such as suffocation, displacement, prolapse, and ulcers (ibid, pp. 75-93). The same previously outlined Galenic treatments are also found here, alongside direct mentions of Galen himself: bloodletting, cupping, sexual intercourse, and fumigations. Although womb movement towards the respiratory organs or towards the bottom is refuted here, rather following Al-Jazzar's 'fume' or vapour theory, the fact that womb displacement and those directions identified are mentioned suggests the possibility of this phenomenon and reflects the beliefs of the time in Italy (ibid, p. 26).

Surveying the key medical corpora that dominated a large portion of the Middle Ages has highlighted the significance of menstruation in women's health. It has further shown that, generally, such medical texts were written to help medical practitioners and midwives to provide the necessary care to the women who need it so that they could help themselves if no physician was around. For these reasons, the notions of women's diseases and the functions of their normatively constructed bodies were written about quite plainly, though some few and far between mentions of secrecy and shame exist within very narrow and specific contexts (Green, 2000, pp. 10-11; Pormann, 2009; 1598). It is not until the 13th century onwards that the shift, both in semantics and in attitudes and anatomical interest, took place. Green (2000) demonstrates how a Latin translation of the Trotula texts rendered almost all straightforward mentions of female genitals as "hidden places" or "secret parts," a practice that would remain in use up until the 15th century (pp. 11-12) (see Section 7.2 for discussions of the concepts of shame and secrecy and their significance in menstruators' lives). Labelling texts on gynaecological issues and matters of generation as "secrets of women" was common practice starting from the middle of the 13th century, and the purpose of such a practice was two-fold: to signify that the text is creating a barrier excluding those who should not be privy to its contents, and to indicate that this previously unknown and female-bound content is being exposed to men (ibid, p. 15). Furthermore, Green (2005) argues that, within this earlier mentioned shift, was also a merging of two traditions that had been distinct up until this point in time: medical gynaecological pathologies and generation. This is illustrated by the

famous *De secretis mulierum* ("Secrets of Women"), that is falsely attributed to the Dominican philosopher Albertus Magnus, and which incorporates medical concepts when discussing generation (Park, 2008, p. 93). One reason for this renewed interest in the scientific and medical workings and implications of generation, as well as for the wide popularity of this pseudo-Albertus work, is a rediscovery of some of Aristotle's precepts. In fact, the popularity of *De secretis mulierum*, and this interest in 'women's secrets' was such that later Latin renditions of the *Trotula* started being titled differently, changing "diseases" into "secrets," and shifting the focus of those gynaecological texts from the physiology of desire to the understanding of reproduction or generation (Green, 2005, p. 11).

In fact, Green (2000) asserts that there was a surge in these new conception-focused gynaecological texts, mostly in Latin and mostly authored by men, during the 15th century, and indeed a "veritable explosion" of these in the 16th century (p. 27). Understandably, this tremendous shift caused the normally various medical needs of women to be chiefly articulated in terms of reproduction and its implicated organs, and because of the heavy influence of Aristotelian philosophy and Christian theology, it also contributed to the mistrust of the knowledge of women regarding their bodies (Park, 2008, p. 94) (see Section 3.2 for modern socio-political context, and Section 7.2 for discussions of present-day menstrual pains and medical disregard).

In the 14th and 15th centuries, two Italian treatises bearing titles of "women's secrets" illustrate these specific effects by writing about menstruation as corrosive, consistently referring to it as "illness" and representing it as a poison in one treatise, and by mostly representing women as weak, frail, morally and physically inferior patients with no knowledge about their bodies nor any capacity for self-treatment (ibid, pp. 95-97) (see Section 7.2 for representations of similar concepts in present-day menstrual language). Similarly, one Latin adaptation of the *Trotula*, possibly compiled in Flanders, focused on themes of conception and childbirth facilitation, and incidentally of pain relief; another English translation of the ensemble titled "The Privitays of Women" altered the very gynaecological nature of the texts in order to highlight its interest in generation, which resulted in a grouping of all content on fertility and conception together, and in additions of the nefarious effects of menstrual fluid and substantial new material on parturition (Green, 2000, pp. 23-24). Challenging the 'secrecy' of the female body

and its hidden reproductive processes, male physicians such as the Italian Michele Savonarola established themselves as authorities in matters of female reproductive functions. To be sure, Savonarola established hierarchies in the care and management of pregnancies, allowing midwives to take care of uncomplicated pregnancies and births, but transferring any sorts of complications or illnesses during this process, and any issues of infertility or conception of sons to medical professionals (predominantly men), as opposed to a "layperson" which definitely included midwives. By doing so, and by redefining pregnancy and childbirth as "acute illnesses" albeit as part of nature, Savonarola successfully medicalised those typically female reproductive processes (ibid, pp. 100-101). Besides the medicalisation of these female processes, Savonarola also solidified the link between the female biology and the woman's social expectations of motherhood by devising a 5-level understanding of the menstrual fluid that essentially divided menses into a pure level akin to the purest of fluids or men's semen, four levels implicated in embryo nourishment and later in lactation, and finally, the final impure level which is evacuated (Savonarola, cited in Green, 2005, p. 9). Despite this shift, however, the womb -particularly the pregnant womb- remained 'secret' in the sense that it was hidden inside the female body, and was thus not accessible for male physicians to scrutinise and fully understand. The uterus was still believed to be related to all the other organs of the body, and unlike men, whose temperament balance and overall complexion hinged on that of the heart, women's balance depended entirely on the quality of the uterus, which was harder to understand because it changed so much during the menstrual cycle. As such, women's health during the late 14th and the 15th centuries was entirely based on the womb and its functions and was thus intensely defined by its interiority; this 'hiddenness' left only two choices to physicians and laypeople alike: trusting women's own testimonies or relying on external indicators. Of course, given the heightened suspicions of anything women said regarding their own bodily experiences, medical and philosophical texts on generation and sexuality began focusing more on the external signs of those reproductive features and functions, namely virginity, fertility, and pregnancy: the colour of the face, the shape of the body, the coldness of the feet post-coitus, etc (ibid, pp. 103-104). Though dissections of animals and male bodies had already been in practice at the time in Italy and France, this virtual obsession with the interior of the female body, the uterus and the pregnant uterus was a contributing factor to the need to dissect

more female bodies, and to observe the pregnant womb, which was the first internal organ to be illustrated, based on personal observation, in Italian medical literature (ibid, p. 106). While menstruation still held an essential role in women's health, the attention drifted more towards generation and motherhood. Renaissance gynaecological texts went further, referencing anatomy and conception processes to justify female inferiority and to entirely frame women's existence within the necessity of being mothers to sons, and listing qualities women should have in order to be 'ideal wives.'

2.6 The Renaissance and beyond medicine

The influence of the pseudo-Albertus text remained strong, particularly regarding the text's propagation of the negative and noxious qualities of menstrual blood; for instance, Joubert (1989), a French physician, insisted that sexual intercourse during menstruation would not produce an offspring, and that it would "pollute" the man (p. 108) (see Section 6.3.1.4 for a discussion of concepts of purification, cleanliness, and pollution).

However, the absence of menstruation was still considered a serious illness that required treatment by a physician because regular menstruation was still central to women's health, which was entirely dictated by the womb, and still held externally observable implications for conception. This is perhaps better illustrated by the use of menarche as an indicator of both puberty and of ability to conceive; Joubert (ibid) writes that, typically, a girl is not able to conceive before puberty, and should she not have regular menses after that point, she will also be unable to produce a child (p. 100). Menstruation was not only significant in conception as the embryo's nourishment, it was also always spoken of in relation to milk after childbirth, as it was known that a lactating woman does not menstruate, since her menstrual fluid flows upwards, whitens, and becomes milk at the breasts (Orland, 2012, pp. 448-449). This is yet again a reflection of classical medical and natural philosophical thoughts in the understandings and writings of Renaissance physicians and authors. Furthermore, Orland (ibid) shows that, much like menstrual fluid could possibly wander, take irregular channels and be suppressed, it was also possible for milk to travel from the breasts to the stomach or to the bladder (ibid, p. 451). The misplacement of menstrual blood and its unnatural flowing towards the breasts was, however, the concept that carried

through till the 18th century. If the milk stops, there was fear that bleeding would start from one place or another (ibid, p. 452). The famous midwife Jane Sharpe (1671) warned, citing Hippocrates, of the danger of going mad should blood come out of the nipples (p. 102). In the late 17th century, Sharpe reflected the acceptance of people of the previous classical authoritative texts; for instance, in terms of the hydraulic understanding of internal fluids and the importance of provoking menses because of their role in conception, while challenging some of the beliefs of such writers as Pliny, that menstrual blood was corrosive and venomous (p. 216). Nonetheless, at the turn of the 18th century, Orland (2012) writes, there was a further shift in the focus of medical research and literature towards more experimental methods and evidence grounded in observation. As such, the previously dominant humoural theory was challenged, and the likening of menstrual blood to milk was dismissed on the grounds that there existed no anatomical direct connection between the womb and the breasts. At least, this was the case among medical professionals as the larger public carried on understanding their bodies through fluid dynamics through the 19th century (pp. 472-473).

By the middle of the 19th century, the practice of gynaecology as a specialised field had started to solidify and grow. The changed notion of 'women's diseases' carried over from the previous times and served to further define the normatively female reproductive organs and functions in terms of pathologies, and to keep this area of specialisation categorised as a 'special subject.' Strange (2000) illustrates this point by arguing that, although the menstrual cycle was regarded scientifically as a stimulation for the organs and an enhancement of "personal loveliness," it was nonetheless still discussed negatively due to its "unfortunate, unpleasant and distasteful" nature by medical practitioners who thought it so foul that women themselves should be spared from hearing about it (p. 609). Early in the century, the influence of the earlier concepts is apparent; Dr William Tyler Smith (1856) understands menstruation as the beginning of femininity and menopause as the decline of it (pp. 113-114), which effectively links menstruation to demonstrations of femininity and thus, marriage and conception, a consequence of which is concern over infertility in the prolonged absence of menses (see Section 6.3.1.3 for a discussion of gendered expressions). Similarly, in the 1870s, Dr Edward Clarke (1873) was asserting that women engaging in academic studies were most likely

to suffer from excessive menses and similarly recounts his personal witnessing of female scholars who excelled and finished their schooling but whose ovaries remained undeveloped and were later on pronounced sterile (p. 39). The psychiatrist Henry Maudsley (1874) adhered to this theory and argued that menstruation did constitute physical and cerebral strain on women, further echoing the earlier thinkers' and physicians' theories that menstruation was the prime indicator for women's health, particularly that of their reproductive organs and functions (p. 190). Moreover, the notion of hysteria as it was articulated in relation to the uterus and to the menstrual cycle also appeared in Dr Smith's observations, as well as earlier in Dr Edward Tilt's (1853) suggestion that this socalled hysteria could be a 'cerebral' symptom of menstruation. The recommendation to deal with this condition, for society's sake and women's own safety, was incarceration (pp. 270-271). As such, it becomes clear that the menstrual event was fully medicalised during this century, as the predominantly male medical authority overshadowed maternal influence, and eventually replaced it completely (Bobel, 2010, p. 32). Victorian male physicians replaced mothers and midwives who had dominated the field in general and the practical menstrual knowledge until then and those male physicians became experts in defining and treating menstruation.

In the scientific and medical discourses that derived from the Victorian era and were carried over to the 20th century, the female body's lacks and dangerousness (further discussed in Chapters 3, 6 and 7), specifically in relation to its cyclical bleeding, have been widely exaggerated and pathologised. Martin (1988), for instance, demonstrates how the female body is dismissed "as failed production" in the metaphorical scientific discourse during the industrial revolution. Thomas Laqueur (1990) illustrates "the artifice of the sexual difference" that doctors established and reinforced through a discourse that often characterises menstruation in a way that is "redolent of war reportage" (quoted in Bobel, 2010, p. 35). Finally, Louise Lander (1988) argues that medical authorities turned their attention to menstruation so that their "social function as agent of larger social forces" could keep exerting dominance over "subservient groups", in this case, women (p. 1-2). Further criticising the active role of the medical authorities in pathologising the menstrual event, Lander points out the misogynistic construction behind Premenstrual Syndrome (PMS), and argues that it is so

because the personality features that appear in people suffering from PMS are ones that are not deemed to befit women (read: "anger, aggressiveness, irritability"), as women are supposed to be "docile, patient and altruistic" (quoted in Bobel, 2010, p. 37).

Such descriptors are guite reminiscent of the notion of hysteria that has subsisted until this point in time. Known as 'Premenstrual tension' until 1953, the collection of symptoms linked to the occurrence of menses started being referred to as 'Premenstrual Syndrome' by Raymond Greene and Katharina Dalton (1953), who deemed the first term "unsatisfactory" (p. 1007) as 'tension' was only one part of the syndrome. The symptoms of PMS are primarily psychological in nature, including emotional, somatic and behavioural aspects, which explains the feminist criticism it has faced since its definition as a clinical disorder by physicians roughly 60 years ago (Richardson, 1995) (see Section 7.2.1 for a discussion of physical and mental suffering). As opposed to PMS, Premenstrual Dysphoric Disorder (PMDD), a mood disorder entailing stronger "irritability, anger, and depression" than those caused by PMS, has been "officially" known as a psychiatric disorder since 1986 (Figert, 1995), and was introduced as 'Late Luteal Phase Dysphoric Disorder' or LLPDD in the Diagnostic and Statistical Manual for Mental Disorders III-R in 1987. Although PMDD was included in the DSM-III-R and then again in the DSM-V in 1994, its status as coded primary diagnostic remained unofficial as it was listed in the appendix as "in need of further study" (DSM-III-R) (Figert, 1995) and "depressive disorder not otherwise specified" (DSM-V) (Bhatia and Bhatia, 2002).

Despite this unofficial status, clinicians still issued diagnoses of it and psychotropic drug development still proceeded (Bobel, 2010, p. 37). Some researchers, however, have in recent years taken it one step further by viewing the entire menstrual cycle as a problem that can be made to disappear through cyclestopping contraception. In the United States, Seasonale and Lybrel, two oral contraceptives that also interrupt menstruation have already been approved and commercialised, respectively since 2003 and 2007. Several healthcare professionals disapprove as there is no way to know with precision what long term consequences these drugs could have, particularly on healthy women who consume those pills as "lifestyle drugs" (ibid, p. 38). Reminiscent of the drug development for PMS, PMDD and menstrual suppression, another treatment emerges at the crossroads of the idea that women and their bodies are enemies,

and that of Margareth Morganroth Gullette (2004) in relation to "age anxiety": menopause treatment, the most popular of which is hormone replacement therapy (HRT) (ibid, p. 40). A large-scale study conducted by the National Institutes of Health reported that, instead of halting heart diseases, as well as other issues related to advanced age, like it claims to do, HRT seems in fact to increase risks of suffering from heart attacks and strokes, and of developing blood clots and breast cancer. This construal of menopause as a disease is criticised by many, especially Martin (1988) who sees that this reasoning equates the postmenopausal body with the "disused factory, the failed business, the idle machine" (ibid, p. 41).

As the genesis of a proper 'biomedical' approach to menstruation, after moving from internal observations and extrapolations to articulation in terms of physiology, to anatomically grounded claims and arguments, was completed in recent years, it effectively became the predominant approach in the menstruation-related medical literature. It now concerns itself with the menstrual cycle only in biological and clinical terms, thus only examining and discussing hormones, behaviours, cognition, and symptoms as a response to the menstrual event, and "disorders" (PMDD and endometriosis) (Johnston-Robledo & Stubbs, 2012, p. 1). This approach, in fact, continues the long-standing tradition of the pathologisation and the medicalisation of the normative menstrual events, such as the various premenstrual fluctuations and peri-menopause (ibid). Because of this enduring conceptualisation of menstruation as a disease in need of treatment (see Section 7.2) despite the advanced knowledge that is now available as opposed to that of the earlier centuries, Coutinho and Segal (1999) and Kaunitz (2000) believe that this representation keeps defining menstruation as 'unnecessary' and essentially 'unhealthy' (see Section 6.3.1 and Section 7.2 for discussions of the representations of menstruation as unnecessary yet an indicator of health). For this reason, Johnston-Robledo & Stubbs (2012) argue that the typically biomedical approach to menstruation is inherently articulated in a way that isolates it from its social, cultural, political, and embodied meanings (p. 1) (see Section 3.2 for a socio-political background and Section 7.2.1 for a discussion of the biopsychosocial medical model).

2.7 Conclusion

Although modern medical practice has now departed from the humoural system and has managed to develop a far better understanding of anatomy, biology, and certain bodily functions and what they entail, many classical works, such as those belonging to the Hippocratic tradition, remain influential and have played a key role in the overall development of medicine. In gynaecology and in menstruation-related understandings and considerations, ancient influence could still be found up until very recent times.

This chapter has surveyed the chronological development of the various concepts and theories that were ascribed to the menstrual event, not only as a health concern but also as a biological imperative and as a social expectation. Beginning with the Hippocratic and then the Aristotelian understandings of the bleeding body and the menstrual event itself, this chapter has presented an overview of the key principles at the root of the recommended medical practices to regulate, induce, suppress, and treat menstruation and its myriad implications. Further exploring the authority of these texts, this chapter has outlined the menstrual concerns of Soranus and Galen. Elsewhere, medical traditions, notably Chinese and Ayurvedic, were sharing similar concerns and apprehended the menstrual question in similar ways despite the geographic gap.

The thread of ancient influence and authority in matters of the bleeding body is followed again throughout the Middle Ages and throughout the popular and impactful medical works of the Arabic-speaking physicians that made their way back to Europe and formed the basis of standard practice, notably through the *Trotula* compendium. A text from this very influential work has served as an example to illustrate the impact of cultural assumptions and language change as this text marks the point at which menstruation acquired new the attributes poisonous and noxious.

Finally, this chapter has extended the chronological outline of the various historical medical and biological understandings of menstruation to the Renaissance and more recent times in the Western world. Although this is the point where many of the ancient principles were rejected in favour of a more "scientific fact-based" modern biomedical approach, some echoes remain ever

present, if only in attitude and general disregard. This chapter has further expanded upon the ancient tradition of developing medical practices that were far from devoid of cultural assumptions. Some of these cultural assumptions, as well as their socio-political ramifications, are explored in the next chapter.

3. Review of the literature: Menstruation and gender in language and society

3.1 Introduction

Besides the practice of examining and writing about menstruation medically, which has, as outlined in the previous chapter, provided a wealth of medical writings spanning from antiquity to the current day, the menstrual event has also been explored through anthropological and cultural lenses. While it has been quite substantially researched medically, a sizable portion of the literature on menstruation or its paraphernalia remains firmly anthropological and social in nature.

In this chapter, modern understanding and social contextualisation is built on using previous historical background through integration of more recent literature. From ancient mythological to real life present-day understandings and representations of menstruation, this chapter first presents a contextualisation of menstruation in society and language, through the various cultural shifts this phenomenon has witnessed. Contextualising menstruation in society therefore provides a useful framework for understanding the menstrual language research landscape and its approaches, methodologies, and conclusions.

This chapter subsequently offers a review of the general menstrual literature that examines how menstruation has been perceived and written about throughout time, cultures, and religions, and of the more linguistically focused literature that has investigated menstrual language to uncover euphemisms, and then conceptual metaphors. By doing so, this chapter highlights a research gap in the menstrual research landscape: menstruation has generally been approached through the anthropological or attitudinal lens, has typically been treated as a "female" phenomenon with not much consideration for gender variance, and has yet to be the focus of a study including the Arabic language and its dialects. Additionally, as far as research instruments are concerned, studies focusing on conceptual metaphors of menstruation, as few as they are, have yet to use a survey as data collection method, and have not previously utilised multiple analysis tools that include the Historical Thesaurus and Mapping Metaphor.

3.2 Contextualising menstruation in language and society

The notion of menstruation as a taboo, specifically as a communication and linguistic taboo, often assumed to have existed for as long as individuals have menstruated, has only emerged relatively recently. In fact, as detailed throughout Chapter 2 (for instance, Section 2.2), in classical Greece, where there was a particular medical interest surrounding the menses, a menstrual taboo per se did not seem to exist yet. In Historia Naturalis, one of the only large surviving and arguably most authoritative texts from antiquity, Pliny the Elder attributes extraordinary powers to a menstruating woman. According to Mary Beagon (2005, p. 228), it is the earliest and most comprehensive account of powers attributed to menstruation existing in ancient literature. Those powers span from turning wine sour, rusting bronze and iron, withering crops and spoiling fruit to killing beehives, clouding mirrors, and infecting dog bites with poison, to only cite a few (Pliny the Elder in Beagon, 2005, pp. 72-73). Such a description starts painting a picture of the construal of menstruation as a power and as a danger through the language used at that specific time. Although there have been arguments that women's need for purification was suggested by Hippocrates (Von Staden, 1992), Beagon finds very little pertaining to the various concerns surrounding menstruation in classical texts that pre-date Pliny, particularly that of the sexual taboo, or the taboo of sexual intercourse during menstruation (2005, p. 228). The fact that the Hippocratic writers and Aristotle considered menstrual blood to be essential for conception, since it constituted the embryo's nourishment, does seem to corroborate Beagon's argument. While Pliny does deem sexual intercourse during menstruation as physically "dangerous" to the normative male bodied partner, with the potential to bring him harm and sickness, although only at certain points of the lunar cycle (Beagon, 2005, p. 229), he himself also writes that some illnesses, such as quartan fever, are cured at puberty, or when a woman starts menstruating (ibid, p. 96). In fact, the denotation of menstruation as a 'source of pollution' seems to truly surface and become the most widespread view of the menstrual event only from the 13^{th} century onwards (Bobel, 2010, p. 32) (see Section 2.5.2).

Prior to those times, menstruation had been referred to as 'katharsis' or 'purgation' by Aristotle and several other classical writers; while this process did not imply that menstrual blood itself was polluted once it was flushed out of the

body nor attribute any noxious effects to it, it still suggests that retained blood that is supposed to be evacuated is a danger to the health of the woman. As the times and the cultures change, so does the language surrounding menstruation; in turn, this language reinforces those cultures and enables the building of beliefs and rituals. The sort of harmfulness attributed to menstrual fluid that is articulated in Pliny the Elder's writings, for instance, only emerges in the late 13th century pseudo-Albertus medical work titled *De secretis mulierum ("Secrets of Women")* (see Section 2.5.2). The most widely circulated version of this authoritative work opens with an anonymous commentary that is Plinian in nature and that explains the main reason behind the composition of this thesis on the dangerous 'secrets' of women (Owens, 2018, p. 354):

The reason for this is that women are so full of venom in the time of their menstruation that they poison animals by their glance; they infect children in the cradle; they spot the cleanest mirrors; and whenever men have sexual intercourse with them they are made leprous and sometimes cancerous. And because an evil cannot be avoided unless it is known, those who wish to avoid it must abstain from this unclean coitus, and from many other things that are taught in this book. Albert, seeing that the cause was just, consented to it, and thus we have the efficient cause for this book... (Pseudo-Albertus Magnus, 1992, p. 60).

This Plinian record of menstruation-caused disasters could very well act as the list "of the evil effects of witchcraft" described by the church and the state in Europe. As Delaney, Lupton and Toth (1988) and Owens (2018) suggest, this catalogue of the nefarious effects of menstrual fluid that Pliny the Elder compiled and that subsequently passed down to later times through influence and rework did inform the 1484 Bull of Pope Innocent VIII, which authorised the Witch Hunt in Germany and inspired the Malleus Maleficarum (1487) by recognising the existence of witches. An example of the powers attributed to the menstruating woman (see Section 6.3.1.1) that appears consistently in all these sources is the toxic gaze of the menstruating woman, which was given the ability to cloud or contaminate a mirror. First appearing in Aristotle's *De insomniis* (On Dreams), it was repeated in Pliny's Historia, then consistently being reprised in the works of theologians and natural philosophers, such as Thomas Aquinas and Albertus Magnus to only cite a few. Those revered authors connected the noxious gaze of the menstruating woman to that of the basilisk, a snake-like monstrous beast said to have a deadly gaze (Owens, 2018) (Section 6.3.2 for a discussion of the monstrous and the horror). In De Secretis Mulierum, a menstruating woman is recognised if a vein-

like red mark appears when she looks at a new mirror and has the ability to extend her toxicity to the air around her; a power that appears in the *Malleus Maleficarum* as useful when battling a basilisk with a mirror (ibid, p. 358). Owens (2018) argues that this feminine toxicity and basilisks had permanently intertwined through a combination of menstruation, monstrosity, and the Evil Eye: "Like the basilisk, women could curse or control with their gaze alone; they could cast the 'evil eye,' ensnare male lovers, or bewitch judges into leniency. Their eyes were not merely vents for the womb's 'evil vapours,' but also for the organ's nefarious and tyrannical influence" (ibid).

During the Middle Ages, further language of poison and pollution (Section 6.3.1.4), such as the Poison Maiden or the Venomous Virgin, surfaced through the same channels and was so widespread and important that it transcended disciplines and was adopted in literature, justified in science and medicine, and told and represented in folklore and various art forms. The transcendence of these misogynistic themes and tropes appears starkly knowing that, to this day, the practice of following a set of strict dietary restrictions when menstruating is observed in some parts of India, particularly avoiding sour foods (Puri & Kapoor, 2006, pp. 168-170). Indeed, *De Secretis Mulierum* explained the basilisk-like and the poisonous nature of menstruating women not only by the accumulation of menstrual 'venom,' which would poison their entire system and make them so accustomed to poison that they are no longer affected by it (Pseudo-Albertus Magnus, 1992, pp. 130-131), but also by their odd taste in 'foul smelling' foods during menstruation, pregnancy, and post-menopause (ibid, p. 129).

Understandably, the mysticism, the powers, and the pollution of menstruation extend to numerous other areas, notably religions, which explains the largely anthropological approaches to researching menstruation. The belief that menstruation is unclean and impure is present in both Abrahamic and Dharmic religions. Each religion sets its own definition of what qualifies as either regular or irregular menstrual bleeding and codifies prescriptions and prohibitions that both menstruating and non-menstruating bodies are required to observe, even though several overlaps emerge across religions. In both Judaism and Islam, for instance, sexual intercourse while menstruating is strictly prohibited as it is said to be harmful to men because the impurity extends to them and renders them unclean for seven days, punishes them along with their menstruating partners by

separating them from "among their people" (Leviticus 20:18) and, in the case of Islam, simply considers them at risk since menstruation is described as الْذَى ('ada) which translates to hurt, impurity, harmful thing, illness or pollution (Al-Bagarah 2:222). Menstruating women are generally required to bathe and are excused from performing religious duties. In some extreme cases, they are forbidden from touching or passing objects to men. While Christianity does not seem to impose specific rituals or rules now, some denominations, such as Oriental Orthodox Christianity, consider women to be "impure for sacred devotion" during this period (Tan et al., 2016, p. 126), and its history is spotted with instances of prejudice towards women as menstruators. Hoffman (1995) argues that the idea of women's menstrual blood is the root of evil and is to be feared is directly addressed in Leviticus 15: 19-33 (King James Version). Indeed, the verses highlight the uncleanliness of the menstruating woman, extending it to anything she touches, sits, or lies on, as well as the need to wash oneself if any contact was made⁸. The verses also stress the need for menstruating women to be separated, and to allow seven days after the end of the menses in order to be considered completely cleansed. Perhaps more solidifying Hoffman's argument is the notion of atonement for the 'issue of uncleanness' described in the verses; this atonement is to be made by a priest on behalf of the menstruating woman after she brings two offerings, one of which is for a 'sin' offering while the other is for a burnt offering¹⁰. Merskin (1999) adds that the biblical representation of menstruation as Eve's affliction because of her sin is at the root of the popular reference to menses as 'the curse' (p. 944) (Section 7.2.1). In Hinduism, the attitudes differ according to the denomination and to the place. If in India menarche is generally perceived as a positive event, it is quite different in Brahmin households, where menstruating women are kept from entering the

Eviticus 15:19 (KJV): And if a woman have an issue, and her issue in her flesh be blood, she shall be put apart seven days: and whosoever toucheth her shall be unclean until the even. Leviticus 15:24 (KJV): And if any man lie with her at all, and her flowers be upon him, he shall be unclean seven days; and all the bed whereon he lieth shall be unclean.

⁹ Leviticus 15:25 (KJV): And if a woman have an issue of her blood many days out of the time of her separation, or if it run beyond the time of her separation; all the days of the issue of her uncleanness shall be as the days of her separation: she shall be unclean.

Leviticus 15:28-30 (KJV): But if she be cleansed of her issue, then she shall number to herself seven days, and after that she shall be clean (15:28). And on the eighth day she shall take unto her two turtles, or two young pigeons, and bring them unto the priest, to the door of the tabernacle of the congregation (15:29). And the priest shall offer the one for a sin offering, and the other for a burnt offering; and the priest shall make an atonement for her before the Lord for the issue of her uncleanness (15:30).

kitchen or any other sacred space for three days and are required to take a cleansing bath after this period is over (Garg & Anand, 2015, p. 185). In the muchcited case of Nepal, a sterner set of rules is observed: women are isolated in clay huts or cowsheds and are not allowed back into their home for three nights (Robinson, 2015, p. 193). A purifying oil bath is required at the end of the period in order to become clean again. If this tradition, chaupadi, is not observed, misfortunes (such as crop failures and water shortages) are blamed on women (Tan et al., 2016). Some Buddhist cultures have strayed from the initial teaching of the Buddha that defines menstruation as "a natural physical excretion that women have to go through on a monthly basis, nothing more or less" (ibid, p. 127) and observe rituals based on superstitions. Aru Bhartiya (2013) explains that this is due to the influence Hinduism has had on Buddhism. As a result, women are considered to be naturally unclean, are forbidden from entering the holiest spaces of temples and monasteries and are believed to pollute the very ground and waters used to make offerings to the Buddhas, which in turn offends them, thus constantly making women's karma negative. Similarly, in Shinto, the indigenous religion of Japan, menstruation brings about a state of pollution and defilement. Purification rituals are required to be cleansed. Moreover, menstruation is believed to be a kind of death, and this makes menstrual blood a taboo. In Sikhism, however, it is believed that the creation of any human being requires the blood of a woman. As opposed to other religions, Sikhism forbids practices that consider women as impure. Menstruating women are not restricted by any rules and are free to live their spiritual lives as they wish (Tan et al., 2016). Aside from very few instances, the common patterns emerging from the conceptualisations of menstruation in religions are that menstruation is a polluting and unclean state, one that imperatively requires some sort of washing, and that some degree of separation between women and men is necessary. These patterns can constitute one reason why a large portion of the existing menstrual literature approaches the topic through the anthropological and theological lenses, while another equally substantial part of the literature focuses on negative or positive attitudes towards menstruation, or on the menstrual taboo in language.

While religions might not be enforcing prescriptions as strictly in all contexts and places, the hygiene issue, the commonly negative attitudes, and the isolation attached to the menstrual event seem to have extended through contemporary

times. In modern Western cultures, for instance, the rules appear to be unwritten and implicitly agreed upon. Menstruation is a hygiene problem, one that must remain concealed, contained, and controlled. The first study analysing the content of print advertisements addressed specifically to teenage girls conducted by Havens and Swenson (1988) uncovered the continued underlying representation of menstruation as a 'hygienic crisis' rather than a maturational one or a coming of age, or a puberty milestone. It is, however, not only advertising that targeted the specific issue of cleanliness. Brumberg (1997) finds that "hygiene, not sexuality, is the focus of most maternal discussions with girls" (p. 30). Indeed, 'modern mothers,' who are the first informants accessible to young girls experiencing menarche as far as parental involvement is concerned in both developed and developing countries, usually stress the importance of staying clean, avoiding any soiled clothing, and purchasing the right product in order to keep the outside appearance unspoiled (ibid). After surveying a number of menstruation-related advertisements in teenage-oriented magazines in the US, Merskin (1999) concludes that "the ideology of American culture suggests that evidence of femininity, that fact that women bleed, is best kept hidden. Girls are responsible for hiding this shame as well as the accoutrements of this activity" (pp. 954-955) (Section 7.2.3). In fact, earlier, such ideologies were already being criticised and questioned by the second-wave feminist movement as it grew of the inherent androcentricity of medical conventions consistent and the centuries old pathologisation of the female body and its functions (Roh, 2019), and eventually progressed beyond issues of convenience of menstrual pads to broader implications for health and safety, and for self-determination and true freedom of the female body, which understandably included menstruation (Bobel, 2010).

Within the umbrella of third-wave feminism activism, the sub-movement of menstrual activism that appears to be growing and gaining more strength as more information and opportunities to be educated in menstrual health become available, finds its roots in second-wave feminism. What seems to characterise this movement is the wide range of strategies deployed by young women and girls within it in order to challenge the established culture of menstruation, which include menstruating body care and the ideology behind these efforts. These strategies are directly related to the earlier battles of second-wave feminism as it remained distrustful of the 'Feminine Care' industry, particularly because of

this industry's lack of commitment to placing the safety of menstrual product users at the heart of its concerns and designs (Bobel, 2010). In the late 1970s in the United States, the questioning of the safety of chemical-based and single-use menstrual products grew, only to reach its peak in the 1980s because of an outbreak of toxic shock syndrome linked to tampon use, which caused 38 deaths, reaching 2,000 cases by 1983 (ibid). Following this major event, menstruation further developed into a women's health concern and an environmental issue; and the deep distrust harboured by activists and environmentalists towards the existing FemCare industry became a major drive behind the development and expansion of an alternative market for organic and more environmentally conscious menstrual products (Roh, 2019). The radical side of the movement then emerged and combined third-wave feminism with the "punk youth ethos of alienation" (Bobel, 2010, p. 9) and worked to oppose and resist corporate control. Menstrual activism became a movement articulated around the rejection of the construction that menstruation is a problem that requires mostly medical solutions. Menstrual activists argue that advocacy for environmentally friendly and safer menstrual products requires knowledge of one's body and the continuous challenging of the previously established culture of concealment and shame (ibid) (Section 7.2). Therefore, there is first and foremost a need to be able to talk about menstruation itself, before endeavouring to move on to advocacy for a better menstrual culture.

3.2.1 Bleeding bodies: From 'women' to 'menstruators'

This culture of shame dictating the need to constantly conceal and hide further contributes to the confusion usually characterising menarche. Finally accessing the status of 'woman', yet forbidden from speaking about it, adolescents experiencing menarche hold largely negative emotions and attitudes towards menstruation to this day and across the world, and they will carry with those throughout adulthood (for example, Section 7.2.3). Furthermore, the idea that menstruation is a problem in dire need of a solution, and that a bleeding body needs to be fixed runs in many strands of discourse. Elizabeth Grosz (1994) interrogates the Western construction of the normative female body as "a leaking, uncontrollable, seeping liquid; as formless flow; as viscosity, entrapping, secreting; as lacking not so much or simply the phallus but self-containment" and hypothesises that the very corporeality of women is conceptualised in terms of a

mode of leakage and seepage. The theory of the 'docile body' (internalising certain priorities, namely those of self-containment, of making sure no leakage has happened, of taking part in or avoiding certain behaviours to maintain control over the body, and of carefully choosing language so the power is always maintained) offers another way to explore this need for containment. In Sandra Bartky's (1990) application of Foucault's self-policing theory in her examination of femininity, she finds that it is merely a set of 'disciplinary practices' and shows how, through constant observation and scrutiny and through internalising the misogynist gaze, in itself a historical construct, women are compelled to fix every 'inadequacy' in their bodies. Monique Deveaux (1999) opposes Bartky's position, however, finding that it reduces women to mere containers receiving culture passively rather than fully active agents who participate in the construction and reflection of the social and cultural contexts they exist in.

It is more realistic, productive and less reductionist to engage with the normative female body as a site for contestation of and interaction between the self and the society, or the internal and the external sides of the body. Alice Dan and Linda Lewis (1992) believe that the menstrual cycle has the potential to offer a research model "to understand relationships between mind and body, and between social meanings and individual experience" (quoted in Bobel, 2010, p. 29). In order to use the menstrual cycle as a research ground to explore those linkages, the imperative gendering of the bleeding body as 'woman' is not a necessity. The 'I Bleed, therefore I am a woman' discourse is what forms the rift among feminists, particularly between radical menstruation activists and spiritualists in the way they frame the definition of menstruation. As outlined earlier, feministspiritualists conceive of it as an indivisible part of womanhood. However, such a framing serves to essentialise women's bodies and assumes that menstruation characterises all women's experiences, despite the well-known fact that not all women do menstruate, and not only women menstruate. Menstrual activists, on the other hand, are activists that choose their language carefully, most notably when referring to people who menstruate as "menstruators", in order to be

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inclusive and show solidarity while simultaneously moving away from and challenging the hegemony of the gender binary¹¹ (Bobel, 2010).

Reminiscent of the notion of normative female bodies and bleeding bodies in general as sites of self and social contestations, trans¹² bodies seem to also be sites of construction and potential reconstruction of sex, both corporeal and cultural. Prosser's study (1998), which uses a psychoanalytic approach, analyses 'body narratives' appearing in transsexual autobiographies, looking more precisely for the interaction of those two forms of reconstruction, and emphasising the focus on embodiment and that the body is more than achieved entirely through discourse. However, the essentialism of sex still seems to surface in the representation of trans folk as people whose sex and gender are at odds. Zimman (2014) argues that "[a]fter all, trans people and other gender non-normative groups are often defined by a purported mismatch of biological sex and selfidentified gender" (pp. 19-20). While it may be true in some cases that transsexuals, according to Marjorie Garber (1997, p. 98) "essentialize their genitalia" and require the presence of an "absolute insignia of maleness," Zimman (2014) argues that trans men are increasingly contesting the female ascribing of their bodies and are not necessarily requiring surgery in order to strongly identify as male. Language has proven to be a powerful tool that they use to "discursively reconstruct their bodies as entirely and legitimately male" (p. 20), which contradicts Prosser's view that affirming gender can only be achieved through

¹¹ In most Western and non-Western societies, the understanding of gender is tightly bound to the sexual specificities of the body, and so, is locked within a hegemonic, strict, and fixed binary. According to this normative binary, the set of reproductive organs individuals are born with corresponds to their gender identity and to a certain behaviour expected by society or to 'nature'. This is where the categories female/woman/feminine and male/man/masculine emerge to hierarchically organise individuals into either of those categories, the former regarded negatively as a subordinate to the latter, more positively evaluated as the dominant. However, scholars such as Judith Butler (1990) have argued that the very act of defining sex as natural and a biological state is cultural in itself, and that sex, far from being a natural and fixed point of reference for gender, appears to be socially constructed as well.

¹² Virginia Prince, a Southern Californian advocate for the freedom of gender expression and a recognised pioneer of the transgender movement, preferred identifying as a transgenderist, by which she meant that she lived "in the feminine gender" whilst harbouring no desire to change her sex (Docter, 2004, p. 57). Prince was also the first to use the term 'transgender' to position herself on the spectrum spanning from 'transsexual' to 'transvestite' (Stryker & Whittle, 2006). It was not until 1992 that Leslie Feinberg made the hitherto noun of 'transgender' into an adjective in her defining pamphlet Transgender Liberation: A Movement Whose Time has Come, broadening its scope and effectively making it an umbrella term and a space for all those experiencing marginalisation on the basis of non-normative gender identification. The term's 'umbrella' conceptualisation has been the most used, although there has been significant recorded use of the neologism 'trans,' which is also used in this thesis to reflect its participants' languages, as well as denote this umbrella of variance.

alterations of the physical body, effectively undermining the crucial role of language.

In fact, when examining trans men's linguistic constructions of their genitals, Zimman (2014) argues that "a continuum of trans male genitals" (p. 21) is created as there are trans men who wish to operate change on their bodies through phalloplasty, metaoidioplasty, and/or testosterone therapy, and others who opt out of undergoing surgery or hormone therapy. This continuum also includes the normatively female genitals as well, effectively blurring the line between trans men who have penises and those who do not, although genitals have little influence on self-identification and perception in daily life. Trans speakers have been found to rework traditional genital terminology and contest the assumed inherent gendered aspect of a given physiological characteristic by "disrupting the semantic link that ordinarily exists between genitals and gender" (ibid, p. 22). As a result, when discussing physiological sex, for instance, it is the vernacular terminology commonly describing normative male genitals that is typically used in a matter-of-fact way, and despite not having undergone surgery. At the same time, normative female genital terminology is also not avoided, and used to discuss specific technicalities of the body such as surgeries, health issues, or piercings, and when expressing discomfort or when talking about sex (Zimman, 2014, p. 27). Despite this vocabulary use, trans men's status as male-bodied is not undermined. It is so because there exist alternatives that appear to be "uniquely trans" that can be used, and because trans men sever the link between genital terms' gendered meanings and physiological realisations (ibid, p. 26). Michael Silverstein (1981) points out that words are above awareness, a characteristic that makes them "available to be consciously chosen, rejected, changed, and commented upon" (Zimman, 2014, pp. 29-30) (Section 4.2 for the cognitive linguistics context).

This metalinguistic awareness of trans speakers indeed "makes the lexicon a powerful tool of social change" (ibid, p. 30), and aligns with the practice of expanding the menstrual discourse to include all those who have been historically excluded. Trans men have demonstrated that it is possible to disrupt the linkage between genitals and gender while retaining their identities; this very practice is located at the core of the phrase 'not all women menstruate and not all those who menstruate are women' in the sense that the physiological realisation of

menstruation which is tied to a specific set of genitals does not need to be linked to the gendered meaning of this same set of genitals to be an important part of one's life. While menstruation has historically been ascribed a feminine attribute simply because it is a realisation of normatively ascribed feminine genitals, it is equally important to work towards challenging this essentialist linkage in order to allow menstruation to be framed as an embodied manifestation rather than a gendered one (Section 6.3.1.3).

3.3 The menstrual language research landscape

Understandably, menstruation, as a research focus, has been explored through particularly anthropological, various lenses, psychological, sociological, theological, medical, and cultural lenses. As outlined earlier, many scholars have analysed religious texts and the rituals of different peoples and sought to contextualise those that refer to menstruation and offer insights into the reasons behind those often-tabooed references (Delaney, Lupton and Toth, 1988; Hoffman, 1995; Merskin, 1999). Others have dedicated their works to documenting all the menstrual myths and the religious beliefs, practices, and prescriptions (Buckley and Gottlieb, 1988; Puri & Kapoor, 2006; Bhartiya, 2013; Garg & Anand, 2015; Robinson, 2015; Tan et al., 2016). For example, the anthropologist study of Golub (1992) reiterates that both magical and poisonous aspects have been used in menstrual language. Even though these beliefs seem to have been left in the past of many societies and cultures, it is important not to dismiss them completely as they have been carried into modern times (see Section 6.3.1). Those studies are united in their goal to record menstrual lore across a variety of fields, cultures, and religions, and to enrich the general menstrual knowledge that contextualises the existence of a taboo, and the overall negativity associated with the menstrual experience.

As such, many more scholars have focused on exploring this negativity, and have thus shown that attitudes expressed either in speech or in writing towards menstruation tend to be generally negative (Brooks-Gunn & Ruble, 1980; Geller, Harlow, & Bernstein, 1999; Golub, 1992; Chrisler & Johnston-Robledo, 2000; Fahs, 2020). For instance, Sophie Laws (1990), a graduate student who endeavoured to research the attitudes of contemporary British men regarding menstruation, reports being faced with significant resistance and with suggestions to research

how other cultures deal with menstruation instead. In her work, she develops the notion of "menstrual etiquette" which shows that contemporary ideas regarding menstruation stem, in fact, from men. In public, women seem to behave as if they did not experience menstruation because the culture rooted in androcentricity dictates so and holds women responsible for keeping menstrual matters out of the public eye and speech (see Section 7.2.3). Therefore, even though this study does not focus on the linguistics of menstruation per se, it still shows how the wider culture directly influences the language and behaviour of menstruators as they censor themselves and have to be cautious about what they say and how they act. Yet, LGBTQ individuals who were assigned normative female sex at birth in the United States and who seek specific healthcare report being admonished upon enquiring about hormone replacement therapy (HRT) because "there's nothing wrong with being a woman" (Wingo, Ingraham and Roberts, 2018, p. 354) and are further lectured on their gender-affirming decisions. This theme of secrecy and concealment has also been associated with the argument that, for many, menstruation is a social stigma and a communication taboo (Oxley, 1998; Kowalski and Chapple, 2000; Johnston-Robledo & Chrisler, 2013).

Exploring facets of this stigma and negativity, other studies have thematically analysed narratives and general discourse. For instance, Donmall (2013) and Brantelid et al. (2014) observe that the themes of mess, dirtiness, and other cleanliness-related terms are often brought up in those narratives. In addition to the negativity and the hygiene concern, there is also a notable fear of menstrual blood becoming visible, and embarrassment at the idea of leakage, and of odour being noticed expressed in both studies. The fear of this intimate issue being visible to everyone, particularly to men, is often expressed as 'feeling exposed' and triggers tremendous stress over remaining as clean as possible. Additionally, Johnston-Robledo and Chrisler (2013) relate the hypervigilance and the selfpolicing women commonly exhibit during menstruation to the Foucauldian concept (Foucault, 1979). Ussher (2004) further illustrates this relation by showing that women experiencing severe PMS believed their symptoms to be incompatible with femininity and those symptoms were therefore regarded as violations of the appropriate norms of femininity. For those masculine of centre or transidentifying menstruators, however, Chrisler et al. (2016) uncover mixed attitudes towards menstruation (which were similar to those of cisgender women), but more

positive attitudes towards menstrual suppression mainly because of practical, psychological and safety concerns. Additionally, Beausang and Razor (2000) observe that menstruation, in the general discourse, has more prominently been represented as an illness, with limited discussion of its implications beyond its physiological nature. DeMaria et al. (2020) further observe that this emphasis is responsible for the perpetuation of the portrayal of menstruation as a shameful and overall negative experience.

Other content analyses have shown that similar negative views and attitudes are perpetuated in menstrual education, including the knowledge received through relatives and peers (Britton, 1996; Lee and Sasser-Coen, 1996; Costos, Ackerman, and Paradis, 2002). Despite such attitudes colouring some of the knowledge given by mothers and peers, several studies have highlighted the inadequacy of the menstrual health knowledge provided in school, in both developed and developing countries, compared to that given by female family members and friends (Agnew and Sandretto, 2016; Chandra-Mouli and Patel, 2017; Stubbs, 2008). Furthermore, where there is mention of menstruation in sexual education content and curricula, it consistently and exclusively appears in association with pregnancy (Advocates for Youth, 2019; Future of Sex Education Initiative, 2012). Moreover, Erchull et al. (2002) uncover a similar negativity upon an analysis of the language used to describe menstruation in a number of educational booklets published between 1932 and 1997. The study reported that all the booklets examined emphasised negativity more than anything else, which was exhibited in focusing on aspects such as cramps, moodiness, accidents, and a comparison with defecation in one instance.

Furthermore, Kissling (1996) argues that menstruation is an often-avoided conversation topic outside of specific contexts. The typical practices of separating girls and boys before broaching topics such as puberty, and of mother-daughter private talks about "facts of life" effectively frame the menstrual talk within specific boundaries and rules, thus marking it "a special topic, not one for ordinary conversation" (p. 495). Further exemplifying this point, The Tampax Report (1981) found that most of the American adult participants believe that menstruation is not to be mentioned in mixed company. This further shows that there is a need for censoring menstrual language, and therefore a need to find ways to speak

about menstruation in different ways, although these studies do not elaborate on alternative naming practices deriving from these menstrual rules and boundaries.

In the media, studies examining the menstrual discourse have shown that cultural and communication taboos, negative language, and themes of shame and concealment are prominent (Luke, 1997; Martin, 1988; Johnston-Robledo et al., 2006; Linton, 2006; Røstvik, 2018). There are various types of media (books, newspapers, jokes, and greeting cards) that contribute to the largely negative public discourse about menstruation. Indeed, those seem to depict women, specifically premenstrual women, through the stereotype that they are out-ofcontrol, moody, temperamental, too emotional, 'psychotic' and violent (Johnston-Robledo and Chrisler, 2013, p. 11), and that one (men, especially) should be cautious around such women. For instance, Fusaro (2016) relies on critical discourse analysis to examine national French media coverage of the 'tampon tax' debate and finds that both economic and feminist discourses "tend to reproduce gender stereotypes about menstruation and they also depict menstrual blood as an abject threat" (p. 2). Similarly, Del Saz-Rubio & Pennock-Speck (2009) apply a multimodal approach in their analysis of television commercials, and report that stereotypical and gender-biased beliefs are present, and certain ads perpetuate the negative connotations of menstruation as they position the product to be the solution to the menstrual problem. Merskin (1999) points out that the euphemistic use of flowers, hearts, and blue fluid further contributes to the secrecy and delicacy being promoted in these ads. In film and television, representations of menstruation and menarche are often used as horror elements and are often accompanied by the underlying notion of the uncontrollable feminine body that needs to be disciplined (Briefel, 2005; Cinias, 2010; Thomas, 2017).

Other content analyses have covered other facets and stages of the menstrual life, such as menopause (Gannon and Stevens, 1998) and PMS (Chrisler and Levy, 1990), which further demonstrate that menstruation is typically portrayed as a medical issue in need of treatment. In medicine, the focus is therefore often on exploring the symptoms of menstruation, on their physical and psychological effects on the quality of life of menstruators, and on ways to manage and treat painful menses

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or dysmenorrhea¹³, and other related conditions such as endometriosis (Unsal et al., 2010; Iacovides et al., 2013; Ju, Jones, and Mishra, 2014; Pope et al., 2015; Armour et al., 2019; Momoeda et al., 2020). For instance, an Australian study surveying 1500 menstruators identifying as women found that those suffering from severe or very severe pain reports that in addition to feeling depressed, lacking energy, and feeling unable to cope, the pain also caused them to be unable to engage in their regular social and leisure activities (Weisberg, McGeehan & Fraser, 2016). Another study reviews the relationship between endometriosis and psychiatric disturbances and concluds that although it is unclear whether the cause of the psychiatric issues is endometriosis itself or other gynaecological chronic pain and inflammation, it is recommended to screen endometriosis sufferers for psychosocial and psychiatric conditions (Pope et al., 2015). That is, if a diagnosis for endometriosis is reached since, as Hudelist et al. (2012), this condition takes an average of 10 years to be diagnosed because of "factors such as misdiagnosis, mothers considering menstruation as a negative event and normalization of dysmenorrhea by patients" (p. 3412).

These previously reviewed studies have hence been focused on approaching menstruation on a discourse level focused rather than on the naming practices for the menstrual event. Exploring the various discourse connotations of the menstrual event when is it verbalised, the menstrual research landscape tends to focus the variety of constructions of menstruation-related activities across cultures such as menarche, PMS, commercial products, education, etc. While such studies have effectively framed the menstrual event within its dominant discourse marked by negativity and concerned with issues of shame, concealment, and suffering, they rarely refer to menstrual naming practices and the use of linguistic tools and humour to cope and seek freedom and positivity.

3.3.1 Menstrual language and euphemisms

Along with the great variety found in the origins of certain terms referring to the menstrual event (the classical Latin menstruum, the ancient Greek καταμήνια or

¹³ Dysmenorrhea can be categorised as two different types: Primary dysmenorrhea, which is pain caused by menstruation without any other associated condition, while secondary dysmenorrhea "refers to painful menstruation associated with underlying pathology" (Harada, 2013, p. 81), such as endometriosis.

katamenia, and the post-classical Latin menstruation) (see Chapter 1 for more details), the definitions of what it is also differed, though they centred around a similar core, which is the regularly discharged blood or blood-like fluid from the normative female body. In Chapter 2 where the classical period is discussed, definitions include this common core, but expand on it to accommodate the construction of the body of the time, as well as to encompass the ancients' preoccupation with the difference between the normative male and female bodies. More modern definitions, however, tend to be thought of as purely 'scientific' and tend to describe the workings of the menstrual event using terminology rooted in physiology and medicine. For instance, Drakshayani and Venkata (1994) define it as the periodic discharge of blood, mucus, and cellular debris from the uterine mucosa. Malmberg (1991) suggests that menstruation can denote numerous concepts: the intermittent discharge of blood and residual organic waste, and the biological process that is represented by this discharge. Malmberg (ibid) includes within the definition of this biological process: the event of menarche, the various phases of bleeding, and indeed the biological process in general as well. However, Kissling (2002) asserts that menstruation "is both a biological event and a cultural event" (p. 5), effectively broadening the definition to include the experiences of the menstrual event as they are lived within society and culture. Jarrell (2018), in an article exploring the significance and the evolution of menstruation, recognises that, although the discussion is more in terms of biology and diseases, the menstrual process is nevertheless of a "complex" nature" and that it has been "the source of much misunderstanding, prejudice, and harm essentially forever" (p. 21).

Even though definitions of the menstrual event took some time to start acknowledging the social and the cultural aspects of it, the stigma has effectively been transmitted through several and various sociocultural means encountered daily, which contribute to the reinforcement of the 'communication taboo,' as the previous section has shown. However, this communication taboo does not only operate through silence and symbolism, but also through euphemism in speech. In a study surveying the most popular euphemisms people have been known to use to speak about menstruation as it is in the popular imagination and culture, Delaney, Lupton, and Toth (1988) uncover a wealth of examples from a variety of languages, which they argue are a better way to gain an insight into mass

psychology. The anonymity or uncredited nature of popular culture materials offers a better perspective into what people think, as opposed to how it is usually expressed in literature and psychoanalysis: as an individual (doctor's or scholar's) response to a person's menstruation. The various expressions identified, once grouped, and divided into thematic categories, seem to point to certain euphemistic trends; such categories were "Time and regularity," "blood and redness," "visitors," "illness or inconvenience," and "male and female persons" (p. 115).

In fact, other exploratory studies focusing on euphemistic menstrual language and the notion of taboo have found similar themes, although they did not necessarily rely on a semantic analysis to further solidify the basis of these euphemisms. As early as 1948, Natalie Joffe (1948) explored the relationship between language and culture in a study conducted with Theodora M. Abel between 1946 and 1947, on the attitudes and beliefs about menstruation in various groups (periodicity or time; explicit or implicit reference to blood or the colour red; reference to visitors; mention of persons; illness, inconvenience, or disability; references to material culture; sexual unavailability), through their focus on euphemisms gathered from interviews and supplemented by other printed sources. Joffe (ibid) argues that widespread attitudes towards menstruation in a given culture may be indicated through the nature of the menstrual language (ibid, p. 181), which is the only interpretation of the euphemisms that is offered in the study. From the material studied, in cultures where menstruation is to be hidden and holds a covert position, the vocabulary is limited. However, in cultures where it is more overtly conceived of, the vocabulary appears richer and more diverse, except for those communities that enforce behavioural rules towards menstruation (ibid, pp. 181-182). For instance, Joffe (1948) suggests that In Polish, menstrual expressions are also limited as menstruation is to stay concealed and never even be spoken about in conversation, whereas in French and American English, they are abundant and vary in themes and references. While this may have been the case at the time, this trend does not seem to be holding in recent times, since the previous sections have shown that a taboo still exists in present-day United States, yet the richness of the euphemistic language has not diminished, although some trends have now shifted and changed. For instance, Joffe (1948) writes that the 'old' and 'polite' menstrual references are "definitely antiquated" and that such expressions as

"sick, unwell, period, she's that way today," which are indirect, are deemed to be out-dated and are often replaced simply by "menstruation" in more polite settings (p. 183). Additionally, she finds that the most standard term used among women under 35, in 1948, is "the curse," while men tend to use expressions like "the rag" or "she's got the rag on" (ibid). The data of the present study finds traces of these older trends, but ultimately shows that they have completely or partially changed, since what was deemed antiquated and polite is now standard usage (such as references to health and activity). Furthermore, although this study includes many languages and cultures (American English, French, German, Italian, Yiddish, Polish, and Irish English), it does not consider the Arabic language, nor does it include participants who identify as Muslim.

Likewise, upon examining the Folklore Archives at UC-Berkeley, specifically a cluster of American menstrual expressions, Ernster (1975) groups those expressions according to the repeated themes she finds. Those categories are very similar to the previously mentioned ones, and included "female visitors" with expressions such as 'My friend is here', "cyclicity" as exemplified in 'It's that time again, my time of the month/moon, my period', "illness or distress," with terms such as 'the curse, the misery, I'm under the weather', "nature" as in 'flowers, Mother Nature's gift', "redness or blood" as illustrated by expressions like 'I'm wearing red shoes today, red plague, red moon, bloody scourge' and "menstrual products" as in instances such as 'on the rag, riding the cotton pony, using mouse mattresses' (pp. 6-7). Although this study illustrates that the popularity of certain expressions has changed since the 1940s and 1950s, it does not distinguish between expressions heard and actively used and is mainly concerned with the different usages exhibited by males and females.

Newton (2016) has shown a similar interest in the differences in menstrual euphemisms used by men and women. In her data consisting of interviews of participants from north Derbyshire, she identifies very similar thematic categories, although she adds others such as "biblical terms, events, horror and torture, and anomalous terms," and notes a difference between the menstrual characteristics that inform the process of euphemising of women as opposed to that of men. For instance, while men focus on direct references to menstruation (such as 'bleed'), women tend to speak about menstruation more in terms of periodicity and time. Importantly, Newton (2016) notes that older expressions

remain within the menstrual lexicon rather than disappear, and newly popular or coined terms and expressions tend to fall within the already existing categories rather than create new ones. In the same vein, she also highlights the notion to menstrual taboo, and explores the creativity and humour in the euphemistic expressions she collected as a direct response to this same taboo and therefore as a means to reclaim freedom over menstrual communication.

Allan and Burridge (2006) also touch on the menstrual taboo in their study on social taboos in an anthropological context. Basing their examination on the concept of X-phemism, a term they coined to denote the continuum existing between euphemism (positive or 'sweet-talk') and dysphemism (more intentionally negative or 'impolite talk'), while encompassing orthophemism (neutral, or 'straight-talk'), the authors uncover themes similar to those outlined in the previous studies and provide anthropological examples from a variety of cultures, languages and religions, such as passages from the bible and some constructions of menstruation and menstrual behaviours from the Navajo people. For instance, they exemplify the theme of "Sanitary protection" with popular advert expressions such as 'sanitary towels, panty liners, sanitary napkins' and with more dysphemistic expressions like "on the rag/jamrag, wearing the rag, riding the cotton bicycle..." (p. 170). Importantly, Allan and Burridge (2006) highlight the flexible nature of taboo utterances and their ability to change over time, much as previous studies have noted regarding menstruation. This study exclusively discusses menstruation as a taboo, and although the tabooed nature of the menstrual event is undeniable, the present study seeks to adopt a more ambivalent approach to survey this taboo, understand it, and eventually challenge the automatic link between taboo and menstruation, and position menstruation as a more complex and more multifaceted embodied experience than a set of censored behaviours and utterances.

Similarly, in a narrower linguistic study on the verbal taboo of menstruation among the Akan speakers of Ghana, Agyekum (2002) examines the use of menstrual euphemisms as the most prevalent Taboo Avoidance Technique (TAT) among these speakers. These euphemisms tend to be either negative, with themes such as "indisposition and seclusion of the woman" or positive, through themes like "transition and fertility and the arrival of a protective visitor" (p. 367). Likewise, through the framework of Politeness Theory (Brown and Levinson, 1987), Chiatoh

& Lando (2021) sociopragmatically analyse data gathered through surveying university female students in Cameroon with the goal of shining a light on the unfairness of the linguistic taboo imposed on menstruation. The authors also structure their findings in the positive/negative dichotomous framework and suggest that positive euphemistic expressions used in public conversations imply positive attitudes and perception towards and of menstruation, while negative euphemisms indicate negative outlooks. This and the previous studies rely on the positivity vs. negativity structuring of euphemistic expression, therefore predicting the kind of overall attitudes women and girls have towards their menses instead of an exploration of all the facets of the menstrual event as a complex and ambivalent phenomenon. Nevertheless, they importantly add other cultures and languages to the existing menstrual literature. Chiatoh & Lando (2021) also identify similar themes to those in earlier studies, such as "visitation, periodicity, indisposition, colour" and add newer ones such as "friendship" and "royalty" (p. 5).

Additionally, there are also some extensive collections of menstrual euphemistic expressions online. For instance, the Museum of Menstruation and Women's Health¹⁴ lists a very wide range of expressions originating from several countries such as Nigeria, Argentina, Brazil, Russia, and Poland. More recently, the menstruation and ovulation tracker app Clue launched an international survey (2016), in conjunction with the New York based advocacy group International Women's Health Coalition, successfully gathered over 5,000 'period' euphemisms from 90,000 respondents from roughly 190 countries. The survey findings, revealed in a webpage on the Clue website (helloclue.com), list all the various euphemistic expressions by languages. Some examples include the German tomatensaft 'tomato juice,' the French c'est la saison des fraises 'it's strawberry season,' the Italian semaforo rosso 'red light,' the Chinese \cancel{FHh} 'good friend' and the Japanese \cancel{FO} the monthly things' to only cite a few. Although such lists can be useful as repositories to record as many expressions as possible throughout a long period of time, and possibly as a resource for linguistic studies,

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¹⁴ http://www.mum.org/words.html

these lists do not engage further with the euphemisms, and do not offer any sort of analysis.

3.3.2 Menstrual language and conceptual metaphors

Approaching menstruation through the lens of Conceptual Metaphor Theory (see Section 4.2.1 for a more detailed background of the theoretical framework) has been, in comparison, a far less used model. Indeed, studies that offer systematic analyses based in lexical semantics and cognitive linguistics, and that examine the various menstrual expressions with a specific interest in the cognitive forces behind their coinage and usage, remain few, thus highlighting a gap in the menstrual research landscape.

Sveen (2016) conducts one such comparative analysis of menstrual expressions in English and Swedish collected from online forums and other online sources with the main goals of uncovering the categorisation and construal of menstruation linguistically, and of exploring the social views on menstruation that could be informing the choice to use such expressions. Not unlike the previously reviewed studies, Sveen (2016) also devises a semantic categorisation and further identifies the underlying conceptual metaphors behind the expressions analysed. Beyond the semantic domains the author identifies, most of which were very similar to the aforementioned ones found in other studies, she discovers three different conceptual metaphors: MENSTRUATION IS MAINTENANCE, MENSTRUATION IS A VISITOR, and MENSTRUATION IS BAIT (Sveen, 2016, p. 155). Sveen (2016) finds that the conceptual metaphor of MENSTRUATION IS MAINTENANCE groups expressions such as "the monthly oil change, having the decorators in, closed for repairs, manadsrening [monthly cleansing]" (p. 155), and explains that this conceptual metaphor also highlights the conceptualisation of the body as a machine requiring periodical maintenance and repair, particularly because "[m]enstruation is a regular feature of the general female body" (ibid). In her dataset, menstruation is also conceptualised as a visitor, or a rather unwelcome visitor or guest, and Sveen (ibid) suggests that this visit could be experienced as more of an invasion rather than as a friendly visit as in other studies (see for example Fingerson, 2005; Jackson & Falmagne, 2013), arguing that visitor-based examples "signal that someone else has entered one's body..." (p. 155) and that some of the expressions analysed are reminiscent of an enemy attack or invasion, with examples such as "Native Americans among

the reeds, ryssen kommer [the Russians are coming], or the cavalry's here" (ibid). The further construal of menstruation as bait implicates connotations of danger, of warnings, and of traffic stop signs, conveying the idea "that something is different and requires distance, in line with the taboo status of menstruation" (p. 150), with expressions such as "bear season, shark week, and paging Edward Cullen" (p. 155). Although Sveen (2016) links such expressions to the presence of blood and does argue that many of those expressions that mix the colour red with some kind of sign or signal are particularly relevant, she does not offer more information or analysis regarding the existence of potential cross-domain mappings.

The one other study¹⁵ using the conceptual metaphor framework to examine menstrual expressions has been conducted by Gathigia, Orwenjo and Ndung'u (2018) and analyses 29 metaphors collected from speakers of the Gĩkũyũ language through interviews. Not unlike the earlier studies concerned specifically with the menstrual taboo, this study also operates under the assumption that menstruation is a tabooed subject among the Agîkûyû people as it sets out to analyse the various menstrual euphemisms used and their underlying cognitive processes. Gathigia, Orwenjo and Ndung'u (2018) thus categorise the menstrual metaphors they find into a set of conceptual domains: MENSTRUATION IS A PERIOD, MENSTRUATION IS A COLOUR, MENSTRUATION IS A VISITOR, MENSTRUATION IS AN INDISPOSITION, and MENSTRUATION IS A VALUABLE POSSESSION. The domains implicated here are also like the previously outlined thematic and semantic categories, with equally similar examples provided. For instance, the authors explain that the underlying temporality of a period of time and the physical perception of blood or the redness of blood form the basis of the conceptualisation of menstruation as a temporary period that has a beginning and an end, with examples such as "Kahinda - 'a period', Mweri - 'a month', Kahinda ka mweri - 'a monthly period', Thakame ya mweri - 'monthly blood', Thikũ -'days'" (p. 167). The authors further mention the instance of "rain" and "to pour"

¹⁵ Since the submission of this thesis, a third study (Malečková, 2023) concerned with the conceptual metaphors of menstruation in English and Czech has been published. Malečková (2023) collects menstrual metaphorical expressions from online forums and analyses them within a CMT framework with the goals of uncovering the underlying conceptual metaphors of menstruation, of exploring their X-phemistic nature, and of comparing the conceptualisations in the two languages. The conceptual metaphors identified are as follows: MENSTRUATION IS A PERIOD, MENSTRUATION IS A COLOUR, MENSTRUATION IS A VISITOR, MENSTRUATION IS AN INDISPOSITION, MENSTRUATION IS MAINTENANCE, MENSTRUATION IS A LIQUID, MENSTRUATION IS BLOOD, MENSTRUATION IS FOOD, and MENSTRUATION IS BAIT.

(p. 169) as part of the metaphor of period, but very briefly explain why this is the case, and do not further explore any metaphoric blends. As opposed to Sveen (2016), the authors of this study are strictly interested in identifying metaphors and do not expand upon any semantic domains or thematic categories, and therefore, only 29 examples emerge from the interview data collected from 60 participants. Even though this sample is relatively restricted, this study remains an important one as it is entirely devoted to the identification of the conceptual metaphors of menstruation.

Other research has touched on conceptual metaphors and metonymy in relation to menstruation in a more tangential way. For instance, Verosub (1994) analyses the wide array of metonymic uses of the colour red, suggesting that the colour red becomes representative of important things in the experience of life. The author establishes and discusses the overarching metonymic framework of IMPORTANT THINGS ARE RED as inclusive of concepts such FIRE IS RED; DANGER IS RED, which spreads across the concepts of EVIL IS RED and CRISIS IS RED, then further to WARNINGS ARE RED, and PROHIBITIONS ARE RED; and BLOOD IS RED, which extends to DEATH IS RED, LIFE IS RED, SEX IS RED, FERTILITY IS RED, MENSTRUATION IS RED, and STRONG EMOTIONS ARE RED. Although the main focus of this study is not related to menstruation in particular, it is useful in pointing out the metonymic network of the colour red as it incorporates further salient menstrual themes like fertility, life, and sex.

Similarly tangential yet more relevant is the research on conceptual metaphors and pain. For instance, in her comparative lexicological analysis of the various French and English expressions used to address bodily functions and diseases to identify underlying conceptual metaphors, Faure (2017) highlights the richness of menstrual metaphoric blends (relating to intimacy, distance, antagonisation, month and moon, and visual perception) (p. 7). The author also finds visit-construed metaphoric blends, notably as an extension of the conventional metaphor OUR ORGANS ARE PEOPLE. Another example is the study of Bullo & Hearn (2020) on the pain metaphors used by women who suffer from endometriosis. Aiming to establish the role that language can have in the facilitation of empathy in listeners and to demonstrate the difficulties of communicating this particular pain, the authors interview 21 women who suffer from endometriosis, and identify several conceptual metaphors of pain: PHYSICAL PROPERTIES OF ELEMENTS, PHYSICAL DAMAGE, EXTERNAL ANIMATE AGENT CAUSING PHYSICAL DAMAGE, TRANSFORMATIVE FORCE, EXTERNAL

INANIMATE ENTITY, SENSORY EXPERIENCE, and ANIMATE AGENT (P. 276). For instance, the conceptual metaphor PHYSICAL PROPERTIES OF ELEMENTS is exemplified with expressions such as "like my womb is going to explode" and "like a burning golfball" (p. 277), while EXTERNAL ANIMATE AGENT CAUSING PHYSICAL DAMAGE is expressed through utterances such as "like someone cutting you" and "someone putting barbed wire in your belly button in a figure of eight" (ibid). Munday et al. (2022) find similar conceptual metaphors as they seek to investigate possible associations between types of pain metaphors and specific conditions inflicting chronic pain. They identify the seven overarching domains of "Causes of Physical Damage, Common Pain Experiences, Electricity, Insects, Rigidity, Bodily Misperception, and Death and Mortality" (p. 2076). In particular, they report patients suffering from endometriosis are more likely to refer to their chronic pain in terms that fall under the specific domains of "Childbirth and Pregnancy" with expressions such as "in full blown labour with no pain relief," of "Physical Damage via Sharp Object" with utterances such as "like knives twisting and stabbing through my pelvis," of "Physical Damage via Pulling/rubbing/tearing" with examples such as "like something pulling at me from the inside," and of "Common Pain via Bruise/fracture/dislocation" with expressions such as "like I'm about to walk on glass with a broken ankle" (p. ibid). Although such research is mainly concerned with pain, there are multiple parallels between these conceptual domains related to chronic pain and those related to menstruation (such as Sveen's "Antipathy" (2016) and Ernster's "Negative references to illness, inconvenience, distress" (1975)). For instance, menstruation is also often identified as pain and suffering, and likened to experiencing childbirth, which raises the possibility of the metaphonymic relationship between menstruation and pain in the conceptualisations of menstruators in particular.

3.3.3 Research gap

Despite the importance of including menstruation in the conversation and of the ability to do so, there is nonetheless an obvious gap in the literature and research focusing on menstruation as a cognitive linguistics matter. Most of the research has primarily been on the general discourse in cultural attitudes, centring on the positive or negative feelings and attitudes of people regarding menstruation, on media representations of menstruation, and on hygiene products and advertisements. In addition, the linguistically oriented studies that have been

conducted mainly focused on the notion of menstrual taboo and euphemistic menstrual language to discuss this tabooed subject, although they did not necessarily rely on a semantic or cognitive analysis to solidify the basis of these euphemisms. In terms of Conceptual Metaphor Theory as a framework to examine menstrual language, there is only tangentially related research that focused on the language of pain and endometriosis pain, and only three studies that have directly investigated conceptual metaphors of menstruation, and have done so in English, Swedish, Gĩkũyũ, and Czech (Sveen, 2016; Gathigia, Orwenjo and Ndung'u, 2018; Malečková, 2023). Importantly, gender variance in such research is rarely taken into consideration, and research methods employed seem to mostly be constrained to online forums and sources, or interviews.

Therefore, the present study fills a gap in the menstrual research landscape, as it offers a systematic, multi-layered analysis (see Section 4.3) of menstrual expressions collected through a questionnaire by locating their meanings and underlying cognitive mechanisms and processes through theories, methods, and tools grounded in lexical semantics and cognitive linguistics. For instance, this study makes use of the Historical Thesaurus and the Mapping Metaphor online tool (respectively explained in more detail in Sections 4.3.3.1 and 4.3.3.2) to devise its analytical categories, which has not previously been done. Similarly, relying on an online questionnaire as a data collection tool has not been used before in the investigation of the conceptual metaphors of menstruation. This instrument allows for the survey of a wider population and serves to capture many perspectives while allowing participants to remain anonymous when disclosing sensitive information.

Additionally, the present research project surveys a range of languages including English, French and German, but especially takes into consideration Arabic and its dialects, which has never been included in such studies before. Likewise, this study includes and considers the experience of a very wide range of demographic categories, including diverse ages, sexual orientations, ethnicities, and religions, but also includes different gender identities, as well as the views of those with differing experiences of menstruation, which is also missing in the conceptual metaphor research of menstrual language.

3.4 Conclusion

Although menstruation has predominantly been the subject of medical interest since ancient times as has been illustrated in the previous chapter, it has also been at the heart of many anthropological and cultural investigations, and recently of more explicitly political interrogations, of linguistic research on the communication taboo and on euphemisms, and of discussions and deconstructions of gender and sex, and what it means and implies to bleed for differently bodied individuals within the social context.

This chapter has presented an outline of the various concerns and preoccupations of some of the most significant works that have been devoted to recording, discussing, and expanding upon the various cultural shifts that menstruation has gone through. Touching on ancient myths and religions, on more recent politically and socio-culturally informed, and linguistically oriented concerns that are rooted in older fights, this chapter has contextualised menstruation within society and language, and has illustrated how some of these shifts occurred expressly through language.

Indeed, the menstrual event has been labelled as both a gift from the gods and as sin or a divine punishment and has historically been attributed all sorts of magical and mystical powers that are sometimes seen as a 'superpower' yet as particularly nefarious at other times. It has also acquired the burden of being a taboo and used and abused to punish bleeding bodies. This chapter has further surveyed the wider menstrual language research landscape dedicated to exploring those constructions, and then reviewed the significant studies dedicated to the investigation of these linguistic and euphemistic labels, and their underlying conceptual metaphors.

In doing so, this chapter has identified the research gap it fills. Indeed, considerations of menstruation specifically through CMT have been shown to be few, and most studies concerned with the menstrual event have generally failed to include different gender identities and have not surveyed euphemisms or conceptual metaphors within the Arabic language and its dialects. Likewise, no other CMT-oriented study has collected its data through a questionnaire, nor has

scrutinised this data using a multi-layered analysis that includes such tools as the Historical Thesaurus and Mapping Metaphor.

The following chapter takes into consideration this rich history as well as this highlighted research gap and delineates the theoretical framework within which this project operates, and outlines the methodology adopted to structure the research process of this project.

4. Theoretical framework and methodology

4.1 Introduction

This chapter outlines the theoretical framework within which the research has been carried out and summarises the overall methodological approach that has been taken.

First, the theoretical assumptions under which this project has been planned and formulated are explained, the goal being to uncover cognitive patterns through the exploration of metaphorical conceptualisations. The most central theory of this project is identified as Conceptual Metaphor Theory as it is the most suitable cognitive linguistics framework to explore the conceptual constructions of menstruation and how these constructions are constrained by their environment, culture, and traditions. Utilising this theory, more elements such as the notions of embodiment and of X-phemism are outlined and the rationale behind adopting them further explained through examination of Lakoffian principles. Likewise, metonymy and other relevant concepts are also delineated when drawing on lexical semantics to give this project's data analysis a bottom-up approach.

Given the subject matter of this project, as well as its location within the qualitative research tradition, the documentation of reflexive subjectivity is also key to ensuring reliability and the soundness of the research process. Furthermore, it is also important as it acknowledges the positionality of the researcher, thus allowing the introduction of another dimension to the theoretical framework in the form of notions and guidelines to observe in terms of intersecting identities and genders.

Finally, this chapter delineates the methodological steps that structure the project and that answer each research question, and the development and evolution of the project's research design. First, it elaborates on the earlier stages of topic consideration, literature review, questionnaire construction, and ethical issues. Then, building on those to move on to the specifics of this project's methodological approach, it touches on discussion and interpretation of data results. The approach used, systematic metaphor analysis, is explained and each

of its phases described and exemplified. The rationale motivating the usage of such a methodological approach is also summarised within this outline.

4.2 Theoretical framework

Chapters 2 and 3, which depicted much of the menstrual landscape, from its earlier historical and medical understandings to its more recent implications in body and gender politics, have identified the menstrual event as a taboo in more ways than one. As such, given this material existence of this taboo in society, it is useful to look at it from this perspective in order to better apprehend its power on language, even though it is not the goal of this study to prove whether menstruation is an indisputable taboo, nor is its practice to refer to menstruation as a taboo. The existence of a taboo compels both violation and preservation of it, making the forbidden concept itself virtually unavoidable, and giving rise to rich lexical variation, forming a complete paradox (Fernández, 2011), or, in the words of Burridge (2004): "[taboo] provides a fertile seedbed for words to flourish - and the more potent the taboo, the richer the growth" (p. 222). This variation manifests typically as euphemism to soften the taboo and to rid it of its obscene qualities, and dysphemism to emphasise those very explicit and pejorative characteristics to offend. In fact, Allan and Burridge (2006) propose the cover term X-phemism to encompass euphemism, dysphemism and ortophemism (or using neutral terms) to illustrate that the various kinds of X-phemisms actually represent cross-varietal equivalents for a particular taboo concept where implications and connotations are different and dependent on the context and on the intentions of the speakers.

Certainly, when language users engage in this process of creating increasingly more elaborate X-phemistic synonyms for the forbidden concept, they are no longer simply responding to the taboo but rather actively finding ways to speak "about the unspeakable, about those concepts banned from public domain" (Fernández, 2011, p. 54). In this common need to find new ways to speak about the unspeakable, then, figurative language and more precisely metaphors seem to be the first choice. Since metaphors allow for the generation of greater lexical variation, and seem to conceptually structure X-phemisms, they assume "a crucial role in the way we manage forbidden concepts and manipulate the taboo referent, insofar as it is at the user's disposal to model the distasteful concept and present

it without its pejorative overtones or, by contrast, with an intensification of its most unacceptable conceptual traits" (ibid). It is essential to consider the menstrual discourse through the lens of conceptual metaphor theory, while considering the X-phemistic realisations cascading from it.

4.2.1 Conceptual metaphor

The foundation of this approach is that metaphors are not peripheral, simple linguistic and literary devices used to embellish a piece of writing or speech; on the contrary, they assume a central role in our thought processes and thus in structuring our ways of making sense of the world. In their postulation of the theory, Lakoff and Johnson (1980) highlight the pervasiveness of metaphor in everyday life, "not just in language but in thought and action" (p. 3). Since our concepts have a role in structuring the way we perceive things in the world and how we relate to other people, and assuming the metaphorical nature of our conceptual system, our everyday actions, experiences, and the very way we think are "very much a matter of metaphor" (ibid). Metaphor is a cognitive mechanism with the core notion that metaphor is understanding one (typically more abstract) concept in terms of another (typically more concrete).

As such, scrutinising the use of metaphorical linguistic expressions, which are systematically linked to our metaphorical concepts, can inform us of the nature of those metaphorical concepts and help us understand better the metaphorical aspect of our activities and how we perceive and make sense of things in the world. To illustrate this, Lakoff and Johnson (1980) discuss the example of TIME IS MONEY. In modern industrialised society, time is quantified and intimately tied to work, and so, treated as a valuable commodity or money. Consequently, we conceive of it as money, and understand, experience and talk about it in those terms as well. The fact that we conceptualise time in terms of money, a limited resource, and a valuable commodity is tied to our culture and our daily life experiences with those concepts. This gives rise to concepts such as TIME IS MONEY, TIME IS A LIMITED RESOURCE and TIME IS A VALUABLE COMMODITY, metaphorical concepts that, together, form "a single system based on subcategorization" (p. 9). This denotes entailment relationships between the metaphors because money is a limited resource and a valuable commodity, and time takes on all those traits by 'being'

money. This chain of entailments creates coherence within both the systems of metaphorical concepts and metaphorical expressions.

Yet, this particular understanding of time as money is not universal and is dependent upon the mainstream culture that one has experienced life within. Kövecses (2005) discusses the existence of metaphor variation and identifies several dimensions along which metaphor can manifest in different ways such as cross-cultural and cross-linguistic variation, and variation within a culture according to its social, ethnic, regional, individual, and subcultural features. Importantly, those dimensions, along with general linguistic knowledge "form an outer layer of embodiment" (Brdar, 2019, p.382). Lakoff and Johnson (1980) argue that:

"[w]e are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. We project our own in-out orientation onto other physical objects that are bounded by surfaces But even when there is no natural physical boundary that can be viewed as defining a container, we impose boundaries-marking off territory so that it has an inside and a bounding surface" (p. 29).

This highlights that we reproduce this pattern of boundary imposition on most things, even if they are not clearly bounded, as we are compelled to mark a territory since it is a human instinct and "an act of quantification" (ibid). Similarly, this understanding of the corporeal envelope of the body as a container allows for the widely known linguistic tool of personification, which enables the understanding of a wide range of experiences with nonhuman entities in terms of human characteristics. Because personification differs greatly according to which human traits, activities or motivations are selected, it is deemed a general category that covers a variety of metaphors and is rooted in the experiential basis of the body that exists in a wider socio-cultural context. As Rohrer explains (2007, p. 29),

... "[e]mbodiment" is also used to refer to the social and cultural context in which the body, cognition, and language are perpetually situated. For example, such context can include factors such as governmental language policy, cross-cultural contact/aversion, or the influence of historical scientific models and theories on individual language learners (Geeraerts and Grondelaers 1995). Similarly, the

context can include the cultural artefacts that aid and manifest cognition—many of which are not only constrained by but are also extensions of the body (Hutchins 1995, 2005; Fauconnier and Turner 2002).

Indeed, if we are to consider the specific subject matter of menstruation, particularly while taking into consideration its very nature as a bodily process, and its medical and socio-cultural history outlined throughout previous chapters, investigating menstrual discourse through an emphasis on embodiment is crucial. Rohrer (2010) further suggests that in order to explore what is meaningful to people, it is necessary to study the cognitive, physical, and social embodiment "that shapes and constrains meaningful expressions" (p. 26) in accordance with findings from other cognitive sciences. The necessity of such an investigation establishes the central role of the embodiment hypothesis and of conceptual metaphor in the current study.

4.2.2 Metonymy, words, and concepts

Not unlike metaphor, metonymy is also described as conceptual rather than a simply linguistic tool (Lakoff and Johnson, 1980; Gibbs 1999). Metonymy, in its barest of senses known as the process of extending the name of the part to the whole, whole to part, or part to part, has historically been intertwined with metaphor, and very arduously extricated from it (for example, see Goossens, 1990; Dirven, 2002; Allan, 2008). Although Lakoff and Johnson (1980) consider metaphor and metonymy to be two distinct conceptual processes, metonymy still tends to be articulated through its relationship with metaphor. Kövecses (2010) provides a typical definition which puts the two processes together and contrasts them as he posits that metaphor is characterised by similarity while involving two distinct domains, whereas metonymy involves contiguity and one single domain.

Further highlighting this entanglement, Goossens (1990) suggests that it "appears to be the case that the two are not mutually exclusive" (p. 323) even though metaphor and metonymy are two separate conceptual processes: he eventually coins the term *metaphtonymy* (ibid) to further illustrate this complex link. There is a basis for the consideration of metonymy-based metaphors (Taylor, 1995; Dirven, 2002), as well as of the framing of those two conceptual processes as being part of a continuum (Dirven, 2002; Allan, 2008). This metaphor-metonymy

continuum, or more generally the tangled relationship of the two concepts, is particularly useful in the current study, and is exploited alongside embodiment to explore how participants conceptualise the menstrual event and how much of the gradation of metaphorical conceptualisation seems to begin with bodily and metonymic considerations before further radiating to more abstract concepts. Indeed, as Barcelona (2002) suggests, "the seeds for any metaphorical transfer are to be found in a metonymic projection."

Similarly, before beginning to tackle matters of metonymy, of metaphor and of Xphemism, there was a need identified during the process of this research project to provide more semantic context for the understanding and the analysis of these elements in a way that would be appropriate for the subject matter, and that would truly exploit the potential of the data gathered. As Phillip (2003) argues that "[t]raditional research into figurative and connotative meaning has tended to focus heavily on etymology in assessing current meaning: something of an anomaly, as it mixes up the synchronic and diachronic aspects of language" (p. 1), this project recognises that while a synchronic analysis is useful in uncovering current meanings and pragmatic functions, a diachronic one can uncover the historical reasons behind semantic change. Furthermore, Gibbs (1993) shows that misinterpretations of the development of figurative meanings are prevalent in speaker intuition, and that having "valid intuitions about metaphoricity in diachronic processes" is complicated for speakers (p. 276). For these reasons, the instance of figurative language and their senses do not originate from researcher intuition but are rather first derived from the synchronic data of real language use, and also analysed diachronically where relevant through the Historical Thesaurus (HT) (see below).

It is crucial to begin the analysis by first considering word meanings and concepts through the lens of lexical semantics, specifically using qualitative semasiology, which is particularly useful here as it "deals with word senses and the semantic links among those senses, like metaphor and metonymy at the level of individual words" (Geeraerts, 2017). In terms of word senses and semantic relations at the word level, there are essentially three kinds of relations: homonyms and polysemes, which share a form but differ in meaning; synonyms and hyponyms, which differ in form but evoke similar meanings; and antonyms, which differ in both form and meaning and are semantically affiliated by opposition.

Starting from these semantic relations at the level of word meanings can be helpful in uncovering the concepts that exist in people's minds. Drawing on lexical semantics within a Cognitive Linguistics framework, it can be assumed that lexical knowledge is organised in the human mind as concepts, or "systems of areas of human experience that provide the necessary contextual knowledge for our understanding of the world around us" (Paradis, 2012, p. 3362). Typically referred to as domains (Langacker, 1987), this knowledge can be basic, as in the case of domains related to colours, smells, tastes, etc., but can also be more complex as it may involve further conceptualisations drawn from more than one single domain. In fact, in most cases, linguistic expressions spread over several domains, though some are more central than others, as Langacker (1987, p. 154) shows with the example of BANANA:

Most concepts require specifications in more than one domain for their characterization. The concept [BANANA], for example, includes in its matrix a specification for shape in the spatial (and/or visual) domain; a color configuration involving the coordination of color space with this domain; a location in the domain of taste/smell sensations; as well as numerous specifications pertaining to abstract domains, e.g. the knowledge that bananas are eaten, that they grow in bunches on trees, that they come from tropical areas, and so on.

Drawing on these multiple domains is necessary for a "full knowledge representation as required in an encyclopaedic, usage-based conception of meaning" (Paradis, 2012, p. 3362), particularly when considering the subject matter of the present study. Since, as suggested by Croft and Cruse (2004), "no concept exists autonomously: all are understood to fit into our general knowledge of the world in one way or another" (p. 16), it becomes especially useful to draw on these assumptions in the current study in order to not only ensure a more rigorous methodology, but also to better approach the fundamental research questions of this study, which seek to know what kind of conceptualisations, of 'full knowledge representations,' exist when thinking and talking about menstruation.

As Lakoff and Johnson (1980) note, there is no non-metaphorical concept that can be structured in a way that is fitting of a single abstract concept. To achieve a fuller image of the concept, there will be multiple typically concrete domains involved, as each one will provide only some aspects to describe the more abstract

domain. Lakoff and Johnson (ibid) exemplify this using the conceptualisation of ideas as people (her ideas will live on forever), plants (having a fertile imagination), money (sharing a wealth of ideas), food (food for thought, requiring time to digest information), and fashions (old-fashioned ideas). This is known as the scope of metaphor according to Kövecses (2000), accepting this breadth of variety, but wondering just how many and what kind of target domains a single source domain can adhere to, a question that is shared by the present study in terms of menstrual language. Kövecses (ibid) discusses the example of emotions conceptualised as health or illness because of their inherent positivity or negativity, an aspect that can also be further explored through such source domains as up-down, light-dark, warm-cold, and valuable-non-valuable. These additional domains encompass metaphors that "have a wider scope than the domain of emotion" (ibid, p. 44), and therefore that overarching conceptual metaphors can assist in exploring and explaining the distribution of linguistic metaphors.

4.2.3 Gender matters and reflexivity

The concept of menstruation and its associated linguistic expressions touches on many domains, and evokes multiple different representations depending on what domain is more central and more informed by the experiential basis of the individual. As outlined in previous chapters, menstruation is a concept that exemplifies these multi-domain representations particularly well as it can be approached from various places, notably those of medicine and biology, of sociology and anthropology, of religion, and gender and queer perspectives. Considering the sexual and gendered essentialism that has historically permeated the menstrual event, it is now an appropriate time to expand the discourse to include those who have previously been on the margins of this issue, and to avoid limiting this embodied experience to any one specific gender that feels it is part of their very identity. Drawing on notions of gender, of performativity, of intersectionality in methodologies, and of menstrual activism is particularly useful.

Indeed, as Stryker and Whittle (2006) explain, transgender studies are in fact an intersection of the two fields of feminist and queer studies as neither could handle the complexity of contemporary gender: transgender phenomena challenged what

it meant to be a 'woman' and presented a way other than being homosexual to oppose heteronormativity. Transgender studies views gender as a comprehensive system of great diversity. This is also important to understand gender in a way that is not limited to the correlating binaries of male/female and man/woman. Furthermore, it is equally important to consider the notion of performativity, which postulates that gender is a performative act instead of a constative one, which might be true or false. Gender is accomplished through 'doing' and not by 'being' which asserts that it does not call for a 'true' or 'false' response (ibid). In other words, performing one's gender is not a mere reflection of what an individual already is (in this case, male or female), rather, it is an active work to constitute and materialise that very impression of one's gender in the wider social context. Therefore, drawing on these notions ensures that this study includes every person that feels concerned with the menstrual event in one way or another, and does not impose boundaries on the sorts of experiences it discusses and holds important.

By holding those assumptions delineated by Stryker (2016) as essential guidelines, the current research project is also operating within the framework of intersectionality. As Davis (2008) explains, intersectionality is concerned with an issue that is now considered fundamental in all fields and which is acknowledging differences between people (as its fundamental concern). At its core, as postulated by Crenshaw (1991), intersectionality encompasses three aspects. Structural intersectionality highlights the fundamental qualitative differences in experiences (such as domestic violence) of women of colour emerging because of their positioning on this intersection of race and gender. Political intersectionality emphasises the historical marginalisation of black women by both feminist and anti-racist movements of the United States. Finally, Representational intersectionality examines the ways in which representations of women of colour perpetuate sexism and racism, and further marginalise and objectify them (Carastathis, 2014).

Davis (2008) further argues that, even though this fight for inclusion is 'quite old', intersectionality still manages to bring something new while dealing with gender/race/class through poststructuralist methodologies (in a novel twist), and still has the ability and complexity to attract both generalists and specialists. By insisting that there are multiple analytic categories that are equally relevant and

actively co-constructing lived experiences, intersectionality as a research framework offers the additional benefits of simultaneity, complexity, irreducibility, and inclusivity. Since components of identity do, in fact, exist simultaneously within any one individual, intersectionality takes this into consideration when examining how oppressions are lived in the same way, and when positing the "convergence, co-constitution, imbrication, or interwovenness of systems of oppression" (Carastathis, 2014, p. 307).

As such, the present study does not fragment the lived experiences of its participants by highlighting one aspect only of their identities and lives. Rather, the discussion sections in Chapters 6 and 7 are informed by those various experiences and examine the instances of menstrual language within this experiential background, along with its historical and social ramifications. Certainly, with the consideration of simultaneous analytical categories comes complexity, which is apparent in the multiple and varied experiences collected within this project. Managing complexity can be accomplished through, for instance, an inter-categorical approach which "focuses on the complexity of relationships among multiple social groups within and across analytical categories" (McCall, 2005, p. 1786), or through an anti-categorical approach which, by contrast, deconstructs those categories since "[s]ocial life is considered too irreducibly complex [...] to make fixed categories anything but simplifying social fictions" (ibid, p. 1773). This is accomplished in the present study, for instance, through the examination of the complex individual experiences of menstruating individuals who, although all offered instances of menstrual linguistic items in English, do not all share the same native language, nor the same experiences of gender, of race, nor of religious background.

Following from ensuring complexity and simultaneity, irreducibility is achieved by acknowledging that "oppression is produced through the interaction of multiple, decentered, and co-constitutive axes" (Carastathis, 2014, p. 308) rather than reducing it to one fundamental clarifying category. Within this project this is done notably by applying King's (1988) argument that it is necessary to address all oppressions, not just one fundamental one, for instance, when discussing some of the taboo dimensions of the menstrual event and addressing the directions from which those forces have been and are still being applied (see Chapters 2 and 3 for context and how they relate to Chapters 6 and 7). Irreducibility is further treated

as a "theoretical commitment on the part of the researcher" (Carastathis, 2014, p. 308) and informs the analysis of the data that was organised according to monistic and isolated categories (in the form of demographic data).

Finally, intersectionality as a research paradigm is crucially relevant to the present study in order to also ensure inclusivity. Adopting an intersectional approach serves to avoid perpetuating "heteronormativity, elitism, and ableism of dominant power and hegemonic feminist theory" (Carastathis, 2014, p. 309), bringing forward the embodied realities and experiences that have previously been excluded from the "constructions of the category 'women'" (ibid). Therefore, and further drawing on the similarly articulated ethos of radical menstrual activists that not all women bleed and not all who bleed are women, the present study equally adheres to the trans-inclusive act of referring to people who menstruate as 'menstruators' and not as 'women' as it creates "gender trouble" and serves to "queer" menstruation itself (Bobel, 2010, p. 156). As Bobel (ibid) further explains, consciously choosing to use 'menstruators' acts as a pointed undoing of gender as it is known and enforced socially, showing that feminism is capable of functioning and of remaining critical of gender norms when we rally not around the body but around the experiential. 'Menstruators' is a term that acknowledges the "sexed dimension" of menstruation, which is "a bodily process that exists not independently of, but in relationship to, the gendered body" (ibid, p. 156) and therefore functions as a term which is inclusive and constantly challenging the essentialist binary. While this linguistic practice is wholly adopted in this study, there is mention of 'women' and 'girls' in the current project to reflect, where appropriate, the language of the source referred to, and to further highlight the socialised and often misogynistic gendering of menstruation. As Fahs and Przybylo (2018) state:

We draw on language such as *menstruating bodies* and *menstruators* to get at the complexity around gender and menstrual politics. Alongside this language, we also draw on the language of *women* and *girls* as a way to mark menstruation as feminized and menstrual negativity grounded in misogyny. Menstrual bleeding in this sense is complex: it is both highly gendered and not attached as a material reality to only one gender (p. 209) (italics in original).

Certainly, espousing these notions when shaping the theoretical assumptions and in structuring the methodological approaches of the present study is particularly

salient as it sets out to ask various people from different backgrounds about their embodied and social experiences of menstruation. These varied perspectives not only ensure the previously outlined benefits of an intersectional approach, but are also valuable because they enable the researcher to better engage with and examine a range of different embodied and social experiences of menstruation. Indeed, not only is it important to carve out a space for differences to be expressed, but also from a linguistic point of view, lexical and metaphoric variations are possible and richer through these same differences being acknowledged and given the importance they deserve. As Browne and Nash (2010) put it, "[b]y recognising not only the messiness of social life and the place of the research/researcher in (re)creating it, such research can provide a place for those who otherwise tend to be marginalised, disenfranchised and excluded in the process" (p. 14).

Uplifting and providing a place for those typically excluded and marginalised by essentialist approaches might, however, have the potential to render those individuals vulnerable and to exploit their narratives. Acknowledging the potential vulnerability and exploitation of participants, the present study takes steps to ensure ethical approval of all questions asked and anonymity. Furthermore, this project also strives to hold its participants as co-constructors of meaning by continuously referring to the experiences they shared, citing them fully and accurately, and by representing their words contextually and reflecting the importance of their embodied knowledge. Feminist scholars have further sought to address this potentially exploitative nature of the relationship between researcher and researched through the use of reflexivity, although it can present the danger of focusing too much on the researcher instead of the participants. Nash (2010) explains that: "Self-reflexivity entails, in part, a 'self-critical, sympathetic introspection and self-conscious analytical scrutiny of the self as a researcher' -a process designed to consider the distance between participants and to recognise the fallacy of the supposed 'objectivity' in the research project (England 1994: 82)" (ibid, p. 135). Donmall (2013), in her psychoanalytic study of experience with menstruation and menarche, highlights the importance of acknowledging that it is not participants themselves who are analysed, but their "narratives, the meanings, and the discourse", and that "reflexivity is key to the process" (p. 208). Although 'positionality' and 'reflexivity' are tools that can be

turned to in order to address the unstable and changing interactions between researchers and participants, Nash (2010) argues that those terms themselves imply a certain momentary and stable place from which one can be reflexive and can consider one's position. She further suggests that "the slippery disconnections and reordering of our interactions with our 'participants' (and collaborators in knowledge production)" should be expected, and that, as researcher, one should "set out to deliberately explore that instability for what it might show about the queerness of our interactions." (p. 141).

While it is important to acknowledge the areas of disconnections and to tackle the instability, it is equally crucial for qualitative researchers to recognise their role as instruments of data collection and analysis, and thus to "critically reflect on the ways in which their various identities and experiences shaped their study topics, sampling, interpretation of the findings, and conclusions through their writing" (Usher, 2021, p. 2). This research project is produced by someone who identifies as a cis-gender woman who menstruates, who has lived in various sociocultural environments, who is a speaker of Arabic, French, and English, and is therefore subject to multiple linguistic interferences and has the ability to codeswitch and fill conceptual gaps using different linguistic blocks from different contexts. Acknowledging this identity without taking up more space than absolutely necessary is a crucial goal of this research, as is reducing bias by articulating all research questions in a neutral manner and by formulating a neutral hypothesis regarding the metaphorical conceptualisations that exist and their implications, reflecting on assumptions about menstrual knowledge and world experiences, ensuring trustworthiness, and safeguarding clarity of research writing to avoid density and remain accessible to all.

Throughout this project, this identity is reflected upon by constantly asking questions such as "What do I know? How do I know what I know? What shapes and has shaped my perspective? With what voice do I share my perspective? What do I do with what I have found?" (Patton 2014, quoted in Marshall & Rossman, 2016, p. 118). For instance, this identity has helped in explaining a menstrual phrase ("vernis الوقت لي ندير فيه ال" [the time I put on nail polish]) shared by a participant in the Algerian dialect with French codeswitching and therefore enabled the consideration and analysis of this phrase. The answers to these questions have been continually checked for bias and structured along the previously outlined

assumptions drawn from transgender studies, feminist and queer studies, and intersectionality, in order to ensure that the researcher's own perspectives are enriching and collaborating in the construction of meaning alongside those of the study participants. For example, the language used throughout this project is continuously questioned and reflected upon as part of the practice of selfcriticality in order to ensure the previously outlined commitment of inclusivity. Similarly, self-conscious analytical inquiry of the self is first achieved through the recognition that the researcher's own experience with menstruation can have its rather negative moments come to mind first when researching such a topic. Second, it is also important to acknowledge the importance of maintaining neutrality throughout the project (such as in questionnaire questions) and to consider the distance between participants. To be sure, this process makes space for experiences that contradict or are very different from those of the researcher to emerge and to be examined, as in the case of menstrual experiences articulated in more positive terms, for instance. As stated earlier, this practice of introspection and self-critical scrutiny helps in considering this distance between participants, which is particularly helpful when constructing meaning with the participants as collaborators.

Self-reflexivity entails, in part, a 'self-critical, sympathetic introspection and self-conscious analytical scrutiny of the self as a researcher' -a process designed to consider the distance between participants and to recognise the fallacy of the supposed 'objectivity' in the research project.

4.3 Methodology

The methodological approach and the research methods that serve to structure the data collection and analysis in this project are adopted specifically because they enable researchers to both deploy and reflexively scrutinise those theoretical assumptions, as well as the political and ethical positions delineated earlier. Additionally, and equally crucial to the development of the present study, the methodology implemented is articulated around the fundamental research questions that this project has set out to answer (see Section 1.2) and is constructed in accordance with principles of reflexivity to ensure trustworthiness, accuracy, accountability, and replicability. As such, the steps taken to apprehend the subject matter of this research project are modelled as closely as possible on

the method of qualitative research postulated by Schmitt (2005): systematic metaphor analysis. This is particularly important given the "tension that exists in the relationship between subjectivity, self-reflection, and adherence to methodical procedures" (ibid, p. 368) within qualitative research.

Systematic metaphor analysis, as articulated by Schmitt (2005), "attempts to reconstruct models of thought, language, and action" (ibid, p. 368), and operates within the philosophical knowledge that the "metaphorical model determines thought, even during the most abstract of discourse" while drawing on "therapeutic practice where metaphors used in communication are a vital part of being able to understand the sense of things, especially under difficult circumstances (von Kleist, 1987)" (ibid). Also drawing on the earlier outlined concepts articulated by Lakoff and Johnson (1980), as well as on the contributions of various other disciplines, systematic metaphor analysis accepts the notion that "metaphors provide preconceptional orientation with respect to thought and experience that is hardly accessible, or accessible only with analytical aids, in rational discussion" (Schmitt, 2005, p. 368) while providing the field of qualitative research with "an approach that allows a systematic reflection of the metaphors in which, and through which, we perceive, speak, think, and act" (ibid, p. 369).

4.3.1 Identifying the target area

The very first step taken in this research project is one that is fairly common and central to all qualitative research methods, and that is to determine the subject matter of the study, to ask the right questions to structure it, and to begin drafting a plan for the collection and analysis of the data. Since metaphor analysis "requires that a topic be selected in advance so that a search can be made for mostly colloquial, metaphoric filling" (Schmitt, 2005, p. 369), this is the first decision in starting the current research.

The target area of menstruation is decided upon. Following that, preliminary questions are posed: How is menstruation, a recurring and chronic condition that concerns roughly half of the world's population, experienced and embodied? How is it conceptualised by those affected and those not? How does it denote monthly bleeding and curse at the same time? Conducted as part of a Master's research project in 2015 (Boughenout, 2015), an initial survey and analysis of some of the

common menstrual metaphors (that time of the month, period, the painters are in) and menstrual language in general (I can't swim, uh-oh someone must be on their period) already reveal some of the domains menstruation is mapped onto, and to some extent that it has a tabooed dimension that may influence its conceptual representations. This menstrual language surveyed is derived from the list of words and expressions relating to menstruation across the world provided by the Museum of Menstruation (http://www.mum.org/words.html), from previous research and finally from an earlier conducted project with a similar line of inquiry (see Chapter 1). This first step therefore helps to begin building an answer to the first research question of this project: How is menstruation construed and conceptualised metaphorically?

As in most research processes, there exists "a wide range of subjective influences" (ibid, p. 370) that emerge when deciding on this target area to be explored and that need to be contended with. Biographically, this is a topic that the researcher is familiar with on an experiential basis, considering the earlier disclosed identity. However, that is only one single sort of embodied experience, and in beginning to investigate the variety of menstrual experiences and languages, the researcher has had to accept that their embodiment of menstruation is but one drop in the metaphorical sea of menstrual experiences that exist in the world. Yet, this sheer breadth of menstrual experiences and languages has not been fully explored, neither through quantitative nor through qualitative methods. This is one more reason, alongside the tabooed implications of menstruation in most cultures, most religions, and most everyday language, that has motivated the choice of this topic.

4.3.2 Broad-based collection of metaphors

In order to establish and document the existing cultural scope for discussing the menstrual event in any capacity, it is imperative to carry out a broad-based collection of background information and metaphors. As a preparatory step, a review of the existing literature referencing the chosen topic is conducted which not only serves to build a fuller multi-disciplinary framework for the understanding of menstruation, but also takes into consideration the metaphorical conceptualisations of the menstrual event, and thus answers more fully the first research question of how menstruation is construed and conceptualised metaphorically.

4.3.2.1 Online questionnaire

Furthermore, since this phase as articulated by Schmitt (2005) only assumes the collection of data from pre-existing sources, the current study constructed its own collection of metaphorical conceptualisations by collecting data from a wide and diverse population through an online questionnaire. In order to prompt data that would be useful in answering the first research question of this project, the questionnaire, an internet-based questionnaire (see Appendix) hosted on the University of Glasgow supported survey tool OnlineSurveys.ac.uk, which is a particularly practical tool for a large sample (Check & Schutt, 2012), asked a series of mostly open-ended questions designed to elicit metaphor usage by the respondents after obtaining ethical approval. Taking into consideration the reviewed literature on menstruation, especially regarding euphemisms and conceptual metaphors, the questionnaire first asked demographic questions about age, ethnicity, religion, gender identity, sexual orientation, native language, and importantly current menstrual status. Such demographic information gives more context to the answers provided and helps inform the researcher of the kind of background the participants are coming from, which in turn influence their menstrual constructions. In addition, the questionnaire link was circulated through various university and society Facebook groups (including Arabic speaking ones), through Twitter, through LGBTQ+ networks, through friends and colleagues, as well as through posters placed on noticeboards throughout the university, in order to reach as diverse an audience as possible and remained open for a period of a year and a half to gather as many responses as possible¹⁶.

Next, taking into account the importance of logical ordering of items without creating unintended response bias (Dillman et al., 2014), the questionnaire included a singular priming regarding metaphor usage by asking participants whether they are familiar with a series of common metaphors (you won the argument, we are running out of time, etc.) to elicit metaphorical conceptualisations, but never used any term other than 'menstruation' and did

Originally, the questionnaire was set to remain open for about six months to obtain a minimum of 50 responses. However, due to COVID-19 disruptions, the questionnaire remained online longer, and garnered more interest after the first wave of lockdowns. After collecting 147 responses, it was deemed enough data was collected to close it after a year and a half.

not prime respondents to represent their menstrual experiences through a good-bad/positive-negative dichotomy.

Subsequently, the questionnaire included a series of custom designed routes. Depending on what answer to the question "What is your current menstruation status?" the participants chose, they were taken to a different set of questions that was tailored to their menstrual experience. For instance, if a participant indicated that they "still menstruate," they would receive questions regarding their thoughts and feelings about the fact they currently menstruate without long periods of interruption, and about how they feel about their bodies as they experience menstruation. Whereas if a participant chose the answer "Menopause/Perimenopause," they would be led to a series of different questions which acknowledge their status and which ask them about their thoughts and feelings on both menstruation as they experienced it in the past, and about the fact that they no longer go through it. Additionally, if a participant chose not to disclose their menstrual status for any reason, they would also be led to a different set of guestions that are more general and related to their thought on the menstrual event as a general phenomenon rather than as a personal experience (see Appendix for the full questionnaire).

As previously stated, the design of the rest of the core data collection questions is informed by previous literature. For instance, knowing that there exists a practice of naming menstruation, the questionnaire asked participants to share how they call it, what other words they have heard used to refer to it, and with whom they use such words. Similarly, on account of this event being an embodied one, the questionnaire asked participants to describe how they feel about their bodies as they menstruate or no longer menstruate. Furthermore, since it has been documented that there exist a variety of menstrual practices and behaviours across cultures, the questionnaire included questions designed to seek information about how participants behave in public when they are menstruating, if they ever hide or claim they are menstruating even if they are/are not, what the contexts of such instances have been, and why they have behaved in this way.

4.3.2.2 Ethical issues

Although using an online questionnaire has the potential to reduce the number of ethical issues involved in the data collection process, some remain and are identified and mitigated in this section. First, any issues of consent that might arise were anticipated by strict adherence to the University of Glasgow ethical guidelines and were mainly mitigated by explicit disclosure of the research topic, by adequate explanation of the research process and of what participants are expected to do, and by providing a box to tick on the questionnaire information sheet stating that participants consent to take part. The information sheet in the questionnaire also clearly stated that all participants must be 18 or more. Second, the present research is entirely dependent on obtaining data concerning the specific topic of menstruation, which can be sensitive for many. The research also involves individuals potentially disclosing their gender variance, and discussing their gender identity, their menstruation, and their sexuality if they feel it is relevant. Participants were therefore always informed of the nature of the research and what it involved through the information sheet, and participants were made aware that they were able to skip questions since some were nonobligatory, and the ones that were all offered options to opt out. Participants were also informed that once submitted, there would be no way to identify their responses anymore and it would therefore be impossible to retract their answers beyond that point. Finally, as far as issues of confidentiality and data security were concerned, the data collected through the online questionnaire was fully anonymised and no one participant could be identifiable in any way in the research. Moreover, all data extracted was treated as confidential and always stored on a password protected computer, backed up on a portable hard drive, in compliance with the data protection requirements of the University of Glasgow.

Next, a primary broad-based and targeted survey to account for specific sources and themes (using previous research as a guideline) in earlier literature in the field and in the data collected is conducted. This data is extracted from the questionnaire website and onto an Excel document. The primary survey subsequently reveals preliminary metaphorical concepts that are culturally appropriate to the demographics of the participants and to the larger and previously explored discourse of menstruation emerge. These metaphorical concepts allow for a reflection on the topic and on the steps to be taken next,

including the tools to be used to construct a systematic analysis of metaphors. Several thematic overlaps (see Section 5.3.3 for full comparison table) can be observed in previous research in the field of euphemistic menstrual language. For instance, the concept 'cyclicality and time' has been identified as "Periodicity or time" by Joffe (1948), "Time or cyclic references" by Ernster (1975), "Periodicity" by Allan and Burridge (2006), "Cyclic terms" and "Change of state" by Newton (2016), "Periodicity" by Sveen (2016), and finally articulated as the conceptual metaphor MENSTRUATION IS A PERIOD by Gathigia, Orwenjo and Ndung'u (2018) (see Sections 3.3.1 and 3.3.2 for a more detailed review of those studies). Those categories are taken into consideration in this preliminary step and help in beginning to reflect on the data collected, and to identify a need for a systematic and semantically based approach to distinguishing similar and original groups.

4.3.3 Systematic analysis of a sub-group

This phase considers what the most appropriate tools are in order to approach metaphor analysis systematically. While taking into consideration the previously un-systematically surveyed metaphorical concepts, this step involves the analysis of expressions that fit within a given sub-group in two stages: "the identification of metaphors through segmentation of the texts" and "the reconstruction of metaphorical concepts" (Schmitt, 2005, p. 371). Here again, while it is assumed that the data source is a pre-existing text, the present study considers the data collected from the questionnaire responses as its 'text' when the process of metaphor identification is undertaken.

As previously stated, a metaphor is identified as the understanding of one conceptual domain in terms of another conceptual domain, and further typically employs "a more abstract concept as target and a more concrete or physical concept as their source" (Kövecses, 2002, p. 6) specifically because of our interactions and experiences with and in the physical world. A metaphor is identified in this project as a unit of meaning that can be understood contextually yet has a more literal meaning, and whose literal meaning is grounded in concrete, physical, and cultural experience of the world and is mapped onto a typically more abstract domain (Schmitt, 2005). While the MIP (Metaphor Identification Procedure) developed by the Pragglejaz group (2007) was designed specifically to identify metaphor in discourse, it also ignores parts of speech, and its latest

version, MIPVU (Steen et al., 2010), confines lexical units to word classes. Therefore, this consideration of parts of speech as separate would ultimately result in reducing the number of patterns and ignoring some of them. The present study thus relies on other methods for the identification of metaphors (see below).

For instance, the term 'guests' provided by many participants illustrates these conditions well and is thus identified as a metaphor for menstruation. In this example, the 'guests' in question are not literal guests as commonly understood. The aspects of the source domain of menstruation relevant here are the cyclicality, duration, and potentially the emotional implications, which are transferred or mapped onto the target domain of guests, informed by the experience of guests as individuals, related to us or not, that come in for a relatively short and subjectively pleasant or unpleasant visit and then take their leave. In the questionnaire distributed (see Appendix), there are direct questions to prompt exactly which other terms and phrases participants use to speak about menstruation and those they have heard used around them. In this case, while there appears not to be much context for the isolated terms and phrases uttered and heard by participants, the questionnaire later on asks more open-ended questions where participants use metaphorical language more implicitly and add more contextual information.

Subsequently, the identification and synthesis of metaphorical domains according to collective references is necessary in order to further restrict the scope of interpretation of plausible metaphorical concepts, and "competing" concepts must be considered (Schmitt, 2005, p. 373). As Schmitt (ibid) argues, there is an evident difference between systematic and non-systematic or 'free' analysis of metaphors since this latter remains rather unfinished and "the (mostly conspicuous) metaphors found initially are over-interpreted" (p. 373). Therefore, following the earlier mentioned notion that no concept exists independently, the metaphors used in the gathered responses that describe the same or similar target domains are grouped into categories or domains.

However, recognising that such rigid super-ordinate groupings can be challenging, especially when also taking metonymy into consideration, as Barcelona (2002) finds, the current study first and foremost groups menstrual expressions together on the basis of their meaning in semantic themes or domains (such as 'blood, flow,

and bloody imagery' - see Section 5.4 for more). Indeed, this challenge in metaphor classification can be addressed through the complex and semantically based system of the Historical Thesaurus, while the Mapping Metaphor project (see below) provides a helpful framework to consider the boundaries and the essence of a given domain. Although "competing concepts" (Schmitt, 2005, p. 373) may not always be clear when engaging in metaphor research in this field and particularly in the context of menstrual language, thus resulting in less rigidity or more challenges in defining neat concepts, the HT and MM can help addressing those. For instance, when Barcelona (2000) suggests that the boundaries between one domain and the next are subjective and vary from person to person, and then asks how one can define these boundaries and clearly distinguish metaphor from metonymy, Allan (2008) contends that inability to define neat boundaries is not due to weakness in the theory. Rather, this fuzziness in domain boundaries is a result of encyclopaedic knowledge learning and organisation in human cognition and thought which is "inherently messy" (ibid, p. 64).

Therefore, in order to explore this fuzziness while adhering to a systematic analysis of metaphors, the present study applies multiple layers of semantic analysis and classification, first through the USAS Tagger, then through the Historical Thesaurus and the Metaphor Map of English. The reason for this is to first identify the "broad themes" of meaning produced by the participants who responded to the questionnaire as compared to the initially identified themes through previous literature and preliminary survey of data, and therefore answering the second research question of this project: "What are the most common metaphors and themes? To what extent can the existence of conceptual metaphors be established?"

4.3.3.1 The USAS Semantic Tagger

The raw data collected from 147 participant answers is first compiled in the format of a wordlist using the software AntConc and organised by order of frequency to establish a list of the most used language that can be semantically analysed. This tool is best suited for this project because of its breadth and comprehensiveness since the search parameters can be changed and were thus kept as broad as possible, while avoiding creating an overwhelming amount of data. Doing this prevents discounting elements that could be relevant later while

creating a comprehensive 350-word list of the most frequent elements in the responses. Because it brings to the fore the semantic fields that categorise word meanings and senses that are linked through the same mental concepts, this wordlist is semantically analysed through the USAS Tagger. A semantic tagging of the wordlist produced is performed using the vertical output style of the USAS online English tagger (http://ucrel-api.lancaster.ac.uk/usas/tagger.html), thus identifying the semantic groups for each word.

Using this connection between word meaning and mental concept and drawing on the previously reviewed literature and knowledge on the menstrual event as an embodied experience, the tags attributed to each elements are carefully considered. Whereas the first tag is typically selected in the case of instances with multiple tags, there are cases where alternative tags are preserved instead, as in the example of the unit 'uncomfortable.' The first tag of this entry is related to judgement of appearance (O4.2); however, its second tag of 'emotional actions, states and processes general' (E1) is deemed more appropriate given the subject matter and is thus selected. In other cases, both primary and secondary tags are preserved, as in the example of 'pain' which first corresponds to the domain of 'disease' (B2-) and then to that of 'dislike' (E2) and 'sad' (E4.1-).

To assist in this process, the 'Clusters/N-grams' section of AntConc is also used to analyse each of the most frequent instances within the wordlist in order to narrow the meanings to those related to menstruation only. For instance, considering clusters of 2 to 5 components helped provide better understanding for the usage of certain words such as time and month, which are both most frequently used together in the cluster that time of the month. Moreover, to further establish the semantic ties between the examples and the menstrual event, the 'Concordance' tab of AntConc is also looked at as it shows each instance in its context. While the initial goal of this project is to analyse isolated euphemistic expressions, the data collected allows for context to be created by the participants as they answer most questions and share their experiences using full sentences. However, the USAS Tagger is mainly used for the semantic tagging of single words, and while this resulted in several appropriate categories and established clear connections with previous research and mental concepts, these categories remain too general, and the USAS Tagger cannot cope with expressions containing two or more words. For instance, shark week is accounted for in terms of the domain of 'time' because of

week, and that of 'living creatures: animals, birds, etc.' because of the literal meaning of *shark*; however, the deeper metaphorical meanings that could be associated with it are omitted.

4.3.3.2 Historical Thesaurus and Mapping Metaphor

For this reason, another layer of examination is carried out using the same most frequent language and utilising the Historical Thesaurus of English (HT), as well as the Mapping Metaphor (MM) with the Historical Thesaurus online tool, on account of their semantic categorisation of concepts, as a framework.

The HT offers nearly 800,000 meanings arranged in a complex hierarchy of semantic categories and a "human scale" level of thematic structure (Alexander and Kay, 2021). These categories can relate to each other on the same hierarchical level or on higher or lower levels, either containing or being contained within another category. The HT data are organised, at its highest level, into the three major categories: Section I: The External World, Section II: The Mental World and Section III: The Social World. Within these primary sections, subcategories are organised in hierarchies and following the concrete-to-abstract directionality of metaphor, the most general meanings come first before moving on to more specific and narrow ones. Furthermore, the HT provides historical coverage and includes dates for all meanings because of its data being derived from the Oxford English Dictionary (OED). This unique feature assists in providing further historical context as it identifies the date a metaphorical sense of a polyseme emerges and potentially ends. For instance, among the first results the HT produces when searching the word *visit* is the category of 'Organs of excretion' (AB170), specifically the 'Discharge of menses' (01.02.04.20.07 n.), with the additional information that usage of this term to denote menstruation was mostly between the dates of 1653 and 1721. Although now outdated, this term could nonetheless be considered as the root of the theme of *visiting* that is found in present-day menstrual language.

The Mapping Metaphor tool (the 'Metaphor Map') is also used in conjunction with the Historical Thesaurus as it utilises the unique hierarchical structure of systems of the HT. By exploiting the database of the HT and examining the metaphorical connections that exist between concepts where there is lexical overlap, the MM

project 'maps' areas of meaning against each other and distinguishes metaphorical patterns in the English language across time. Since the MM considers that, where there is lexis in more than a single area of meaning, there is potential for metaphor to be identified, and since it is the semantic categories that are identified and coded, not the lexical items, it is particularly useful to exploit the MM resource in the present study to further solidify the semantic basis of the various categories identified, to narrow them, and to account for those that have been left unidentified.

The items on the previously USAS tagged list are searched through the MM online tool and the categories recorded. This is particularly useful as the various mappings between MM categories found during these queries reveal several metaphorical connections and represent areas of overlapping meaning that can be compared to areas a little further away in terms of meaning. Additionally, some items yield no results when searched using the MM tool. The Historical Thesaurus is used in order to determine the semantic category of an item by conducting word searches for each of the items previously investigated, particularly for those instances that had not been successfully tagged by the USAS Tagger. For instance, the item of *menstruation* and its variations, which are tagged as 'unmatched,' are successfully grouped under the thematic category of 'Bodily excretions' (1B20). Similarly, the term *dysphoria* is also documented in the MM, and falls under the previously mentioned category of 'Emotional suffering' (2D06). Because of the nature of the Thesaurus, word clusters such as time of the month and on my period do not yield any satisfactory result. Consequently, those expressions are discarded and only their components are preserved, since each part belongs to a different category (e.g., time falls under 'Time', while month falls under 'Period of time'). Not unlike the first analysis using the USAS Tagger, certain instances are repeated in two or more categories because the HT search indicated several categories, and the most relevant to the topics are preserved (see Section 5.3 for full report of results).

Subsequently, combining the findings of these analyses and comparing those against those of previous and primary research in the field of euphemistic menstrual language ultimately allows for the devising of an original classification of semantic groupings, which is outlined and further explained in Section 5.4, then utilised in discussing the results throughout Chapters 6 and 7.

4.3.4 Interpretation

Finally, the last step of the systematic analysis of metaphors is the interpretation of the results discovered, which allows the finally provide answers to the remaining two research questions of "what is the role and purposes of these metaphors? How can the conscious or subconscious choice of certain metaphors be explained in relation to social and gender norms?" and "what are the implications of these menstrual conceptualisations for the menstruators and the non-menstruators in their embodied and social experiences of and with menstruation?" It is crucial to explore, for instance, what the metaphorical concept of MENSTRUATION IS A VISITOR entails, and what its cross-linguistic and crosscultural implications are. As Schmitt (2005) argues, uncovering and reconstructing those metaphoric concepts and domains only becomes useful when interpretation is rendered possible. Interpretation involves those connections between the concepts discovered and "the events, thoughts, and actions that take place in the real world" (ibid, p. 374), and becomes a helpful tool in gaining hermeneutic understanding as it requires projecting a given subject onto the world. As such, "linguistic, intellectual, and practical 'worldliness'" (ibid, p. 375) becomes a necessity when setting out to reveal further connections in the world as it is symbolically structured.

The discussion and interpretation of the metaphorical concepts found is carried out while taking into account these principles to ensure true representations of the participants' embodied experiences of menstruation and to produce an accurate and faithful network of the variety of mappings they provided through their menstrual language. One of the ways which allow for interpretation is the comparison of metaphorical concepts, since this approach allows for the exploration of several different experiences of the menstrual event. For instance, where one participant conceptualises menstruation as an invader, another might speak of it as a friend or an aunt coming in for a visit, or the visit of mother nature. There are various differences in the conceptualisations of the same event, which enables different conclusions to be drawn.

Another method that is used in the present study to aid the interpretation of the metaphorical domains uncovered is the use of implicit sub-divisions, since several sub-themes and values reveal themselves under the same overarching semantic

category. For instance, when looking at the semantic domain that groups all expressions relating to 'blood,' sub-divisions become apparent, notably when participants speak of various liquids and bodies of water and when they convey images of bloody massacres. Thus, with a single mental image or term and using everyday language, accommodating different representations of the lived and embodied experience of menstruation becomes possible. Schmitt (2005) suggests that: "This reveals a still undiscovered richness in everyday language with all its natural classifications and complex layers, which often remain hidden by inconspicuous usage" (p. 376).

It is also useful to ask the question: "What is the differentiating, expressionextending... functional content of the metaphors used?" (ibid) since it allows for an investigation of the various strengths and resources of a given metaphorical domain. For instance, the earlier mentioned example of conceptualisations pertaining to 'blood' reveals imagery of both nature and horror. The nature imagery might allow an individual to feel more accepting of the menstrual event as its force is that of nature, and therefore something no human can counter; while that of horror might allow speakers to both convey the gravity of their pains and feelings, but also to make light of it and joke about it. Similarly, it is also possible to explore the hidden and omitted elements and the "ideological and cognitive deficits" (ibid, p. 377) of a given domain. For instance, conceptualisations of menstruation as a purely feminine and normative female experience, while revealing the tight link between this event and gender identity, fail to represent intersecting identities and represent an area of ideological deficit. The reconstruction of the resources and deficits of a metaphorical concept in the usual individual, sub-cultural and cultural use of metaphor is possible, and so is discernment of which aspects are 'emphasising' and which are 'concealing.' This in turn further requires a certain subjectivity that derives from living in and understanding the culture.

On the basis of the embodiment ground, but also the experiential, the question of: "How does someone act who thinks in these images?" (Schmitt, 2005, p. 377) can be asked and explored. The questionnaire ensured the existence of a contextual background when discussing specific menstruation-motivated actions or lack thereof. For instance, many of the participants who emphasise their disgust through their metaphor usage also stated that they are very unlikely to engage in

sexual activity when menstruation was happening. Here again, Schmitt (ibid) insists that knowledge and experience of the world remains a prerequisite for this level of response correlation. Likewise, this prolonged exposure to the data combined with the overall knowledge of this specific culture allows us to perceive and engage with some of the conflicts that arise between metaphorical conceptualisations in individuals or sub-culture. Schmitt (ibid), drawing on Pollio et al. (1977), assumes that "the varied use of metaphors is an indicator of psychosocial integration" since "the dominance of a single fund of metaphor makes it possible to forecast the disposition to act in a certain way" (p. 378). In the case of menstruation, it has been evidenced in most of the earlier literature, and to some extent in the present study, that the dominance of the more negatively constructed fund of metaphors and euphemisms has been an active part in the larger social construction of the menstrual event and thus in the prediction of how menstruators will view themselves and will act in the world.

4.3.5 Steps to ensure reliability

Ultimately, this systematic analysis of metaphors was carried out in the way outlined in order to ensure that its credibility can be tested. In terms of quality criteria in qualitative research, Steinke (1999) covers the whole of the investigation process when she stipulates that a reflection on the limits of the study results, the soundness of the theory developed and adopted, the relevance of this theory for research and practice, and the acknowledgement of the self by documenting reflexivity are the most crucial criteria. Schmitt (2005) adheres to these principles and applies them specifically to the interpretation and evaluation stage of the research process. The present study strives to follow those quality guidelines both in its entire methodological approach and in the specific section of result interpretation and discussion.

Therefore, the present research project has rigorously followed the research process outlined throughout this chapter, which also serves as the documentation of the process as posited by Steinke (1999) and Schmitt (2005). The appropriateness of the methods selected for this project has also been discussed and achieved since the main purpose in using the systematic metaphor analysis approach is to "discover patterns of interpretation and how they are altered and/or processed discursively" (Schmitt, 2005, p. 381). Throughout the

reconstruction, presentation, and discussion of the metaphorical conceptualisations uncovered in Chapters 6 and 7, frequent examples and verbatim quotes from participants will be provided, thus empirically anchoring this study in data. Further adhering to Schmitt's (2005) own additional criteria formulated specifically for systematic metaphor analysis, this study documents and discusses at length a large number of metaphorical instances and has defined a number of conceptual metaphors that are sufficiently evidenced with examples of representations, while using earlier menstrual literature as a general guideline.

4.4 Conclusion

This chapter has outlined the theoretical notions and assumptions that framed the research process and has further explained what this research process has consisted of in terms of methodological steps.

Lakoffian assumptions derived from Conceptual Metaphor Theory have been identified as key to the investigation of the metaphorical conceptualisations of menstruation in this project. Further taking into consideration semantic complications and expansions, the notions of metonymy and X-phemisms have been explored as well, while the emphasis on the experiential and the worldly as articulated in this theory, has been adopted and defined as the notion of embodiment.

Since embodiment is a central concept, and one that is directly derived from and reflective of the bodily experience of menstruation, it was particularly crucial to provide a theoretical understanding of what gender matters and intersecting identities might imply. As such, the project has borrowed notions and guidelines from the fields of transgender studies and queer and feminist studies. Since this has been identified as an area of experiential deficit on the part of the researcher, this chapter has also included the documentation of reflexive subjectivity in order to safeguard trustworthiness, clarity, and credibility throughout the research process.

Ultimately, this chapter has modelled its methodological approach to data collection and data analysis and discussion on the systematic metaphor analysis postulated by Schmitt (2005). The steps of this approach, as they have been

applied throughout this research project and how they answer each of the four research questions of this project, have been outlined in detail, and covered the earlier stages of topic consideration, preliminary overview of data, including questionnaire construction and considerations of ethical issues, superficial data analysis, systematic and more rigorous analysis, and finally discussion and interpretation of data results. Throughout the description of each step taken during the research process structuring this project, the rationale and motivations for each decision have been accounted for.

5. Results – The semantics of menstruation

5.1 Introduction

This chapter presents the preliminary analysis of the empirical data collected within the framework of the present study. It also serves as an introduction to the participants who responded to the survey, as far as their demographic information is concerned. When the survey was being circulated, great emphasis was placed on making it clear that the survey was open to everyone willing to share their views; no one specific group of people was targeted based on their gender identity, their menstrual status, or their linguistic background. This ensures there is no bias throughout the respondents that could influence the results of the study. Consequently, there was great demographic variety among the respondents, particularly with the involvement of previously excluded groups such as trans individuals and Arabic speakers, therefore offering unique perspectives that have yet to be explored.

Considering this demographic diversity, from which also derives a particularly salient linguistic variety, this chapter seeks to first establish the commonalities in the menstrual language of all participants by exploring the semantic basis of the most frequent words in the data through semantic tagging and through a thesaurus framework. These procedures effectively address one of the intentions of this study: examining empirically the metaphoricity of menstrual language and how it is used in everyday language. Additionally, the thematic thesaurus used in this chapter serves not only to establish the definite metaphorical aspect of the specific language related to menstruation, but also to contextualise the usage of this language historically and socially. These analyses directly tackle one of the research questions of this project, which is concerned with exploring the role of euphemistic menstrual expressions in reflecting how the menstrual event is lived and perceived in society.

Finally, as this chapter reviews the findings of previous research, not only are the similarities highlighted, but so are the areas requiring further investigation. This review stresses the need for an original classification that is rooted in an empirically established semantic foundation, that integrates these prior findings, and that further describes each category and its basis. In doing so, this chapter

successfully begins to address the primary and most fundamental overarching question of this research project, which is: how is menstruation construed and conceptualised metaphorically?

5.2 Menstruators and non-menstruators

It was important for all participants in this study to be able to self-identify on all the aspects that could potentially be relevant to the research, and which are: age, ethnic background, gender identity, sexual orientation, mother tongue, faith, and current place of residence. While options were pre-defined for a few of these questions, there was always a choice for self-description or additional specification offered in order to avoid limiting the participants and to allow them more freedom of identification. All the demographic information of the survey participants is listed in the table in the appendix. The age bracket encompassing all the participants extends from 18 years of age to 70 with a mean of 27.

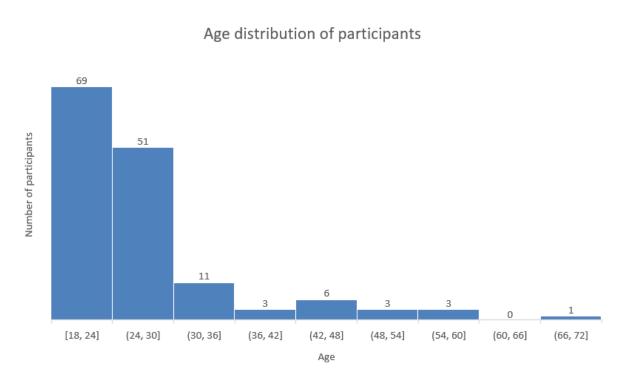


Figure 5 - Histogram and statistics for the ages of respondents.

It was also essential to this study to know the participants' menstrual status in order to determine whether experiencing menstruation or having experienced it at some point in life influences the language used to think and talk about it, as

well as the attitudes towards it. Out of the 147 respondents, 109 revealed that they still menstruate regularly, 14 said that they menstruate intermittently or not regularly for various reasons (6 of them explained that it was because of birth control, 6 said it was because of a medical or a bodily condition, while the remaining two either were not certain of the cause or simply were not willing to share this information), while 7 of the overall participants disclosed that they are in the menopausal stage of their lives. The remaining respondents replied that they either do not menstruate at all at the moment, or that they have never menstruated. Two participants indicated that the reason why they do not menstruate at the moment is going through Hormone Replacement Therapy (HRT), 6 explained that they are on birth control and two others that it is because of a medical or a bodily condition, while the remaining 6 respondents explained that the reason why they do not or have never menstruated is their identification as normative males with male reproductive organs. One last participant chose to keep their menstrual status private and did not disclose it.

Given the strong ties of the menstrual event with a particular gender identity that have been emphasised in previous research and that have been established in the collective thought, it was also important for this study to allow all participants the freedom to self-identify. As a result, out of the 147 participants, 115 indicated that they identify as female, making this gender identity the largest category in this sample. Participants identifying as non-binary constitute the second largest population, which comes to 17 participants. Following this category, 8 participants identified as male, while 3 indicated that they identify as queer and another 2 as trans men. One participant chose to self-express their identity and wrote that they identify as agender, and one last participant chose not to disclose their gender identity.

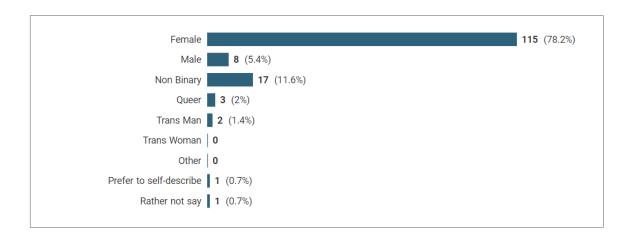


Figure 6 - Bar chart of gender identity of participants.

In terms of ethnic background, 92 out of the 147 overall respondents identified as White, 27 as Arab, 9 as Black, African, or Caribbean, another 9 indicated that they were of mixed ethnic background, and 8 identified as Asian. 4 participants indicated that their ethnic background is one that is not covered within the options offered, and 4 others preferred to self-describe as American Hispanic, North African, North African/European, and Turk. The remaining 3 respondents chose not to disclose their ethnicity.

This demographic information was important to collect because it has been demonstrated in previous research (Plan International UK, 2018; Baumann, Lhaki, Burke, 2019) that the ways in which menstruators and non-menstruators around the globe are impacted by menstruation, particularly regarding their attitudes towards the menstrual event, often include a juxtaposition of elements that include ethnic background. Religious background and practices rooted in culture and religion are also an important contributing factor in forming an opinion and an attitude towards menstruation (Karki et al., 2017; WaterAid, 2017; Ranabhat et al., 2015). Indeed, it has been suggested that menstruation often appears as an overt stigma in religious societies, consequently leading to menstruating women being perceived as unclean, being more ashamed of their menses, yet having stronger bonds with the community of menstruators, and having a deeper understanding of the sense of sisterhood (Pappas, 2012). For this reason, data on the participants' faith was gathered. Out of the 147 respondents, 38 stated that they are Agnostic, making this the largest group in the dataset. This is followed

closely by the pool of 36 participants identifying as Muslim. Another 27 respondents stated that they are Atheist, 19 that they have no religion, and 13 that they are Christian. The smallest groups in the dataset are those 7 participants that chose to self-identify and used the free text box to report their faith, 6 chose not to disclose it at all, and 1 participant stated that they are Jewish. Among the 7 respondents that chose to self-describe, 3 identified as Pagan, 2 as Spiritual, 1 as Catholic, and 1 as Quaker.

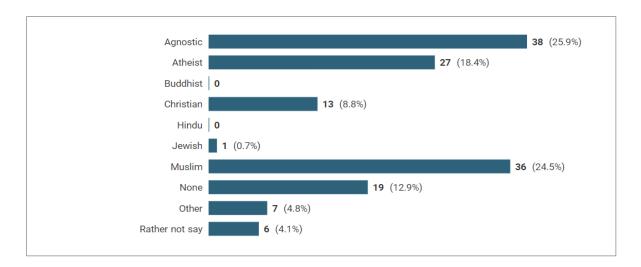


Figure 7 - Bar chart of religious background of respondents.

Another possible demographic factor that previous research concerned itself with is that of sexual orientation. Research has indicated that it was far more likely to hear positive recounting of menstrual experiences from lesbian and bisexual women, particularly in the context of sexual activity (Fahs, 2011). Furthermore, Ussher and Perz (2008) have presented evidence of more supportive and more responsive attitudes from the partners of lesbian women when those are experiencing premenstrual changes and hardships. This research contributed the

primary basis of collecting information relating to the sexual orientation of participants.

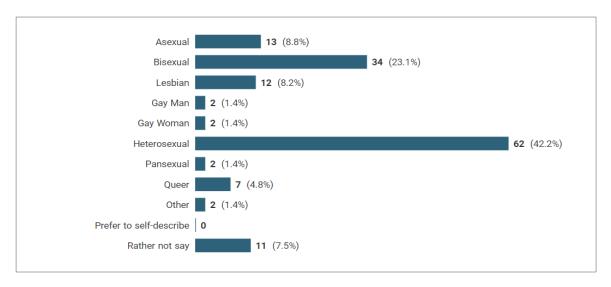


Figure 8 - Bar chart of sexual orientation of participants.

As a result, it was found that, of the 147 respondents, 62 identified as heterosexual, making this category the largest of the sample. Following this group, 34 participants identified as bisexual, 13 as asexual, and 12 as lesbian. The smallest pools are those who identify as queer with 7 respondents, and those who identify as gay men, gay women, and pansexual with 2 informants each. In addition, 2 participants preferred to self-identify; one stating that they identify as both asexual and demisexual, and the other as gay, with no gendered addition to the term. Finally, the 11 remaining respondents chose not to disclose their sexual orientation.

Just as crucial to the multilingual aspect of this study was to know what the first language of the participants was, as well as their current place of residence in order to gain a better understanding of their primary language of expression and if this was influenced by other languages. Given the importance of linguistic self-identification, particularly in multilingual countries such as Algeria and Morocco, where there is "linguistic friction" between multiple varieties of Arabic, French, Tamazight or Berber and its varieties, Spanish in some regions, and, in recent years, even English (Mokhtar, 2018, p. 134), participants were presented with a text box to fill out for themselves. Because some of the respondents indicated

two or three languages as their first languages, each instance of a language was counted separately, which brings the total of recorded responses to 166. Of the 147 participants, a majority of 77 stated that English was their mother tongue or one of their primary languages. This category is followed by speakers of Arabic of whom there were 39. English and Arabic are the largest groups in this dataset, as participants who indicated French as at least one of their mother tongues reached a total number of 9, those who stated German as theirs were 8, and those who said it was Spanish were 7. Following these three categories, native speakers of Polish were 4, those of Italian were 3, those of Tamazight, Portuguese and Mandarin were 2 each, and the remaining languages recorded each had one speaker. Those languages were Bulgarian, Danish, Dutch, Finnish, Greek, Kannada, Punjabi, Romanian, Russian, Setswana, Turkish, Welsh. One participant chose not to disclose their first language.

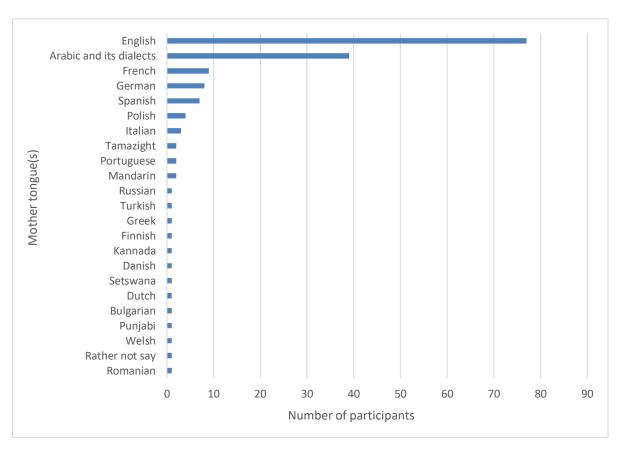


Figure 9 - Bar chart of first languages of participants.

One unexpected yet interesting outcome discovered upon analysing the data was that, despite the primary linguistic background being different, the majority of respondents offered examples of metaphorical menstrual language in English and replied to most questions in English as well. This could be a consequence of the survey itself being written in English, thus influencing participants to reply in kind,

despite the measures taken to prevent this by encouraging respondents to provide examples of their own languages. As a result of this finding, the metaphorical language collected was classified first according to the language it appears in (see the following Section 5.3) and then according to the first languages of the participants.

5.3 Semantic analysis and domains

As a "starting point for carrying out qualitative analysis" (Potts, 2016, p. 58), the menstrual expressions collected were grouped together on the basis of their meaning in semantic themes or domains. The reason for this was to identify the "broad themes" of meaning produced by the participants who responded to the survey, which would allow further analysis of conceptual metaphors at a later stage. The raw data collected from the survey questions relating to the way participants think and talk about menstruation was first compiled in the format of a wordlist using the software AntConc and organised by order of frequency. This wordlist showed a total of 9804 tokens and 1959 word types. The wordlist compiled was semantically analysed through the USAS Tagger, and then further examined utilising the Historical Thesaurus and the Mapping Metaphor online tool.

5.3.1 The USAS Semantic Tagger

In order to determine whether the most frequently recurring words and expressions appearing in this dataset "were suggestive of potentially meaningful patterns" (Archer, 2009, p. 2) of lexical selection, a semantic tagging of the first 350 words in the wordlist produced was performed using the vertical output style of the USAS online English tagger¹⁷, thus identifying the semantic domains for each word. The category system of this tool comprises "21 major discourse fields" which expand into 232 category labels (Archer et al., 2002). As Archer et al. (2002) further explain, this tagging tool helps to bring forth the semantic fields that categorise word meanings and senses that are linked through the "the same mental concept" (ibid, p. 1) to some level of generality. Subsequently, using this connection between word meaning and mental concept, the first tag was typically selected in the case of instances with multiple tags; however, there were cases

¹⁷ http://ucrel-api.lancaster.ac.uk/usas/tagger.html

where the alternative tags were preserved instead, as explained in the previous chapter. Furthermore, there were also multiple tag instances where both the primary tag and alternative ones were considered and preserved, as in the instance of the word 'pain' which is first tagged as corresponding to the domain of 'disease' (B2-) and then to that of 'dislike' (E2-) and 'sad' (E4.1-).

Table 1 illustrates the absolute and relative numbers of instances of each major discourse field appearing in the 350 words tagged, as well as some of the most frequently identified semantic categories. Because of the overlap of discourse fields in certain words, such as 'pain,' the total number of instances came up to 369. However, the words tagged as belonging to the discourse field of 'names and grammar' (Z), which were 133 instances, were discarded. The instances in this category did not include any names and were all grammatical elements which express no specific meaning related to the topic of menstruation.

	Major discourse fields identified	350 W (%)	Includes semantic categories
Α	General and abstract terms	58 (24.6%)	Evaluation: Good; Evaluation: Bad; Comparing: Usual/unusual; Degree: Boosters; Difficult; Unlucky
В	The body and the individual	31 (13.1%)	Anatomy and physiology; Health and disease; Cleaning and personal care; Medicines and medical treatment
С	Arts and crafts	2 (0.8%)	Arts and crafts
Ε	Emotion	22 (9.3%)	Emotional actions, states and processes general; Like; Dislike; Calm/Violent/Angry; Happy/Sad; Fear/shock; Worry
L	Life and living things	3 (1.3%)	Life and living things; Living creatures: animals, birds, etc.
М	Movement, location, travel and transport	18 (7.6%)	Moving, coming and going; Sailing, swimming, etc.; Location and direction
N	Numbers and measurement	23 (9.7%)	Quantities; Frequency
0	Substances, materials, objects and equipment	14 (5.9%)	Objects generally; Colour and colour patterns; Judgement of appearance
Q	Language and communication	17 (7.2%)	Language, speech and grammar
S	Social actions, states and processes	33 (14%)	People (female and male); Kin; Social actions, states and processes; Hindering; Religion and the supernatural
T	Time	19 (8%)	Time: Early/late; Time
W	World and environment	2 (0.8%)	The universe; Green issues
X	Psychological actions, states and processes	13 (5.5%)	Thought, belief; Ability
Z	Names and grammar (excluded)		
	Total	236 (100%)	

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Table 1 - Discourse fields and semantic categories.

Overlaps between the findings of this study and previous research are immediately observable. These similarities appear particularly as far as the semantic domains, categorisations and qualitative comments on the menstrual event are concerned. For instance, the two major discourse fields of 'general and abstract terms' and 'emotion' seem to centre around semantic domains of evaluation or appreciation of menstruation, as well as feelings towards it, which is consistent with the domain that Sveen (2016) calls "antipathy/sympathy" (p.151). Likewise, the sematic categories of 'health and disease,' 'time,' 'people,' and 'colour and colour patterns' can all have direct equivalents in the earlier categorisation of Joffe (1948), but also that of Agyekum (2002), Allan & Burridge (2006), and Sveen (2016). For this reason, the 'Clusters/N-grams' section of AntConc was used to analyse each of the most frequent instances within the wordlist in order to narrow the meanings to those related to menstruation only.

The clusters studied were constituted of 2 to 5 components and helped provide better understanding for the usage of certain words such as time and month, which are both most frequently used together in the cluster that time of the month. Moreover, to further establish the semantic ties between the examples and the menstrual event, the 'Concordance' tab of AntConc was also looked at as it shows each instance in its context. While the initial goal of this project was to analyse isolated euphemistic expressions, the data collected allowed for context to be created by the participants as they answered most questions and shared their experiences using full sentences. To run this data through AntConc, all answers were compiled in a document. This procedure has allowed to not only account for the frequency of isolated expressions such as Aunt Flo and Shark Week, but also to have a better understanding of why some words are frequent and if they are related to the participant's menstrual experience and their attitude and opinion towards it. Furthermore, this process was also crucial in determining whether an instance is considered literal, or metonymical and/or metaphorical. For instance, the word birth appears by itself in the list and was classified in the general/literal group as it is tagged as part of the category 'anatomy and physiology' (B1); however, when looking at its contextual usage, it appears most frequently in the cluster birth control, or in expressions relating to pain, such as

ironically, I feel like I'm giving birth. Another such instance, also belonging to 'anatomy and physiology' (B1), is pregnant. Five out of the six instances allude to the absence of pregnancy marked by the arrival of menstruation with expressions such as monthly confirmation that I am not pregnant, I'm definitely not pregnant or evidence that I am not pregnant.

Table 2 shows the various instances and their frequencies classified in their semantic categories as they appeared in the USAS tagger tool. An additional division between general/literal and metonymical/metaphorical menstrual language was independently added, while allowing repetitions, in order to illustrate two aspects. First, not unlike the instances explained earlier, some examples were repeated in both literal and metaphorical categories because there were instances of both in the data, such as the usage of the word 'blood' which is predominantly used by itself or preceded by the word 'period' to specify the kind of blood talked about but is also used in metaphorical expressions like blood moon and blood monster. This difference is reflected in the number of instances accordingly. To accomplish this, as was explained earlier, the 'Concordance' tab of AntConc served to look at the full text surrounding the word, and thus to identify whether its usage is more literal or metaphorical. Second, there are instances where the USAS Tagger provided multiple tags that were relevant to the topic. Therefore, where appropriate, the first and subsequent tags were conserved, as in the word cycle which appears under 'anatomy and physiology' and under 'frequency,' as well as the word *visit(ing)* which is tagged as belonging to 'moving, coming and going' and to 'social actions, states and processes.'

General/literal men	nstrual language		Metonymical/Metaphorical menstrual language			
Semantic category	Instance	Freq	Semantic category	Instance	Freq	
	Blood	61		Period	180	
	Bleeding	15		Cycle	20	
	Natural	12		La regla [the rule]	10	
	Uterus	7		Bleeding	7	
	Hormones	7		Période [period]	6	
	Menstrual	6		Pregnant	5	
Anatomy and physiology	Biological	5	Anatomy and physiology	Bleed	5	
	Birth	5		Hormonal	4	
	Bleed	5		Uterus	3	
	Bloody	2		Blood	2	
	Pregnant	1		Bloody	2	
				Birth	1	
				Hormones	1	
Arts and crafts	-	-	Arts and crafts	The painters (are in)	8	
Cleaning and personal care	Tampon(s)	14	Cleaning and personal care	La regla [the rule]	10	
	Red	5		Red	19	
Colour and colour patterns			Colour and colour patterns	Rouge [red]	5	
				Crimson	4	
Comparing: Usual	Natural	12	Comparing: Usual	Les règles [the rules]	20	
Difficult	Inconvenience	15	Difficult	-	-	
Difficult	Difficult	7	Difficult			
Dislike	Hate	7	Dislike	-	-	
Distike	Douleurs [pains]	5	Distike			

Emotional actions, states and	Uncomfortable	23	Emotional actions, states and	-	-
processes general	Ashamed	6	processes general	-	-
	Bad	17		Bad	1
Evaluation: Bad	Stigma	9	Evaluation: Bad		
Evaluation, bad	Negative	7	Evaluation, bad		
	Awful	5	<u> </u>		
Evaluation: Good	Good	10	Evaluation: Good	-	-
Evaluation, Good	Healthy	8	Evaluation, Good		
Fear/Shock	Embarrassment	14	Fear/Shock	-	-
Fraguency	Monthly	15	Fraguency	Cycle	20
Frequency	Irregular	6	Frequency		
Green issues	-	-	Green issues	Nature	7
Нарру	Нарру	7	Нарру	-	-
	Pain	78		Pain	2
	Cramp(s)	50		Bad	1
	Bad	17			
Health and disease	Healthy	8	Health and disease		
neattii aliu uisease	Health	6	Health and disease		
	Discomfort	5			
	Douleurs [pains]	5			
	Debilitating	4			
	Inconvenience	15		-	-
Hindering	Negative	7	Hindering		
	Discomfort	5			
	Messy	8		Dirty	1
Judgement of appearance	Unpleasant	6	Judgement of appearance		
	Dirty	3			
Kin	-	-	Kin	Aunt Flo/aunt flow	34
NIII			NIII	Auntie	5
Living creatures: animals, birds, etc.	-	-	Living creatures: animals, birds,	Shark week	37
Living creatures, annuals, pirus, etc.			etc.		

Media: Newspapers etc.	-	-	Media: Newspapers etc.	Monthlies	5
Medicines and medical treatment	Pill	5	Medicines and medical treatment	-	-
	Flow	12		Flow	12
Moving, coming and going	Mood swings	6	Moving, coming and going	Visit(ing)	14
				Arrived	4
Not allowed	Taboo	14	Not allowed	-	-
Objects generally	Pad(s)	21	Objects generally	(On the) Rag	13
Objects generally	Products	8	Objects generally	(On the) Blob	11
	People	40		Lady	13
	Woman	13		Les anglais [the English]	6
	Girl(s)	12		Miss	3
People (female and male)	Men	8	People (female and male)	Child	2
	Female	5		Female	2
	Gender	5		Girl(s)	2
	Male	5		Woman	1
	Miss	3			
Deligion and the supernatural	-	-	Deligion and the supernatural	Hell	7
Religion and the supernatural			Religion and the supernatural	La regla [the rule]	10
	Painful	8		-	-
Sad	Embarrassment	14	Sad		
Sau	Douleurs [pains]	5	Sau		
	Frustrating	5			

Social actions, states and process	es -	-	Social actions, states and processes	Visit(ing)	14
	Every month	8		Period(s)	207
				'Time of the month'	73
				Week	55
				'On my period'	41
				'Shark week'	37
Time			Time	Days	23
			rime	Due	19
				I'm on	8
				Période [period]	6
				Ciclo [cycle]	4
				That time	2
				'Due my period'	2
Unethical	Taboo	14	Unethical	-	-
Offectificat	Shame	11	Offectificat		
Universe (the)	Moon	1	Universe (the)	Moon	5
Unlucky	-	-	Unlucky	Curse	7
Violent/Angry	Mood swings	6	Violent/Angry	Hell	7
Violent/Angry	Annoying	6	Violent/Angry		
\\\	Nuisance	6	Worm.	-	-
Worry	Concerned	4	Worry		
	Menstruation	59		Tage [days]	6
	Menstruating	17		Diaf [guests]	5
	Menstruate	10		Erdbeerwoche	5
Unmatched			Unmatched	[strawberry week]	
	PMS	10		Indisposée [indisposed]	5
	Dysphoria	8		Ada [habit]	4

Table 2 - Literal/general and metonymical/metaphorical menstrual language according to semantic categories.

Following this analysis, it appeared that, despite the previously highlighted connections between the semantic categories identified and those of previous research, some of the semantic categories identified through the tagging remain too general. While they form a preliminary broad view of the language surrounding menstruation, they require a measure of narrowing, particularly in the case of some of the more metaphorical expression.

Because the USAS Tagger is mainly used for the semantic tagging of single words, it becomes much more challenging to account for expressions containing two or more words. For instance, shark week is accounted for in terms of the domain of 'time' because of week, and that of 'living creatures: animals, birds, etc.' because of the literal meaning of shark. However, the deeper metaphorical meanings that could be associated with this expression are lost. For instance, there could be a meaning related to 'evaluation' because of the awfulness of being attacked by a shark, to 'health and disease' on account of how painful an experience that would be, to 'colour and colour patterns' because of the sheer amount of redness that would create, or to 'anatomy and physiology' as it could equally be highlighting the bloody aspect of this event, as well as to the act of attracting sharks with menstrual blood, also referred to as 'chumming.' Some other categories, on the other hand, are too specific and can be included within a larger concept, such as 'worry,' violent/angry,' 'fear/shock,' 'sad,' etc. In addition, some instances were tagged as 'unmatched' (Z99), such as menstruation and dysphoria in English, and the French indisposée [indisposed] which does not appear on the lexicon list provided for the French semantic tagger. Besides these 'unmatched' instances, this category also contains instances from languages that do not have a semantic tagger yet, such as Arabic in examples like ada [romanisation of ضياف, habit] and diaf [romanisation of ضياف, guests], as well as the German instances of *Tage* [days] and *Erdbeerwoche* [strawberry week].

Originally referred to as 'offal,' 'chum' consists of rejected fish parts (internal organs, bone and blood), and is effectively used as fish bait that is thrown in water to attract various fish, especially sharks, in a process that is called 'chumming' (Rudow, 2012). The Urban Dictionary further defines 'chumming' as "menstruating, the monthly act of vaginal bleeding" with the example of "Don't go swimming in the ocean when you're chumming" which highlights the meaning of bloody fish bait that will attract danger. (https://www.urbandictionary.com/define.php?term=chumming).

5.3.2 The Historical Thesaurus and Mapping Metaphor

Subsequently, a second layer of analysis was conducted using the same most frequent examples illustrated in Table 2 above and utilising the Historical Thesaurus of English (HT), as well as the Mapping Metaphor (MM) with the Historical Thesaurus online tool, on account of their semantic categorisation of concepts, as a framework. As is explained in more detail in Section 4.3.3.2, the thematic categories of the HT preserve conceptual groupings that are largely familiar to its users and was therefore useful to determine the semantic category of a word.

Table 3 illustrates the HT and MM groupings identified, the instances being categorised, and an independent addition of the possible, perhaps more metaphorical and metonymical thematic categories that could be connected to the initial groupings. This second analysis allowed a confirmation of some of the previously identified categories, such as those pertaining to persons, 'Biological processes,' and 'Health and disease.' Furthermore, a measure of narrowing was achieved in certain cases, such as that of 'Emotional suffering' (2D06) and 'Illhealth' (1C02), which, although they exhibit some overlaps between each other, have grouped a number of instances that were each in their own category according to the USAS Tagger. In addition, utilising the HT also provided more detail and depth, accounted for some of the previously 'unmatched' words, and showed clearer connections with other categories, which is particularly salient in understanding the metaphoricity of menstrual language. For instance, and perhaps one of the most significant cases, the word menstruation and its variations, which were tagged as 'unmatched,' have successfully been grouped under the thematic category of 'Bodily excretions' (1B20). Similarly, the term dysphoria is also documented and falls under the previously mentioned category of 'Emotional suffering' (2D06). Nevertheless, some instances, such as shark, are still primarily categorised according to their literal meaning; in this case, shark falls under the category of 'Fish' (1E06). However, the HT search yielded other categories ('Destruction,' 'Disadvantage and harm') associated with the word shark, and which are thematically closer to the variety of possible meanings that can be inferred from the expression shark week.

MM/HT grouping ID	Second/third-tier grouping	Instance	Possible groupings connected
3D05	Authority: Prohibition	Taboo	
		Child	
1D05	Baby and young person	Girl(s)	
		Miss	
2C02	Bad: Accursed	Awful	
2002	Bad	Bad	
		Biological	
		Cycle	Period of time
1B07	Biological processes	Hormonal	
	biological processes	Hormones	
		Menstrual	
		Pregnant	Ill-health, Liquid, Period of time
1B04	Biological sex	Female	Female person
1004		Male	Male person
1B02	Birth	Birth	Bodily excretion, Biological processes
		Flow	Rivers and streams, Tides, waves and flooding
		Menstrual	Ill-health, Liquid, Period of time
1020	Dadily avanation	Menstruate	
1B20	Bodily excretion	Menstruation	
		Menstruating	
		Monthlies	
		Visit(or/ing)	Social event
2B08	Contempt	Stigma	
1K02	Creation	Product(s)	Healing and treatment, Cleanliness

antage and harm
excretion, Sex organs, Biological ses
rson
rson
position
ction, Disadvantage and harm
r

2D09	Hatred and hostility	Hate	
1C04	Healing and treatment, Cleanness	Pad(s) Pill Tampon(s)	Bodily excretion Bodily excretion
1C01	Health and disease	Health Healthy	Good
1C03	Health and disease, Mental health	Mood swings	
1Q06	Hell	Hell	Bad, Emotional suffering, Curse, Punishment
1D01	Humankind	People	
2D15	Humility	Ashamed Embarrassment Shame	
	Ill-health, Pertaining to discharge/flux	Bleed	Leaking and outpouring
1C02	Ill-health	Bleeding Cramp(s) Debilitating Discomfort Pain(ful) Uncomfortable	Ill-health, Body of water, Liquid Disadvantage and harm
1J35	Individual colours	Crimson Red	Disadvantage and harm
1D03	Male person	Men	
1M04	Period of time	Days Month Monthly Week	
01.02.04.20.08.08 n.	Period of time, The Body: Menses	Period	Bodily excretion, Biological processes

1A22	Planets and satellites	Moon	Period of time
2D05	Pleasure	Нарру	
1B21	Sex organs	Uterus	
01.10.04.08.01 09 n.	Softness	Blob	Liquid, Hunting and fishing
1H01	Textiles	Rag	Cleanliness
01.13.08.05 adj.	Time	Due	
1M01	Time	Time	
3J01	Travel and journeys	Arrived	
1B23	Vascular system	Blood	Body of water, Liquid
IDZJ	vasculai system	Bloody	Ill-health, Bad
3M05	Visual arts	Painter(s)	

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Table 3 - Second and third-tier semantic groupings and connections using the Historical Thesaurus and Mapping Metaphor

In addition to the previously outlined aspects that the HT and MM analysis covered, there are a number of instances that stand out and are worth discussing further. One such example is the term blob or the phrase on the blob in its entirety. In order to locate some of the etymological roots of this phrase, which was used a total of 11 times in the present dataset, its frequency in general usage was examined. Among the 91 instances found on the iWeb: The 14 Billion Word Web Corpus, only 3 are used to denote menstruating. Additionally, the Corpus of Global Web-Based English (GloWbE) yielded 13 instances, 7 of which came from US sources, and the remaining 5 from GB sources. All US cases were unrelated to menstruation, while 4 out of the 5 GB instances were about it. Similarly, when using the Corpus of Contemporary American English (COCA), none of the 6 cases found were related to menstrual language. This identifies the phrase on the blob as a chiefly British English occurrence, and it is further supported and narrowed by the fact that all 11 participants in the present study who shared this expression have stated that English is their first language, and that they reside in Scotland. Likewise, in the study she conducted in "the north Derbyshire area of England" (p. 1), Newton (2016) reported that the term *blob* and its variants were the fourth most frequent slang term, noting that its usage seems to be more predominant amongst "males" (p. 191). Having established that it is largely British, particularly British slang, the etymology of blob was examined. To be sure, the northern dialectal origin is recorded in the OED, and the meaning of "[a] bubble, a large drop; a pimple or pustule" in Older Scots is found in the Dictionary of the Scots Language (DSL), as well as the meanings, in Modern Scots, of "drop of moisture" and "rainy" (as in blobby). While Partridge (1984) documents the expression "to be blobbing," explaining it as "a gonorrhoeal ulcer" (p. 96), once again, this record makes no mention of menstruation. Despite this breadth of meanings associated with blob itself, the complete phrase on the blob, and its relation to menstruation appear to be missing and rarely used formally. The few sources that do draw a clear link between on the blob and being on one's period or menstruating, such as the online reference guide A Dictionary of English Slang & Colloquialisms (Duckworth, 1996-2020) and the Urban Dictionary¹⁹, do not elaborate much on the etymology of this expression and how it came to be used

¹⁹ The full Urban Dictionary entry was added on 17 March 2003 and reads: "When a girl is on the blob, that means she has her period: Dis bitch's a lil' bitchy, I fuckin' think she's on da blob" (www.urbandictionary.com).

to denote menstruation²⁰. As Newton (2016) writes, the exact origin and etymology of this phrase as a menstrual euphemistic expression is particularly "difficult to trace" (p. 191).

Consequently, the present study relies on the HT and its 'human-like' categorisation to account for the blended metaphorical layers that seem to make up the concept of being on the blob. The initial search on the HT yielded several categories that blob can fall under, such as 'Mouth' (01.02.04.08.01.04.11 n.) following the meaning of a pouting lower lip recorded in 1762, 'Eruption' (ACO1aO3) according to its definition as a pimple or pustule (1597-1614), and several other uses, including its chiefly northern English (1429 and 1609) usage as soil or stain, and the figurative usage as a small quantity of liquid (1725-). Keeping in mind the topic discussed and the various denotations explored, the categories selected and displayed in Table 3 are those of 'Softness' on account of the meaning of "drop of soft and moist substance" and, related to this, 'Liquid' (AJ05) and 'Hunting and fishing' (1G04) as it is defined as "bait for eels" (1874-local). The rationale for selecting those two categories as possible groupings connected was that, in the case of the former, the connection lies in the substance itself and relates to blood; in the case of the latter, the assumption was based on a possible relation to the term 'chumming' (explained in Section 5.3.1. above) since this very term is reportedly used to denote menstruating (Sveen, 2016).

Another instance that is particularly salient is *visit(or/ing)*. Among the first results the HT produces when searching the word *visit* is the category of 'Organs of excretion' (AB17o)²¹, specifically the 'Discharge of menses' (01.02.04.20.07 n.), with the additional information that usage of this term to denote menstruation was mostly between the dates of 1653 and 1721. Although now outdated, this term could nonetheless be considered as the root of the theme of *visiting* that is found in present-day menstrual language. Further, within the subcategory of 'Discharge of menses,' other equally outdated terms are found: 'terms' (c1450-1714),

The free dictionary Wiktionary is one rare website that attempts to account for the origin of the phrase on the blob in its entry, stating that it is "a reference to the blobbing (i.e. dripping) of menstrual blood, likely following the model of on the rag" (https://en.wiktionary.org/wiki/on_the_blob).

²¹ The Mapping Metaphor online tool yields the result shown in Table 3, i.e., the thematic category of 'Bodily excretion' (1B20). This category was preferred on account of the ongoing usage of the term *visitor* as opposed to the now obsolete *visit*.

'custom of women' (1611-1705), 'purgation' (1737), 'lunation' (1822/34), and 'periodicity' (1848-1875), with the exceptions of 'menstruation' (1776/84-) and 'the curse' (1930- colloq.) which are still in use and are accounted for in the dataset analysed. Understandably, when searching the word *menstruation* itself, these same results are found. However, when a search is conducted for the word *menses* or even *period*, those appear under the category of 'Menses' (01.02.04.20.08.08 n.), itself falling under the overarching thematic category of 'Excretions' (01.02.04.20.08 n.). *Visitor* is one of the results appearing through this search, with the added information that it is a slang term which was first used in 1980, and that its usage carries on to the present-day.

Since the thematic categorisation adopted by the HT operates according to a 'human' classification, all the terms associated with both period/menses and menstruation/visit are to be considered as concepts that are or were likely familiar to most people at some point in time. This is further supported by the parallels, both in specific terms or expressions and in general concepts, existing between the terms appearing in the period or menses search and some of the menstrual expressions reviewed in Section 3.3, and those collected within this project. Table 4 below illustrates those results alongside the timelines of their usages, and their related literal and conceptual equivalents found in the data analysed. Understandably, many of the expressions and phrases gathered from participants find either their direct parallel in the HT, or a concept that they share with those HT entries, while other expressions remain unaccounted for and require a finer level of analysis (discussed more below). Those expressions that do find their matches, however, further solidify the foundation upon which the answers to this project's most fundamental question, that is, how menstruation is construed and conceptualised metaphorically, are built, and expanded. The fact that expressions such as 'women's evil,' 'visitor' and 'the curse' not only are attested terms that fall under the overarching concept of menstruation, but also act as replacement terms for menstruation itself, proves that there is a metaphorical aspect to the fundamental understanding, conceptualisation, and language of menstruation. In fact, in the three examples mentioned earlier, it is evident that the terms draw on multiple metaphorical notions that all orbit the main concept of menstruation and how the menstrual event is lived. For instance, 'visitor' as a term or theme to denote menstruation seemingly draws on the

concepts of visiting people or places for a specific period of time, as well as that of coming and then leaving. Likewise, 'women's evil' and 'the curse' are conceptually close, denoting something negative, possibly harmful, and to be endured (in the former, by 'women' only). These denotations appear to be anchored in lived and embodied experiences, and with the additional timeline details that the HT provides, suppositions can be made regarding those experiences, which allows for a richer explanation of why and how such metaphorical expressions came to be mapped onto the domain of experience of menstruation. In doing so, both this historical quality of the HT, and the embedding of aspects of experience within the language, directly address the research question: what do these euphemistic expressions reveal about how menstruation is lived and perceived in society?

HT terms under 'Discharge of menses'	Timeline	Related terms and concepts from data	HT terms under 'Menses'	Timeline	Related terms and concepts from data
Terms	c1450-1714	Les règles [the rules], la regla [the rule], 7a9 shhar ²² [حق الشهر] the month's due]	Women's evil	1379	Necessary evil, women's troubles, lady troubles
Custom of women	1611-1705	Monthly habit, العادة [al aada - the habit]	Nature	c1386-1607 + 1922	Mother nature, natural process, part of nature
Visit	1653-1721	Zarouni syadi [my sires have visited], mother nature's visit	Menstruum	1398-	Menstruation, it's like giving a mini birth, fertility, I've lost another potential child, reassures me that I am not pregnant
Purgation	1737	الغسلة [al ghusla - cleansing], cleansing, a purifying process	Menstrue	c1400-1674/7	Menstruation, menstrual
Menstruation	1776/84-	Menstruation, menstrual, menstruate	Flowers Flourishes	c1400- 1605	Superpower, rewarding, I am blessed to have it
Lunation	1822/34	Lunes [Moons], moon cycle, it's a red moon, I am being "mooned"	Menstruosity	1503-1654	Blood monster, menstruation
Periodicity	1848-1875	Monthly cycle, النوره [a'dawra - the cycle]	Month courses Courses Women's courses	1563 1563-1671 + 1839 1615	Period, la période [period]
The curse	1930- colloq.	The curse, woman's curse, the burden of having a female body	Reds	1563-	Red, madame rouge [mrs. red], khalti el hamra [my red aunt], red sea, red lady, etc.
Menstruousness	1597-1682 + 1727 Dict.	Menstrual, dirty, impureté [impurity], smelly, مجونبة [mejuunba - impure], El wsakh ta'a ch'har [monthly dirt]	Monthly time	1564-	Time of the month, the monthly thing

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²² Some participants who speak Arabic and its dialects expressed themselves using an 'informal' language known as Arabizi. Arabizi is a form of writing text in Arabic that uses Latin letters and numbers, and which is popular in regions of the Maghreb and the Middle East. Klouche and Benslimane (2021) report that, within the Algerian context specifically, the variety of Arabizi used is usually "a mixture of Arabic dialect and French or even Arabic spelled in Latin letters mixed with numbers" (p. 790). To represent Arabic letters that have no phonetic equivalents in French or English, numbers that are visually close to those Arabic letters are used. In this specific example, the number 7 is used for the letter $_{\mathbb{C}}[h]$ and 9 for $\mathfrak{F}[q]$.

HT terms under 'Discharge of menses'	Timeline	Related terms and concepts from data	HT terms under 'Menses'	Timeline	Related terms and concepts from data
Menstruosity	1634	Blood monster, menstruation	Times	1564/78-1889	That time
Molimen	1865-	PMS, pain, mood swings, acne, bloating, discomfort, I feel like I'm dying	Purgations	1577-1645/52	الغسلة] [al ghusla - cleansing], cleansing, a purifying process
			Months	1578-1826	7a9 shhar [حق الشهر - the month's due]
			Fluors	1621-1724	Flux, flow
			Menstrua	1650-1726	Monthlies
			Period(s)	1822/34-	Period(s), Les règles [the rules], la regla [the rule], la période [period]
			Turn(s)	1857	Monthly cycle, الكوره [a'dawra - the cycle]
			Monthlies	1872- colloq.	Monthlies
			Visitor	1980- slang	Diaf/Les invites [guests], zarouni syadi [my sires have visited], les visiteurs [the visitors], aunt Mary is visiting

Table 4 - Historical Thesaurus entries categorised as 'Discharge of menses' and 'Menses', timelines, and data equivalents.

One such instance is the term 'flowers' (also 'flourishes' later on) that was used in association with menstruation between the 15th and the 17th centuries. The OED entry on flowers as denoting menstrual discharge states that it originates from the French 'fleurs', and adds that, according to French scholars, this was a corruption of the term *flueurs* [flowings]. Likewise, Echevarria (2018) deems the usage of 'flower' in 11th and 12th century medical Christian writings, and in the seminal treatise of Ibn Sina (Avicenna), a mistranslation of the word 'fluid' in Latin or 'fluor' [flux]. The entry 'fluors' (1621-1724) appears in the HT as well; however, Green (2005) reports it as a rare term, only used in the 4th to 5th centuries by the writer Caelius Aurelianus. In fact, the Latin 'flos' and 'flores', meaning 'flowers' have been recorded in 12th century texts (ibid), particularly in the Trotula (discussed in Section 2.5). Green (2001) confirms that, even though 'flowers' in the prior sources upon which the Conditions of Women text is based is missing, the author still uses this term, and explains that it is what the menses are commonly called. The author further elaborates on the rationale behind this term, writing that, "just as trees without their flowers will not bear fruit, so, too, women without their 'flowers' will be deprived of offspring" (p. 21). Similarly, Hildegard of Bingen (1098-1179) considered the menstrual fluid to be a woman's "generative greenness and floridity" (1980, p. 105). Rather than a mistranslation, the term 'flowers' was most likely a common colloquialism that was spread throughout medieval western Europe. One striking feature of this term is that it was part of a more general positive outlook on menstruation that appeared in Conditions of Women and in Hildegard of Bingen. As Green (2001) asserts, this view will be greatly contrasted by the later medieval scientific texts that consistently regarded menstruation as "thoroughly poisonous and noxious" (p. 22). This rather positive view formed the basis of relating such instances as superpower, rewarding, I am blessed to have it to the terms 'flowers' and 'flourishes', as demonstrated in Table 4. In this specific case, and although 'flowers', at the onset of its usage, was most likely not euphemistic, it is the general tone, appreciation of and attitude regarding the menstrual event that was taken into consideration.

Another example that is worth examining in more detail is 'menstruation' and its variations, whether obsolete or still in use: 'menstruum' (1398-), 'menstrue' (c1400-1674/7), 'menstruosity' (1503-1654 + 1634), 'menstruousness' (1597-1682)

+ 1727 Dict.), and 'menstrua' (1650-1726). The earliest entry recorded, 'menstruum,' is defined by the OED as both the menstrual discharge and the matter from which the embryo is formed, and both meanings are labelled as rare or historical. Indeed, as previously discussed in Section 2.3, the menses were thought to be nourishment for the foetus, and the matter contributed by the female bodied partner in procreation. There was also great disagreement among philosophers and physicians throughout history concerning what they called 'female sperm' or 'seed,' whether this 'seed' was the same as menstrual blood, and whether one or both of those were implicated in generation. Van't Land (2012) identifies a similar confusion among late medieval physicians regarding the definition of the term 'menstruum,' which seemed to be used as denoting both female generational seed and embryo nourishment, and the monthly menstrual discharge of blood. This implication of the theme of procreation formed the basis of relating such data expressions as it's like giving a mini birth, fertility, I've lost another potential child, reassures me that I am not pregnant to the HT entry of 'menstruum.' Nevertheless, this term is still, although rarely, currently in use, particularly in medical journals, to denote *menstruation*, as illustrated in Table 4. Likewise, the next entry of 'menstrue' seems to be exclusively used to signify 'menstrual discharge' as a noun, or the adjective 'menstrual,' hence the connections made above. Equally as straightforward in its origin and usages is the term 'menstrua,' that Green (2005) reports is literally Latin for 'monthlies.'

Also sharing this baseline, obsolete meaning of *menstruation*, 'menstruousness' and 'menstruosity' both seem to carry more connotations. 'Menstruousness,' more often encountered as 'menstruous,' is more prominently discussed in relation to its appearance in Biblical sources that frequently likened unworthy or filthy items and objects to "a menstruous cloth" (Read, 2008, p. 14). This phrase appears in Isaiah 30:22 of the Geneva Bible of 1560 in a comparison with false idols and includes an annotation that highlights the "filthy" and "polluted" aspects (ibid). Read (ibid) further adds that, in texts ranging from the 16th to the 18th century, a large number of authors chose to render overt mentions to 'menstruation' as stained, filthy, or polluted rags, with the addition of some "salacious adjectives to emphasize their point" (p. 16). Related to this notion of filth and pollution, 'menstruosity' appears in a sermon by William Sclater (1654) in the line: "It is but as a defiled, nasty, and polluted menstruosity" (Oxford English Dictionary, Second

Edition 1989). However, as it can be expected, this term involves an additional notion of monsters and monstrosity, as written in Esdras the Prophet (chapter 5, book 4, line 8): "and menstruous women shall bring forth monsters" (King James Bible Version). This is also discussed by Paré (1983) in an encyclopaedia that attempts to account for birth defects titled *On monsters and marvels*, under the heading of "[a]n example of the wrath of God" (p. 3), which highlights the strong biblical stance against sexual intercourse during menstruation. Murphy (2011) notes that such menstrual descriptions coincided with the peak of the witch-hunts of the 14th to 18th centuries, which were largely sparked and fuelled by the *Malleus Maleficarum* (1484) (see Section 2.5). Further drawing on the 'menstrousmonstrous' connection, Parsons (2009) explores the topic of the menstrual female blood in horror extensively and highlights the 1970s horror media representation of womanhood transition through menarche as a shift towards becoming monstrous (see Section 6.3.2).

Ultimately, the HT did include some of the previously identified semantic domains, added some more, and validated the legitimacy of the most fundamental research question of this project. However, there remain instances in the dataset that are yet to be accounted for, as mentioned previously. For this reason, one more layer of analysis was conducted, deriving from both earlier research and the findings of the USAS Tagger and the HT.

5.3.3 Review of previous groupings

Taking into account the semantic categories identified through the USAS Tagger process, and the thematic categories found through the various Historical Thesaurus and Mapping Metaphor searches performed, a classification was devised. Additionally, this proposed classification also considered the groupings discovered and recorded in the earlier works of Joffe (1948), Ernster (1975), Agyekum (2002), Allan & Burridge (2006), Newton (2016), Sveen (2016), and Gathigia, Orwenjo and Ndung'u (2018), even though the nature of each of these studies differs, and each of these sources takes a distinct approach to data collection, analysis, and overall theories and frameworks (see Sections 3.3.1 and 3.3.2). Despite these discrepancies, this menstrual literature still exhibits many overlaps which also extend to the findings of the present study so far. Therefore,

and for the sake of clarity and brevity, all categorisations have been summarised and displayed in Table 5.

USAS TAGGER	HT/MM	Joffe (1948)	Ernster (1975)	Agyekum (2002)	Allan & Burridge (2006)	Newton (2016)	Sveen (2016)	Gathigia, Orwenjo and Ndung'u (2018)
Time	Period of time, Time	Periodicity or	Time or cyclic		Periodicity	Cyclic terms	Periodicity	A PERIOD
Frequency	Travel and journeys	time	references		renodicity	Change of state	renoulcity	AFLINOD
Anatomy and physiology	Bodily excretion Vascular system	Explicit or implicit reference to	References to red or blood		Red	Descriptive terms	Blood/flow	A COLOUR
Colour and colour patterns	Individual colours	blood or the colour red	or the			The colour red	The colour red	
Moving, coming and going Social actions, states and processes Kin	Baby and young person Family members and	Reference to visitors	References to a female visitor, friend, relative, or other person by proper name	Arrival of a protective visitor	Visitor	Visits	Visitor	A VISITOR
People (female and male)	genealogy Male person Female person Biological sex Humankind Existence and its attributes	Mention of persons, male or female	References to a male			Gender-specific terms		

USAS TAGGER	HT/MM	Joffe (1948)	Ernster (1975)	Agyekum (2002)	Allan & Burridge (2006)	Newton (2016)	Sveen (2016)	Gathigia, Orwenjo and Ndung'u (2018)
Hindering Health and	Disadvantage and harm Health and	Illness, inconvenience or disability	Negative references to illness, inconvenience, distress	Indisposition	Indisposition	Illness and Inconvenience	Indisposition	AN INDISPOSITION
disease	disease							
Medicines and medical treatment	Ill-health							
Worry								
Difficult	Difficulty							
Distilis	Contempt	ed and tility tional ering ad order ssion of nion nility	References to behaviour	Seclusion	Antipathy	Behaviour	Antipathy/ sympathy	1
Dislike	Hatred and hostility							
Emotional actions, states and processes general	Emotional suffering							
Evaluation: Bad	Bad							
Fear/Shock	Disorder							
Sad	Expression of opinion							
	Humility							
Evaluation: Good	Good							ļ
Нарру	Pleasure							
	Dirtiness			Pollution Power and purification		Cleanliness issues		

USAS TAGGER	НТ/ММ	Joffe (1948)	Ernster (1975)	Agyekum (2002)	Allan & Burridge (2006)	Newton (2016)	Sveen (2016)	Gathigia, Orwenjo and Ndung'u (2018)
Cleaning and personal care Objects	Healing and treatment, Cleanness Creation	References to material culture	References to material used during		Sanitary protection	Reference to menstrual materials	Sanitary protection	
generally	Textiles		menstruation					
		Sexual unavailability				Maintenance terms	Sexual unavailability	
Green issues	Birth			Failed production		Nature	Mythical/ nature/ procreation	A VALUABLE POSSESSION
Religion and the supernatural Universe (the)	Planets and satellites		References to nature	Fertility and transition		Part of life		
. ,						Humorous terms	Vagueness/ wordplay	
	Biological processes Sex organs					Medical terms		
Unlucky	Curse					Biblical terms		
Violent/Angry	Hell					Horror and torture		
						Events		
						Food stuffs		
Unmatched	Softness		Combinations of the above categories			Anomalous terms		

USAS TAGGER	НТ/ММ	Joffe (1948)	Ernster (1975)	Agyekum (2002)	Allan & Burridge (2006)	Newton (2016)	Sveen (2016)	Gathigia, Orwenjo and Ndung'u (2018)
Living creatures: animals, birds, etc.	Fish							
Media: Newspapers etc.								
Unethical Not allowed	Authority: Prohibition							
Arts and crafts	Visual arts							

Table 5 - Comparative review of semantic categorisations in earlier research alongside USAS Tagger, Historical Thesaurus and Mapping Metaphor groupings

The similarities that can be observed in Table 5, despite the cultural and the linguistic differences of their contexts, are now rather established and can be considered common. Understandably, some of these commonalities are most likely a direct result of the material experience of the menstrual event. For instance, references to blood, the colour red, periodicity and visits, menstrual products, and illness are likely to be common associations with menstruation. Nevertheless, menstruation is also a social event and a notion that is at the heart of a complex network of conceptual considerations that influence how it is experientially lived, managed, conceptualised and talked about by both menstruators and non-menstruators. Consequently, these numerous overlaps of previous research have been taken into account and have been anchored in the systematic semantic basis identified through the USAS Tagger and the HT/MM analyses.

Because of the more detailed and thus more explanatory nature of the categories derived from the USAS Tagger and the HT and MM, those classifications were used as a starting point and guide to fit the comparatively broader groupings from previous research. The level of specificity provided by the USAS Tagger and the HT/MM analyses is crucial to understanding what those larger categories entail by basically breaking them down into subcategories or smaller conceptual units as in the group that is related to the concept of 'emotions and behaviours' and by explaining them further by itemising concepts within them as in the categories related to 'blood' and 'colour.' Following this process, both the overlaps and the gaps become more apparent. For instance, whereas all the studies unanimously identify the concepts of 'visits/visitors' and of 'illness/indisposition,' there seems to be no agreement on categories such as those related to 'pollution' and to 'people and gender.' Additionally, there does not seem to be a definite consensus on the relatively complex category of 'humour' or 'wordplay' despite several mentions that some expressions are used with a humorous intent, as in Joffe (1948). This might be so because this is not a semantic category in the same way as the others, but a category that cross-cuts all the others, especially since humour can theoretically relate to any semantic area.

Nevertheless, given the fact that these analyses have been performed on a list of the most frequent 350 words in the data collected, gaps are to be expected,

particularly as far as the more elaborate categories and concepts are concerned. The previously mentioned example of the category of 'humour' is one such instance that is too complex to be reflected in the classification derived from the USAS Tagger and the HT/MM. Similarly, the categories pertaining to 'sexual unavailability' identified by Joffe (1948), Newton (2016) and Sveen (2016) seem to have no equivalent in the present study, nor in any other. Furthermore, there are categories found in the analyses conducted within this study that have no parallels in earlier research, and that are simply too specific or too literal to be taken into consideration, such as those of 'fish' and of 'visual arts.'

Therefore, acknowledging these relative shortcomings of the USAS Tagger and HT/MM analyses and considering both the established categories of earlier research, and those groupings that are less common and perhaps less explored, the present study recognises the need for an original classification. This proposed categorisation would encompass the universally shared concepts, while also reflecting the more culturally and linguistically specific, and experience-derived themes and notions that appear in the data collected. In fact, the need for a new classification is highlighted further by the linguistic and cultural variety of the data in this study. While previous research has dealt with a wealth of languages (see Section 3.3), some of which also appear in the present data, Arabic and its various dialects seem to be consistently missing. The data collected and analysed within this study does, however, include Arabic and its dialects, both as a language of expression and as a first language of participants who also responded using other languages. For this reason, in addition to the semantic and thematic aspects of the proposed classification, the language of expression of each instance of menstrual language was considered as well.

5.4 Proposed classification

Finally, the classification identified and retained in the present study includes the thirteen categories of: (1) Activity break, inconvenience, and illness; (2) Anatomy, biology, and procreation; (3) Appreciation and behaviour; (4) Blood, flow, and bloody imagery; (5) Cleanliness and purification; (6) Food references; (7) Genderspecific expressions; (8) Menstrual materials; (9) Nature and the mystical universe; (10) The colour red; (11) Time and periodicity; (12) Visitors and people; (13) Wordplay, humour, and vague terms. Each one of these groupings is discussed

in more detail, illustrated with examples from the data collected, and further historically and socially contextualised in the following chapter.

The first category identified is related to the concepts of activity break, inconvenience, and illness. As was illustrated in the comparative review of previous research (Table 5, this chapter), there seems to be unanimous agreement that the menstrual event is construed as an indisposition, an inconvenience, and a sickness. To be sure, this theme is also found in the data of the present study, with more euphemistic additions pertaining to the concept of an activity break or an incapacity to engage in certain activities.

The second category groups all the language pertaining to anatomy, biology, and procreation due to the thematic closeness of such concepts. This is a grouping that is less agreed upon and is partly addressed in different categories of earlier research. For instance, Newton (2016) dedicates a category to "medical terms" while Agyekum (2002) explores the themes of "failed production" and "fertility and transition" and Sveen (2016) discusses "procreation" alongside concepts relating to the mythical and the natural.

The third category within the proposed classification relates to the concepts of appreciation and behaviour. Because of the material and the social nature of the menstrual experience, it is understandable that both menstruators and non-menstruators alike generate opinions, attitudes, and behaviours in regard to various aspects of it. The first category already offers some insights as Ernster (1975) dubbed those references to illness and inconvenience "negative." There is an evaluation of the menstrual event, accompanied by a specific behaviour. Sveen (2016) has coined perhaps the most appropriate way to describe this phenomenon: "antipathy/sympathy" while Newton (2016) not only explores "antipathy" further, but also adds the categories of "biblical terms" and "horror and torture," both of which include instances of language that points to a sympathetic or antipathetic attitude towards menstruation.

The fourth grouping pertains specifically to blood, flow, and bloody imagery. Understandably, given the very nature of the menstrual experience and what it entails, it is to be expected that this category is found in most of the literature. However, expressions that relate to blood or flow are more commonly grouped

within the same category as the colour red for apparent reasons. While the colour red is a relative given as far as blood is concerned, the data analysed has offered more variety in terms of both literal mentions of blood and more metaphorical bloody imagery. Moreover, the data has also provided the same variation in instances concerning the colour red. Therefore, for the sake of as comprehensive an analysis as possible, the proposed classification of the present study sets the themes of 'blood' and 'red' apart and explores each one in its own grouping.

The fifth category identified is that of cleanliness and purification. This domain seems rather uncommon in earlier research as the only works that dedicate separate categories for the themes of "pollution and power and purification," and "cleanliness issues" are those of Agyekum (2002) and Newton (2016) respectively. As shown in Table 5, the Historical Thesaurus and Mapping Metaphor analyses also pointed to a semantic domain of 'dirtiness,' which establishes that this theme does exist in the data as well. Justifiably, this specific theme can be subject to the cultural construal of and to social influences on the concept of menstruation. For instance, some literature specifically employs the term of 'sanitation' when discussing the category of materials of menstrual management, pointing to the fact that there exists an issue of cleanliness that is addressed through the usage of 'sanitary protection.'

The sixth category developed is also an uncommon one that relates to food references. From the literature reviewed (see Sections 3.3.1 and 3.3.2), only Newton (2016) seems to identify and dedicate a category to "food stuffs." It is understandable that, on account of its far more common associations with disgust, menstruation is rarely likened to or construed in terms of food. Nevertheless, although low in frequency, there are references to various foods within the data collected.

Likewise, the seventh group identified, which encompasses expressions that are gender-specific, also seems to be infrequent in previous research. Joffe (1948) and Ernster (1975), in their categories relating to references to persons, both specifically indicate whether this person is "male" or "female," thus clearly identifying an aspect of gender. Nevertheless, this gendered precision differs from that of Newton (2016) as she devotes a separate category to it. Whereas Joffe (1948) and Ernster (1975) classify within their groupings those menstrual

euphemisms that are essentially personal names or titles exhibiting aspects of gender, Newton (2016), like the present study, targets those expressions that explicitly code menstruation as a "female occurrence" (p. 200) and conceptualise it as 'female trouble' or as a 'lady problem.'

The eighth category of this suggested classification is that of menstrual materials, which encompasses mentions of menstrual management materials. As stated above, most products and shopping outlets blend the concepts of sanitation and hygiene, sometimes even the gendered dimension, with that of menstrual products. Nevertheless, Joffe (1948), Ernster (1975), and Newton (2016) mention specifically materials and products without associations to anything but menstruation. This is perhaps due to their narrower focus on euphemisms and how 'material culture' is reflected in those expressions such as 'on the rag.' This category includes only references to materials and products, because the interest of the present study is to take apart each conceptual blend and to reduce it to its primary concept.

The following category pertains to themes of nature and the mystical universe, which are relatively common in earlier research, albeit expressed differently or included within other categories. The commonality of these themes is clearly explicable by the fact that the menstrual event is often talked about in terms of nature, as it is a 'natural' occurrence, and is a 'normal' 'part of the life' of an individual born with the organs connected to menstruation. While these instances are rather literal, perhaps simply metonymical, there seems to be more to explore as Agyekum (2002) writes about "power" (and purification), Sveen (2016) adds a dimension of myth, and Gathigia, Orwenjo and Ndung'u (2018) identify the conceptual metaphor of MENSTRUATION IS A VALUABLE POSSESSION. To be sure, both types of expressions appear in the data, and thus served as the basis for this category.

Similarly, the tenth category encompassing references to the colour red is also a familiar one. As previously stated, this is evidently the case because of the associations with blood, which is a crucial part of the menstrual event. Expressions that refer to the colour red are, however, more commonly metaphorical and denote a sense of creativity and sometimes humour that seems to be a characteristic feature of menstrual language. This is one reason justifying the

classification of such instances as their own category and not in conjunction with mentions of 'blood.'

Equally as popular is the category pertaining to time and periodicity. Here again, the association is rather unambiguous; menstruation is a periodic event with a beginning, a middle, and an end. Therefore, expressions relating to the passage of time, to periods of time, to cyclicality and to change of state are to be expected to some extent. However, discussing the metaphoricity of such instances, as well as exploring the ways in which this theme blends with other concepts, is crucial to the understanding of the euphemistic nature of menstrual language, and to that of the importance of using such expressions in the first place.

The twelfth category, that of visitors and people, also appears in all the literature surveyed, and in the data analysed. Not unlike the previous groupings, the themes of 'visit' and 'people' can also be understood through the lived experience of menstruation as an individual who visits the menstruator for a short period of time and then leaves. While this is likely the conceptual source of expressions that relate to relatives, friends, and guests, there are nevertheless instances of 'visit' and 'people' that do not seem to have a direct relation to this same source, and that might be borrowing from several other concepts at the same time. The result of this phenomenon is often humorous and indicates creativity that is worth exploring further.

Finally, the last category gathers those expressions that exhibit aspects of wordplay and humour, and some of the rather vague terms. As stated before, humour seems to be one of the more prominent characteristics of menstrual language. However, while it is often acknowledged and pointed out in previous literature, only Newton (2016) and Sveen (2016) devote a category exclusively to discussing it and exploring wordplay, dysphemisms and general vagueness. Because of the multi-faceted nature of the menstrual experience, and knowing its prejudiced and struggle-laden history, menstrual language is likely to develop further in ways that serve its users to cope with menstruation, and to conceptualise it in a way that does not inspire, or at least lessens and softens negative feelings towards it.

5.5 Conclusion

Initially introducing the survey respondents and outlining their demographic information, this chapter established a comprehensive profile for the menstruators and non-menstruators who participated in this study. Because each demographic element delineated in the first section of this chapter has been shown to influence one's experience with menstruation to some extent, it was crucial to first reach the widest audience possible in order to guarantee coverage of all these elements, but also to allow participants the freedom to self-identify, and to report those results as authentically as possible. This resulted in a wide range of diversity which helped in bringing forward differences, similarities, and gaps in the menstrual language used.

The subsequent step outlined in this chapter was to further explore the similarities found through a systematic procedure. To achieve this, a semantic basis in the form of semantic categories was first established through the usage of the USAS Semantic Tagger, and further consolidated, and historically and socially contextualised by several searches through the Historical Thesaurus and through the Mapping Metaphor online tool. By doing so, this multi-layered analysis empirically investigates the question of and establishes the metaphoricity of menstrual language and its everyday usages in daily life. Moreover, the additional historical and social contextualisation of the HT further provides insights into how the lived social experiences of menstruation are revealed through euphemistic language usage.

Ultimately, this chapter delineated a comprehensive review of the semantic classifications that appeared in the earlier works of Joffe (1948), Ernster (1975), Agyekum (2002), Allan & Burridge (2006), Newton (2016), Sveen (2016), and Gathigia, Orwenjo and Ndung'u (2018) (see Sections 3.3.1 and 3.3.2 for a more comprehensive review of this literature) and compared those with the groupings identified in this study. By doing so, the commonalities and the gaps recognised emphasised the need for an original classification that incorporates the most salient aspects of the analyses performed and of earlier research. This chapter was concluded by the proposed categorisation and provided a perfunctory description of each grouping and the rationale behind its design.

6. Thinking, talking, and embodying menstruation, part 1 — It's about bloody time

6.1 Introduction

This chapter initially briefly reintroduces the categories identified in the present study, and further illustrates the linguistic variations of the data. Following that, each one of the semantic categories is explored more in depth and examples from the data are discussed in detail, departing from a place of rather common knowledge to menstruators and non-menstruators, while following a gradual expansion from more prosaic themes to more imaged ones.

This first part of the discussion opens with the two most crucial and well-known features that frame the menstrual experience: blood and time. This is due to the menstrual event being one that is rooted in temporality and that is defined first and foremost, for many, as the tangible experience of temporary yet recurring appearance of a bloody fluid. Yet, as a bodily experience, it is also felt and lived in different ways, some more metaphorical than others, and some more horrifying than others. Certainly, the menstrual experience is not only one of the body, but also one that exists within complex social, cultural, political, and religious environments. This chapter aims to ground the discussion of the metaphoricity of the menstrual blood and its implications in both body and society, therefore answering research questions 3 and 4 more extensively.

Because the most fundamental question of this research project interrogates how menstruation is construed and conceptualised metaphorically, this chapter focuses on addressing this question as it examines each aspect of meaning tied to blood and time. The subsequent CMT-based analysis and discussion of each of these two fundamental aspects then carefully scrutinise instances of embodied euphemistic menstrual language. This allows for the identification of metaphor-based euphemisms, and any overarching conceptual metaphors, while drawing on previous research and on the experiences of the menstruators and non-menstruators who participated in this study. Therefore, this chapter not only adds to the sparse literature on menstrual conceptual metaphors, but also discusses never previously explored Arabic language mappings, and the menstrual constructions of trans individuals.

6.2 Classification

In the previous chapter, a comprehensive analysis of the semanticity of the most frequent menstrual language in the data was performed, first through semantic tagging, and then through a thesaurus framework. Establishing a solid semantic basis and yet identifying gaps, earlier research was additionally explored and helped in consolidating the ground for a proposed classification. The final classification devised (and upon which the analyses and discussions of this chapter are developed) includes a total of thirteen categories that the previous chapter briefly outlined: (1) Activity break, inconvenience, and illness; (2) Anatomy, biology, and procreation; (3) Appreciation and behaviour; (4) Blood, flow, and bloody imagery; (5) Cleanliness and purification; (6) Food references; (7) Genderspecific expressions; (8) Menstrual materials; (9) Nature and the mystical universe; (10) The colour red; (11) Time and periodicity; (12) Visitors and people; (13) Wordplay, humour, and vague terms.

Table 6 below summarises the results of the examination of the data using the devised classification, with additional details regarding frequencies and a more detailed distinctions based on the languages in which the expressions analysed were conveyed. In some instances, a single respondent offered variations of the same root expression or concept, such as <code>inple [diaf - guests]</code> and <code>inple [jaw addiaf - the guests arrived]</code> or <code>Aunt Flo</code> and <code>Aunt Flow is visiting.</code> Such expressions were classified as variants of the same instance and were only counted once per participant. Because some of the expressions provided could be classified under two or more categories, they were taken into account as separate and thus counted in each category.

Some common combinations included pairings of the domains of 'cyclicality and time' with the domain of 'the colour red' in instances such as *shark week*, *red week* and *red days*, as well as with the domain of 'appreciation and behaviour' in examples such as *death week* and *hell week*. Other frequent pairings were expressions relating to the domain of 'the colour red' with another domain, such as that of 'visitors and people' in instances like *les anglais débarquent* [the English are arriving], *Santa Claus arrived last night*, and عمتي الحمواء ['amti al- hmra - my red aunt] (discussed more in the following chapter), and that of 'blood, flow, and bloody imagery' in examples such as *red river flowing*, *red sea* and its French

counterpart *la mer rouge*, and *having the painters in*. One less common pairing with the domain of 'the colour red' was with that of 'food references' in instances such as *strawberry juice* and the German *Erdbeerwoche* [strawberry week] (discussed in Section 7.4.1). For this reason, while the frequencies illustrated in Table 6 do include repetition in order to represent this variation as much as possible, each individual category and case is explored in depth in the subsequent discussions.

Additionally, it is worth pointing out that the domains of 'visitors and people' and 'the colour red' have a higher potential to include more metaphorical expressions than literal ones, as most of the language within those two categories is conceptualisations of menstruation as a person visiting (les visiteurs [the visitors]), as a red concept (red tide, red scare, code red), or as a blend of both categories or more (Santa Claus arrived last night, red week). In contrast, categories that have higher frequencies of literal instances seem to include more evaluative and descriptive language that serves to qualify the material menstrual event as it is experienced, predominantly in terms of symptoms such as mood swings, exhaustion and PMS, blood, and biological functions with mentions of fertility and specific organs like uterus. Such expressions are largely the participants' responses to the question asking them to write words that they immediately associate with menstruation. This data was analysed because, while it is clear that it is not euphemistic or metaphorical, it still helps in shedding light on the respondents' material experiences, and in understanding general attitudes towards the menstrual event.

	Categories	All responses	Arabic	English	French	German
(1)	Appreciation and behaviour	367	8	333	20	6
(2)	Cyclicality and time	315	20	250	34	11
(3)	Blood, flow, and bloody imagery	164	5	147	10	2
(4)	The colour red	152	6	121	17	8
(5)	Activity break, inconvenience, and illness	96	7	71	16	2
(6)	Visitors and people	91	17	55	17	2
(7)	Cleanliness and purification	77	11	62	4	0
(8)	Wordplay, humour, and vague terms	73	22	47	3	1
(9)	Anatomy, biology, and procreation	42	1	41	0	0
(10)	Nature and the mystical universe	35	0	32	3	0
(11)	Gender-specific expressions	24	0	22	1	1
(12)	Menstrual materials	16	0	16	0	0
(13)	Food references	8	1	4	0	3
	Total	1,460	98	1,201	125	36

Table 6 - Absolute frequencies of expressions in each semantic category across the most frequent languages appearing in the data (Arabic, English, French, and German)

6.3 Blood, flow, and bloody imagery

The semantic category of blood, flow, and bloody imagery includes all expressions that refer to blood literally and metaphorically, as well as all those that refer to any kind of flow. Even though other domains are larger, the recurring observation of a bloody fluid remains a core feature of the menstrual event for many. From an experiential point of view, the features that characterise this recurring viewing of blood, its fluidity, its colour, its smell, its texture as it touches the skin, its necessary management, and its indelible mark, are crucial to the menstruator, and are thus omnipresent throughout this chapter and the next, and appear in some way in other semantic categories. Many of the examples in the literal subcategory of this domain are prosaic in nature, and refer to blood, sang, bluten, and literally including variations such as bleeding, bloody, etc. Even if these prosaic instances are the most frequent within this category, there is still little usage of formal or more 'medical' expressions, as there are only two instances of uterine evacuation or shedding of the uterine lining in the entirety of the dataset.

In instances such as *bloodbath* and *bloodflood*, even though the direct reference to the literal blood is present, it is nevertheless the imagery that was considered. This is because the bloody imagery is used in the metaphorical sense to convey a certain degree of horror experienced by the menstruators, which sets such instances apart from simply stating "blood" when asked to jot down any words coming to mind when thinking about menstruation. The more metaphorical expressions in this category are often creative and cleverly coined to deliberately paint a gruesome and horrifying picture to reflect exactly what is felt. As such, it is sometimes a *scène de crime dans ma culotte* [crime scene in my panties] or a *scene of Texas chainsaw massacre*, or the *blood monster*.

Likewise, expressions denoting a moving body of water are also often graphic, such as the devil's waterfall, the waterfall of hell, les chutes du Niagara [Niagara Falls], the red river flowing, the red sea, the floods, the rivers, etc. Such examples highlight the use of metaphor to intensify the quantity of menstrual fluid, a practice that seems common in this dataset and in previous research as well. For instance, Agyekum (2002), in a study on the verbal taboo of menstruation

among the Akan speakers of Ghana, finds that participants use expressions such as "she has killed an elephant" to amplify the quantity of blood as an elephant would have the largest amount of blood (p. 381). However, despite the participants' apparent focus on the gruesomeness and the horrifying aspects of their interaction with their menstrual fluid, there is a distinct lack of crude expressions. Sveen (2016) finds that, in the English sample she analysed, there are a few particularly blunt instances such as "chumming" and "my vagina is molting" and that, in comparison, Swedish expressions tend to be mild with examples such as "månadsblod [monthly blood]" and "blodbad [blood bath]" (p. 150). Newton (2016) adds a gendered reading, finding that "...most of the terms given by males make direct reference to the processes of menstruation" (p. 135) with examples such as "blob," "blood," "bleed," and "rag" (ibid). This is consistent with Joffe's (1948) findings, who notes that the use of expressions referring to bleeding or the colour red (discussed in the following chapter) tends to be found more prominently in "male speech" with popular euphemisms at the time such as "the Red Sea's out, she's got the bloody monthlies, and blood and sand" (p. 183), with the addition of indirect blood references such as "the gal's at the stockyards, ketchup, the flag is up" and "sorority juice" (ibid). In the present data, however, there is no significant disparity in the references to blood among the groups that differ according to their gender identity.

However, while there are no distinct differences between those groups in this category, there is still observable gradation of metaphors, and a consistent connection to the embodied experience of menstruation. In fact, it could be argued that it would make more sense that a menstruator focuses more on blood references since it is their lived embodiment of this event which puts them in very close contact with bloody fluid for a period of time. Is the goal of the normative male bodied individuals to be as graphic as possible to mock? Is it to 'simply' state a fact while avoiding what they perceive as overly formal or medical terms? On the other hand is the goal of the normative female menstruators in shying away from blood references to keep it out of their minds since they are forced to interact with it anyway? Is it to be as mild as possible to avoid uncomfortable situations and to equally avoid too formal expressions? It might be too difficult a task to attempt to define an exact goal that is also shared by an entire population; however, it is clear that relying on metaphorical language and then layering in

degree, manner, and specific imagery allows everyone, regardless of the kind of body they inhabit, to create their own term for menstruation and to communicate exactly what is wanted to be communicated. Table 7 below displays an obvious gradation in metaphors, and the frequencies of each of the sub-themes equally reflect a logical thread of conceptual thought from literal to more imaged.

	Overall	Arabic	English	French	German
Literal "blood & bleeding"	81	3	73	3	2
Viscous liquids	20	0	20	0	0
Body of stagnant/running water	21	1	17	3	0
Implied coverage & perimeter	19	0	17	2	0
"Flow" & "flux"	13	1	11	1	0
Gruesome imagery	10	0	9	1	0
Total	164	3	144	10	2
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					167

Table 7 - Absolute frequencies of 'blood, flow and bloody imagery' references organised by sub-themes.

6.3.1 "I can feel the river flowing 24/7"

Experientially, it is perfectly understandable to feel that menstrual fluid is flowing all the time, is overwhelmingly present at all times, and that it is so in very large quantities. Furthermore, because it is a fluid itself, it is logical to think of it in terms of other liquids of similar consistency and viscosity, and of bodies of water. In fact, all the expressions relating to bodies of stagnant and running water are only ever used to conceptualise quantity and not texture. Phrases such as the devil's waterfall, the floods, the rivers, la mer rouge [the red sea], les chutes du Niagara [Niagara Falls], and red river flowing are all indicative of the felt sheer quantity of menstrual fluid, and not of texture.

Many of these examples are also present in Joffe's work (1948), although she does not discuss them further. Sveen (2016), however, reports that blood or the overall characteristic of flowing of liquid-like substances appear to be more significant in the Swedish sample compared to the English one and argues that such expressions "relate primarily to the discharge of blood and cellular debris, that is, to the first of Malmberg's (1991) defined meanings of menstruation" (p. 152). Newton (2016) offers a more pointed argument when she lists all the expressions that combine the domains of the colour red and water, stating that such phrases suggest that

"periods are a force of nature" (p. 197). Furthermore, Gathigia, Orwenjo and Ndung'u (2018) record uses of terms related to rain and argue that the conceptualisation of menstruation as rain might be explained by the fact that menstrual fluid "is perceived to come out in drops like rain," and because "it equates menstruation and rain in terms of their unpredictability" (p. 169). Those expressions pertaining to any body of water that flows or is tidal do reflect elements of nature, as well as the inevitability and the force that comes with it, which is more significant given the history of menstruation as something that ought to be controlled, managed, and concealed by any means possible.

6.3.1.1 Nature and the mystical universe

In fact, the domain including expressions that denote elements of nature, the literal terms "nature" or "natural" themselves, as well as elements of the larger mystical universe such as death, the devil, and hell, does emphasise this previous point. In her study, Newton (2016, pp. 199-203) devises separate categories for Nature (moon, wave) and for Biblical Terms (curse, devil), and affiliates the water-related expressions under the larger group of the colour red since she finds mostly instances of "Red + Water variants" (p. 196) (discussed in more detail in Section 3.3.1 and Section 5.3.3). However, in the present study, those expressions fall under the same category as they are thematically and semantically close. Table 8 below displays the frequencies of all such expressions in the present dataset within each of this category's sub-themes.

	Overall	Arabic	English	French	German
"Natural" and "Part of life"	13	0	13	0	0
Moon-related expressions	8	0	7	1	0
Mother Nature	7	0	5	2	0
Other mystical elements	7	0	7	0	0
Total	35	0	32	3	0

Table 8 - Absolute frequencies of 'nature and the mystical universe' references organised by sub-themes.

Most of the phrases appearing within this category seem to emphasise the 'natural' feature of the menstrual event. While it should be evident that it is a naturally occurring event that many experience for many years of their lives, participants, being aware of the complex landscape of menstruation in society,

still state that it is "a natural thing that happens" and that they "see it as something natural." The fact that there is a need to emphasise the naturalness of it implies that, at some point, this feature was denied. Even if menstruation itself is accepted to some extent as natural, the menstruators themselves have consistently been denied that feature, and have been alienated and stigmatised because of something that is supposedly natural, and that they have little to no control over. Perhaps is it this difficulty to control, the inevitability of it happening that is also a motivator for expressions pertaining to naturally occurring water sources.

Further echoing these characteristics are the expressions referring to Mother *Nature*. The imagery of nature as a mother figure is longstanding and has been in both literary and everyday usage since ancient times. Nature nurses and nurtures humans, gives life, food, and water, much like a mother to their child. Steamey (1994) argues that, as "an ideology, motherhood encompasses the biological act of producing a child, but more specifically evokes the social relationship that is characterized by emotional intensity, selflessness, nurturing, and protection" (pp. 146-147). Although the biological relationship is an important aspect of this imagery, it is more so rooted in the "complex emotional and psychological relationship that is not necessarily exclusive to the caretaking, nurturing, sustenance, and protection of a biological child" (Phoenix and Woollett, 1991, p. 4). While this nurturing can be seen in an expression such as "mother nature's reminder I'm not pregnant" which is considered to be a good thing for this participant, the remaining phrases seem rather neutral, and either only mention "mother nature" or a variation of it (as the French dame nature and mère nature), or state that they have received the visit of mother nature (discussed in the next chapter).

Nevertheless, it could be argued that the features of possessing tremendous strength and force that cannot be stopped or controlled easily, as well as the inevitability of ultimately receiving either the visit or simply the presence of nature are also usually attributed to mothers and can likewise apply to menstruation. Indeed, nature is not without its dangers, especially because it is such a strong force that is hardly ever controllable; this same idea also applies to menstruation, particularly in its depiction as a 'disorder' in many Western patriarchal societies, and in some of the more traditional cultures' beliefs. When

discussing Amerindian mythic patterns, for instance, Clément (1986) cites Claude Levi-Strauss, stating that:

'Women's periods, their uncontrolled flow, too close to nature and therefore threatening,' are the stabilizing element through which runs the split between nature and culture: simultaneously the rule and the unruly (règle/règles). A natural and dangerous order, always open to the possibility of lasting, turning into a cataclysm; hence, perceived by culture, by men who take on its value, as disorder... (Lévi-Strauss cited in Clément and Clément, 1986, pp. 28-29).

While conceptualisations of menstruation as a part of nature can be associated with positive feelings and aspects of nature, it also seems that the facets which denote of the dangers of nature, its unpredictability, and its resistance to control are also themes within this concept. Clément's (ibid) reconsideration of the normative female body as "self-regulating, potentially life-giving source, [and] which periodically connects with the natural world" (Dyer, 2016, p. 5) can be an especially powerful concept in resisting the pathologizing of the menstruating body, and reflects the deep and intricate relationship between menstruator, nature, and periodic power. It can then be surmised that a conceptual metaphor encompassing the themes of nature and all things occurring in nature, including the potentially threatening features, does apply to menstruation, in the terms of MENSTRUATION IS A PART OF NATURE, or in terms of MENSTRUATION IS A NATURAL PART OF LIFE (discussed more in the next chapter).

Yet, the mother nature also grants the gift of menstruation, which a respondent calls a "superpower" of those able to birth life. In this sense, menstruation becomes a valuable possession, one that is conceptualised as a special power or as a blessing (discussed further in the following chapter). Gathigia, Orwenjo and Ndung'u (2018) report metaphors such as "a woman's jewel" being used as a form of endearment and do discuss the larger conceptual metaphor of MENSTRUATION IS A VALUABLE POSSESSION. Although this theme is not overwhelmingly present in the current study, and nor is it in any other previous research, there are still instances specifically pertaining to this positive aspect of being gifted something, of having been blessed by the divine. In fact, all the participants who have shared the expressions pertaining to menstruation being a blessing also identify as Muslim women and do specify that this is a blessing from the Almighty. This is in agreement with the findings of Dunnavant & Roberts (2012) that even though

"women who practice prescriptive religions acknowledged many negatives regarding their periods compared to nonreligious women, they also identified some positives that secular women did not" (p. 129).

Still part of nature, yet more mystical, is the ancient relationship between menstruation and the moon. As outlined in Chapter 2, the moon has always been thought to have an influence and be at the origin of the menses (Shuttle and Redgrove, 2005), including within the medical spheres. Because lunar changes are observable phenomena, associating the moon with the passage of time, the month, was inevitable, and by extension, the confluence extended to menstruation because of its cyclical and periodic features. In fact, etymologically, it is said that 'month', 'moon', and 'menstruation' share the root word 'menses' (Online English Dictionary). Robert Graves (1948) identifies a month as "a true lunar month not only in the astronomical sense of the moon's revolutions in relation to the sun, but in the mystic sense that the Moon, being a woman, has a woman's normal menstrual period..." (p. 166). Participants then talk about menstruation as a blood moon, as a red moon, as a moon cycle, as their moon sickness, and as moon time. Likewise, French speakers share expressions such as "avoir ses lunes" or to have one's moons. One participant adds the expression of "being mooned these days" and explains that this is "from the Moon = changes in mood," which not only relates to the theme of moon and nature, but also encompasses the meanings of change of state and the inevitability of this happening just as it is for the moon to wax and wane. In fact, those features are all reminiscent of the fictional creation of lycanthropy, or the transformation of man into wolf-like beast under the influence of the moon. In various media, the link between normative female werewolves and their menses is often obviously hinted at, although this only began after "cinema favoured the full moon as a lycanthropic trigger that the werewolf was subjected to a regular, monthly cycle" (Cinias, 2010, p. 1). Indeed, the expressions provided by the participants in the present study, particularly relating to menstruation being a sickness, the influence of the moon on state changes, the bloodiness, and the knowledge that it will be happening again as soon as the moon is a certain way, could just as easily fit into a lycanthropic narrative (more in Section 6.3.2), although nowhere in the data any direct reference to werewolves is made. There are, however, references to popular culture and media (discussed in more detail in Section 6.3.2), such as the

expression "surfing the crimson wave" which is from the 1990s film *Clueless* (1995) and which remains a popular referent for many young adults to this day, and the instance in the present dataset of "Good Attitude" referring to a comedy sketch from the 1989 HBO comedy show Kids in the Hall²³.

Although it is often conceptualised as a body of water, blood, and by extension menstrual blood, is far more viscous than water, and thus considered to be guite different from it²⁴. Understandably, the sub-theme pertaining to the viscosity and overall texture of menstrual fluid is quite popular. It is populated with expressions such as being on the blob²⁵, feeling gooey, mentioning clots, and having the painters in. Although this latter expression is a blend of multiple sub-themes such as the implied coverage, as in painting the walls of a room, the colour red, the mess and uncleanliness, and the hassle of having to deal with a mess of red paint left behind, it is nonetheless discussed in this section as well because of the potential conceptualisation of menstrual blood as paint, which fits well in this picture. The expressions in this category appear to be quite popular, particularly in the United Kingdom as Newton (2016) finds that it is the fourth most frequent expression in her data, also the fourth most common among female participants and the third amongst the male population. These phrases successfully conceptualise menstruation and menstrual blood as a fluid that feels rather unnatural, and is particularly viscous, wet, and sticky. In a study attempting to establish the perceptual and cognitive determinants of tactile disgust, Saluja and Stevenson (2019) report that disgust among the participants who observed and touched specific stimuli "was strongly associated with sticky and wet textures, and moderately with viscous, cold, and lumpy textures" (p. 2705), which suggests that textures that adhere to skin easily may provoke the reaction of disgust. Evolutionarily, it is theorised that distaste and disgust developed primarily to defend against infections via ingestion; however, this has expanded to include interpersonal disgust, which is elicited from "contact with unfamiliar, unhygienic,

²³ https://www.youtube.com/watch?v=Cm4FdyWaOCo&ab_channel=SketchiT

The makeup of water and other typical Newtonian fluids is simply molecules, which means that they can slide over each other more easily. In contrast, menstrual blood has been identified as comprising "blood, vaginal secretions, and the endometrial cells of the uterine wall as they exist immediately prior to menses" (Yang et al., 2012, p. 1024), thus making it a non-Newtonian fluid with a distinctively different viscosity profile than that of water.

²⁵ Explained further in Chapter 5, *the blob* is an ambiguous term with origins in the Scots language, and meanings of a drop of moisture, a large drop, a pustule, a bubble, and being rainy (Dictionaries of the Scots Language).

or diseased conspecifics," sexual disgust, and violations of the corporal envelope, which include blood and injuries (Chapman and Anderson, 2019, pp. 62-63). Many participants have compellingly shared that they are "generally grossed out by it" and have spoken about the feeling of being disgusted by both the menstrual fluid and themselves.

Further outlined in Chapter 2, menstrual blood has had a long history of conflation with the blood from an injury but was more confusing and deemed mystical because there is no actual injury, and it is a recurring event in the lives of the normative female bodied. As previously described in Section 2.2, women with the ability to give birth spent more of their lives in pregnancy or in lactation, which could have made the periodic bleeding that much more unsettling when it happened. Yet, for a long time, it was this periodic blood that has assisted physicians of ancient times to establish a difference between the 'male' and the 'female' sex, and there was great concern with making it flow when it did not, and to try and stop it when it did too much. Menstrual blood has always been important, particularly since it was understood as the central core of procreation, which was considered one of the most important aspects of life, and as it taught people about the inner workings of their bodies and anatomies at a time when performing autopsies was a sin.

6.3.1.2 Anatomy, biology, and procreation

Indeed, because of this long-standing history of menstrual blood as an indicator of what biology physicians are dealing with, of what sort of anatomy the body of the patient has, of what reproductive age and phase the menstruator is in, and of what sort of remedies and prescriptions are needed for the specific ailments the bleeding body suffers from, it can be expected that some forms of references to anatomy, to biology, and to procreation will appear in the metaphorical menstrual language. Even though some of these ancient medical approaches to menstrual blood have since evolved or changed completely, menstruation still firmly remains as the quintessential tie between medicine and society, since menstruation involves the physical and biological transition from 'being an immature girl' to the new state of 'potentially child-bearing woman' while also implicating a monthly reality of stigma and shame. Of course, no one person is better aware of this intersection than a menstruator themselves, and this awareness is often reflected

in the way they conceptualise the menstrual event. As such, for many, the experience is first and foremost rooted in the embodiment of it and has as much to do with its conceptualisation as a *normal*, *natural*, *and simple biological process* as its construal as a *lost child*. Table 9 below displays the distribution of the 42 instances recorded within this domain according to their respective subthemes which refer to the reproductive function, to biology, and to anatomy, particularly to the uterus.

	Overall	Arabic	English	French	German
Procreation: sex, babies & childbirth	18	0	18	0	0
"Biological" & hormones	16	1	15	0	0
Anatomical part ("uterus")	8	0	8	0	0
Total	42	1	41	0	0
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)				44	

Table 9 - Absolute frequencies of 'anatomy, biology, and procreation' references organised by sub-themes.

As discussed at length in Chapters 2 and 3, menstruation has been medicalised, and articulated in terms of an illness needing medical intervention, and more importantly requiring the 'male' savvy as that is what has been postulated as the 'objective scientific knowledge' (Martin, 1988). As such, the perceptions of menstruators of their own bodies seem to differ, sometimes quite drastically, from the ways in which medical literature portrays menstruating, child-bearing, and lactating bodies. Martin (ibid) finds that medical science tends to describe the menstrual event in negative terms, "as a degeneration of the womb lining due to failed conception" (Newton, 2016, p. 61), whereas normative male reproductive processes tend to be articulated more positively. In the present study, although participants do, in fact, refer to this 'failed conception,' they more frequently do so in positive terms, as none of them want to be pregnant at the moment. Others equally mention the theme of procreation positively when they talk about menstruation as a reminder that their bodies are doing fine, and that it proves that they can enjoy the gift of bearing a child when they are ready for it. Where there is reference to the so-called failed conception, however, there also seems to be a rather macabre sense of humour, notably when participants state that they "lost another baby" or that they "lost another potential child." For these respondents, this conceptualisation of menstruation as the humorous loss of a

potential baby, far from signifying "the weeping of a disappointed uterus" (Jeffcoate, 1975, quoted in Laws, 1990, p. 93), reflects the awareness of menstruators as far as reproductive functions are involved, and shows their ability to creatively conceptualise their own menstruation however they live it in their own bodies, and independently of any medical textbook.

Furthermore, even if menstruation is still medically construed "as the result of a woman's failure to conceive" (Newton, 2016, p. 66), this construal is rendered rather dubious because there are now several readily available ways to assist menstruators and those with reproductive abilities to take control of their fertility and choose whether they want to conceive or not, and whether they want to interrupt their menstrual cycles or not on their own terms. The current study did ask participants about their current menstrual status, and 12 respondents out of the 28 who indicated that they currently menstruate intermittently or not at all explained that they are on some form of birth control. Subsequently, upon being asked how they feel regarding this intermittent or absent bleeding and why, the majority indicated that they feel very good, good, or simply neutral about it. One participant explains in detail her reasons and covers many of the previously discussed aspects of the menstrual experience:

[Menstruation is] not a worry or something to even consider/plan for, less financial burden incurred, physically less burdening as mood/sleep/energy levels go unaffected all month. Retain the choice to change birth control and be able to menstruate normally as and when i should choose. I have suffered no adverse side affects (sic) that others have so there is no real negative side to my personal experience

Means of birth control do help menstruators in dealing with not only the reproductive aspect, but also with the many other features of the menstrual experience that only menstruators are privy to. Many more participants echoed this testimonial when stating that menstruation is "inconvenient, painful, and menstrual products are an additional expense," that they "hate menstruating with a passion, 4 times a year is manageable (which [can be done] through the pill), monthly would be too hard to cope with," and that no menstruation means "no pain, no stigma. Don't have to miss school/work, can continue to act as i normally do. Can continue to wear what i want." Certainly, the so-called 'failed conception' the medical literature talks about is not mourned, but rather embraced and appreciated for the freedom and the peace it brings to

menstruators who have a particularly difficult time during their menstrual phase, and this is clearly reflected in their linguistic choices and in their metaphorical imagery.

Yet, as outlined in Chapter 3 and as Newton (2016) further argues, while means of contraception, notably hormonal ones, have helped menstruators to regain control over their menstrual cycles and their reproductive choices, their usage also implies the further medicalisation of menstruation and of reproduction as a whole, since the access to these contraceptive technologies is achievable primarily through medical professionals. As such, in an age where menstruators have access to the power to control and to simply put a stop to their menses, "bleeding is still symbolic for some women, and concepts of 'reproductive control' and 'bodily control' can become dislocated from one another, when bleeding patterns are disrupted by these technologies" (ibid, p. 66). Hoggart and Newton (2013), for instance, find that the unpredictability of bleeding whilst wearing a contraceptive implant was construed as a threat by young women, and that the removal of the implant spelled more control over their bodies. Although there are no such cases in the present study, the symbolism of menstrual bleeding can still be observable in the responses given, as well as a certain nostalgia of menstruating when the uterine bleeding is no more. For example, one participant shares that she is "not enjoying the fact [she is] taking birth control. [She] never minded [her] period." Likewise, another participant confesses that although her menstrual experience was rather painful, its implications are still now missed:

I experienced a lot of pain around menstruation, so I am happy to avoid pain and a heavy flow due to being on birth control. However, I also miss having monthly confirmation that I am not pregnant and the 'rejuvenating' feeling that menstruation causes me to have.

It is crucial, however, to point out that while some menstruators have had a say in their menstrual status, others have not necessarily suspended their uterine bleeding out of their own volition, but rather due to medical and bodily conditions. The menstruators' feelings are divided and marked by duality: it can be a good thing to avoid pain, but it can also be a source of distress. One participant encapsulates the meaning of bleeding intermittently or not at all due to bodily reasons when she states:

Having an irregular period is fine in the sense that it's not something I have to deal with on a monthly basis, however it's difficult not knowing exactly when it will occur. I tend to stress about whether my period "finally came" or not.

Another respondent further illustrates this dichotomy, with an added symbolism of nature and health attached to menstruation when she shares: "I hate menstruating, but the fact that not doing so is related to medical problems I'm concerned about and still in the process of having diagnosed is stressful for me."

Indeed, for many, the menstrual event is a particularly powerful indicator of overall health and a good way for menstruators to gauge their bodily well-being (discussed more in Section 7.2). One participant further illustrates this dichotomous phenomenon when she states that her menstrual status makes her feel bad because "it makes [her] feel like less of a woman" (discussed more in the following Section 6.3.1.3). Yet, she indicates that she feels her body is now "strong, predictable" as it no longer bleeds, and clarifies: "I feel as if I am able to control my body all the time, I don't lose that control because I don't have a period." Then again, she goes on to share that this new status was difficult to come to terms with and navigate and explains: "When I used to get a period it was uncomfortable, and I would wish it away but now I feel as though something is missing." Therefore, no matter how painful, uncomfortable, and inconvenient or disgusting the whole ordeal is, once it is no longer there with no obvious reason, it becomes dearly missed, and a distressing absence as it might spell a bigger health issue that has yet to be found out. One participant described her experience with menstruation, which is similar to many in this study, as "a pain. Literally, socially, and metaphorically. Keeps me from getting on as I need to, hurts, makes a mess, ruins my clothes, and don't get me started on VAT for products as if this is a luxury," but adds that she, in fact, feels 'very bad' about her current intermittent or absent bleeding, and explains: "Doctors could not diagnose a firm reason for irregularity. Could be due to my hypothyroidism, could be polyps, could be ovary issue, no idea, and not given any more options to test out and find out more." In this sense, where medical help is actively needed and sought, the menstruator is let down, and is left to come to terms with their body on their own as it misses one of the most salient indicators of good health for them. Still, even when there is a known cause for irregular or absent bleeding, the psychosocial, gendered, and embodied implications of inhabiting a body that

bleeds (discussed more in the next chapter) keep a steady pressure on the menstruator who then has to negotiate their place in the world when their body does not seem to do what everyone expects it to do, even though everyone expects it to do so in secret and to deal with it in silence and out of the social context. Two participants, in their testimonies, encapsulate those implications that they have to contend with in their daily lives; while one explains: "I don't miss having periods, but not having regular periods is not only worrisome if I've had unprotected sex; but it's also a reminder of my past [Eating Disorders] and I have difficulty dealing with it sometimes," another aptly summarises that her absence of bleeding: "means something's wrong with my body. On the other hand, I'm glad I don't have to suffer all the pain and discomfort that derives from menstruation every month" and adds that even though her menses are "painful and uncomfortable," she is nonetheless "slightly happy when I menstruate because it means that my reproductive system isn't completely messed up."

Thus, with such profound implications for healthy reproductive functions and general bodily health, it is rather understandable that menstrual language contains all manner of literal mentions of biological process, hormones, and the relevant anatomical parts involved, as well as all sorts of metaphorical expressions making use of those same implicated concepts. Such conceptualisations of menstruation as A HEALTH INDICATOR, as A PART OF NATURE, and the regular conflation of the terms 'natural,' 'normal,' and 'biological' in a manner reflective of Fahs' (2020) major theme of 'the body as intuitive/normal' (discussed in detail in the next chapter), can all be observed in the various statements provided by the respondents in this study (such as in "it is a normal part of my experience and biology"). In fact, the earlier discussed conceptualisation of Mother Nature is a recurrent concept in lay medical literature, particularly in the form of "image-toimage metaphor and explicit analogy" as Faure (2017, p. 4) finds. Given the experiential basis existing, notably in the form of interactions with the outside world and the environment, such conceptualisations as organs, as well as certain functions as fruits and vegetables and as animals²⁶, all relate to the overall concept of nature. Likewise, some of the references to conception or lack thereof

²⁶ For instance, towards the end of the 19th century, menstruation was articulated in relation to 'bears' in French, as in "avoir ses ours," which Faure (2017, p. 6) suggests could be linked to the infamous "bad temper" of menstruating women, or by analogy with the word "jours" [days].

made by participants relate to nature, as it is Mother Nature reminding them that there is no child to bear this month again. In fact, the intertwining of nature and conception is long standing, and could be seen in the much earlier conceptualisations of menses as flowers (see Section 5.3) and of conception as fruit bearing. In her study of the Beng people residing in the Ivory Coast, Gottlieb (1988) quotes the words of a senior tribe member as he explains what menstrual blood means:

Menstrual blood is special because it carries in it a living being. It works like a tree. Before bearing fruit, a tree must first bear flowers. Menstrual blood is like the flower: it must emerge before the fruit—the baby—can be born. Childbirth is like the tree finally bearing its fruit, which the woman then gathers (p. 58).

To be sure, as of 2021, this theme of flowers and fruits as denotation of maturity and fertility is recorded by Chiatoh and Lando (2021) who find many euphemisms of "flower" and "my flower" and "my rose" among young female students in Cameroon, arguing that "menstruation symbolises the flower, while the fruit stands for childbirth. Put differently, menstrual blood is the flower that must blossom before the baby (the fruit) can emerge" (p. 7). Although the present dataset does not contain such explicit references to flowers and fruits, there are nonetheless clear links with the overall nature implicated with processes such as childbirth and the natural workings of the body. Particularly since the cycling of the body through menstruation is reminiscent of the cycle of nature through seasons and through life and death. It is perhaps these aspects that appear as solid enough bridges between the conceptual domain of nature and of menstruation that facilitate the existence of such expressions as "Mother Nature's reminder" and "it's like giving a mini birth." However, in the case of feeling like giving birth, the salient dimension of physical and mental suffering cannot be excluded, particularly since participants actively point it out and acknowledge it.

In fact, physical and mental suffering (discussed at length in the following chapter), also being such crucial features of the menstrual experience as a whole, have often been construed in a variety of ways. In particular, as shown by Bullo and Hearn (2021), menstrual pain can be conceptualised as AN ANIMATE AGENT and as a TRANSFORMATIVE FORCE, and so does menstruation as it often is metonymically understood as its particularly significant attribute of pain. As such, menstrual pain

and therefore menstruation take on the role of murderer, and specific key anatomical parts also acquire agency, and inflict actions of their own harmful volition to the menstruating body. For instance, one participant describes her menstrual experience as "the feeling that my uterus is simultaneously twisting itself into a pretzel and running itself through a paper shredder," while another views it as: "my stupid uterus is doing its stupid uterus thing." Thus, by giving the uterus agency, participants are operating under the conventional conceptual metaphor OUR ORGANS ARE PEOPLE (discussed further in the subsequent chapter), which Faure (2017, p. 9) finds has impacted the lay language of medicine in English and French. There are further anthropomorphic conceptualisations of the salient anatomical part that is the uterus, as it is described as a child "throwing a hissy fit." In fact, not only organs are construed in this anthropomorphic way, as there is evidence of other elements of the overall biology being described in a similar fashion. For instance, one participant describes the menstrual event by mixing prosaic medical terminology with a process of personification, stating that: "your uterine lining decides to tear itself off and out of your body," while another gives agency to her hormones when she shares that she feels like her "hormones are playing with me."

6.3.1.3 Gendered expressions

In many ways, the menstrual experience is articulated according to the intricacies of the anatomy and the biology involved in its happening, as well as in relation to nature and to the 'normalcy' of the body. Yet, it is notorious that both social and medical spheres have worked to further essentialise these aspects of the menstrual experience by anchoring them in a 'feminine' and 'female' body (see Section 2.2 for instance, and Section 3.2.1). As such, menstruation has long been construed as a purely 'female' function, as a 'woman's' problem, and as a 'natural part of womanhood.' Nevertheless, it has been shown throughout this study, and within this section that such a conceptualisation not only excludes the women whose bodies do not bleed because of a different anatomy and biology but can also punish the women whose bodies 'should', by these standards, bleed but cannot, and the men whose bodies do bleed by denigrating their status as men and tying them to 'womanhood.'

Indeed, the conceptualisation of menstruation as a 'female' event, on account of its long-standing history of being attributed to women and of constituting the prime symbol of womanhood and of the 'female' sex (see Sections 2.2 and 2.3 for example), does appear in the present study. It is spoken about in terms of lady troubles, lady time, Frauenproblem [women's problem], lady business, lady week, lady days, female issues, female times, girl time, woman's curse, and the burden of having a female body. Similarly, participants who are now in their menopausal phase have shared that, while they are happy to no longer experience the painful parts of the menstrual event, they also feel "less of a woman" now and feel that their youth has disappeared. The parallels with nature and biology are also evident, notably in expressions such as I'm a woman, it's in my nature. Likewise, in her category of 'gender-specific terms,' Newton (2016) groups very similar expressions to those in this study as they construe menstruation "specifically as a female-only event" and argues that such expressions highlight a gender difference, and that expressions "such as 'women's pains', 'women's complaint', and 'women's issues', carry with them the stereotype that women's bodies are innately flawed and less strong than men's (an attitude that still persists in medical approaches to menstruation)" (pp. 199-200). Therefore, while these instances do conceptualise menstruation as a female phenomenon or as a part of womanhood when referencing nature and reproductive functions, they also prominently highlight the socio-cultural construction of menstruation as a 'lady thing,' one that is flawed, tabooed, and that must stay confined within this community of those who bleed, and thus away from 'men' who are not meant to hear about it, see it, deal with it, nor acknowledge it.

Predictably, this construal, among other socio-biological factors, in turn serves to prop up further the disregard, disinterest, discomfort, and exclusion of normative male bodied individuals, and gives more substance to the concept of menstruation as a mystical and mysterious entity (discussed more in Section 6.3.2 below), thus assisting the circularity and perpetuation of the menstrual taboo. Interestingly, two participants explicitly acknowledge that mentions of menstruation "make men uncomfortable" and many others implicitly accept the same notion when they explain that they intentionally hide it from their fathers, brothers, uncles, and other men in their lives. One of those participants, however, states that she "delight[s] in making men uncomfortable" as she goes out of her way to address

menstruation explicitly and without euphemistic cloaks. This practice simultaneously challenges the branding of menstruation as a 'woman thing' and its confinement to a community of women bleeders by exporting it front and centre into the public and 'male' space, but also accepts the concept it challenges, that of menstruation as a 'woman-exclusive' event.

Moreover, it can also be argued that the act of addressing one's menstrual status, even (or perhaps especially) when doing so using gendered expressions, equally works to disrupt the established silence surrounding the issue, and effectively makes menstruation public and known to all, since the taboo implies that everyone is aware of exactly what it entails to be in one's *lady week* or to be dealing with *lady troubles*. This practice is also similar to that recorded by Newton (2016) in the form of young girls adopting typically 'boy' behaviour when teasing boys using menstrual products, which she identifies as a "disruption of their gendered teasing" since, "rather than the boys exercising sole power through gross denigratory talk and joking, some girls mimicked them in order to disrupt their play" (p. 87). Likewise, Fingerson (2006) finds that in certain contexts, young girls will use explicit references to menstruation as means to reclaim power in gendered spaces and interactions.

In fact, this self-same act of referring to one's menstruation using gendered expressions serves to not only disrupt the menstrual taboo, but also the sex and gender binaries. One participant who identifies as a trans man has shared that "manstruation" is the term that "trans men use." By explicitly addressing menstruation, an event socially dubbed as 'normatively feminine,' this expression serves to challenge this social notion by attaching menstruation to 'man' and therefore not only allows trans men a way to speak about their bodily experiences in a way that they deem safe and comfortable, but also to carve out a space for the trans body within the menstruating community at large. It is true that most of the participants who identify as trans, non-binary, queer, or agender have expressed varied degrees of discomfort, of dysphoria, and of mental struggle in regards to their menstruating bodies; however, many of them have also shared a variety of ways in which they are able to contend with this event in thought and in speech, notably reliance on "simply call[ing] it period," or using certain expressions either deemed neutral such as the thing, funny and creative such as the fall of the Berlin Wall, or that refer to specific aspects of menstruation,

particularly pain and discomfort, as in *death week* and *hell times*. In this regard, it can be said that, to some extent, the metaphorical language used by trans participants does not differ much from that of cis-gender participants as most highlight the relatively shared experience of pain, discomfort, redness, and time, actively engage in creative coinages of new expressions, and challenge and disrupt established notions and taboos.

Yet, trans people who menstruate have to contend with the potential additional burden of dysphoria, which might be accentuated by the heavily feminine coding of menstruation. Certainly, Schwartz and colleagues (2022) report that most (93%) of the gender diverse adolescent patients they surveyed experience dysphoria associated with menses and 88% expressed desire in exploring menstrual management and suppression methods. Reaching a similar conclusion, Berrahou et al. (2022) "recommend a model of gender-affirming care grounded in the tenants (sic) of reproductive justice, emphasizing patient autonomy and the development of holistic management plans centered around the patient's unique goals for affirming their gender identity" (p. 753) thus further emphasising the importance of acknowledging gender variance in menstrual health and menstrual discourse alike.

It is crucial to reiterate the argument postulating that sex is a cultural construct since it serves to ascertain that not all menstruators are 'female' (Newton, 2016) and not all those who do identify as 'female' menstruate. This concept helpfully ruptures the supposedly inherent link between menstruation and womanhood. Of course, as shown in the previous section, menstruation still holds many biological implications, notably its intricate connection to reproduction, and as a reminder that one is not pregnant. Yet, as previously argued, menstruation has just as many socio-political implications. As such, and as Bobel (2010) argues (see Section 3.2), the recognition of the menstrual event as "both a biological process and a social construction" (Newton, 2016, p. 51) is more worthwhile, especially since it is clear and has been made starker throughout this study until this point that, while menstruation at its core is a basic function of the body, it is also a social and a cultural phenomenon in its care, in its management, and in its embodied and linguistic negotiation in private and in public. Woodward (2008) argues that this question of "finding ways of talking about the body without fixing it as a naturally determined object which exists outside politics, culture or social change... whilst

also holding on to the materiality of living bodies" is a crucial one in gender studies, particularly since said bodies "are always in the world and those bodies and the world are also changing" (pp. 76-77). Therefore, as far as menstrual matters are concerned, "the physical body cannot, and should not, be absent" (Newton, 2016, p. 51) and there needs to be a way to include this physical body "in discussions about the cultural body" (ibid).

6.3.1.4 Cleanliness and purification

In addition to the mystical powers historically attributed to menstruation and by extension to the menstruators, notably by Pliny the Elder in the shape of abilities to cloud mirrors, rot fruit, rust metal, kill crops, and make "caterpillars, worms, beetles and other vermin fall to the ground" (Pliny the Elder, 1963, p. 57), there was also the added effect of depicting an image of the menstruator as dirty, and unclean. As detailed in Chapter 3, these mysterious powers, combined with perceived harmfulness and 'evil' of both the menstruator and their blood, ultimately catalysed witchcraft, and inspired the *Malleus Maleficarum* (1487). Along then came images of venomous and evil eye wielding menstruators, who are inherently unfamiliar, unfathomable to men, and therefore harmful and dangerous. Eventually, these features transferred to several other religions, and manifested in the form of conceptualised dirtiness and more harmfulness, thus requiring a set of prescribed rules to deal with a menstruator in the house and in the kitchen.

Furthermore, as outlined in Chapter 3, menstruation was and still is to some extent depicted in terms of a 'hygienic crisis' of sorts. Adverts of menstrual products, for instance, have notoriously tapped into this specific theme, offering ever more discreet and scented products to help manage the blood flow and keep it out of clothes to avoid the infamous stains on white shorts. Furthermore, as explained in Chapters 2 and 3, there has been a plethora of different physician recommendations and religious prescriptions to deal with various aspects of menstruation, notably how to cleanse the body afterwards, and what to avoid in order to keep it flowing within the boundaries of the normal. Menstruating bodies are deemed dirty and unclean (Stein & Kim, 2009). Cleaning the body, which has been soiled by dirt or "matter out of place," becomes an occasion to improve (Douglas, 1966, p. 36), and what better way to accomplish that than to observe a

cleansing ritual in the form of a shower or bath. As Røstvik (2018) puts it, showering or bathing "promises to exonerate smells, external pollution, and bodily excretions" (p. 56).

In the dataset of the present study, the domain of cleanliness and purification encompasses expressions and terms that reflect this historical theme of menstruators being dirty, as well as that of the state of menstruating or menstrual fluid eliciting a reaction of disgust. It is clear that the menstrual event as it has been historically and socially outlined so far in this study, seems to spread across a few domains of disgust, notably that of contact with a substance deemed 'unhygienic' and potentially the carrier of unknown diseases and powers, that of sex since it could compromise reproductive fitness, and that of the violation of the body's envelope by witnessing blood. Such a background could explain, at least partly, the existence of such expressions relating particularly to wet and sticky textures, as well as to dirt and uncleanliness. However, the data also includes conceptualisations of menstruation as a purifying ritual of the body. Table 10 below illustrates all the expressions pertaining to this domain, along with their sub-themes and absolute frequencies.

	Overall	Arabic	English	French	German
Dirt and Mess	55	6	47	2	0
Menstruator is dirty	14	4	8	2	0
(Is) Purification	4	0	4	0	0
(Needs) Cleaning	4	1	3	0	0
Total	77	11	62	4	0
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					<i>7</i> 9

Table 10 - Absolute frequencies of 'cleanliness and purification' references organised by sub-themes.

Experientially, it would make sense for menstruators to associate their menses with the concept of mess, since they are in very close contact with a potentially unpleasant smelling, unnatural feeling reddish fluid that tends to stain and stick, knowing that they have been socialised to keep it secret and deal with it on their own and in silence. Additionally, some flows happen to be heavier than others, which would require more proactive upkeep and more worrying about potential leakage and mess, and therefore put more of a mental load on the menstruator as they have to contend with all these different aspects, the physical feelings, and

the anticipatory thinking involving social activities, and menstrual management via products and bathroom trips (discussed more in Section 6.3.1.3). As such, the menstruators who have shared the expressions grouped within this category have had a direct experience with the kind of "mess" they are talking about and know what it takes to deal with it. Therefore, expressions such as *awful smell*, *stains* and its French counterpart *tâches*, *impureté* [impurity], *smelly*, *stinky*, *(very) messy*, *laundry time*, *dirty*, *leaking*, and *yukky* (sic) all stem from an embodied experience and make up the largest sub-theme within this domain.

However, participants have also shared expressions that they have heard or still hear other people use around them, and many of those can also be found within the sub-theme of 'dirt and mess' since they specifically single out those aspects. One respondent shares many of those in Arabic: الريحة [al-wasakh - the dirt], الوسخ [a-riḥa - the smell], الخنز [al-khanaz - smelly, rot-like smell], and goes on to add similar terms that specifically describe the menstruators themselves: راها مجونبة [raha mjounba - she is dirty], واها موسخة [feyḥa - she is dirty], and فايحة أوليحة feminine adjective meaning smelly or stinky]. Another participant shares that she has heard "El wsakh ta'a ch'har (monthly dirt you have)" being used "from males when they are rejected if they ask a girl to talk to them" which suggests a form of retribution or punishment. Likewise, a Russian-speaking respondent shared that течка [techka - "derived from the verb течь 'to leak'" is a "specific term in Russian for the menstruation of animals... and if it is used with reference to females, it acquires pejorative meaning." Again, this suggests that the association of menstruation with the themes of dirt and of leakage can serve as a dysphemistic insult and punishment, particularly from the normative male-bodied nonmenstruators. Furthermore, this view of menstruation as pollution has very often been criticised as showcasing the solidarity of normative men in many societies where menstruation is heavily tabooed and framed as a polluting agent (Buckley and Gottlieb, 1988). Douglas (1966) adds that a specific meaning in religions, as well as a socio-symbolic power, are attributed to menstrual blood as a pollutant, which in turn contributes to the cultural enforcement of religious logic and doctrine. Newton (2016) argues that: "The negative connotations of terms, such as 'on the rag', 'jam ragging' or 'on the blob' can transfer to the woman, making her feel that menstruation is something undesirable, negative, and to be ashamed of, rather than simply physiological" (pp. 141-142). Although the expression 'on

the blob' is not etymologically or semantically reflective of a negative aspect, it seems to have acquired one socially. To be sure, there are menstruators within this study who have shared expressions such as "I am dirty" and its French counterpart "je suis sale," "a general feeling of being unclean," "Rani hassa rouhi fay7a" [I am feeling stinky], "rani 3ayfa rohi" [I am disgusted by myself], and "I feel kinda disgusting when I have my period. Don't really know why" which show this transfer to the menstruator themselves, making them conceptualise their bodies as needing to be cleaned. The menstrual body becomes in dire need of cleaning, as evidenced by expressions such as "need to take a shower almost every day" and "it's hard to keep consistently clean." Therefore, it can be argued that the conceptual metaphor of MENSTRUATION IS SOMETHING DIRTY, or of MENSTRUATION IS UPKEEP, exists and groups all those expressions within it, on account of menstruation being something that requires cleaning and maintenance and that elicits a reaction of disgust because it is dirty.

Nevertheless, most participants who have experienced menstrual bleeding, upon being asked how comfortable they are with their hands coming into contact with their own menstrual fluid, responded that they are very comfortable or moderately comfortable with it, although the variance between those and 'mildly uncomfortable' is not very large. Many of those respondents also took the time to share some of their thoughts and reasoning as to why they chose a specific answer. Indeed, the motivations behind indicating that they are very or moderately comfortable range from "it's just blood" to "... I get to engage in tactile way with my fluids again it feels like an act of resistance against societal menstrual stigma that treats fluids as wastes to be disposed of," while encompassing statements such as "I do not enjoy it, but it is a small part of me," "It doesn't bother me," "It's my own body, why would I be afraid or disgusted? It's natural," and "Over time I have become more comfortable with menstrual blood and see it as a natural bodily function. I'm not 'freaked out' by any blood touching my hand during changing or washing menstrual products." Predictably, menstruators are well aware of the branding of menstruation as something dirty and unclean, and many of them seem to be mindful of that and of the fact that it is coming from their own natural bodies, thus providing them with a sufficient reason to simply coexist with it and not be bothered by it. Still, the previously explored disgust pertaining to blood and injury does involve blood coming out of the natural body as well, so

when participants express that they find it "extremely gross, smells bad/wrong" and others state that they are, in fact, quite afraid and uncomfortable with blood in general, and that "[t]he fluid's texture makes me feel uncomfortable. I just want to wash my hand immediately after touching it," they are operating within an understandable bodily reaction. For most, however, a sort of middle ground has been reached as there is recognition that it can be uncomfortable or 'gross' but also that it is something that happens and that simply needs to be dealt with, a stance that is perfectly summarised in some participants' statements: "I'd rather not come into direct contact with it especially if it's clumpy but otherwise I have no problem, it's just like any other liquid or any other blood that comes out of our bodies and it's a means to clean" and "I suppose I find it kind of gross but in a similar sense to if I got blood on my finger from a paper cut or the like. It might make me mildly uncomfortable at times, other times neutral, but I would just clean my hands and move on." Finally, one participant encompasses these themes with an additional dimension of inevitability when she states:

I believe eventually you start to get used to it. Especially when the tampon overflows during the night, you need to clean yourself and the bed sheets... you'll touch it and get more and more adjusted to the idea of it - although it is still not a pleasant view or experience.

Yet, for some, the menstrual event itself is a cleansing ritual. This particular conceptualisation has made an appearance in the earliest history of menstruation, when it was called "katharsis" by Aristotle in Generation and described as a necessary process of "purgation" by physicians such as Soranus and Galen (discussed more in Section 2.3). Certainly, some participants feel that it is "a purifying process" of the "inner body" and "on the physical level," and that "it feels like [they are] cleansing [their] body." Agyekum (2002) reports that menstruation can also be given a place of importance among the Akan-speaking groups of Ghana who consider it a powerful substance that can protect and be used in charms, and who also see it as a purifying process after birth. Sveen (2016) finds similar results in her study when she surmises that the conceptual metaphor of MENSTRUATION IS MAINTENANCE groups expressions such as "the monthly oil change, having the decorators in, closed for repairs, manadsrening [monthly cleansing]" (p. 155). She goes on to explain that this conceptual metaphor also highlights the conceptualisation of the body as a machine requiring periodical maintenance and repair, particularly because "[m]enstruation is a regular feature of the general

female body" (p. 155). Although this idea does not explicitly appear in this specific domain, some references can be found in the category of 'activity break, inconvenience, and illness' (discussed in the following chapter). However, the findings of the present study do align with Fingerson's (2005) observation that menstruation was represented as something positive by many girls through their conceptualisation of it as a cleansing process. As such, it might be more worthwhile to talk about the conceptual metaphor of MENSTRUATION IS PURIFICATION and including within it both the instance of purifying something and being purified to reflect that menstruation is both something that requires cleaning and that itself cleanses the body.

6.3.1.5 Menstrual materials

In fact, the conceptualisation of menstruation as a 'hygienic crisis' is a particularly pervasive and difficult one to challenge because it has notoriously been reinforced by stakeholders in the menstrual management industry, in addition to a rich history in society and religions. As highlighted in Chapter 3, Havens and Swenson (1988), who were the very first to analyse printed advertisements whose target audience was teenage girls, did find that the representation of menstruation as a hygienic issue was the most prominent. Brumberg (1997) uncovers that the subject of most discussions between mothers and young girls regarding menstruation is hygiene rather than sexuality or puberty. It is the need to stay clean, to avoid leaks and stains that can be seen in public, and to purchase the correct products that has become the most stressed aspect of menstruation by 'modern mothers' who are usually the first point of menstrual information for young girls (ibid). Even though, as evidenced in previous chapters, the issue of cleanliness has been raised at various points of history, Røstvik (2018) argues that "perceptions about uncleanliness have changed depending on the knowledge and products available for management" which range from 19th century homemade cloths and usage of moss, to tampons and pads produced on a mass-scale for public consumption starting from the 1930s (p. 55). Malmberg (1991) found that menstruation did not constitute reason to alter clothes or behaviour, as women seemed to have bled either directly onto their clothes, legs, floors, or used cloth (Røstvik, 2018). From the 1900s onwards, however, there was a renewed interest in sanitation ushered in by medical and educational institutions, highlighting the need to have a modern and clean body (Freidenfelds, 2009; Shuttleworth, 1990). Following this was a

widespread culture of self-care, in the form of instructing young girls on how to make their own cloths and knitted pads to pin to their underwear, in what became a direct connection of "women's cleaning labor with women's intimate hygiene" (Røstvik, 2018).

It was a time when menstruators would be wearing a self-made knitted pad or cloth to manage their menstrual flow, which would have been the first instance of a 'rag' in relation to menstruation. In 1948, Joffe reported that the American expression, incredibly popular among men, of "on the rag" was reflecting "the material culture of over twenty-five years ago with regard to the type of sanitary protection characteristically used by women" (p. 183). Likewise, Ernster (1975) finds the case of "on the rag (or variants such as OTR, have the rag on, or riding the rag)" remarkable as it made up 50% of all the contributions by males (p. 5). Although it had ceased to be an actively used type of menstrual product at those point in time, the 'rag' was still relevant culturally and socially and had acquired a negative meaning in a similar way to the earlier discussed 'blob.' In fact, Sveen (2016) identifies the domain of "sanitary protection" which encompasses expressions such as "on the rag or OTR... raggin' and ragtime" (p. 151) in English, and similar expressions in Swedish. Further, Newton (2016) also reports quite frequent usages of the expression 'on the rag' and argues that even though this expression might have lost its connection to the original 'menstrual rag,' "[t]he connotations it carries are robust and resistant to change" (p. 139) and thus stays a relevant menstrual slang term to this day. Newton (2016) argues that this "endurance of old terms indicates a cultural resistance to change, and while the etymological origin of a term may be lost, the stereotypes still persist, carrying with them the negative connotations attached to menstruation" (ibid). Although such endurance can be observed in the present study, the category of 'menstrual materials' is small and only contains 16 instances of the term rag and the full expressions of on the rag or ragging. Additionally, in most cases, the participants indicated that these are the expressions they hear used around them, and that they do not use them themselves.

Still, the idea that menstruation is something to be managed persisted through this system of self-care, and perhaps through language, as the 'rag' became as stigmatising as tedious to deal with discretely, and this formed the basis of the industrialisation and commercialisation of disposable menstrual products. From

then on, menstrual products and sanitation became intertwined for decades through the various advert campaigns by large companies such as the American Kotex, the Swedish Essity, of which both the British Bodyform and the French Nana are part, and the German tampon o.b., which later came up with the applicator for tampons to provide a solution for the issue of touching menstrual fluid (ibid). Even though their primary role is to manage menstrual blood, it wasn't until Bodyform's 2017 campaign ad of 'Blood Normal' that actual red liquid was used in an advertisement of a menstrual product, which up until that point, was also a very runny blue liquid. The fact that it took such a long time to acknowledge what is known to menstruators as one of the most basic features of menstruation, combined with a history of questioning the safety of chemical-based single-use pads, which eventually culminated into outrage as Toxic Shock Syndrome claimed lives in the 1980s, maintained distrust of the Feminine Care industry throughout the 1990s and well into the present day. This contentious relationship gave an opportunity to the development and expansion of an alternative market for organic and more environmentally conscious menstrual products (Roh, 2019), which led to the development of the first rubber menstrual cups and to the shift back to reusable pads. Later, more menstrual materials emerged, notably menstrual underwear, and better and safer medical-grade silicone menstrual cups.

In the present study, single-use pads or napkins, followed by tampons, remain the most popular among participants, because in addition to being convenient and readily available, they are also what many respondents feel most comfortable with, and what they have been taught to use. One participant explains: "I was raised in an environment where all my female family members wear single-use pads, so I got used to them. Also, I had a limited choice. And I can't wear tampons or cups because of my virginity." Within certain context, notably those relating to a specific religion, some menstrual materials may be omitted by the general market as they are deemed unfit. As this respondent explains, there might be concern with virginity, and thus any product that is to be inserted should be avoided or is not as conveniently available as pads and napkins. Algeria is one such context, and one other participant who has transitioned into using tampons states that

...in Algeria thery (sic) rarely sell tampons. I discovered them in the UK (I feel much better now with them). In Algeria I used to use single-use pads (I used to hate myself when I'm in my period): seeing it on the pad everytime I go to the toilet, sometimes the flow misses the pad and I find blood in my panties sometimes even in my pant, the smell is strong.

Other participants expressed their wish to transition to more eco-friendly options, such as the reusable cloth pad, but because of their circumstances ("I bleed too heavily for the other option"), they can only rely on single-use pads. It is crucial for menstruators to have access to a variety of materials in order to experiment and find the one that feels the most comfortable for them. Because this is an experience that is tangled with social negativity and stigma, with feelings of disgust, with religious representations and prescriptions, and with concepts of nature and of gendered bodies, it is entirely possible to be reminded of all of this during a time that is supposedly private, which highlights more the importance of having access to various forms of menstrual products in order to reappropriate this event and also normalise it as "just one of those things."

Indeed, for some non-binary participants, having access to the menstrual cup served exactly this purpose. It was the cup that has managed to help them improve their relationship with menstruation, to the extent that it "[a]lleviates my gender dysphoria, I don't have to think about it much or change it often, once it's in I can't feel it anymore." As another non-binary respondent puts it, the "[m]enstrual cup made me SIGNIFICANTLY more comfortable with my own menstruation" (emphasis in original). Similarly, as mentioned earlier, some participants who do use menstrual cups, expressed that the cup helps them be more in control of their menstruation, and that by using a menstrual cup, they "get to engage in tactile way with my fluids again it feels like an act of resistance against societal menstrual stigma that treats fluids as wastes to be disposed of." Another respondent who has stated that she uses menstrual cups and menstrual underwear, shared: "I like my blood, I'm kind of proud of it/proud of finally loving it" which once again shows how essential it is for menstruators to be able to use whatever they find most comfortable for them, and whatever can help their embodied experience of menstruation to be a truly personal and personalised one, with as little negative interference as possible. Perhaps it is because of this more recent partial absence of negativity tied to menstrual materials that the euphemistic expressions pertaining to the rag are so infrequent, even if the

connotations persist and the term still exists socially. As Newton (2016) concludes, it would be interesting "to see whether interest in reusable menstrual products, such as Mooncups and washable cloth pads, will have any influence on future developments in the naming of menstruation" (p. 151).

6.3.2 "leje mi się krew po nogach" [Blood is pouring down my legs]

Menstruation is a different concept for different people; while it can be a process of cleansing the body for some, a large body of water, and simply a gift from Mother Nature for others, it can also be a particularly gruesome experience for many. Given the acute physical and emotional suffering that usually accompany the menstrual event, as evidenced earlier in this chapter, it is perhaps not surprising that menstruators in particular would employ more imaged language to reflect the gravity of their felt state. Likewise, such a language can also be helpful when attempting to highlight specific features of the menstrual event as it is lived. For instance, while the pain was expressed in terms of being killed or being physically hurt by sharp or blunt objects (discussed further in Section 7.2.1), the sheer quantity of blood and the horror of the whole experience of seeing and sometimes touching blood tend to be depicted in terms of a murder scene. Some examples of this appearing in the data are as follows: Bloodbath, murdered down there, Scene of Texas chainsaw massacre, and the French scène de crime dans ma culotte [crime scene in my panties]. Similar expressions have also been found to be conceptualised in terms of TRANSFORMATIVE FORCE by Bullo and Hearn (2021) and in terms of 'death and mortality' by Munday et al. (2021) (See Section 7.2.1 for more details). Additionally, scenes of gory murders are also included within the previously discussed form of physical disgust. As such, this imagery that so vividly paints a picture of violent crime and an abundance of blood spilled after a painful altercation also fit within blood and injury disgust (Chapman and Anderson, 2019), which could also be a part of the reason why such expressions are used in the first place.

Certainly, the fact that such expressions blend many themes together and might thus include allusions to pain and suffering, and to torture, horror, and the monstrous cannot be denied. In fact, this is also a dimension of the mystical power of menstrual fluid and menstruators, and its relationship with the moon. As

previously stated, many references to menstruation as a "moon sickness" and as an event of lycanthropy have been made in popular media, and particularly highlighted the horror and the monstrous features of both lycanthropy and menstruation. In *The Monstrous Feminine*, feminist writer Barbara Creed (1993) locates the purpose of the monstrous in the horror genre in the "encounter between the symbolic order [that is typically the rational and 'male' coded mind] and that which threatens its stability" (p. 11). She argues that monstrous women in horror are almost always depicted in relation to their reproductive and menstrual specificities, and thus appear as "the archaic mother, the monstrous womb, the witch, the vampire, and the possessed woman" (ibid, p. 7). Thus, on account of this order disturbance, menstrual blood is considered to be abject, as Kristeva (1980) posits. She explains that the abject is that which "disturbs identity, system, order. What does not respect border, positions, rules" (ibid, p. 2). As such, violations of the corporeal envelope resulting in injuries, wounds and blood are considered in the same way because they align with "corporeal orifices" (ibid, p. 71). Likewise, the abjection expands to include certain substances (such as urine, blood, semen, milk, and faeces) because they constitute direct threats to the socially acceptable and orderly and clean body and elicit acute reactions and feelings of disgust. By those terms, menstrual blood is abject, and so is the menstruator whose bodily order is being disturbed; Creed (1993) argues that "all human societies have a conception of the monstrous-feminine, of what it is about woman that is shocking, terrifying, horrific, abject" (p. 1). And, because what is deemed as shocking and terrifying also has the potential to be captivating and fascinating, showcasing the monstrous feminine in horror films became the perfect ground for both adherence and subversion of those ideas of abjection and of menstruating women as blood monsters, as "the menstruating monster exposes her biological identity with every drop of blood she sheds, both her own and her victim's" (Briefel, 2005, p. 25).

As such, in much of the research reviewing and discussing the representations of menstruation in the media, references to the monstrous and the abject are inevitable. In what Cinias (2010) identifies as "the cult Canadian hit of 2000" (p. 2) film cleverly titled *Ginger Snaps*, a young girl, Ginger Fitzgerald, is attacked by a werewolf on the night she experiences her first menstrual event as the creature is apparently drawn to her because of the smell of blood. Beyond this explicit

parallel between lycanthropy and menstruation, Ginger then begins experiencing "unprecedented hair growth" along with "uncontrollable, confusing physical urges" and "bodily transformations that blur the boundaries between animal and human, inside and outside" (Miller, 2005, p. 5). Such symptoms would otherwise be cause for concern, but because Ginger is a young girl who has just started her menstruation, the school nurse simply informs her that this is all perfectly normal and natural and should be expected to happen again every month. Likewise, the film purposely titled The Curse (1999) showcases werewolf attack on heroine Frida Harris²⁷ at a lingerie sale, who starts her full-moon synchronised transformations into a man-killing beast at the whims of her PMS. Subsequently, Frida's menstrual phase is prefaced by the 'usual' symptoms of "bloating, irritability, depression and emotional instability" (Cinias, 2010, p. 3) and devolves into a "more extreme manifestation of every woman's 'condition'" (Flaherty, 2008, p. 4) and includes "increased bust size, nails turning into claws, sharper teeth, increased facial and body hair, nightmares and blackouts" (Cinias, 2010, p. 3). Predictably, just as with Ginger, Frida is told by a male doctor that these are all normal symptoms and are all "just part of being a woman" (ibid). Becoming a monster and menstruation, including PMS, are both framed as a 'moon sickness' or an uncontrollable series of bodily changes that simply have to be endured and that cannot be stopped, thus collapsing the natural and the supernatural as a rather straightforward involuntary corporeal, mental, and emotional imperative (ibid).

Given the incredible powers that have been attributed to menstrual blood and women as menstruators throughout history, and which have been known to disturb the so-called stable order, including that of religions and cultural beliefs, and that of the body, it is rather unsurprising that such an imagery of monstrosity, of turning into a raging and uncontrollable hairy beast every month at the call of the moon, and of being the cause of blood dripping and pouring both from the self and from others, exists and is reproduced in various social contexts. Perhaps more tellingly, is the opening scene of the famous horror film *Carrie* (1976), which is

²⁷ It is particularly salient here to point out that Frida Harris as a character was inspired by the 1980 British case of Sandie Craddock Smith, who, upon being convicted of manslaughter, claimed diminished responsibility because of acute premenstrual symptoms, and was only given probation. The main argument of the defence was that her PMS "turned her into a raging animal each month and forced her to act out of character" (Benedek, 1988) which was proven by diaries and institutional records showing a "cyclical pattern to her violent behaviour" (Easteal, 1991, p. 6).

based on a Stephen King novel, during which the pubescent heroine, Carrie White, experiences her very first menstruation in the public space of the girls' locker room showers and under the intense bullying of her classmates. It is also during that same experience that Carrie sees her telekinetic powers grow, which will later on serve to take revenge on everyone who tormented her, starting with her mother, who repressed and misinformed Carrie notably about her menses, then her classmates who seemed to take great pleasure in throwing menstrual products at her in the showers while screaming "plug it up!" and eventually herself, as her own blood finally brought about her death. Thomas (2017) writes that "[n]o film is a better touchstone for the association of evil to menstruating women" (p. 5) than *Carrie* (1976) and argues that the coincidence of Carrie's menarche and telekinesis, as well as her decision to turn this mystical power on her mother and bullies, "indicates that a menstruating woman should be associated with evil and is frightening/threatening to others" (p. 10).

Through this narrative, Clearly, menstrual blood is powerful and mysterious, yet a "humiliating and scary experience, especially for women" (ibid, p. 15). Thomas (2017) adds that, beyond the supernatural elements depicted in the film, the audience will still take away some important gendered notions: women will grasp that "exposure of menstrual blood can lead to the social death by exclusion" and men will learn "how to respond to the women who identify with Carrie's embarrassment" (p. 16), which is typically a similar reaction to that of the girls in the locker room showers: disgust and revulsion at witnessing the abject in plain view. Thomas (2017) further argues: "This fear, in turn, causes women to respond to their menses by hiding it from the public to avoid social exclusion. Yet this reaction makes menstruation's presence more mysterious to men, thereby perpetuating the taboo (p. 16). Certainly, those themes of disgust, of shame and embarrassment, of fear of being exposed and of leaking in public through clothing, of needing to engage in upkeep and cleaning, and of altering language to deliberately keep things private and secret from 'men' are all themes that have been discussed throughout this chapter, and will be further in the next, as part of the participants' embodied experiences, and are themes that can be gleaned from various media, especially gory horror films when they pertain to menstrual blood and menstruation in general. Indeed, the genre of horror fits well with menstruation as a main concept because, in addition to menstrual history (see

Section 2.5 for instance) being rich in associations with mystical powers and witchcraft, with nature and pollution, and with abjection and discrimination, the menstrual experience is also abundant with potentially 'gory' and stigmatising elements such as blood, pain and suffering, unpredictability, instability, and various dangers to self and others, including blood exposure and contamination. As such, when participants in this study share expressions such as *blood monster*, it can be ambiguous as to what exactly is the monster, the menstrual blood or the menstruator themselves? With representations of all these themes, and with showcases of blood running down legs in a shower leading to being battered with pads and tampons and covered in pig blood, it is perhaps not surprising that such ambiguity exists, and that such graphic imagery as "scene of the Texas Chainsaw massacre" is used. As such, it could be argued that there exists a conceptualisation of menstruation as some sort of violation of the corporeal envelope, that elicits disgust and horror by mimicking blood from an injury, since it is also often accompanied by acute pain. Bullo and Hearn's (2021) identified conceptual metaphor of TRANSFORMATIVE FORCE might be extended to encompass the horrifying themes as they relate to the 'death and mortality' of Munday et al. (2021) (See Section 7.2.1), but also those previously discussed images of mystical power, force of nature, and process of purification.

Blood running in the shower is an image that is popular in the horror film genre and is also the opening sequence of the film *Carrie* (1976), as Carrie is shown bleeding from between the legs, her hand touching this blood running down along her thighs as the water from the shower takes away and down the drain. Røstvik (2018) explains that this is part of "the tropes of the *shower of angst*" (italics in original) that shows characters, often female, in the shower after traumatic events (murder, sexual assault, etc.) (p. 58). In various forms of media, characters can be seen in the shower after such bloody events as the shower symbolizes cleanliness and peacefulness (Briefel, 2005). In the case of Carrie, her menstrual blood is not only conceptualised as something traumatic, but also as something that needs to be washed away to make her clean again, yet, as the events unfurl, even though the water managed to wash the blood away, the sin and the evil remained, and Carrie has been symbolically marked as unclean forever. Røstvik (2018) argues that: "The blood marks her as a sexual and dangerous being, with the story rendering her an actual killer. The bloodstains carry beyond the shower,

making water and soap useless. Carrie's innocence has been corrupted by blood, literally taking and spilling over her" (p. 58). Interestingly, the first menstrual product advertisement campaign to show actual red liquid launched by Bodyform under the title "Blood Normal" (2017) does include a shower scene that is a clear reference to that of Carrie. The shot shows red blood running down the thighs of a white woman in a steamy shower, and figures among a "collage of period culture" Røstvik (2018, p. 59) showing a menstrual pad Halloween costume worn by a woman, and a man purchasing a pack of Bodyform products in a store. Even though this ad has been the first to show red liquid (which is, in fact, a blend of corn syrup and red food colouring, since using actual blood would have been "unhygienic" (Gil, 2017)) in an attempt to start undoing the centuries long taboo surrounding menstruation in the public eye, the Carrie shower scene included still echoes earlier advertisements that highlight themes of freshness and of 'just-outof-the-shower' feelings of cleanliness, and mirrors the established importance of menstrual hygiene and management while once again binding menstruation to dirtiness, pollution, and the need to clean and shower every day. Certainly, with such a direct parallel to the single moment when Carrie felt the most distraught, bullied, confused, horrified and traumatised, as well as with the arguably famous trope of the 'shower of angst,' these themes are going to transpire through this advert given its subject matter.

6.4 Cyclicality and time

The semantic domain of 'cyclicality and time' is one of the two largest domains identified in the present study, with 325 examples across all the languages recorded in the sample. The expressions collected include all manner of time references; some refer to the week (e.g. bad week, hell week, death week, shark week, Erdbeerwoche [strawberry week]), others to the month (e.g., that time of the month, حق الشهر [the month's due], monthly curse, monthly visitor), while the most frequent expressions refer to a time period in general (e.g., period, that time, special times, lady times). This domain is the second largest in English with 250 examples out of 1011, and the third largest in Arabic with 20 instances out of 81. However, in the French and German samples, expressions referring to week, month, and time, as well as other expressions involving time (e.g., Tage [days], la pire période du mois [the worst period of the month]) are the most frequent, making this semantic domain the largest with 33 examples out of 101 in the data

from French, and 14 out of a total of 20 instances in German. Just as was the case of blood in the previous category of 'blood, flow, and bloody imagery,' the periodicity is equally a salient feature of the menstrual event, since the material observation of blood is always defined by the temporality of it. It follows that, thematically, as well as experientially in both embodying the menstrual experience and talking about it, the characteristics of cyclicality and time and those of blood and flow frame the menstrual even in its conceptualisations in the minds of menstruators and non-menstruators alike.

These findings are consistent with previous research; Newton (2016) reports that the terms *period* and *time of the month* are the most frequent terms across genders in her sample, and Sveen (2016) finds the same prevalence of periodicity in the Swedish sample with 24% upon analysing menstrual euphemisms collected from scholarly articles on menstruation, published dictionaries and online blogs and forums. In fact, as early as 1948, *time* was already a recurring theme in menstrual research, notably in Joffe's (1948) "the vernacular of menstruation," in which she states that, "everyday words for menstruation take cognizance of its relationship either to the month or to its periodic appearance" (p. 181) with examples such as the English "it's her time" and the American English "the monthlies," the German "die Zeit" [the time], the Polish "czas" [time], the Italian "il mese" [the month], and the French "les règles" (ibid).

While *physical and emotional suffering* is the first thought to come to mind for many when asked about menstruation in this sample (See Section 7.2.1), *time* seems to be just as prevalent a thought, and is just as consistently referred to, particularly when taking into consideration the larger social context within which discourses of menstruation circulate. Table 11 below illustrates the exact frequencies of each of those references while grouping them according to the specific time they refer to.

	Overall	Arabic	English	French	German
Period	140	6	100	30	4
Month	89	5	81	3	0
Week	40	0	37	0	3
Cycle	17	3	13	1	0
General time	13	1	12	0	0
Days	11	1	6	0	4
Habit	5	4	1	0	0
Total	315	20	250	34	11
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					325

Table 11 - Absolute frequencies of 'cyclicality and time' references organised by specific time reference.

6.4.1 "Period-ing"

Period clearly seems to be the most frequently used term for menstruation. Indeed, it seems evident that it would be since it is now the most widely known term for it by all who speak or understand the English language to some level. Certainly, the term *period* is now, as one participant wrote, "its name," meaning the name of menstruation. For the respondents of the survey, calling it *period* is simply calling it what it really is, without euphemism or metaphor. Yet, this term is not without euphemistic attributes. Etymologically, the word period finds its roots in 'peri' and 'hodos,' Greek words that mean respectively 'around' and 'traveling, journey' or 'a way, path, road,' combining into the word periodos, which means a 'cycle, circuit' and 'a period of time.' A Latin origin also locates this term in 'periodus,' meaning a complete sentence or a 'recurring cycle.' This experience of cyclicality and recurrence that is lived during the menstrual event is the most likely reason why the term *period* became the most popular way to refer to one's menstruation in the present day. This is the term that is the most likely to be encountered in any sort of discourse on menstruation, including political campaigns, social activist movements, commercial adverts, and even in medical literature. For instance, Chapter 1 details a number of campaigns by various bodies to refer to period as period. Furthermore, the NHS webpage on menstruation refers to *Periods*, and proceeds to explain that, "[a] period is the part of the menstrual cycle when a woman bleeds from her vagina for a few days"28, which adds the dimension that a period is only a part of the bigger

²⁸ https://www.nhs.uk/conditions/periods/

menstrual cycle, whereas most menstruators do not really make such a distinction, and do use specific time-related terms (such as those illustrated in Table 11) and cycle interchangeably to mean the time characterised by menstrual fluid. The usage of this term could be attributed to a need to make the text as accessible as possible, thus employing the current name for menstruation in order to convey the important medical information without further stigmatisation or taboo perpetuation.

Sure enough, this is what many respondents expressed they wished various discourses surrounding menstruation were like: clear information and to the point, without scientific complicated terms or stigmatisation and euphemisms. Numerous participants, when asked why they thought euphemistic terms were used to speak about menstruation, replied that the most likely reasons are personal embarrassment, causing discomfort to an interlocutor or audience, particularly a normative male one, the need to be reserved and bashful, to keep such matters private and contained between a select few. At the same time, some also expressed their dislike of this social practice, and denounced calling menstruation anything other than *period*, or what it simply is. For instance, one participant explained, "some people feel uncomfortable about calling a period, or Menstruation, exactly what it is," while another thought that "people are embarrassed to just come right out and say, I'm on my period or I'm bleeding!" This sentiment was also echoed by participants who are speakers of other languages; for instance, one respondent expressed her opinion in French, saying that: "Je pense que la plupart des expressions servent à ne pas utiliser les mots règles et menstruations à cause du tabou..." [I think that most expressions are in the form they are in order not to use the words *period* and *menstruation* because of the taboo]. Although the survey circulated as part of the present study was very careful not to use any term other than "menstruation," some participants, including those quoted above, instinctively seemed to equate it with period, when answering the previously mentioned question.

Even though the Arabic, French, and German samples within the current dataset are rather limited in comparison with their English counterpart (see Table 12 above), the tendencies that can be observed across them remain consistent with current popular usages of the most frequent terms. For instance, the French "règles," defined as "the blood flow of menstruation" by the French dictionary

Larousse²⁹, is the now recognised name for menstruation in common usage. Many respondents within the present study offered translations and explanations for some of the non-English examples they provided, and many of those stated that "règles" is the equivalent of the English "period." Indeed, both of those terms have now become the most well-known name of the menstrual event in everyday language, even if there are still many references to "menstruation" in both French and English in any specialised literature (such as medical and academic). In the present dataset, there are also the Spanish "regla," the German "regel," and the Turkish "regl," all descending from the Latin "regula." Although the current meanings of "règle" encompass both the rule and the ruler, the tool, the actual meaning of "règles" which only exists through the plural form is "what takes place in regular intervals" and is particularly relevant to the menstrual experience. However, this meaning is now said to be obsolete by the Dictionnaire de l'Académie Française³⁰. Moreover, all the instances appearing under the Arabic column are instances of codeswitching by the participants who are all Algerian and whose first language is Arabic and its Algerian dialect. While the sample is too small to generalise, Algerian Arabic does not seem to have a direct equivalent of "period," as the only instances cited all include the French "les règles" preceded by the Arabic verb *jawni* [جاون] - literally meaning 'they arrived for me'], a particularity of the Algerian dialect as it borrows loanwords "from French, Turkish and Spanish" (Harrat et al., 2016, p. 385). Although there are instances such as [a-dawra or a-dawra a-chahriya - the cycle or the monthly cycle], الدورة الشهرية or الدورة those are not as frequent and participants who shared them did not attempt to explain that they are the equivalent of the English period as they did in the example of the French règles.

Period and its French, German, Spanish, and Arabic equivalents have been established as, for all intents and purposes, the working name of the menstrual event. The metaphoricity of this term could be questioned on the grounds that it is now so conventionalised, i.e. became the name for it, and that the metaphor itself is now to be considered dead. While Lakoff and Johnson (1980) do not take into account the degree to which a metaphor is conventionalised, they describe

²⁹ https://www.larousse.fr/dictionnaires/francais/r%C3%A8gles/67654

³⁰ https://www.dictionnaire-

<u>academie.fr/article/A9R1335#:~:text=%C3%89tymologie%20%3A%20xiiie%20si%C3%A8cle%2C%20r%C3%A8gle,de%20regere%2C%20%C2%AB%20diriger%20%C2%BB.</u>

dead metaphors as those that "play no particularly interesting role in our conceptual system, and hence are not metaphors we live by" (p. 55). Later on, Lakoff (1987) reopens the discussion regarding metaphor death and adds that metaphors are not considered dead if the conceptual link remains active. By both of those definitions, period as metaphor for menstruation is still alive, relevant and interesting in our conceptual system, a metaphor many of the world's population live by, and with currently a literal meaning available and still in usage. In fact, it could be argued that the sheer popularity of this term within this dataset and in the larger context of menstrual discourse proves that it is a metaphor we currently live by and helps in shedding light on some conceptualisations related to menstrual discourse which have not been explored more comprehensively before. Further showing how salient this metaphor is, Gathigia, Orwenjo and Ndung'u (2018), who report that 52% of the metaphorical euphemisms they analysed in the Gîkûyû language were classified as relating to periodicity, argue that "[t]he underlying notion of all the metaphorical expressions included in this conceptual mapping [that of MENSTRUATION IS A PERIOD] is based on the fact that a period and the act of seeing the salient colour red or darkish red are temporary and therefore, the target domain is conceptualized as a temporary event" (p. 167). Evidently, the embodied experience of menstruation as a cyclical event, one that takes place monthly and that lasts for a short period of time, a few days, and then stops, is the reason behind this focus on time. Following this conceptualisation, menstruation becomes a period in the month that comes and goes, a cyclical routine, a habit of the body.

In fact, the embodied experience at the root of the conceptualisation of menstruation as a *period* and as a recurring, temporary event might run deeper than simply associating certain salient features like blood and colour to this critical period of time. As explained earlier, it has now become the understanding that menstruators seem to be going about their daily lives with monthly intervals characterised not only by menstrual fluid, but also by potentially excruciating levels of pain, and thus everything else that would accompany this sort of pain in terms of mental health, mood, and overall physical health (See Section 7.2.1). There have been numerous studies discussing how pre-existing conditions deteriorate before and/or during the menstrual cycle, such as in patients with asthma whose airway inflammations worsen (Oguzulgen, Turktas, & Erbas, 2002),

and in otherwise periodontally healthy menstruators who report increased "gingival inflammation and discomfort associated with their menstrual cycle" (Machtei, Mahler, Sanduri, and Peled, 2004), and in patients suffering emotional symptoms and gastrointestinal symptoms which tend to occur "disproportionately more frequently with depressive or anxious emotional symptoms than when those were not present, both prior to and during menses" (Bernstein, Graff, Avery, et al., 2014). Moreover, Ozgocer, Ucar, and Yildiz (2016) find that cortisol awakening response is blunted during the menstrual period, which suggests that the cortisol hormone might have a role in regulating the cycle that is specific to the different phases. They also report that "premenstrual symptoms, including pain, were more severe when ovarian steroid levels reduced (i.e., menses and the premenstrual phase)" (ibid). Considering this research, menstruation is an event that affects, cyclically, the entirety of the body in various ways, and that more effort should have been invested in researching these ways further, and under one common umbrella. A 2018 study accomplishes this by simply asking the question of whether normative female health is actually cyclical and argues that a better understanding of "females' evolved reproductive system is foundational" (Alvergne and Tabor, 2018). Upon reviewing the growing body of evidence on the implications of the menstrual cycle regulation of the immune system, the authors conclude:

"Given the modulation of inflammatory patterns imposed by the menstrual cycle on the body, we argue that female health is best conceptualized as cyclical because symptoms and susceptibility to infection are expressed differently across the phases of the cycle, and women with different cycling life-histories vary in their susceptibility to and experience of diseases. Further, we contend that acknowledging the cyclical nature of female immunity in menstruating species might shed new light on behaviour, sex-specific immunity, and the evolution of pathogen virulence" (ibid).

There are considerations and implications much more complex than observing dark red fluid for a temporary time during the month that underpin the cyclical embodied experience of the menses. While it is true that not all menstruators will have the same levels of inflammatory responses and patterns during their cycle, nor the same sensitivity to changes that are slighter than others, the cyclicity of whatever is felt, whether it is the pain, the bloody fluid, the mood changes, the fatigue, and other aspects (outlined in more detail in the Chapter 7), remains central to their broader health, and to their experiential menstrual life.

Therefore, the conceptual metaphor MENSTRUATION IS A PERIOD articulated by Gathigia, Orwenjo and Ndung'u (2018) and their explanation for the inclusion of all the phrases and terms that refer to a specific time or period, to a temporary event, within this conceptual metaphor provides an appropriate framework for the current study's data. It is also in agreement with the various accounts regarding the status of the term *period* by the participants of this study. In fact, it could be argued that general HEALTH IS A CYCLE is a conceptual metaphor that would constitute a broader umbrella encompassing menstrual metaphors like MENSTRUATION IS A PERIOD since the actual menstrual event is one period of the monthly cycle. As such, these could potentially be collapsed in the conceptual metaphor of MENSTRUATION IS A PERIOD OF THE HEALTH CYCLE.

6.4.2 The "habit" and the "month's due"

Even though *period* is the widely accepted name for it, there are still many other metaphorical ways that refer to the menstrual event, or the time surrounding and characterising it. As Table 12 shows above, expressions relating to the month, the week, and the days during which menstruation is happening also constitute a significant part of the data analysed, along with those terms and phrases pertaining to any general time and the specific term of "habit." As previously explained, many participants reject the need to use any language other than what they think is the most direct in order to challenge the still existing taboo; however, many others also choose to use all sorts of expressions around the term *period* or its counterparts, be it by necessity, by simply wanting peace of mind and being able to talk about something personal without controversy, or by sheer playfulness, humour, and relatability (more in Section 7.5). Furthermore, perhaps the downside of the term *period* becoming so popular within the wider social context is the fact that it becomes entangled with all the other codes associated with menstruation, particularly those of girlhood and womanhood.

Having other options becomes vital in some cases. A non-binary respondent shared: "for example, I use 'shark week' because it alleviates the gender dysphoria," while another explained: "I feel like people don't like to use the term 'periods' or 'menstruation' because it's often something we're embarrassed about for whatever reason. Using expressions makes it seem less serious, so it probably helps people get over how awkward it is." The respondents, after being asked to

list the expressions that they use themselves as well as those they hear around them, were asked to explain why such expressions are used. These are, to the best of their knowledge, the primary functions of these various metaphorical menstrual expressions. Many are the participants sharing that their experience of talking about menstruation in a public space and sometimes in a private one, is one of awkwardness, of being uncomfortable and of being extremely aware and wary of making the other person uncomfortable, of feeling watched and exposed, of gender dysphoria, and of shame and restriction (discussed more in the subsequent chapter). Many are those who wonder why it is so difficult to simply speak about their menses, or not talk about them. Both overtly sharing and keeping it to oneself are often seen as either acts of socio-political defiance or as shows of compliance with the general order that tells them to be quiet and to keep it hidden (see Section 7.2.3). While it is true that participants have expressed their desire to do both of these, many others have also raised the unfairness of it all and stated that they simply want to exist and talk or not about it freely, without inheriting one label or another for doing it one way or another, or not doing it at all. Perhaps this is the key role of metaphorical expressions.

It has been previously shown that euphemistic language is often used as a way to talk around an issue that is deemed taboo in a specific social context (see Section 3.2). While there is no denying that this is the case in many ways regarding the issue of menstruation in the social context, the respondents' candid thoughts and opinions raise the real possibility that the metaphoricity of some expressions provides a middle ground — a middle ground where one can speak or not about their menses, share as little or as much as they wish, in a way that accomplishes their wishes and goals. For instance, the previously quoted participant who shared they prefer referring to it as "shark week" had no problem calling it their "period" as well, yet still prefers another expression that accomplishes the communicative goal while helping in alleviating their dysphoria. Another participant's explanation is very apt in summarising that such expressions can be used because they "do not give much away. I guess depending on who you are talking more (sic) you say more moderate or intense things." There are degrees, both in how much information is shared, and how graphic the imagery is going to be. In both of these cases, particularly in the latter, relying on metaphorical language is useful to the communicator because it proves them with a wide array of options to choose from

so that their words are perfectly tailored to their liking and to reflect exactly what they are experiencing.

For instance, among the 89 instances of expressions pertaining to the general time tag of 'month,' there are clear degrees of how much information is conveyed, and how graphic the experience is. The popular that time of the month seems fairly moderate for some and is deemed too much or too little for others. Some might say it is "[Taa a'chahr - of the month], that it is 7a9 shhar [""] - the month's due], or that they have their lunes (j'ai mes lunes) [moons - I have my moons], while some others will say it is their monthly visitor, monthlies, the monthly thing or the monthly curse. Similarly, the time tag of 'week', 'days', and 'general time' all exhibit similar gradation, with more imagery available in examples such as magic week, lady week, Erdbeerwoche [strawberry week], red week, bad week, shark week, death week, and hell week, as well as in instances such as Tage [days], these days, критические дни [kriticheskiye dni - critical days], difficult days, red days, moon time, lady time, and special times.

Additionally, a particularity of the native speakers of Arabic and its dialect seems to be the term habit, whether it is the monthly habit or simply the habit [العادة] al-aada], as this appeared in no other language. The origin of this expression can be traced to the Arabic العادة الشَّهريَّة [al-aada a-chahriya - the monthly habit] which is one of the commonly accepted names for حيثُ المرأة [hayd al mar'a - woman's menstruation] according to the Arabic dictionary Al-maany³¹. Finally, and perhaps capturing the essence of the use of such metaphorical expressions and their 'middle ground' quality is the earlier discussed example of vernis في الوقت لى ندير فيه ال [fi al-waqt li ndir fih el-vernis]. This instance is an example of metaphorical language that is tailored to the needs of the speaker. The respondent who shared this expression is a practising Muslim woman, so it is her lived experience that during her menstruation, she is relieved of her religious duty of daily prayers, and therefore can freely wear nail polish. Nail polish is typically avoided as one must wash before every prayer and it can become a hassle to remove it and reapply it for every single prayer of the day. By choosing to communicate her menstrual status in this way, the respondent can accomplish any number of goals. She can share private information in a rather mild manner, allowing her to talk about her

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³¹ www.almaany.com/ar/dict/ar-ar/العادة/

menses with a degree of privacy while communicating information that only a specific population will understand. This specific population includes people who have intimate knowledge of Islam and praying, who have an interest in wearing nail varnish, and who potentially also know about the workings of the menstrual event within those conditions.

Because these time-related metaphorical expressions with their variations in degrees, in specific time tags and in imagery, are all rooted in the embodied experience of menstruation as a monthly event and how it is perceived and felt during this time, many of them do seem to fall under the same overarching metaphor of MENSTRUATION IS A PERIOD. Still, the smaller components relate to a specific time, a few days, a week, and an overall specific or critical time in the month, so the previous conceptual metaphor could perhaps be articulated in a better, more comprehensive way as MENSTRUATION IS A PERIOD OF TIME. Moreover, the particular metaphorical expression of *habit* found primarily in the Arabic sample of the present dataset could also serve to encompass more aspects of the temporality of menstruation. A habit in English is defined in the Merriam-Webster dictionary³² as "a settled tendency or usual manner of behavior," as "an acquired mode of behavior that has become nearly or completely involuntary," and as "a behavior pattern acquired by frequent repetition or physiologic exposure that shows itself in regularity or increased facility of performance." The examples given respectively for all three definitions are the habit of going on a morning walk, the forced habit of waking up early, and "the daily bowel habit." The menstrual event, as it has been explored in the previous chapters and sections, is an event that is influenced by the many contexts of life, that is yet a bodily physiological process, but one that is constantly the subject of re-negotiations because it is scrutinised yet ignored, and one that is bound by a time constraint during which certain behaviours take place because of the biopsychosocial particularities of the event itself. Therefore, borrowing from those definitions, it can be argued that menstruation can be conceptualised as a habit of the body, one that is a settled, temporal, repeated behaviour pattern that is quite involuntary. The conceptual metaphor of MENSTRUATION IS A HABIT does exist and

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³² https://www.merriam-webster.com/

could encompass many metaphorical expressions pertaining to time and to various behaviours.

6.5 Conclusion

Menstrual language, especially its metaphoricity, can tell us much about the embodied and the social experience of menstruation. Through the in-depth analysis of the first two and perhaps more representative characteristics of *blood* and *time*, both in their literal and more imaged meanings and representations, the various pieces that make up the larger picture of the menstrual event start coming together. Certainly, while everyone knows, or at least can guess, that menstruation is, in the barest of senses, a matter of recurring blood, there is still more to it than that, particularly when considering that this regular bleeding hardly takes place in complete isolation from the wider contexts of society, of culture, of politics, of gendered realities, and of language.

The discussion in this chapter has illustrated the various facets of the complexity of the menstrual event within its representations as blood and time, while exhibiting that, what may appear as purely literal language can in fact have deeply entrenched ties in the metaphorical. After all, both blood and time are concepts that have tremendous implications for human life and have thus constituted notorious case studies for the metaphorical potential of language and its pervasiveness in everyday life. This chapter has answered research questions 3 and 4 more fully by discussing the embodied realities of recurring bleeding as shared by participants and as they relate to the conceptual domains of blood and time, while working to constantly contextualise them and anchor them in the body of previous literature. Indeed, in the first section, the materiality of the blood was explored in depth, further uncovering that, beyond the literal bloody in "it's about bloody time", there are landscapes of nature, seas and rivers, pictures of a mystical universe, rituals of purification of mind and body, depictions of life giving parts and processes, conflations of the sexual and the gendered corporeal envelopes and their abilities, material requirements of protection from leakage and shame, and scenes of horror and murder. The implications of the blood, whether it flows out and signals death and danger, or stays in and means life, have been made clear throughout this section. Time, expectedly, proved to be just as productive a domain, since this bloody affair is a matter of days, of weeks, and of

months. In fact, its temporality, both its chronicity and cyclicality, is so pervasive that it becomes a cycle, and a habit of the body.

Since the most fundamental question of this research project is to uncover how menstruation is conceptualised metaphorically, this chapter has also begun answering this question as regards the concepts of *blood* and *time* and has successfully illustrated the existing metaphor-based euphemisms, as well as the overarching conceptual metaphors. We can finally speak about the menstrual event in terms of other conceptual domains, notably in the form of the conceptual metaphors of MENSTRUATION IS A PART OF NATURE, or of MENSTRUATION IS A NATURAL PART OF LIFE, MENSTRUATION IS SOMETHING DIRTY, or of MENSTRUATION IS UPKEEP, MENSTRUATION IS PURIFICATION, MENSTRUATION IS A PERIOD OF TIME, or of MENSTRUATION IS A PERIOD OF THE HEALTH CYCLE, and finally of MENSTRUATION IS A HABIT.

7. Thinking, talking, and embodying menstruation, part 2 — *It, the cursed red death*

7.1 Introduction

Further scrutinising the instances of the euphemistic and the metaphorical language surrounding the menstrual event as it appeared within the data, this chapter picks up the discussion of those instances that reflect an appreciative language, and those that refer to the more metaphorical domains identified in the earlier outlines of the classification. Previously, the domains of blood and time, arguably the two most distinctive features of menstruation for all, have been discussed first because of this, but also on the ground that, experientially, they would 'naturally' take precedence. Yet, the participants in this study showed us otherwise as they referred more to their bodily pains and mental strains than to their bloody periods.

This chapter serves to highlight how crucially important it is to listen to what menstruators have to say, and to take that as a primary guideline going forward, through uncovering further the conceptual metaphors underlying the fundamental understanding of menstruation. By doing so, this chapter also further addresses the most essential question of this research project, which concerns itself with how menstruation is construed and conceptualised metaphorically. In this dataset, menstruation seems to be predominantly conceptualised as suffering, as visitors, and as the colour red, and this latter domain proves to be rich in metaphoric blends. In addition, menstruation is also further construed as a blessing, as a break, and spoken about with humour and creativity particular to the various rarely included communities of trans individuals and Arabic speakers.

Such conceptualisations not only reflect the interactions of the social, the cultural, the political, and the embodied aspects of the menstrual event, but also showcase the place of agency that menstruators have carved out for themselves through their metaphorical language. This is more evident when it comes to negotiating concepts and experiences when they become unacceptable, abject, and taboo. As it examines these interactions and continuous negotiations, this chapter also finishes comprehensively answering research questions 3 and 4.

7.2 Appreciation and behaviour

The semantic category of 'appreciation and behaviour' encompasses expressions with a broader sense of, as Sveen (2016, p.151) puts it, "antipathy/sympathy" towards the menstrual event. This is by far the largest semantic category identified within the present dataset. Despite the fact that the bloodiness and the temporality of the menstrual event are the two most commonly known aspects about it, and to some extent its most defining features, it is nonetheless the evaluative language and the behavioural patterns tied to menstruation that dominate the figures of this study. As previously pointed out, on account of this event being a material reality to many people, one that is bodily, mentally, and socially experienced, menstruators and non-menstruators alike are likely to have specific feelings about it, to form opinions, to adopt attitudes, and to express those through their everyday language. This category includes examples that denote feelings of judgement, or, more generally, a descriptive appreciation of menstruation such as the curse, bad week, and bad time. Indeed, in her own classification of collected menstrual language, Newton (2016) identifies groupings pertaining specifically to descriptive terms, behaviours, part of life, biblical terms, and horror and torture. Many of these categories have been grouped under the same title of appreciation as they are, in fact, either literal judgements passed by the participants, or a euphemistic, metaphorical, or dysphemic description of the emotions, thoughts, and experiences that stem from the menstrual experience.

Initially, most of the language within this category seems to denote a clear disdain or "antipathy" (Allan & Burridge, 2006; Sveen, 2016) towards the menstrual event, expressed in prominent negative terms and exaggerated with hyperbolic metaphors and dysphemistic expressions. Upon being asked to write the words that come to mind when thinking about menstruation, most respondents replied with hurts, pain or a variant of it across all languages. Typically, the highlighted painful aspect is accompanied by a few other physical and emotional symptoms such as bad cramps, mood swings, depression and anxiety, bloating, and other expressions denoting physical and emotional discomfort, even suffering. The lived physical experience is debilitating for some, unpleasant, frustrating, and unfair for others. In addition, some trans and non-binary participants stated that they experience dysphoria and are "generally grossed out by it," some feeling suicidal.

Many respondents also made sure to point out the general social view of menstruation with expressions such as *shame* and its French equivalent *honte*, *taboo*, *stigma*, *something to be ashamed of*, *embarrassment*, and "awkward, gross, and inappropriate as a conversation topic." Given the participants' bodily experiences of the menstrual event and what it entails, it is understandable that the majority of the literal and the euphemistic expressions in this category seem to tend towards a more negative outlook, and that menstruators would state that they "hate thinking about and then having to deal with the experience."

Despite expressing a sometimes-extreme antagonistic stance towards menstruation, respondents still acknowledged the better aspects of this experience. Some specifically mentioned their neutral attitudes through their language, stating that "it's really just one of those things" or that it is "a natural part of life." Others expressed a more understanding, even affirmative disposition towards menstruation with expressions such as a time for self-care, a good indicator of general health, normal and healthy for a cisgender woman, happy (because it is a sign of good health), mercy, peace, etc. The complexity of the menstrual event is reflected in these expressions, perhaps more so in one respondent's example of a necessary evil. One more layer of complexity is added when considering the thoughts and expressions provided by participants who are experiencing menopause. While some expressed happiness only at the thought that they no longer menstruate, others shared that in addition to being happy to leave this experience behind, it also felt as if there was "something wrong with [their] body" and that they were ageing and "losing [their] youth."

Consequently, since this single category exhibits more complexity than it would initially suggest, it is worth examining each expression more in depth in order to not only attempt to fully capture the intricacies of menstrual language, but also to discover potential patterns. Table 12 below illustrates the sub-themes identified within the overarching category of 'appreciation and behaviour' along with their absolute frequencies in each of the most frequent languages recorded in this study. The results do support the initial overview of the nature of the descriptive and appreciative language surrounding menstruation. The themes with the most instances appear to be those of 'physical suffering and pain,' 'appreciation in negative terms,' and 'emotional and mental suffering.' Those results are consistent with the findings of previous research and are also consistent

with the long-standing history of menstruation as an unpleasant experience, an unsavoury topic, and a source of harm and social stigma, as outlined throughout Chapters 2 and 3.

	Overall	Arabic	English	French	German
Physical suffering and 'pain'	143	4	134	2	3
Appreciation in negative terms	114	2	94	15	3
Emotional and mental suffering	58	2	53	3	0
Appreciation in positive terms	25	0	25	0	0
Normality and nature	21	0	21	0	0
Behaviours	6	0	6	0	0
Total	367	8	333	20	6
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					375

Table 12 - Absolute frequencies of 'appreciation and behaviour' references in organised by sub-theme.

7.2.1 Suffering - "My insides are trying to kill me"

For most, the menstrual experience is a rather painful one. Ju, Jones, and Mishra (2014) place the prevalence of painful menses, known as primary dysmenorrhea³³ to up to 91% in people of reproductive age, with 2% to 29% of their population reporting severe pain. Dysmenorrhea, which translates to 'painful monthly bleeding' in Greek, or literally to "difficult menstrual flow" (Deligeoroglou, 2006), is identified as a common gynaecological concern associated with menstruation, manifesting as lower midline aching and discomfort. These symptoms do in fact vary from one menstruator to another, and can range from "lower abdominal pain, low back pain, and pain radiating to the legs" to "nausea, headache, dizziness, insomnia, anxiety/irritability, diarrhea, and depression" (Momoeda et al., 2020). The onset of menstruation, with all these physical and psychological effects, disrupts a menstruator's routine, and constitutes a somewhat major inconvenience and annoyance. One participant offered many evocative words that she associates with the menstrual event: "painful, frustrating, inconvenience, time-consuming, uncomfortable, awful." She concludes by stating that she, in

Dysmenorrhea can be categorised as two different types: Primary dysmenorrhea, which is pain caused by menstruation without any other associated condition, while secondary dysmenorrhea "refers to painful menstruation associated with underlying pathology" (Harada, 2013, p. 81), such as endometriosis.

fact, "dread[s] it" and "also hate[s] thinking about and then having to deal with the experience."

This testimonial is shared by an overwhelming majority of the participants surveyed in the present study and supported by further research surrounding the effects of dysmenorrhea. Unsal et al. (2010) report that the health-related quality of life perceptions of individuals surveyed are significantly lower due to dysmenorrheic pain. Iacovides et al. (2013) further show that severe pain correlates with a reduction in general quality of life in people with dysmenorrhea in comparison to their own pain-free phase of the menstrual cycle. One more respondent aptly finds that it is "debilitating as an experience" while another describes some of the additional effects, stating that it "wrecked both [her] sleep schedule and [her] productivity." Indeed, an Australian study surveying 1500 menstruators identifying as women found that those suffering from severe or very severe pain reported that in addition to feeling depressed, lacking energy, and feeling unable to cope, the pain also caused them to be unable to engage in their regular social and leisure activities (Weisberg, McGeehan & Fraser, 2016). It has also been shown that productivity worldwide is negatively affected by pain during menstruation, manifesting in the forms of school absenteeism, difficulties concentrating, and general negative impact on academic performance (Armour et al., 2019). Additionally, Tanaka et al. (2013) find that greater loss in work productivity correlates with reports of painful menses. Considering all these effects on the menstruator's body and daily life, it becomes understandable that the most recurring references in the data point to pain and suffering, and frame menstruation as a rather negative occurrence, one that is unpleasant, unfair, and a waste of time.

In fact, these evaluations are made starker considering further research on the effects of painful menses. John Guillebaud, professor of reproductive health at University College London, is quoted by Goldhill (2016) in a *Quartz* article reporting one particularly poignant testimony from his patients, who described their menstrual pain as "almost as bad as having a heart attack"³⁴. This description was powerful enough to shock a large number of people, especially those who are

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³⁴ https://qz.com/611774/period-pain-can-be-as-bad-as-a-heart-attack-so-why-arent-we-researching-how-to-treat-it/

not familiar with the experience of dysmenorrhea, once it reached the social media app TikTok in 2022, into realisation, questioning, and indignation at the apparent lack of interest in this quite painful phenomenon by all parties with the power to change things, particularly doctors. However, Dr Jen Gunter, OB/GYN and pain medicine physician, responded to this statement in a 2018 article on her website with her disagreement, asserting that we do, in fact, know much about menstrual pain, and that comparing these cramps with a heart attack "isn't useful or accurate"35. Patients who first shared this analogy with Professor Guillebaud could have been attempting to express their cramp pains in a way that would be fathomable by the population who do not experience it for themselves, since, as the professor told *Quartz*: "Men don't get it and it hasn't been given the centrality it should have" (2016). Dr Gunter, after explaining the specifics of menstrual pain throughout the cycle and outlining the differences between the pain provoked by a heart attack and that linked to the menstrual cycle, volunteers a comparison of her own, writing that, "if you need an analogy to describe period pain use labour [i.e. childbirth] or cutting your finger off without an anesthetic" since a "heart attack is often not painful or only mildly painful, especially for women" (2018). Regardless of what the most appropriate analogy should be, painful menstruation remains the reality of many menstruators, and it remains easily comparable to heart attacks and finger severing. Since this is the recognised level of painful experience we are operating under, one can only wonder what else in the life of an individual going through this pain is being affected for a few days every single month.

It has been demonstrated that dysmenorrhea does not only inflict physical pain and lead to perceptions of considerably lower quality of life, but it is also frequently linked to psychological distress, to behavioural changes, and to shifts in the central nervous system regarding pain empathy towards others (Tu, 2010; Preis et al.) and in brain morphology and plasticity (Vincent et al., 2011; Wang, 2021). The emotional and mental suffering experienced is evident in the responses collected, as among those were several reports of *depression and anxiety*, of experiencing mental instability, often related to body image and mood, of suffering *dysphoria*, and of feeling *suicidal*. Various psychological symptoms have

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^{35 &}lt;u>https://drjengunter.com/2018/03/02/comparing-period-cramps-with-heart-attacks-isnt-useful-or-accurate/</u>

been found to be associated with greater rates of dysmenorrhea, especially in people who suffer from endometriosis (Pope et al., 2015). Actually, in a meta-analysis of a large number of research papers, Jang and Elfenbein (2019) report that the risk of deaths by suicide, of suicide attempts, and of psychiatric admissions are all greater during menstruation. The language of menstruation, whether it is literal or metaphorical, seems to be rich in expressions that reflect pain and suffering, both physical and psychological, or that over-stresses these aspects of the experience. Some of the most poignant phrases used are such examples as: "I feel like I'm dying," "I'm going to fight with everyone," "kraht hyati" كرهت حياني - I hate my life], "the Devil's waterfall," "Scene of Texas chainsaw massacre," "My insides are trying to kill me," and "It's like being flayed with knives."

Interestingly, however, one respondent points out that there is "overexaggerated language" used when talking about how painful the experience is. Exaggeration is frequently mentioned as 'magnification' which is, alongside 'rumination' and 'helplessness,' an element of the so-called "Pain Catastrophizing Scale" (Sullivan, Bishop and Pivik, 1995). Pain catastrophising is defined as a pain cognition concerned with "lack of control and the expectation of negative outcomes related to a painful experience" (Evans et al., 2021, p. 2). Much research has been conducted using pain catastrophising in trying to understand chronic pain and to attempt to suggest better coping mechanisms, since pain catastrophising is identified as a 'maladaptive strategy.' In particular, many studies focused on menstrual pain and general chronic pelvic pain that may be associated with menstruation and found that higher levels of pain catastrophising correlate with greater pain intensity and other negative health-related outcomes in patients suffering from dysmenorrhea, as well as lesser effectiveness of over-the-counter painkillers (Walsh et al., 2003), that pain catastrophising fluctuates during the menstrual cycle (Cosic, 2013), and that pain catastrophising is an important tool in understanding a wide array of chronic conditions (McPeak et al., 2018). However, there is still no definitive understanding of the relationship between pain catastrophising and pain experience. In their recent study, Evans and colleagues (2021) report that the element of 'helplessness' is particularly significant in the sense that "only helplessness was associated with pain" (p. 7). Considering the ways in which life-long experiences with pain, especially

menstrual pain, which is cyclic yet chronic³⁶ in many ways, can have such profound impacts on any individual, it may well be that the feeling of being powerless and feeling unable to cope with this pain has primed the brain to expect greater pain and to be ready to experience it.

Certainly, more research is needed to understand the underlying mechanisms of this relationship, but in the meantime, it is clear that 'catastrophising' appears to be both a cause and a consequence of recurrent menstrual pain or dysmenorrhea (ibid). In fact, it seems to be more worthwhile to explore menstrual pain through a biopsychosocial model³⁷, as have done Faramarzi & Salmalian (2014) and Schoep and colleagues (2019), who demonstrate that biopsychosocial health is negatively affected by dysmenorrhea. Evans and colleagues (2021) helpfully point out the fact that the menstrual landscape in its entirety, as it has been depicted throughout the current study, makes it unsurprising, perhaps expected, that people who suffer from any form of dysmenorrhea feel helpless and unheard. Indeed, Professor Guillebaud, upon being asked about the indifference that many physicians exhibit towards patients complaining of painful menstruation, responded that: "I think it happens with both genders of doctor. On the one hand, men don't suffer the pain and underestimate how much it is or can be in some women. But I think some women doctors can be a bit unsympathetic because either they don't get it themselves or if they do get it, they think, 'Well I can live with it, so can my patient'" (Goldhill, 2016). Certainly, Bullo and Hearn (2021) highlight "the perceived normalization, trivialization, or disbelief of pain by medical professionals and families, and diagnosis delays" (p. 272) which can take up to 10 years (Hudelist et al., 2012) as major inducers of distress in individuals suffering from endometriosis.

Despite the heavy medicalisation of menstruation and the menstruating body, pain, real, chronic, recurring pain has yet to be acknowledged and actually treated as such rather than as mercurial symptoms. Przybylo and Fahs (2018), denounce this long-standing denial of pain, and argue for a new theorisation of menstruation as a cyclic, chronic, and severe temporal embodiment, stating: "We understand the chronicity of menstrual pain as demanding a cyclical and embodied approach to thinking about pain in the face of its medical dismissal and pathologization" (p. 208).

³⁷ Forty-five years ago, Dr Engels (1977) called for a rework of the dominant biomedical approach to disease, arguing that it is a reductionist model that sees disease as a deviation from the biological norm without taking into account not only the isolated disease but also the patient and their psychosocial contexts.

The language frequently used in menstrual pain-related research, notably the socalled "Pain Catastrophizing Scale," has been criticised on the grounds that it is "frankly sexist and pain-minimizing language" (Przybylo and Fahs, 2018, p. 213). In fact, as previously mentioned, menstrual pain has been likened to both a heart attack (Guillebaud, 2016), and labour and finger severing without anaesthesia (Gunter, 2018); so, it should have been guite evident that there is little catastrophising to begin with. Consequently, the usage of terms such as 'catastrophising' could be included within trivialisation, thus actively contributing to the distress, and negatively impacting biopsychosocial health. Because menstrual pain is such a complex phenomenon, one that sits at the crossroads of a plethora of biopsychosocial elements, it is often difficult to objectively assess it in a way that is not reductionist and that is attentive and mindful of people's lived experiences. Hence, affected individuals heavily rely on language and other nonverbal tools to better communicate this subjective experience (Munday et al., 2021). To externalise such a private experience, Lascaratou (2007) has proven that patients rely on various linguistic tools, among which we find metaphorical language (Semino, 2010). It is posited that reliance on metaphorical descriptions of pain may be used in order to elicit greater emotional and empathic responses from listeners (ibid) by attempting to provoke a form of "internal embodied simulation of pain experiences for the listener" (Munday et al., 2021, p. 2). Furthermore, it has been demonstrated that educational material articulated in the form of metaphors and stories can aid patients with chronic pain in reconceptualising this pain and understanding it better (Gallagher, McAuley and Moseley, 2013).

There are well-documented grounds for conceptual metaphor identification within the menstrual language related to pain communication and management (reviewed in Section 3.3.2), and to dysmenorrhea and other menstruation-related pain. In their investigation into the metaphorical language of pain, Munday and colleagues (2021) document several conceptual metaphors, some of which do overlap with the present data. They identify the source domains of "Causes of Physical Damage, Common Pain Experiences, Electricity, Insects, Rigidity, Bodily Misperception, and Death and Mortality" (p. 4). Considering the source domain definitions and sub-domains delineated (ibid, p. 5), the overlaps with the findings of the present study seem to be mostly within the areas of "Causes of Physical

Damage," of "Common Pain Experiences" particularly its sub-domain relating to "Childbirth and pregnancy," of "Bodily Misperception" and of "Death and Mortality." Within the domain of "causes of physical damage" are also listed additional sub-domains, some of which are relevant to the current study, particularly that of "sharp objects" (ibid). The sub-domain of "Childbirth and pregnancy" is described as "[a]spects of childbirth such as 'contractions,' or pain being 'similar to those... during labor'" (ibid) (see Section 6.3.1.2). Likewise, Bullo and Hearn (2021) uncover the conceptual metaphors of the pain specifically inflicted by endometriosis. Endometrial pain is conceptualised as "PHYSICAL PROPERTIES OF ELEMENTS, PHYSICAL DAMAGE, EXTERNAL ANIMATE AGENT CAUSING PHYSICAL DAMAGE, TRANSFORMATIVE FORCE, EXTERNAL INANIMATE ENTITY, SENSORY EXPERIENCE, ANIMATE AGENT" (p. 276). Similarly, there are noticeable intersections between these and the data in the present study, particularly within the metaphors of PHYSICAL DAMAGE, ANIMATE AGENT, and to some extent PHYSICAL PROPERTIES OF ELEMENTS and TRANSFORMATIVE FORCE. The authors describe those two latter domains respectively as perceiving pain as an "intrinsic feature that happens in its own right and is made akin to physical properties of elements..." (ibid) that have the potential to inflict physical damage, and as "a transformative force or process whereby women perceive themselves as shifting into a different location, state, or entity" (ibid). While it is undeniable that there exist clear connections between these source domains and the semantic domains identified in the course of this study, it is crucial to point out that these conceptual metaphors are first and foremost concerned with pain, be it general chronic pain or endometriosis. That being said and considering the salience of pain in the menstrual experience and its long-standing impact on biopsychosocial health and experience, such research can be illuminating when discussing the metaphorical language surrounding the whole menstrual experience. For this reason, some of the domains outlined by previous research will be discussed in sections that do not necessarily directly centre around physical suffering.

As far as the larger domain of 'appreciation and behaviour' is concerned, however, the conceptual metaphors uncovered by Bullo and Hearn (2021) and Munday et al. (2021) mainly apply to expressions of physical suffering, and to some extent, to appreciation in negative terms, but do not extend to the more positive evaluations, and not explicitly to emotional suffering and behaviour. Table 13 below demonstrates how some of the metaphorical expressions identified within

the domain of 'appreciation and behaviour' can fall under the source domains documented by previous research on pain.

Bullo and Hearn (2021)	Munday et al. (2021)	Metaphorical expressions from data		
PHYSICAL DAMAGE	Causes of Physical	lwje3 9lani ya mhaynek³8 It's like being flayed with knives		
	Damage	It's cutting me open		
DUNGIS AL PRODERTIES OF		That 'meanwhile in my motherfucking uterus' meme ³⁹		
PHYSICAL PROPERTIES OF ELEMENTS		I'm an overly inflated balloon that is		
		about to blow up		
		Half shut knife		
		the feeling that my uterus is		
		simultaneously twisting itself into a		
ANIMATE AGENT		pretzel and running itself through a paper shredder		
		my stupid uterus is doing its stupid thing		
	Padily Misparsantian	feeling like my body shouldn't do that		
	Bodily Misperception	it feels wrong		
TRANSFORMATIVE FORCE		Monthly curse		
	Death and Mortality	I feel like I'm dying		
		My insides are trying to kill me		
		Scene of Texas chainsaw massacre		
		Scène de crime dans ma culotte ⁴⁰		
		My period is killing me today!		
		Death week		

Table 13 - Organisation of metaphorical data according to source domains identified by Bullo and Hearn (2021) and Munday et al. (2021).

As previously highlighted, it is useful to acknowledge that where Bullo and Hearn (2021) write about an animate agent, for instance, they are in fact writing about pain being perceived in terms of an animate agent; whereas the expressions within this dataset have all been articulated by respondents with menstruation in mind. In this case, participants were most likely responding while operating under the metonymic understanding of menstruation as its particularly significant attribute of pain. It is menstruation, or menstrual pain, that is "cutting open," that is

³⁸ "lewje3 9lani ya mhaynek" is transliterated Algerian dialectal Arabic for لوجاع قلاني يا محاينك, itself signifying a rather emphasised expression of the sensation of being "literally fried" by the pain felt.

³⁹ This is a popular meme that is typically made up of a background picture depicting a scene of war or gruesome battle, alongside the text "Meanwhile, in my motherfucking uterus" written in big block letters across the image.

⁴⁰ "Crime scene in my pants" in French.

simulating all the violence and bloodshed of warring battle within the uterus, that is dooming and *cursing* the person who experiences it, and that is attempting to *kill* and causing *bloody massacres* and *death* (see Section 6.3 for more on the bloody imagery). There is also ground for expressions being affiliated to more than one domain. For instance, "it's cutting me open" is not only a conceptualisation of MENSTRUAL PAIN AS PHYSICAL DAMAGE BY SHARP OBJECT, but also as an ANIMATE AGENT doing the cutting and the killing as well in "my period is killing me today!"

There is, however, little explicit basis within these domains to include expressions such as insides faking (sic) out, logistical nightmare, disaster zone, blood monster, necessary evil, hell times, the gates of hell, and the devil's waterfall. Even if there can be a dimension of implicit pain expressed in words like nightmare, disaster, monster, evil, hell, and devil, it remains difficult to fit those phrases under the identified source domains. Regardless, this implicit expression of a sort of prolonged suffering which is characteristic of depictions of hell, seems to be more denoting of mental rather than physical suffering. In fact, when searching the previously mentioned keywords in the Historical Thesaurus, there are common semantic categories that appear, notably that of "Suffer mental pain" (02.04.11 vt.) which appears in all word searches. This is consistent with the earlier discussion of the various areas of affliction related to the menstrual event. Consequently, and considering the previously highlighted salience of pain and the possible metonymic relationship between menstruation and pain in the minds of participants, it could be speculated that there exists a conceptual metaphor that articulates MENSTRUATION AS PHYSICAL AND MENTAL SUFFERING. Within this domain of physical and mental suffering, other sub-domains would also be found, notably those of PHYSICAL SUFFERING AND DEATH, and of MENTAL AND EMOTIONAL SUFFERING.

7.2.2 Blessing - "A rewarding experience"

At the same time, within the present dataset, expressions of both suffering and negative stance appear alongside expressions of more positive dispositions towards menstruation, many times originating from the same participant. As expected, given the long history and the varied embodied experiences of the menstrual event, it remains a decisively complex phenomenon. In the previous chapter, instances of understanding, indeed affirmation, could also be identified, notably in the conceptualisations of MENSTRUATION AS A PART OF NATURE and of

MENSTRUATION IS A NATURAL PART OF LIFE, which intersect with themes within this present section. It is impossible to discuss the suffering without further exploring what sort of optimism, perhaps joy and hopefulness, may exist and what picture they may paint. In fact, as early as 1987, Delaney, Lupton, & Toth were wondering what changes might appear in results if researchers used an investigative tool that would focus on measuring positivity, which led to the playful development of the Menstrual Joy Questionnaire (MJQ). This questionnaire lists 10 positive items: "high spirits, increased sexual desire, vibrant activity, revolutionary zeal, intense concentration, feelings of affection, self-confidence, sense of euphoria, creativity, and feelings of power" (Chrisler et al., 1994). Chrisler and colleagues (ibid) further add that, even though the MJQ was not intended to be actually used in research, they still wished to see the possible results, and did discover that such a questionnaire may have an impact on attitudes towards the menstrual event and on symptom reporting (p. 380). Importantly, the authors emphasise that while the positive aspects were accentuated, the negative elements were not eliminated in the slightest, thus proving that rather than subject bias, this is in fact a consequence of suggesting that menstruation "could be joyful" (ibid, p. 382). Since then, there has been more research on positive menstrual experiences and attitudes (Aubeeluck & Maguire, 2002; King & Ussher, 2013) along with the development of menstrual activism (Bobel, 2010) and the Period Positive movement (Quint, 2006).

Going further, Fahs (2020) investigates both distinctively negative and positive experiences with menstruation and finds that there are three major themes in the positive experiences: "(1) Evidence of not being pregnant; (2) Body as normal/intuitive; and (3) Menstruation as tolerable" (p. 6). Interestingly, those are themes that are equally present in the findings of the current study, and the aspect of not being pregnant is often phrased as a positive event in the data (see Section 6.3.1.2). The remaining two themes are nevertheless quite salient within this semantic domain as shown in Table 14 below. As stated earlier, most of these expressions that conceptualise menstruation as a rather positive event, whether because it is a natural process or because it is tolerable, have been shared by participants who also provided many of the phrases related to pain and unpleasantness. This dichotomy is further complicated by a domain that is absent

from Fahs' (2020) findings, but which is found in the present study: active affirmation in expressions such as "I am blessed to have it."

Fahs (2020)	Metaphorical expressions from data		
	It's a normal biological phenomenon		
	It's part of nature		
	an interesting natural process		
	A natural process as part of my life		
	It's just a natural part of my life and		
	body		
	I see it as something natural		
	A natural physiological (sic) phenomenon		
	I am happy as every time I menstruate, I		
Body as normal/intuitive	know I am healthy		
Josephan meaners	Suffering from [not having] it		
	[Not having it] something's wrong with		
	my body		
	Normal and healthy for a cis woman		
	It is a normal part of my experience and		
	biology		
	A sign of being healthy		
	Good indicator of your overall health		
	The 'rejuvenating' feeling that		
	menstruation causes me to have.		
	Not a hindrance to my life		
	I have a better experience than most		
	It's not particularly bothersome or		
Menstruation as tolerable	painful		
menter action as coverable	It's something that happens and needs to		
	happen whether I like it or not		
	Necessary evil		
	It's really just one of those things.		

Table 14 - Organisation of metaphorical data according to positive themes identified by Fahs (2020).

The fact that the negative feelings far outweigh the positive ones despite the participants being asked explicitly about recalling any positive associations led Fahs (2020) to conclude that "women do not yet have a schema for imagining menstruation in positive ways, perhaps as a sign of health, a way of connecting to their body, a symbol of femininity, a marker of time or cycles, or as a mechanism for defiance against norms of silence and secrecy about women's bodily functions" (p. 10). In contrast, the present study did not make use of a prime to think in either positive or negative ways; the only prime used was to prompt metaphorical conceptualisations in relation to menstruation. Despite this lack of priming, respondents still shared such associations with the menstrual event as *mercy*,

freedom, and happy, as well as more euphemistic phrases such as "a painful rewarding experience," "Magic week," "It's a blessing from the Almighty," "I am blessed to have it," and "Being blessed, it is a bless (sic)" Consequently, potential source domains could be apparent here as menstruators seem to conceptualise MENSTRUATION AS A HEALTH INDICATOR, AS A NORMAL PART OF LIFE, and AS A BLESSING.

The juxtaposition of these domains and those identified earlier speaks of a variety of blended concepts framing the menstrual experience. In fact, while the broader semantic category of 'appreciation and behaviour' has successfully contained all manner of expressions pertaining to the participants' own evaluations and experiences of their menses, it may have also served to encompass the wide attribute of pain and frame conceptual metaphors better in light of it. Indeed, although menstrual physicality and pain seem to have such a central importance in grounding respondents' attitudes and thus predicting to a certain extent some of their metaphorical linguistic choices, it firmly remains only one of the many facets of the menstrual experience as a whole. There is certainly a measure of PHYSICAL AND MENTAL SUFFERING, but menstruation is also a HEALTH INDICATOR, A NORMAL PART OF LIFE, and A BLESSING. For this reason, there appears to be a need for an overarching conceptual metaphor that would capture those seemingly polarised aspects: MENSTRUATION IS BLESSING AND TORMENT. The terms chosen being blessing as defined by the Merriam-Webster dictionary: "a thing conducive to happiness or welfare" and torment: "extreme pain or anguish of body or mind" (Merriam-Webster.com dictionary), both of which appear quite appropriate.

7.2.3 Performing- "I was taught to hide the fact that I was on my period"

Finally, Fahs (2020) further discusses this apparent emotional divide in negative and positive responses as she finds more passionate expressions in the former and more of a detached attitude in the latter. She argues that the physical symptoms that accompany the menstrual experience act as a sort of "stand-in" for the negativity frequently associated with it, anchoring it in a physicality that makes it indisputably a negative experience. Considering the intrinsically metaphorical attribute of language, indeed of menstrual language, and given the salience of embodiment in conceptualisations of things in the world, it is in fact understandable that the framing of menstruation would be mainly lodged in a

casing of negativity on account of the unpleasantness it brings with it, whether it is in the form of physical pain, emotional distress, or social stigma and shame. In fact, Foucault (1995) argues that the construction of the body is the product of the cultural and societal environment the body exists in. The power structures, both explicit and implicit ones, at play within society do apply to the body, and actively "mark it, train it, torture it, force it to carry out tasks, to perform ceremonies, to emit signs" (ibid, p. 25). 32% of the participants who have had any kind of experience with menstruation would qualify it as a "not enjoyable" experience, despite having two more neutral options to choose from ("fine" and "neutral").

Perhaps further illustrating Foucault's (1995) argument, respondents in the current project were asked whether they have ever actively *behaved* in a way that either hides the fact that their bodies are currently menstruating or that, on the contrary, signals it explicitly. The responses varied: while 36% of participants who have had any kind of first-hand experience with menstruation stated that, "Yes, sometimes" they do hide the fact that they are menstruating, and another 25% said that they did so in the past; the majority (70%) stated that they never do the inverse, although it is worth mentioning that the remaining 30% of respondents pointed out that they have done so in the past, and that they still do it rarely or sometimes. These questions were also coupled with the linguistic aspect, and participants were thus also asked whether they ever *say* that they are not menstruating even though they, in fact, are; a question to which the overwhelming majority of 70% responded, "No, never."

Most participants offered insights into their motivations for acting a certain way or saying a certain thing depending on the menstrual situation. For instance, one respondent who has actively hidden their menstrual status in the past explains that it might have been "because of some sort of stigma that is still around it, I had to hide it around my male family members because I was told to do so, but I was never really told why." This is a common experience among the participants in this study; most are aware of a stigma, a taboo, a social obligation to keep it hidden and secret because it is framed as an intimate and personal event. Further illustrating these points, with an added dimension of religious obligation, a participant recalls,

back in the days when I was a high school student, we had to hide as much as we can that we had our periods. I was always terrified that my clothes would get stained, and everybody would know. When I was in pain and my dad innocently asked what was wrong with me, I'd just say stomach-ache. In Ramadan, when we were allowed to break our fast during our period, we preferred to hide from our brothers and fathers because it was not acceptable to do so in front of them even if it is a right given by our own religion.

Another respondent shares a similar experience, highlighting the embarrassment she felt she would have to endure: "Because it is considered as an embarrassing thing in my culture. For example, when I have to stop fasting during menstruation in Ramadan, I do not want to show to anyone that I am not fasting during that time because they'll know that I am menstruating, which is really embarrassing." For some, as previously explored, the menstrual event is sometimes heavily coded as an exclusively feminine experience that is something personal and intimate, and that should never be mentioned in front of men who do not experience it and do not have to acknowledge it. Yet another respondent discloses her past experience in school, and how feelings of embarrassment were so pervasive and stemmed from the embodiment of the menstrual event:

When I first started my period I was very embarrassed because I knew (thought) most of my friends hadn't so I didn't want them to know and think I was strange. I used to peel the back of sanitary pads very slowly and carefully in public toilets, especially at school and hide my pads in my bag or in pocket for fear of anyone finding out. It came from embarrassment about my body, feeling that it was unnatural, that there was something wrong with my body for behaving in this way, that it was something that others shouldn't know about and shouldn't be detectable (via leaks or smells for example).

Understandably, participants seem to be left with feelings of shame and embarrassment, as one respondent stated, "I was ashamed of that" and another that she "thought [she] would make people feel uncomfortable." They emphasise their confusion over the reasons behind these learned behaviours and state that this is simply what they were taught as children and this is the way everyone else, notably the older women, in their surroundings acted and talked.

Despite these behaviours and experiences being numerous in the current data, it is not to say that they are the only explanations for menstruators choosing to behave accordingly to hide their menstrual status. In fact, even if the social

powers at play primed menstruators to 'emit' certain signals and act in certain ways in particular situations since childhood, participants are still aware of these and are actively thinking about them and questioning them constantly. One participant shares: "In the past, I was taught to hide the fact that I was on my period, but now I don't care and I want people around me and other women to feel free to talk about it instead of hiding something that happens every month or so" and another also states that "I was taught to hide it and never speak [about] period around men in the family especially, I grew out of that [though], thankfully." Menstruators are not only leaving behind transmitted ideas of shame and secrecy, but also actively challenging or simply side-stepping stereotypes by reappropriating the fact of hiding menses. One respondent exemplifies this when she shares that it is "because my mum thinks she's won the argument if I'm on my period e.g. if I yell about something she's like "well someone's due on" and it pisses me off so I lie," another discloses that it is done "in fear that someone may make a remark about what I say means I'm on my period in a misogynistic way," while one more participant explained: "I don't want to be seen as less capable or weaker by people who don't understand how periods affect people." Menstruators are aware of the various social implications accompanying the menstrual event and are navigating the bodily experience privately without necessarily censoring themselves. They are also navigating those social associations in ways that allow them to carry out their daily lives with as few disruptions and unwanted outside intrusions as possible. A participant aptly sums up with:

When I was younger, I would be very secretive about sanitary pads and tampons, e.g. trying to make sure nobody saw them as I take them out my bag to go to the bathroom, especially with men. But nowadays I don't bother. I don't should (sic) from the rooftops that I have my period, but I'll take what I need out of my bag in the open air now without caring if someone notices or not.

Yet, there are instances where menstruators do 'shout from the rooftops' that they are menstruating to accomplish specific goals. Overwhelmingly, the main reason seems to be to avoid a particular activity, be it a social gathering or party, a work activity or meeting, a physical activity such as a physical education class, swimming, or sexual activity with a partner, or a religious activity such as praying. One respondent, however, shared that it was because her "period started later than usual so pretended it had already started when friends spoke about theirs," as a way not to be excluded and an outsider to her own group of friends who all

seemed bonded through a common experience. This is one more way in which menstruators negotiate their daily lives with their menses. In many ways, the participants in the current study are aware of certain activities they are usually prohibited from performing, or simply cannot engage in due to their menstrual status. Because of this knowledge, they are also able to flip the script and use their menstrual status, whatever it may or may not be at that particular moment, to their own advantage when necessary. Perhaps this ability to behave in a certain way and to be virtually completely unquestioned is another contributing factor to the positive associations with menstruation previously explored, notably mentions to relief, freedom, and blessing from the Almighty (since, in Islam, it is a Godgiven break from certain religious activities such as fasting and praying). More interesting is the fact that many participants who previously said that they do behave to keep their menstrual status hidden because it is entirely personal and no one needs to know it, also figure among those who sometimes explicitly cite it as a justification to get out of an activity they do not wish to engage in. This only constitutes further proof that the menstrual event is a complex bodily experience that menstruators have to negotiate every day, whether it is by hiding it in order to be taken seriously, to make themselves as comfortable as possible in society, and to simply avoid unnecessary confrontation, or by signalling it when it is not happening for the purpose of getting some rest and of avoiding unwanted sexual activity or in order to challenge their surroundings. In fact, this latter negotiation is only possible because of the wider implications of menstruation that have been popularised and that exist in the common social imagination. Often, however, these implications are generalisations about the state of the menstruator and are believed to be exaggerated by said menstruator: they are in pain and fatigued, so they will be in a bad mood, cranky, angry, not very good company, they will be lacking in energy and their social or professional performance will be diminished; yet, all these symptoms are subject to the denial and minimising in medical contexts.

The question then begs to be asked: had menstrual pain been formally recognised by medical authorities when necessary and addressed adequately, had mental and emotional suffering been heard and validated rather than dismissed as hysteria and exaggeration, had menstruation and its pain and blood not been silenced, hidden, and eschewed, would its embodied experience still be overwhelmingly

conceptualised in negative terms? As it stands, it is clear that not only is a biopsychosocial model for approaching the physicality of menstruation crucial, but so is a framework where "menstruation allows space for recognizing pain and embracing voice, agency, and removal of the silence around menstrual experiences without necessarily enforcing that the only "non-negative" reaction to menstruation is joy" (Fahs, 2020, p. 11; see also "menstrual crankiness" (Przybylo & Fahs, 2018)). Perhaps then will it be possible to observe distinct changes in pain metaphors, and thus in the larger conceptual metaphors encompassing those.

7.2.4 Activity break, indisposition, and illness

In light of the appreciative language used to address menstruation, with all its implications for physical and mental suffering, of peace and respite, of social inconvenience, and of deliberate behavioural and linguistic changes, it is worth discussing the semantic domain of 'activity break, indisposition, and illness' within the larger domain of 'appreciation and behaviour.' Indeed, there appears to be several overlaps between the two domains, which serves to both further prove the sheer complexity of the menstrual event, and to uncover the multitude of metaphorical blends that exist in any one menstrual expression. This semantic domain encompasses expressions that pertain specifically to any activities performed or avoided because of menstruation, and to conceptualisations of the menstrual event as a sickness and as an indisposition, making this domain rather rich in euphemistic expressions. Likewise, as previously discussed, there seems to be a metonymical basis to some of the pain-related expressions, as the feature of pain or physical suffering and being somewhat ill extends to the whole state of menstruating. As such, expressions within this category include references to stomach-aches (as in j'ai mal au ventre [I have a stomach-ache]) and to more general feelings of sickness (such as feeling unwell, not on my best, I am generally sick), as well as more explicit references to indisposition and inconvenience, as in the examples: je suis indisposée, rani indisposée [both meaning I am indisposed, respectively in French and Algerian dialectal Arabic], and it's an annoyance that gets in the way.

By extension from pain, in many of the languages surveyed, the expressions provided by participants generally seem to denote, besides the discomfort

previously discussed, additional dimensions of being physically and socially inconvenienced and of having daily or beloved activities suspended. Respondents are not being able to do much, feel like they are out of service, are less free and limited, and unable to do certain loved activities such as swimming. Nevertheless, and just as was the case in the previous category, a dimension of positivity can also be observed here, notably in expressions such as having a welcome break from, for instance, praying and fasting in the case of Muslim respondents, as well as an opportunity to rest and practise self-care. Table 15 below illustrates the frequencies of all the expressions of this domain within their respective subthemes.

	Overall	Arabic	English	French	German
Inconvenience and bother	44	0	42	0	2
Activity (and) break	24	4	15	5	0
Illness and being sick	18	1	14	3	0
"indisposed"	10	2	0	8	0
Total	96	7	71	16	2

Table 15 - Absolute frequencies of 'activity break, inconvenience, and illness' references organised by sub-themes.

7.2.4.1 "It's a pain to deal with"

To be sure, the theme of inconvenience, indisposition, and sickness is a rather salient one, and is present in much of the menstrual research available to date. Joffe (1948) identifies the category of 'illness, inconvenience or disability' and explains that "where the menstruating woman is regarded as not quite up to par physically, as in the United States, *unwell*, *indisposed and sick* are polite synonyms for the catamenial state" (italics in original) (p. 181). She adds that, as of 1948, many of those words were actually more frequent in the past, as the expressions that are more up-to-date mostly highlight inconvenience over illness, as in the examples of "the *curse* and the *nuisance*" (italics in original) (ibid). Ernster (1975) further identifies the connotations of "illness, inconvenience, distress" (p. 6) in the negative references she finds in American menstrual expressions, with examples such as: "The curse. I've got the misery. Under the weather. To come sick. Being unwell. Lady troubles. A weeping womb. Bride's Barf. A tiger is stepping on my toes" (ibid). The current study indicates a similar metaphorical usage of

expressions pertaining to inconvenience, and equally reflects the higher likelihood of conceptualising menstruation as a bother rather than a strict sickness.

Just as it is a productive semantic domain in this study, it is also in Syeen's (2016) study of English and Swedish menstrual euphemisms, since she finds the most euphemistic expressions in her domain of 'indisposition' with instances such as: "There is the stomach ache, of course, which is anatomically correctly located, but also stub one's toe and hurt my ankle" and "feeling unwell, på det viset [that way], bloated, and girl flu" (p. 150). She adds, however, that the Swedish sample seems to emphasise a stronger form of discomfort more in examples like "det sjuka [the illness] or månadsgalen [monthly insanity]" when compared with "milder" English expressions such as "under the weather," (p. 151) and further contends that such Swedish expressions are rather old in contrast with the English ones which seem to keep evolving alongside popular culture. Newton (2016) also identifies a category pertaining to 'illness and inconvenience' and notes similar differences in usages and conceptualisations according to age groups. For instance, she finds that the sub-theme of "ill and variants ('ill'; 'unwell'; 'poorly week')" is not a popular one, and that "[n]o young women of school age or 18-30 gave this term" (p. 201) which might indicate a similar phenomenon to that observed by Joffe in 1948, and which frames the conceptualisation of menstruation "as an illness and affliction" as a rather older view and attitude to have (Newton, 2016, p. 201). As opposed to this sub-theme, Newton (2016) finds that expressions referring to "pain" or "painful" only appear among younger adults and explains that this sub-category "does not connote 'illness' but articulates both the physical pain and inconvenience that menstruation can cause" as in examples like "it's such a pain to have my period on holiday" (p. 201). The present study, in contrast, shows no real disparity among the age groups and their usage or recollection of expressions pertaining to sickness, although it is worth mentioning that there are slightly more participants whose first language is Arabic and its dialects and French who shared examples such as I am sick, unwell, j'ai mal au ventre [I have a stomach-ache], and feeling low in comparison to those whose first languages are English or German (6 participants speaking Arabic, Algerian dialect, and French versus 4 speaking English and 1 speaking German, with the addition of two participants whose first languages are Punjabi and Turkish). Likewise, Chiatoh and Lando (2021), who surveyed young female

university students in Cameroon, identify similar themes of 'indisposition,' 'discomfort,' and 'obligation/duty' but make no reference to a specific age or linguistic discrepancies.

In fact, in her evocatively titled *Metaphors we suffer by*, Pascaline Faure (2017) analyses metaphors used in medicine and lay medical language and argues that menstruation, much like other natural bodily functions, is "a major source for taboos" (p. 7) therefore requiring a measure of vagueness and ambiguity, and thus becoming the site of many metonymy-based metaphors, notably that of sickness, and the prominent French 'indisposition' with examples such as: "In French, a girl may say je suis indisposée (lit. "I'm indisposed") or j'ai mal au ventre (lit. "I have a stomach-ache") when she is menstruating" (italics in original) (ibid). As shown in Table 15, the French indisposée appears in the present study, and does also appear in instances of intra-sentential codeswitching in the Algerian dialect of Arabic. Such instances, alongside the earlier outlined references to sickness appearing among speakers of the Algerian dialect and French, might show that there is a linguistically motivated variation in menstrual conceptualisation, particularly that of sickness and indisposition as 'to be indisposed' is defined both in English and in French respectively as "slightly ill" (Merriam-Webster Dictionary) and "Être légèrement souffrant" [to be slightly ill] (Dictionnaire Larousse), with the added second meaning of "Être dans la période des règles, en parlant d'une femme" [lit. to be in the period of rules (meaning menstrual period), when speaking of a woman] (ibid). Chiatoh and Lando (2021), although presumably surveying menstrual euphemisms appearing in Cameroon English, record examples such as "'woman sickness/illness', 'woman crisis', 'woman headache', 'woman palaver', 'woman wahala', and 'disturbance'" within their identified thematic class of "discomfort" (p. 7) and argue that such instances "criminalise menstruation" (ibid) and suggest that there are inherently negative attitudes towards the menstrual event because to menstruate implies to endure pain and to be obligated to unsure upkeep and hygiene throughout (see Section 6.3.1.4), which becomes a "nuisance" and an inconvenience. Considering the fact that both the English and the French dictionaries mentioned earlier also include meaning "averse" and "disinclined" (Merriam-Webster Dictionary) and "incommodé" [incommoded] (Dictionnaire Larousse), the themes of illness and inconvenience

can be collapsed in some instances (such as *je suis indisposée* [I'm indisposed]), further displaying that menstrual language is rich in metaphorical blends.

7.2.4.2 The case of sexual unavailability

Many of those metaphorical expressions denoting inconvenience and illness can also serve to communicate further themes of sexual unavailability and breaks in certain activities. For instance, Chiatoh and Lando (2021) find that their thematic class pertaining to "indisposition" (p. 7) speaks more to an implied refusal or inability to engage in sexual activity rather than to a "nuisance" on the ground of physical suffering and social inconvenience. Young girls and women in Cameroon seem to talk about "'broken tap', 'broken calabash', 'broken dish', and 'broken oil bottle'" (ibid) to communicate their sexual unavailability by presumably likening their vaginas to broken taps as this image:

invokes the visual of a broken faucet with water oozing out of it in great quantities and an uncontrollable manner. When a faucet is broken, the main supply point is either identified and locked, or any other cosmetic method is used to seal it in order to prevent water from oozing out while waiting for repairs to be done. During such time, water cannot be fetched from the faucet since it is temporarily out of use. Similarly, when a girl/woman is menstruating, she uses sanitary products like tampons and pads to absorb menstrual flow throughout her period. She cannot engage in any sexual activity during this period (ibid).

Indeed, this conceptualisation of the menstruator as sexually unavailable is also observable in the earlier works of Joffe (1948) and Ernster (1975), who both record respectively expressions such as "ice-boxed⁴¹, Mickey Mouse⁴² is kaput" (Joffe,

⁴¹ To be 'ice-boxed' typically means to be rejected sexually. The current usage seems to mostly apply to "ladies" as what entries in the Urban Dictionary refer to as the "lady blue balls." There are, however, entries applying it to denied sex "especially when done by a woman to a man" (https://www.urbandictionary.com/define.php?term=ice%20box). It is unclear whether the expression was exactly the same around the 1950s.

⁴² Joffe (1948) indicates that 'Mickey Mouse' is "a current (1946-7) slang euphemism for female genitalia" (p. 184).

1948, p. 184) and "too wet to plow"⁴³ and "on the rag"⁴⁴ (Ernster, 1975, pp. 9-10). Similarly, Sveen (2016) categorises the expression "plugged up" as relating to both domains of "sanitary protection" and "sexual unavailability," with the latter encompassing references to unavailability in the form of "female body parts as out of order, often for the sake of improvement; two examples are ladytown is under construction and closed for repairs" (italics in original) (p. 151), to a certain prohibition or possible lack of sexual interest in the Swedish example of "nej inte ikväll [no, not tonight]" (italics in original) (ibid), to momentary disfunction of a body part like "stängt för helgen [closed for the weekend] or somebody poisoned the waterhole" (italics in original) (ibid), and to "the expected heteronormative counterpart and agent for the intercourse" as in killfritt i hålet [no guys in the hole], too wet to plough or blowjob week" (italics in original) (ibid). Newton (2016) records similar terms and expressions throughout her study, which she classifies under the category of "maintenance terms" since they conceptualise the body, and sometimes more specifically the vagina as undergoing repairs and are to remain shut and inaccessible for the duration of the menstrual phase. For instance, she argues that, in expressions like having the painters in or painters and decorators, the "reference is to a room or a house that cannot be used for normal purposes because it is being decorated. Here the room is representative of the vagina, which is out of use, messy, and a space which cannot be occupied, meaning 'no sex available'" (ibid, p. 196), and that, similarly, phrases such as " out of order" and "closed for maintenance" also refer to the non-functional state of the female body parts, thus signalling sexual unavailability as mandated by the sex taboo (ibid).

However, in the present study, there seems to be a distinct lack of references to the sex taboo and the sexual unavailability it dictates. The overwhelming majority of both literal and metaphorical expressions found in this semantic category refer

⁴³ Ernster (1975) quotes a male informant's explanation for the usage of the expression 'too wet to plow' and which states that: "This is a euphemistic way of saying that a girl is going through her menstrual period. When a field is soaked with water, a farmer will not plow it because dirt will not be turned over correctly; similarly, when a girl is having her period, her male should not have intercourse with her, since doing so might be an incorrect move because it would cause the girl to become pregnant" (pp. 9-10)

⁴⁴ While 'on the rag' is an expression that explicitly refers to menstrual materials, it has been identified in earlier works, notably that of Ernster (1975) as having negative connotations, as well as being associated with sexual unavailability as one male informant explains: "I couldn't fuck her because she was on the rag" (p. 10)

to the previously discussed themes of inconvenience and of illness with examples such as it is an inconvenience, logistical nightmare, women's troubles, Frauenproblem [women's problem], feeling unwell, malade [sick], I am generally sick, is a bit of a waste of time really, and a pain in the arse. Nevertheless, there are instances that could denote a certain sexual unavailability in the form of maintenance and general time off, as Newton (2016) and Sveen (2016) suggest: je suis en congé [I am on leave/I am off], days off, break, être en travaux [lit. be under works or under maintenance], and cant, im on my period (sic). In addition to these expressions that may imply a connotation of sexual unavailability, many participants (60 out of the 135 who answered the question), upon being asked whether they would consider engaging in sexual activity while menstruating or with a partner who is menstruating chose the answer 'No,' citing various reasons ranging from disgust and hygiene issues (see Section 6.3.1.4) to religious prohibitions (see Section 3.2). These two dimensions coupled together might suggest the existence of a construal pertaining to the sexual unavailability explored in previous research.

However, the data within the present study is not sufficient to make that conclusive argument, particularly because many of the participants who shared the previously mentioned expressions have also shared that they are Muslims, and thus most of these terms and phrases apply to their religious activities rather than their sexual ones. For instance, one Algerian dialect speaking respondent provides the expressions rani off, pause ou congé [I am off, on pause, or on leave/off], and clarifies that those are applicable to her religious duties of (Ramadhan/prayer). Likewise, many other respondents who also shared similar expressions all include other expressions relating to activity breaks and pauses in relation to religious duties, as in "not praying, days off, sometimes it's a welcome break" from the same participant and "an opportunity to have some rest from praying and fasting, without guilt" from another. On the other hand, yet confirming the same inconclusiveness regarding the concept of sexual unavailability within this study, one participant who shared the previous expression of "cant, im on my period (sic)" also stated that she would consider sexual intercourse "if [her] partner wanted it," which implies that this inability to do something does not necessarily include sex.

[ma nsalish - I don't pray] ما نصلیش

Certainly, the menstrual phase of the cycle, with all its physical, emotional, and social implications, can be articulated in terms of a leave of absence or an activity break other than sexual activity. In the current dataset, this specific sub-theme encompasses some particularly interesting examples of metonymy-based metaphorical blends. As discussed earlier, the fact that some respondents identify as Muslim also provides opportunities for new euphemisms and creative metaphors to emerge. For instance, a participant shares the expression Maranich nssali [I am not praying] and its French equivalent je ne fais pas la prière en ce moment [I do not pray at the moment] as a way to, as she explains it herself, "indirectly refer to it." Another participant further demonstrates this metaphorical creativity when she shares the more ambiguous expression whose understanding depends not only on the 'insider' knowledge of menstruators, but also on this knowledge within the specific context of Islam: vernis الوقت لي ندير فيه ال ffi al-waqt li ndir fih el-vernis - the time when I wear nail polish]. Not only is this an instance of codeswitching that is characteristic of the way the Algerian dialect of Arabic is now spoken by attaching the French word "vernis" [nail polish] to the rest of the dialectal sentence, but it is also an example of a creative metaphor that is the site of many metaphorical blends, as previously detailed in Chapter 6. Menstruation is conceptualised as a break from religious duties and thus, even if it is an inconvenience, it is nonetheless "sometimes a welcome 'break'" and "a chance to stop, rest, and let emotions out." As outlined in Section 7.2.3, there is a specific set of behavioural patterns that accompany the menstrual event, both in religion and outside of it.

If for some it is a God-given right to take a break and to slow down and focus on one's body and emotional state, for others, it can be a hindrance and a sign of limitations. One participant shares the previously mentioned phrase of "cant, im on my period" (sic) in this sense, accompanied by the term "limitations," further framing her usage of the expression. Because there is so much anxiety and worry about leakage, mess, and generally being exposed in public, menstruators feel like they cannot engage in certain activities, such as swimming, which a participant who is now well into menopause mentions when she shares that she "can go swimming anytime." For many, the menstrual event is conceptualised in terms of a prohibition, an inability to do something, perhaps an unwillingness to do something on account of pain or mood, and sometimes, even though it is a God-

given piece of freedom, it must still only be enjoyed within specific parameters, as men must not hear about it, as participants explained in Section 7.2.3. Therefore, the conceptualisations of menstruation as BREAK, as AN ILLNESS, and as A GENERAL INCONVENIENCE can be observed here as well. It might, however, be more productive to include the conceptual domain of ILLNESS within the earlier discussed one of PHYSICAL AND MENTAL SUFFERING as they address the similar features of the menstrual event, and to equally incorporate the conceptualisations of BREAK and INCONVENIENCE within the overarching one of BLESSING AND TORMENT as it similarly encapsulates polarised meanings and aspects of the menstrual experience.

7.3 Visitors and people

The semantic domain of 'visitors and people' is also one of the largest in the overall dataset, containing expressions that relate to a person or a visitor, sometimes unwanted. Expressions that fall under this category are common across all the languages, and constitute one of the largest domains in Arabic and its dialects. Examples vary from person to visitor, though the latter seems more common, most likely to reflect the recurring nature of menstruation. One of the most recurring English expressions, and the most frequent instance in this domain, is Aunt Flo, sometimes spelled Aunt Flow. Aunt Flo's actions are sometimes elaborated in expressions such as Aunt Flo is visiting, got a visit from Aunt Flo, Aunt Flo is in town, etc. Less popular than Aunt Flo are other names such as Aunt Irma, Tom (though this overlaps with the domain of cyclicality and time as it is an acronym for Time Of the Month), Tante Emma [Aunt Emma], Tante Caroline [Aunt Caroline], madame rouge or red lady, Aunt Mary, Moș Crăciun [Santa Claus], Andrés, خالفة الحصواء [My red aunt], خالفة الحصواء [Aicha] and خالفة الحصواء [Louisa], il marchese [the marquis], the Vikings, etc.

There are also general expressions that indicate a possible close relationship with the visitor in question without attributing them a specific proper name, such as friend, auntie, الخالة [the aunt], ضياف [guests], little sister, my visitor, les visiteurs [the visitors], etc. In many of these instances, combinations with other domains are clear and common, particularly with the domains of the colour red and the cyclicality and time, as highlighted in examples such as auntie in a red car has arrived, Santa Claus arrived last night, les anglais débarquent [the English are arriving], الهنود الحمر [the red Indians], and monthly visitor. One German-speaking

respondent shared their template of making a visitor or person-based expression, stating that it usually is "die Tante aus [Stadtname mit "rot"]" meaning 'the aunt from [city name with "red"]' which shows an awareness of the euphemistic language, as well as an active participation in coining new expressions. Table 16 below shows the frequencies of the 'visitors and people' expressions within each of this category's sub-themes, as there are clear differences between the types of visitors that participants are referring to.

	Overall	Arabic	English	French	German
Family (female) member	42	4	34	2	2
General female visitor/female name	23	6	11	6	0
General visitors & guests	16	6	7	3	0
Implied invasion	8	1	1	6	0
General male visitor/male name	2	0	2	0	0
Total	91	17	55	17	2
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					95

Table 16 - Absolute frequencies of 'visitors and people' references organised by subthemes.

In fact, this practice of personifying menstruation is long standing, and has been documented as early as 1948 by Joffe in her analysis of "the vernacular of menstruation" (1948). The names used might be different (Rachel and Sophie then, Caroline and Emma now), but the procedure of not only anthropomorphising menstruation, but also establishing a close relationship with it remains the same. Likewise, in her analysis of "American menstrual expressions," Ernster (1975) identifies a similar category that encompasses all the "[r]eferences to a female visitor, friend, relative, or other person by proper name" (p. 6). Certainly, this domain of visitation and personification can be found in most of the subsequent menstrual research and across languages, with varying degrees of creativity and ever-changing proper names and scenarios for the visitations. For instance, Newton (2016), in her category titled 'visits,' records a variety of persons visiting, notably aunts and grandmothers (sometimes further identified with names such as Hilda, Norah, Irma, Muriel, and Sally), friends (sometimes also named as Pamela), and proper names such as George, Tom, and Maureen (pp. 198-199). The two subthemes of (female) close relative and proper names are often collapsed, but not always. Sveen (2016), for instance, records examples such as "friend" and "little

sister" that are separate from proper names such as Kit, Sally, and Fanny (p. 151). Although the English, French, and German samples of the present study do exhibit the links between specific person names and relationships, the Arabic samples mentions the two names of علية [Aicha] and الويزة [Louisa] without attachments to a particular relation. Allan and Burridge (1991) find that the usage of female names is rather unsurprising because of the "uniquely female event" they are representing (p. 82). Furthermore, Newton (2016) argues this construal of menstruation as a visitor, whether named or simply attached to the menstruator through a specific relationship, seems to often utilise older females such as aunts and grandmothers, as well as rather old-fashioned female names which "evoke images of old, unfashionable, frumpy women" (p. 140), and explains that such names "indirectly depict the vagina as undesirable and unsexy at this time" (ibid). As opposed to this, Newton (2016) suggests that the rare conventionally male names she recorded in her study do not appear to be out-dated.

In fact, beyond the popularity of the names themselves, it is the relative rarity of male names that is consistent across much of the menstrual research available to this day. Joffe (1948) notes the rarity of using conventionally male names (the Spanish Andrés being the only instance in this dataset), and the high frequency of female names in contrast, as well as the common pairing of those expressions with those denoting colour (p. 183). Sveen (2016) finds similar results, but reports discovering a few more male names (Fred and George) in the English sample, and the male name "Andreas" in the Swedish one (p. 151). Moreover, Allan and Burridge (1991, p. 82) provide examples of names similar to those collected by Sveen (2016) (Fred, George) though with a little more variety (little Willie, also reported by Joffe (1948) who noted that it was a rare one to appear). Allan and Burridge (1991) further state that the usage of male names is "mysterious", particularly because their frequency is higher in their findings (p. 82). The present study contradicts those and aligns with the findings of Joffe (1948), Sveen (2016) and Newton (2016), as there are many more conventional female names, as well as more female relative terms, than there are male ones.

However, Spanish speakers in the present study also shared the male name *Andrés*, which is consistent with Joffe's (1948) report, as well as Sveen's (2016) Swedish version of it. Although the connection of certain conventionally male names to menstrual euphemisms seems to extend across time and languages, it is difficult

to attribute this phenomenon, as well as the selection of specific names (such as Fred or George) over others, to any one reason beyond linguistic radiation and equivalence. Nevertheless, some names do have a basis for their usage, notably the Spanish name Andrés, as it is often attributed to the rhyme "Andrés, el de cada mes" [Andrew, the one of each month] (Llorente, 2020), or "Andrés (el que viene una vez por mes) - Andrew (who comes once in a month)" (Clue, 2016). Furthermore, Allan and Burridge (1991) suggest that one possible explanation for the usage of male names is the fact that this visitor to the vagina would be, under any other circumstances, a male. Consequently, by analogy, menstruation would be attributed a conventional male name to reflect the sexual nature of the visit, just like using an old-fashioned female name would seemingly construe the vagina as sexually unappealing during the menstrual phase (Newton, 2016). Within this same sexual interpretation of menstruation, Agyekum (2002) finds that it is commonly personified as a rival male "who comes to guard the woman and to prevent other males from entering her vagina" (p. 382). Because the belief that sexual intercourse during menstruation would result in contracting disease or in the man's defilement, such expressions serve as a warning. Agyekum (ibid) further explains that examples of visitor-based expressions are typically used by a normative female to her male partner to communicate the impossibility of sexual intercourse (discussed in earlier Section 7.2.4.2).

Despite the rather unfashionable conventionally female proper names attributed to menstruation, and the rarity of conventionally male ones, the practice itself still works to personify menstruation, affording it an identity, and making it familiar and quite well-known to the menstruator. Chiatoh and Lando (2021), in their analysis of public conversations among girls and women in Cameroon, identify the menstrual euphemism thematic classes of 'visitation,' of 'royalty' and of 'friendship' (p. 5), but no specific proper names, whether conventionally male or female. The findings of the current study are consistent with these themes, as participants shared expressions such as *monthly visitor*, *guests*, dialectal Arabic terms of respect such as for its French and English equivalents *madame* and lady, where [sires, sirs], the Italian il marchese, as well as the example of one participant: Miss Period, or the endearing where the beloved of another respondent, and friend. These familiar relationships and respectful titles reflect the near-complete adherence of the concept of guests and visitors to that of

menstruation, since menstruators seem to be affording their menstrual guest the same respect and affection they would to a relative arriving for a few-day visit. Indeed, Gathigia, Orwenjo and Ndung'u (2018), who report the semantic domain of visitation reaching 7% of their sample of expressions, attribute this possible sympathy expressed towards this visitor to the temporary nature of the menses, and to the tradition that "a visitor ...should not be scorned but should be treated with love" (p. 172). Similarly, when discussing the theme of royalty and representative examples such as "her royal majesty, the queen... and the rosy princess," Chiatoh and Lando (2021) argue that such "sexy and appealing phrases" uttered in public spaces to refer to menstruation successfully "attribute royal qualities to menstruation and puts (sic) it in a positive light" thus implying positive perceptions and attitudes towards the menstrual event (p. 6). However, it is often the case that such guests are accommodated at the expanse of the host, who has to comply with this tradition and act as if there were no issues with an unannounced and sometimes ill-timed visit.

Certainly, Sveen (2016) suggests another interpretation and proposes that the expressions point to a rather unwelcome visitor or guest, and that this visit could be experienced as more of an invasion rather than as a friendly visit (Fingerson, 2005; Jackson & Falmagne, 2013), arguing that visitor-based examples "signal that someone else has entered one's body, such as X is here (little sister/Fanny); I've got X (Fred/Jack); X has come (Kit/George)" (p. 155). This is consistent with some of the creative content that can be found on websites like YouTube, and the portrayals of menstruation shown. In 2014, users Leenda Dong and Lilly Singh posted videos parodying the menstrual experience, and portraying menstruation as a person dressed in red and as a rather unwelcome or unexpected guest that imposes themselves on the host for a week, a host who is shown to be annoyed and exasperated all the time. This visitor ruins their plans to perform certain activities, including swimming, wearing white clothing, makes them experience mood swings and overeat sugary foods, provokes cramps, disturbs their sleep, and prevents them from having sexual relations with their partners. Since 2014, there have been several other YouTube videos on the theme of "What If Your Period Was A Person," depicting menstruation in a similar way, which demonstrates both an awareness and an understanding of this specific semantic domain, and a humorous approach to broaching an otherwise still taboo topic.

In fact, some of the proper names recorded in earlier literature seem to also apply to organs within the conventional conceptual metaphor of OUR ORGANS ARE PEOPLE with examples from slang English and French such as "fanny" which "refers to the anus in American English and to the vagina in British English" and "the names will*, willie*, dick*, Peter* and Percy" to refer to a penis (Faure, 2017, p. 9). Faure (2017), in her analysis of medical metaphors in a series of lexicons and dictionaries, further elaborates on such anthroponym-based metaphors and argues that the concept of 'visit' does constitute one of the ways in which one can discuss taboo subjects. She finds that:

Menstruation is a good opportunity for visit-construed metaphoric blends: a visit from Aunt Flo* (by analogy with flow); Aunt Minnie is visiting*; Aunt Jodie has come with her suitcase*; grandma's coming*; Kit has come*; my little friend has come*; etc. (see Green 2001) (Faure, 2017, p. 9).

To be sure, most of these terms seem to be tabooed to some extent and are metaphorically addressed through the concept of visit. Moreover, these also appear to be instances of bodily functions and of medical issues that pertain to intimate parts of the body and/or elicit a reaction of disgust socially and are thus conceptualised as an unpleasant visit or intrusion upon the otherwise peaceful body. Even though it is the body that is performing these functions and experiencing these issues, this specific conceptualisation still suggests that these are things that happen to the body as opposed to being things that the body does. In her anthropological analysis of the various views surrounding the reproductive functions of women, Martin (1988) argues that applying conceptual metaphor theory to an extent to her interviews allowed her to uncover that "the central image women use is the following: your self is separate from your body" (p. 77). Therefore, when we talk about the visit of Aunt Flo, or the arrival of the marquis, or the aunt who came to visit in her red Ferrari, we are effectively anthropomorphising menstruation, and construing it as a separate entity that, instead of coming out of one's body, comes into it from the outside, disturbing it, invading it, imposing upon it, and demanding to be treated as a visiting friend or as a family guest. The conceptual metaphor of MENSTRUATOR IS A VISITOR, with all the implications a 'visitor' entails, does exist and encompasses many semi-lexicalised and creative metaphors, including those references to unpleasantness, imposition, and invasion.

Further elaborating on the concept of invasion, Sveen (2016) argues that some of the expressions analysed are reminiscent of an enemy attack or invasion, with examples such as "Native Americans among the reeds, ryssen kommer [the Russians are coming], or the cavalry's here" (p. 155). Such imagery is perhaps not entirely surprising since the conceptual metaphor of MEDICINE IS WAR has existed in popular usage for a long time, notably since the second half of the 19th century (Faure, 2017), as Sontag (1978) attributes its emergence to the 'germ theory' of the time. Given the historical conflation of menstruation with disease, with pollution, and with infection that needs to be contained, treated, and isolated, it might be almost expected to conceptualise menstruation in terms of an 'invasive' disease to be 'fought.' In the present dataset, expressions reflecting this sense of unpleasant visits and implied invasions would be the French les anglais débarquent [the English are arriving, as English soldiers were known as "the redcoats" (Joffe, 1948, p. 183). There are two other instances, both in Arabic and in English, that could be interpreted as denoting a similar sense: الهنود الحمر [the red Indians] and Vikings. Despite the fact that the former seems unlikely to be used in the specific sense of an enemy invasion, it remains an expression that shows a glimpse of, as Sveen (2016) stated, "the White, Western perspective" (p. 155), and which also illustrates the metonymic blends that particularly incorporate the colour red.

7.4 The colour red

This domain is one of the richest in terms of metaphoric and metonymic blends, and thus accounts for all the explicit and implicit expressions that involve any shade of the colour red. References to the colour red are of a wide variety, and manifest in equally various manners. Joffe's (1948) earlier example of the French les anglais débarquent [the English are arriving], as well as the instance of the red Indians] recorded in the present dataset are such creative ways. In fact, as Chiatoh and Lando (2021) find, the colour red is so particularly significant in the menstrual experience that "many euphemisms for menstruation have been created based on colour metaphors... like the 'lady in red', 'red oil', 'palm oil', 'red princess', 'the red rose', 'red car', 'red wedding', 'code red', 'tomatoes', and 'grenadine', are created based on colour metaphors that associate menstruation with the colours of common things" (p. 7). To be sure, the salience of the colour red has been consistently addressed in all of the menstrual research available to date, which is to be expected given the widespread practice

of coining new menstrual euphemisms by simply attaching the literal word 'red' to them, or by using a referent that is known to be some shade of red. As such, the current dataset includes many overt references to the colour red, as in red sea, red tide, red scare, red lady, red days, code red, la zone rouge [the red zone], and عمتى الحمراء [my red aunt]. Likewise, Newton (2016) records similar examples, and an equally diverse selection of references to red, which she organises as "Red + Water variants" (p. 196), "Crimson wave and variants" and "Red + Non-Water variants" (p. 197). Sveen (2016) also identifies these direct references to the colour red in both English and Swedish, and further discusses those expressions that make more metaphorical references to the colour, notably in examples like "tomtevecka [Santa Claus week], flying the Japanese flag" (p. 150), and points out the "great creativity and denotations far removed from the original meaning" (ibid), particularly in examples such as "Swedish expressions... Native Americans and communists" (ibid). Such references could in turn provide context for other expressions like red scare and red flag, which denote a certain dimension of danger.

Evidently, that the conceptual domain of THE COLOUR RED can in fact encompass any number of metaphoric blends, since this is entirely dependent upon menstruators and their creative processes when coining new and reiterating older expressions referencing *red* in either a covert or an overt manner. In the present study, the three most frequent blends appear to be those involving the conceptual domain of THE COLOUR RED and TIME, BLOOD, and VISITORS (or more generally people), all of which have been previously discussed individually. The current data appears to be consistent with Sveen's (2016) observation that the creation of new linguistic menstrual expressions holds the redness of menstrual fluid as one of its core productive characteristics, particularly in English, but also in French and the Algerian dialect of Arabic to some extent. Table 17 below illustrates the exact frequencies of all covert and overt references to the colour red, as well as those three most salient metaphoric blends.

	Overall	Arabic	English	French	German	
Covert references	50	0	44	3	3	
Overt references	31	3	22	5	1	
Blends						
Red & time	34	0	31	0	3	
Red & blood	21	0	18	3	0	
Red & visitors	16	3	6	6	1	
Total	152	6	121	17	8	
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					155	

Table 17 - Absolute frequencies of 'the colour red' references organised by sub-themes and blended themes.

Gathigia, Orwenjo and Ndung'u (2018) observe a similar pervasiveness of the colour red and do identify the conceptual metaphor of MENSTRUATION IS A COLOUR, on the basis that it is a distinct characteristic of the menstrual experience as it becomes, by metonymic process, the name of the expression by which it is construed and addressed. In fact, that such a conceptual metaphor exists is hardly surprising given the omnipresence and salience of the colour red in our lives. To begin with, red is the most visible and discernible colour from a distance, taking precedence over green, yellow, and then white (Birren, 1956), which is a crucial aspect of its "existence as a visually salient, aggressive, advancing color" (Verosub, 1994, p. 28). Because it is so visible, Verosub (1994) further suggests that it is particularly efficient in drawing attention, therefore signalling importance. The colour red becomes representative of important things in the experience of life, including "money, criminals, blood, traffic signals, or bureaucrats" (ibid, p. 28). Verosub (1994) establishes and discusses the overarching metonymic framework of IMPORTANT THINGS ARE RED as inclusive of concepts such fire is red (which involves further concepts of HEAT IS RED, SUN IS RED, LIGHT IS RED, CHRISTMAS IS RED, and HELL IS RED), BLOOD IS RED (which extends to DEATH IS RED, LIFE IS RED, SEX IS RED, FERTILITY IS RED, MENSTRUATION IS RED, and STRONG EMOTIONS ARE RED), POWER IS RED (which also includes other concepts like HONOUR IS RED), and DANGER IS RED (which spreads across the concepts of EVIL IS RED and CRISIS IS RED, then further to Warnings are RED, PROHIBITIONS ARE RED, and STOPPING IS RED).

Likewise, Moller, Elliot and Maier (2009) show that the colour red represents such concepts as danger, bad, loss, and failure in American culture, while Jacobs, Keown, Worthley, and Ghymn (1991) suggest that red is a marker for

prosperity/happiness in Chinese culture, which further illustrates the wide conceptual network that the colour red is at the centre of, and which has the potential for more variation according to cultures and geographies. Similarly, upon investigating colour associations across the three cultures of English, Chinese bilingual, and Chinese monolingual, Tham et al. (2020) discover that the colour red is associated with the concepts of heat, of anger, of danger and stopping, of excitement, and of sexual and romantic attraction. Naturally, given the visual and often emotional basis characterising art, it stands to reason that the colour red would equally be used to convey a similarly wide array of representations, of meanings, and of emotions. Interestingly, Green-Cole (2020) discusses some of the art, particular its menstrual iconography, of modern and contemporary artist Louise Bourgeois, who, even though she never explicitly represented menstruation, still produced "paintings depicting sexuality, motherhood, and birth [that] use the color red in a way that suggests menstrual blood" (p. 797). She explains that this colour carries a range of different connotations for Bourgeois:

Red is the colour of blood
Red is the colour of paint
Red is the colour of violence
Red is the colour of danger
Red is the colour of shame
Red is the colour of jealousy
Red is the colour of grudges
Red is the colour of blame. (Bernadac (1998) and Coxon (2010),
quoted in ibid)

Indeed, many of these themes and concepts can be glimpsed throughout the present study, whether they are direct references to blood, to hell and evil, to life and death, and to danger, or more complicated and roundabout ones to fertility, to power, and to strong emotions (like shame and anger). For instance, notions of menstruation as an evil thing have been discussed at length in previous chapters, as well as in earlier sections of this chapter, notably due to its link to hell, to power, to evil things and individuals (such as so-called witches who use menstrual blood in black magic rituals) and ultimately tying it back to danger since menstrual blood was believed to be harmful, especially to normative male-bodied men. Sveen (2016) also points out these connotations of danger, of warnings, and of traffic stop signs, arguing that those expressions that mix the colour red with some kind of sign or signal are particularly relevant in conveying the idea "that

something is different and requires distance, in line with the taboo status of menstruation" (p. 150). Such expressions, notably code red, raising the red flag, and red scare⁴⁵ are also present in this study. Additionally, the phrase la zone rouge [the red zone] could also denote a similar dimension of danger whilst also implying coverage and quantity. Verosub's (1994) framework is also useful here in illuminating the conceptual links between expressions and larger themes, particularly when considering the history of menstruation as a potential deliberate misdeed of the evil menstruator and as an error of the naturally 'male' body, and more so when discussing menstruation as a harm and danger to all. Verosub (1994) argues that:

Warnings indicate situations of potential crisis, and since crisis is red, warnings are red as well. Red attracts attention so people are more likely to notice the warning in the first place. In addition, because danger is red, a warning in red is that much more effective. The most obvious cases of warnings are red are stop lights and stop signs, which regulate traffic through potentially dangerous intersections. Here, red means stop [...] Also, a 'red alert' is a signal of imminent enemy attack, as is a 'red flag (ibid, p. 42).

The combination of the concepts of danger and stopping could, in fact, also be implicated in the previously discussed representations of menstruation as a sign of sexual unavailability. Since the colour red signals danger, acts as a warning to stop, much like traffic lights, it could be drawing on the rich and detailed history of menstrual blood as pollutant, as carrier of diseases, and as stigmatised mark that could transfer and endanger the life and the social standing of the normative male, and therefore as sexual censor.

Importantly, the tight conceptual link between menstruation and the colour red seems to be achieved primarily through the concept of BLOOD IS RED. Blood is, as Verosub (1994) puts it, "possibly the most universally occurring red material in existence. Every person has blood, and every person, at some point, observes blood's bright red color" (p. 30). Certainly, blood is simultaneously representative of life and death. Lakoff and Turner (1989) highlight this connection when

⁴⁵ In addition to its literal meaning, the phrase 'Red Scare' was also a rather well-known menstrual euphemism of the mid-20th century, as it was a time of "anti-communist fervour" in the United States (https://www.history.com/topics/red-scare) and makes references to the red flag of the Soviet Union.

discussing the metaphors of LIFE IS THE PRESENCE OF FLUID and DEATH IS THE ABSENCE OF FLUID. This conceptualisation fits blood as a fluid of life and death perfectly, since "when the body's blood is contained, the body is alive, but when the blood flows out, the body dies" (Verosub, 1994, p. 30). DEATH IS RED is one metonymic concept appearing in terms of "violence, danger, and war, the main causes of bloodshed" (ibid, p. 31), whereas LIFE IS RED can be extended to encompass new-borns, sexual intercourse (thus creating SEX IS RED) as there are foundational representations of redness as sexual maturity, potency, and marker of sexual life (as in hymenal blood, see Section 2.2), sexual attraction, and ultimately expanding further to fertility and menstruation, thus making the concepts of FERTILITY IS RED and MENSTRUATION IS RED. Verosub (1994) further argues that this relationship with the menstrual event is "reinforced by the color of menstrual blood, which is, of course, red" which gives reason to the emergence of euphemisms such as "the red river is up', 'to fly the red flag', 'the red devil', and 'the red light'" as well as to the general association of "women... with red" (p. 33). However, it could also be argued that menstruation, in addition to its originating within the concept of LIFE IS RED, also belongs within that of DEATH IS RED. Certainly, as discussed in earlier sections and earlier chapters, menstruation is construed as bloodshed, and is conceptualised in terms of violence and danger, particularly because of its salient feature of physical and mental suffering, and its dimensions of horror, and of disgust. As such, even though it is an important indicator of fertility, it is also blood that flows out of the body, and which has been historically seen just as that, as the body dying yet it remains well and alive, thus crystalising notions of mysticism, of magic and power, of unnaturalness, of harm and poison, and eventually ending in the shunning of the unknown, the unexplainable and the abject.

Then, aside from the concept of ALCOHOL IS RED (because it makes the body flush red), it is clear that the menstrual event effectively spreads over the main concepts found with the overarching metonymic BLOOD IS RED. Therefore, menstruation is markedly characterised by both blood and red, so that when participants share an expression such as *red tide*, they are drawing on their experience with menstruation as both a bloody fluid that flows, and as a bloody fluid that is red. Similarly, and perhaps less obviously, when respondents speak of a certain *shark week*, notions of blood, of red, of (attraction of) danger, and of

physical and emotional harm, begin emerging. Sveen (2016) discusses the conceptual metaphor of MENSTRUATION IS BAIT, arguing that the menstruator is construed as "vulnerable and possibly in danger because... menstruation is attracting dangerous, bloodthirsty animals (and vampires)" (pp. 155-156). Additionally, in a different manner, associating THE COLOUR RED with the concept of VISITOR equally ties redness, blood, and visiting people under the experiential basis of witnessing red blood coming and going (as discussed in the previous section). Table 18 below displays all the expressions referring to redness in the data and organises them according to their respective blends with time, blood, or visitors.

Blends	Examples from the data			
	Red days			
Red & time	Red week			
	Shark week			
	Red sea, la mer rouge, sto nel mar rosso			
Red & blood	Red tide			
	Red river flowing			
	La zone rouge			
	The painters are in			
	Surfing the crimson wave			
	It's a red moon			
	Khalti el hamra jat [my red (maternal) aunt arrived]			
	[amti el hamra - my red (paternal) aunt] عمتي الحمراء			
Red & visitors	Madame rouge			
	Red lady			
	[al-hounoud al-homr - the red Indians] الهنود الحمر			
	Moș Crăciun [Santa Claus]			
	Les anglais débarquent [the English are arriving]			
	Aberdeen playing at home			

Table 18 - Examples of the metaphoric blends: Red & time, red & blood, and red & visitors.

Moreover, in some instances such as *it's a red wedding, white shorts, I got my red Ferrari, auntie in a red car has arrived*, the colour red is referenced either overtly or covertly and attributed to whatever animate or inanimate object, and to events, seemingly at random or according to personal preferences and to popular culture, as Newton (2016) suggests. These references serve to further solidify the menstruation-blood-red relationship. In fact, these expressions, particularly those that overtly mention the colour red, are often described as "so direct that [they leave] little room for multiple interpretations" (Chiatoh and Lando, 2021, p. 7).

Indeed, since the menstruation-blood-red relation is so pervasive and so well-known to everyone, including those who do not menstruate and who do not feel concerned by the menstrual event in its entirety, such explicitly 'red' expressions can be assuming a similar role to those pertaining to specific genders in disrupting the menstrual taboo (see earlier sections and Chapter 6). The opposite can also be accomplished through less overt expressions; if one's goal is to confuse those not privy to the intricacies of menstrual knowledge or to address menstruation in a subtle manner to avoid the social repercussions of breaking the taboo, there is a wide selection of subtle menstrual references utilising the concept of the colour red. In fact, as Chiatoh and Lando (2021) argue, in some cases, the menstrual taboo and the societal imperative of keeping menstruation hidden are contributing factors to the linguistic creativity reflected in menstrual metaphors.

7.4.1 Food references

Certainly, the depths of creativity, as far as menstrual expressions are concerned, seem to be ever-expanding as such expressions are cleverly coined to accomplish specific goals. Whether it is to propel menstruation to the public space without naming it, or to confuse and avoid, many ways are available to menstruators to build their own expressions and put their own twist on it (discussed more in the following Section 7.5) while retaining some identifying link with the menstrual event. One notable instance of this is the references to various foods. As previously discussed, there are foundational representations of menstruation and fertility as the flowers preceding fruit bearing, and as the ripeness and maturity of a fruit (see Gottlieb, 1988; Agyekum, 2002). Sveen (2016) records instances of fruit-related "edible things" in the form of strawberries and lingonberries predominantly in Swedish, alongside other foods like "ketchup and jam" (p. 150). Whilst there is a clear connection between these conceptualisations as fruit and to the previously discussed ones pertaining to nature, there is more directly a relation to the colour red. Most food references seem to be established based on their being red. In the present study, similar examples denoting the colour red can be observed, notably the German Erdbeerwoche [strawberry week], and strawberry juice. Sveen (2016) further notes that the English sample she analysed lacked in food references, as the only ones that refer to the colour red she could find are "Ordering clams with red sauce, the tomato sauce is on the boil/overcooked, and her cherry is in sherry" (italics in original) (ibid). Newton

(2016), however, records a variety of jam-related terms, noting that they were volunteered by more males than females, and explains that the usage of 'jam' "probably refers to the colour and consistency of menstrual blood itself" (p. 203).

Furthermore, given the disgust-eliciting potential of menstrual blood, and the preexisting links between disgust and distaste, it could also be argued that such expressions are coined as a way to jokingly address or elicit disgust by painting a visual which prompts the listener to imagine taste and potential ingestion. It could equally be a reference to oral sex during menstruation, which is referred to in terms of vampires in popular culture, and which also involves some measure of disgust, as discussed in earlier sections. Nevertheless, this variety in metaphorical expressions undeniably attests to the linguistic creativity of menstruators in particular, and shows that, as Newton (2016) puts it, "people can also find it amusing to play around with, and challenge, discourse" (p. 145).

7.5 Wordplay, humour, and vague terms

This final domain of wordplay, humour, and vague terms includes instances of creativity that is similar yet conveyed in different ways to that outlined in the previous section. While there are many jokes and puns, and much wordplay and sarcasm, this domain also encompasses terms and expressions that are particularly vague, as well as those that are markedly dysphemistic as they insult menstruation and swear at it. For instance, whereas expressions such as I lost another potential child and terms like الحبوبة [al-habouba - the beloved] can constitute instance of sarcasm and dark humour, others such as expressions only using pronouns, as in [jatni - lit. she's come to me], هاذوك [hadouk - them], elle est là [she is here] جاتني and simply 'it,' as well as more mysterious and vaguer terms like you-know-what, aki 3labalek [you know], highlight a dimension of voluntary vagueness. Jackson and Falmagne (2013), in their analysis of discourses of menstruation and menarche, indicate that the young women they interviewed would use 'it' and 'this' pronouns to avoid naming menstruation or menarche, a practice also noted by Sveen (2016) as she finds the English 'it' and its Swedish equivalent 'det.' This is also the case in the present study, as the sub-theme of 'vague terms and expressions' comprises more instances than other sub-themes, and many of those instances are pronouns and other references to the term 'thing,' as shown in Table 19 below.

	Overall	Arabic	English	French	German
Vague terms & expressions	38	12	23	3	0
General jokes & sarcasm	16	4	12	0	0
Insults and swear words	11	4	6	0	1
Wordplays and puns	8	2	6	0	0
Total	<i>7</i> 3	22	47	3	1
Total including other languages (Italian, Polish, Romanian, Russian, Spanish, and Turkish)					74

Table 19 - Absolute frequencies of references to 'wordplay, humour, and vague terms' organised by sub-themes themes.

Jackson and Falmagne (2013) argue that the usage of this lexical device, as well as all the other conceptualisations discussed throughout this study that allowed menstruators to talk about the practical and material experience of menstruation in terms other than explicit ones, "serve to distance the women (and girls) from menstruation" (p. 390). They further suggest that, by avoiding explicit references to the menstrual events, "these adolescent girls were following the culturally scripted 'rule' that menstruation is not a topic to be discussed in public" (ibid, p. 391). Indeed, the practice of 'it-ifying' menstruation works in the opposite way of the expressions that do not leave much room for different interpretations and can be assimilated to the long-standing tradition of avoidance when talking about reproductive functions and genitalia, particularly those of normative females (see Braun and Kitzinger, 2001). As such, the notion of menstrual blood as that which is abject (discussed more in Section 6.3) joins the concept of linguistic taboo, making menstruation an unmentionable function of the female body, and one that calls for "dismissive, and often demeaning, referents" (Jackson and Falmagne, 2013, p. 391). *It*-ifying menstruation embodies this dismissal, and allows menstruators to distance themselves from it, and to further construe it as a foreign invader (see earlier Section 7.3), as an outside 'thing' that is happening to them and that they have to endure (Lee, 1994). Jackson and Falmagne (2013) conclude that "referring to menstruation as 'it' further serves to keep the topic of menstruation from entering open public discourse" (p. 391) which is, again, the exact opposite of many other conceptualisations that, even though they do not address menstruation explicitly, still refer to one or more of its salient aspects, thus rendering it intelligible to everyone in the social context.

Certainly, through the use of humour, complicated, awkward, and taboo topics can allow for a better and easier approach to discussing them (Hay, 2000), while similar sensitive subjects can be catapulted to the public social space, in plain view of all, under the guise of jokes. As Newton (2016) argues, however, provocative humour and jokes do not only provide entertainment and momentary amusement, but they also more importantly provide a sense of "release or relief" (p. 148) because they allow for an otherwise impossible and socially unacceptable exploration of the sensitive and taboo topic. In this sense, jokes are arguably able to serve as minor transgressions of the "social boundaries about what is considered 'wrong' to say without seriously challenging taboos" (ibid). In fact, menstrual humour itself is a long-standing practice often used by menstrual and feminist activists, and perhaps the most representative piece of writing ever produced is Gloria Steinem's 1978 satirical essay titled *If Men Could Menstruate*, and in which imagines a 'political fantasy' around the simple question: "So what would happen if suddenly, magically, men could menstruate, and women could not?" Certainly, this piece jokes about the menstrual experience as it imagines mapping it onto the male one as it has been politically, socially, and culturally constructed, all the while bringing menstruation to the centre of the social context and making it relatable and accessible to everyone. Kaufman (1980) encourages menstrual humour because it has the potential to create a narrative in which "menses is not to be hidden (as shameful) but to be joked about (as normal) or even celebrated (as naturally female) ... the expression of such humor attacks the unhealthy and oppressing idea cultivated for thousands of years that women's bodies are foul" (p. 14).

Humorous terms in the present study accomplish similar functions, even if unconsciously, and do address the abject and the unmentionable while joking about aspects that have otherwise always been described as serious matters. For instance, the earlier discussed example of *I lost another potential child* refers to the traditionally medical definition of menstruation as 'failed production or conception' in a humorous way, and more importantly, in a way that is proper to the menstruator who shared it, and that de-dramatizes the jumble of socially unacceptable conceptual threads of reproduction, sex, blood, disgust, nature, biology, etc. Furthermore, just like Sveen's (2016) recorded examples of creative wordplay and humour such as "going to Egypt (presumably from the metaphor of

parting the Red Sea)" (p. 153) and "the double meaning of the word *period* [which] allows examples of references to menstruation by way of other punctuation marks, such as full stop and exclamation mark" (p. 152), the present study also identifies similar examples such as the Algerian dialectal Arabic مساطير [masatir - rulers] which is a literal translation of the second meaning of the French word règles, itself used for period, but also means ruler, the measuring instrument. Such expressions appear to add little twists to pre-existing metaphorical phrases that, as Newton (2016) suggests, lose their originality over time because of overuse, a notion that menstruators seem aware of as they alter older terms to make them their own, as in mensie or mensies, and Miss Period, or simply create new ones entirely. There are completely original instances, as in the expression Fall of the Berlin Wall that one participant shared and explained: "this was a joke that started in a history class with a friend - In the period tracking app (Clue) whenever my period is coming it says, "the fall of the Berlin Wall shall soon commence." It's been like that since I was 16 though." Other participants also shared their original terms and phrases: البازينڤة [el-bazinga - random feminine name?], uterus throwing a hissy fit, insides freaking out, creeper, zlabiya fel rkayeb [zlabiya (a type of sweets) in the knees] which possibly denotes the feeling of weakness in the knees, and of feeling soft and breakable, just like the sweets.

Finally, dysphemistic expressions are also present in the data, and more abundant in Sveen's (2016) corpus. She records specific instances that, although also pertaining to other semantic domains, are deemed dysphemistic as "they evoke too-detailed bodily images" such as "have my rags, smoking a lady cigar," "graphic expressions" such as "bleeding like a stuck pig, birthing a blood diamond" and because they use strong language such as "the curse, rövveckan [ass week]" (p. 154). Likewise, the present study identifies similar instances, notably in the examples of: الخيل [al-khra - the shit], shit, mein Scheiß [my shit], lort (Danish, translated to "shit"), بنت الكب الكب [bent al-kalb - lit. daughter of dog], crap, and raging bitch. Sveen (2016) argues that the purpose of using such dysphemistic language when addressing menstruation appears to be for either shock value as many of these are especially "gross or unpleasant", or for simple relief by freely expressing "antipathy toward the concept" (p. 154), adding that this dysphemistic use of language, within the context of menstrual activism, is "a lexical way of challenging the idea that menstruation is a taboo subject and

therefore needs to be hidden" (ibid), which corresponds with the earlier discussed notion of menstrual humour and its goal in activism.

However, just as much of the metaphorical menstrual language of today does not necessarily contest the previously identified themes and semantic domains, notably in Joffe (1948) and in Ernster (1975) but rather reproduces similar patterns and only seems to grow around these, Sveen (2016) contends that many of these euphemistic expressions, in their consistency with commonly recognised concepts such as that of shame, work to reinforce the menstrual taboo (p. 154). Similarly, Newton (2016) argues that jokes remain "a powerful, conservative force" even if they "appear to disrupt social boundaries, explore 'unsafe' ideas, and question authority" (p. 156). It is the idea that, the recognition of a taboo and the subsequent joking and laughing about it implies the acknowledgement that the topic being joked about is not a socially acceptable one, which in turn strengthens the already powerful structures dictating how each gendered individual is supposed to behave, think, speak, think, and exist in society alongside others. She further argues that joking "is a safety-valve, allowing exploration without breaking boundaries" (pp. 156-157).

In fact, when using humour as a rhetorical device, it can often seem as though the individual making use of it is devaluing and degrading themselves, usually through addressing stereotypes (Kalčík, 1975). Conner (2020) argues that the strength of such stereotype-based humour in protest "is that it usually carries implicit critiques of the stereotypes it appears to propagate" (892). Therefore, the use of humour remains crucial and strategic in feminist and menstrual activism, particularly cooperative rhetoric, since bringing awareness to others finds at its core the underlying practices of establishing common ground and self-denigration to some extent (Dubriwny, 2005). While the instances analysed within the present study do not necessarily constitute examples of 'formal' feminist and menstrual protest, they are nonetheless the small yet tremendously important ways in which menstruators negotiate their menstrual identity in the various contexts of their lives. Newton (2016) contends that jokes and humour, just as euphemistic and metaphorical language, are characterised by a certain duality as they create pockets in public space where it is permitted to talk about the menstrual event in some way. She concludes that: "There is a need to talk about it and so people find their own methods and their own ways. When silence dominates, it is vernacular

discourse... which rises to fill it" (p. 160), an argument that cannot be better illustrated than by the earlier discussions relating to the wealth of ways in which menstruators navigate private and public conversations, interactions, and simple existence through specific language and behaviours (see Section 7.2).

7.6 Conclusion

Throughout this chapter, menstruation as an embodied experience, as a deeply personal and private yet also public and sociocultural event, has been further explored and shown to be, in its complete picture, a decidedly intricate and multifaceted phenomenon. While the previous chapter illustrated how this experience is deeply entrenched in *blood* and *time*, this chapter has expanded the discussion to encompass the more metaphorical understandings and conceptualisations of menstruation, and to frame the lived menstrual experience within the actual realities of menstruators in this study as they wrote about their chronic, cyclic, and bloody pains.

By further answering the first question of this research project, which concerns itself with how menstruation is construed and conceptualised metaphorically, this chapter has emphasised how crucial it is to afford the language of menstruators, when they tell their stories of pain, of shame, of freedom, and of red aunts and strawberries, the same importance given de facto to biomedicine as it issues dismissive diagnoses of mercurial conditions. As outlined in this chapter, there is great value in uncovering those conceptual metaphors underlying the fundamental understanding of menstruation, as it allows an exceptional perspective on the menstrual experience as an incredibly complex interplay of physical and mental sensations and representations, ranging from material pain to abstract notions of invaders and strawberry juice. These multiples interactions and their implications, as they take place within the gendered, the political, the social, and the cultural body that bleeds, have constituted answers to the last two research questions (3 and 4).

Certainly, the menstrual conceptualisations are varied and many, reflecting more than a reality of blood and temporality, as participants in this study talk about the menstrual event in terms of PHYSICAL AND MENTAL SUFFERING, yet also in terms of A HEALTH INDICATOR, A NORMAL PART OF LIFE, and A BLESSING, thus giving rise to the

overarching conceptual metaphor that would capture those seemingly polarised aspects: MENSTRUATION IS BLESSING AND TORMENT. Further still, the interrelated web of conceptual threads at the centre of which we find menstruation brings us back to its rooting in time, as menstruators and non-menstruators alike share their understanding that MENSTRUATION IS A VISITOR, coming and going, as well as its entrenchment in the concept of redness, as menstruation is associated with something red (MENSTRUATION IS THE COLOUR RED) through those same connections with blood and with life, death, and fertility. Finally, these threads that start with suffering eventually extend all the way to jokes and humour, then back again to painful episodes only to circle back again in a loop of crankiness, of acceptance, of bloody times, and of red visits.

8. Conclusion

This research project has set out to explore the menstrual language of its participants, to understand what the various manifestations of this language are, and what purpose they serve. To accomplish that, this research has aimed to use semantic category analyses and conceptual metaphor analysis to undercover the various conceptualisations of menstruation and eventually the deeper knowledge that governs our thinking where menstruation is concerned. Additionally, to understand where those varied conceptualisations come from and what context they were born within, it was essential to return to the history of menstruation. This research has also presented an overview of the menstrual event in medical history and in social, cultural, and political history.

The structure and scope of this research have been entirely shaped by the following research questions:

- 1. How is menstruation construed and conceptualised metaphorically?
- 2. What are the most common metaphors and themes? To what extent can the existence of conceptual metaphors be established?
- 3. What is the role and purposes of these metaphors? How can the conscious or subconscious choice of certain metaphors be explained in relation to social and gender norms?
- 4. What are the implications of these menstrual conceptualisations for the menstruators and the non-menstruators in their embodied and social experiences of and with menstruation?

Answering those questions comprehensively formed the core goal of this project. To do so, a sound methodology had to be devised with these questions in mind. Chapter 4 of this research outlines both the theoretical framework that has informed this project and within which it operated, and the methodology formulated and adopted to tackle each question. Since the primary purpose was to uncover the metaphorical conceptualisations of menstruation, this research has been articulated along the Lakoffian assumptions that derive from Conceptual

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Metaphor Theory (CMT). Additionally, it was also crucial to provide a sound semantic base for the CMT analysis, so semantic categories, complications and expansions have been explored and tackled through a semantic tagging of the entire data followed by Historical Thesaurus and Mapping Metaphor analyses; the notions of metonymy and X-phemisms have also been explored since menstruation has been established to be a productive ground for euphemism, dysphemisms, and metaphor generation, while the emphasis of the experiential and the worldly as articulated in CMT, has been adopted and defined as the notion of embodiment. This last notion was found to be a particularly salient one since it derives directly from and is reflective of the bodily experience of menstruation, and therefore was particularly crucial to providing a theoretical understanding of what discussions of gender variance and intersecting identities might imply. This project has borrowed notions and guidelines from the fields of transgender studies and queer and feminist studies.

This theoretical background, along with the systematic metaphor analysis outlined further in Chapter 4 formed the basis that allowed for the tackling of each of the earlier listed research questions. Subsequently, after carrying out extensive analyses and discussion and after delving into the rich medical and cultural histories of menstruation, it has ultimately become possible to answer them comprehensively, yet with avenues for expansions and for future research.

Chapters 2 and 3 have presented an extensive overview of the medical and the socio-cultural history and research of menstruation. Chapter 2 has surveyed the chronological development of the various concepts and theories that were ascribed to the menstrual event, not only as a health concern but also as a biological imperative and as a social expectation. Beginning with the Hippocratic and then the Aristotelian understandings of the bleeding body and the menstrual event itself, Chapter 2 offered an overview of the key principles at the root of the recommended medical practices to regulate, induce, suppress, and treat menstruation and its myriad implications. This ancient authority in matters of the bleeding body that was also found elsewhere, not only in the West, has carried on throughout the Middle Ages and throughout the popular and impactful medical works of the Arabic-speaking physicians that made their way back to Europe and formed the basis of standard practice, notably through the Trotula compendium. A text from this influential work has served as an example to illustrate the impact

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of cultural assumptions and language change as this text marks the turning point where menstruation acquired the descriptive attributes of being poisonous and noxious. Chapter 2 has carried this overview further and to more modern times and has shown that the ancient tradition of developing medical practices that were far from devoid of cultural assumptions has in fact existed for a long time and can still be gleaned in our time.

Chapter 3 of this research has presented a menstrual literature review and an outline of the various cultural shifts that menstruation has gone through when touching on ancient myths and religions and on more recent politically oriented and socio-culturally informed concerns in order to contextualise the menstrual event. Indeed, the menstrual event has been labelled as both a gift from the gods and as sin or a divine punishment and has historically been attributed all sorts of mystical powers that are sometimes seen as a 'superpower' and as nefarious at other times. It has also acquired the burden of being a taboo and used to punish bleeding bodies. Chapter 3 has therefore reviewed the general menstrual language research landscape, as well as the linguistics and then CMT-based studies that have been conducted, outlining the variety of approaches taken to tackle this subject that show the scarcity of CMT-focused research on menstruation. In doing so, Chapter 3 further enables the identification of an area of missing knowledge, and that mainly consists of a lack of interest of previous scholarship in not only investigating menstrual conceptual metaphors, but also in including gender variance, more languages such as Arabic and its dialect, and in diversifying approaches and methodological and analytical tools.

With Chapters 2 and 3 providing a historical background and a literature review to better inform and frame the answers to research questions 3 and 4, Chapters 5, 6, and 7 of this research project have presented the core answers to the first fundamental research question. Chapter 5 reported the results of all the analyses conducted to uncover the conceptualisations of menstruation as they have appeared in the data and therefore more fully providing an answer to research question 2. The following two chapters provided a thorough discussion of all those results, and therefore of all the various conceptualisations identified while contextualising them further in the experiential basis of the participants and in the previous research in the field, thus comprehensively answering research questions 3 and 4.

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Because there were similarities and overlaps in the expressions provided by the participants, Chapter 5 has shown how a semantic basis in the form of semantic domains or categories was first established through the usage of the USAS Semantic Tagger, and further consolidated, and historically and socially contextualised by several searches through the Historical Thesaurus and through the Mapping Metaphor online tool. This multi-layered analysis resulted in an empirical investigation of the question of and ultimately the establishment of the metaphoricity of menstrual language and its everyday usages in daily life, therefore answering question 2 of this project. Moreover, the additional historical and social contextualisation of the HT has also provided valuable insights into how the lived experiences of menstruation in society are revealed through the euphemistic language used to conceptualise and talk about it, and which the following chapters expand upon. Finally, after a review of the semantic classifications that appeared in the earlier works of Joffe (1948), Ernster (1975), Agyekum (2002), Allan & Burridge (2006), Newton (2016), Sveen (2016), and Gathigia, Orwenjo and Ndung'u (2018) (see Sections 3.3.1 and 3.3.2 for a full review of these studies), and a comparison of those with the groupings identified in this study, Chapter 5 has presented the proposed categorisation of this research project to highlight the most common themes, and which consisted of:

- 1. Activity break, inconvenience, and illness
- 2. Anatomy, biology, and procreation
- 3. Appreciation and behaviour
- 4. Blood, flow, and bloody imagery
- 5. Cleanliness and purification
- 6. Food references
- 7. Gender-specific expressions
- 8. Menstrual materials
- 9. Nature and the mystical universe
- 10. The colour red
- 11. Time and periodicity
- 12. Visitors and people
- 13. Wordplay, humour, and vague terms.

Menstruation has been shown to be construed and conceptualised metaphorically along terms belonging specifically to these categories. Chapters 6 and 7 have expanded further upon this categorisation, and have discussed exhaustively the different contexts, meanings that are and that could be, the implications of these metaphors in reflecting the lived experiences, and the contexts within which those metaphors and X-phemisms are used.

Chapter 6 has presented the in-depth analysis of the first two and perhaps more representative characteristics of blood and time, both in their literal and more image-based meanings and representations. While everyone knows, or at least can guess, that menstruation is, in the barest of senses, a matter of recurring blood, there is still more to it than that, particularly when considering that this regular bleeding hardly takes place in complete isolation from the wider contexts of society, of culture, of politics, of gendered realities, and of language. The discussion here has illustrated the various facets of the complexity of the menstrual event within its representations as blood and time, while exhibiting that what may appear as purely literal language can in fact have deeply entrenched ties in the metaphorical. This chapter has further discussed the embodied realities of recurring bleeding as shared by participants and as they relate to the conceptual domains of BLOOD and TIME, while working to constantly contextualise them and anchor them in the body of previous literature. Chapter 6 has not only answered question 1, but also covering all the remaining questions as it has illustrated the existing metaphor-based euphemisms, as well as the overarching conceptual metaphors, and as it has discussed the purposes of those metaphors, examined the choices of using them in relation to social and gender norms, and explored the implications of these conceptualisations in the embodied and social experience of menstruation. For example, see Section 6.3.2.

Chapter 7 has accomplished a similar purpose and has expanded the discussion to encompass the more metaphorical understandings and conceptualisations of menstruation, and to frame the lived menstrual experience within the actual realities of menstruators in this study as they wrote about their chronic, cyclic, and bloody pains. As this chapter also set out to answer the aforementioned research questions, especially question 1, it has emphasised how crucial it is to afford the language of menstruators the same importance given de facto to biomedicine as it issues long overdue and often dismissive diagnoses. When

participants tell their stories of *pain*, of *shame*, of *freedom*, and of *red aunts* and *strawberries*, they demonstrate the interactions of the social, the cultural, the political, and the embodied aspects of the menstrual event through their conceptualisations. Therefore, this chapter completes the answers to research questions 3 and 4, while still expanding on those answers to the first two questions; for instance, see Section 7.2.3.

Undoubtedly, the menstrual conceptualisations have been shown to be varied and many, reflecting a reality of pain, of shame, and of peace, but also of blood and temporality. This research project has identified several conceptual metaphors that seem to govern the thinking and the talking about menstruation in everyday language. Chapter 6 has uncovered, discussed, and contextualised the conceptual metaphors of: MENSTRUATION IS A PART OF NATURE Or Of MENSTRUATION IS A NATURAL PART OF LIFE, MENSTRUATION IS SOMETHING DIRTY OF OF MENSTRUATION IS UPKEEP, MENSTRUATION IS PURIFICATION, MENSTRUATION IS A PERIOD OF TIME OR OF MENSTRUATION IS A PERIOD OF THE HEALTH CYCLE, and finally of MENSTRUATION IS A HABIT. Likewise, Chapter 7 has identified and expanded exhaustively upon the conceptual metaphors of: PHYSICAL AND MENTAL SUFFERING, yet also of MENSTRUATION IS A HEALTH INDICATOR, MENSTRUATION IS A NORMAL PART OF LIFE, and MENSTRUATION IS A BLESSING, thus giving rise to the overarching conceptual metaphor that would capture those seemingly polarised aspects: MENSTRUATION IS BLESSING AND TORMENT. Further still, the interrelated web of conceptual threads at the centre of which we find menstruation has brought us back to its rooting in time, as menstruators and non-menstruators alike have shared their understanding that MENSTRUATION IS A VISITOR, coming and going, as well as its entrenchment in the concept of redness, as MENSTRUATION IS THE COLOUR RED through those same connections with *blood* and with *life*, *death*, and *fertility*. Finally, these threads that start with suffering eventually extend all the way to jokes and humour, then back again to painful episodes only to loop back to highlight themes of accepting one's self and body, of 'being cranky,' of times and visits marked by redness and blood (see Table 20 below for all findings).

Conceptual metaphors	Examples of expressions
MENSTRUATION IS PHYSICAL AND MENTAL SUFFERING MENSTRUATION IS A NORMAL PART OF LIFE MENSTRUATION IS A HEALTH INDICATOR MENSTRUATION IS A BLESSING MENSTRUATION IS BLESSING AND TORMENT	I feel like I'm dying, I hate my life, an inconvenience, a burden. It's really just one of those things. Normal and healthy for a cis woman. Mercy, magic week, a break. A necessary evil, the curse is upon me.
MENSTRUATION IS A PERIOD OF TIME MENSTRUATION IS A PERIOD OF THE HEALTH CYCLE MENSTRUATION IS A HABIT	Period, monthly period, les règles, death week, shark week, red days, cramp time, that time of the month. Cycle, monthly cycle, the habit, the monthly habit.
MENSTRUATION IS A PART OF NATURE MENSTRUATION IS A NATURAL PART OF LIFE	Moon sickness, Mother Nature visited me, mooned, full moon, moon cycle, moon time, mother nature's reminder I'm not pregnant, devil's waterfall, It's a blessing from the Almighty, A natural process as part of my life, superpower.
MENSTRUATION IS SOMETHING DIRTY MENSTRUATION IS UPKEEP MENSTRUATION IS PURIFICATION	Laundry time, leaking, messy, el wsakh ta'a ch'har [monthly dirt], Rani hassa rouhi fay7a [I feel smelly], need to take a shower almost every day, rani 3ayfa rohi [I am disgusted by myself], feels like I am cleansing my body, purifying your inner body.
MENSTRUATION IS A VISITOR	Andrés, Aunt Flo, the guests have arrived, les anglais débarquent [the English are arriving], Tante Emma [aunt Emma], aunt Irma visiting, I got a visit from Mother Nature.
MENSTRUATION IS THE COLOUR RED	I got my red Ferrari, Strawberry week, the red sea, painters and decorators, code red, red tide.
MENSTRUATION IS BLOOD	Riding the crimson wave, bloodflood, blood monster, waterfall of hell, murdered down there, Miss Flow.

Table 20 - Summary of all conceptual metaphors discovered accompanied by examples from the data.

This research project has answered the research questions it was built upon and has thus accomplished its purpose not only to adequately explore and resolve those questions, but also to fill an area of missing knowledge in the menstrual literature. It has successfully expanded the discussion beyond gendered boundaries to include all menstruators and non-menstruators, regardless of their gender identity, and beyond the linguistic boundaries, notably to include the

speakers of Arabic that had yet to be surveyed regarding menstrual experience. Throughout the chapters of this project, it has been demonstrated that just like menstruation itself as an experience and as a linguistic manifestation, its medical and socio-cultural history is exceptionally nuanced, and has ebbed and flowed through time due to various influences of a category of people without first-hand menstrual experience. Such influence translated into effort to medicate it, police it, ignore it, minimise it, demonise it, sacralise it, and eventually make it a psychiatric issue, a 'gross medical exaggeration' and to a distasteful 'thing' that only 'feminists' will bring up in conversation, to further police and discredit the bodies that bleed. That a menstrual sub-culture developed, with its own codes, rituals and language, is hardly surprising. To survive the harsh punishment and the unfounded policing, one had to adapt on all fronts, especially linguistically. Therefore, the wealth of menstrual metaphors, indeed of menstrual lore, identified and discussed in this research could be seen as the various strategies deployed to remain safe, to cope by joking, and to safely disturb this order where possible. After all, not all those expressions seen in Chapters 6 and 7 are exactly subtle. The menstrual metaphors found are rather a safe space for menstruators in particular, as they are able to express themselves in any way that they wish and find comfortable and appropriate, to matter-of-factly speak about a rather common manifestation of a body function, and also to be actively transgressive, to purposely make others uncomfortable in their comfort that only exists because of this history of silencing and policing.

8.1 Future directions

There are several ways in which the research undertaken here could be further expanded and built upon. As mentioned earlier, this research has sought to include certain populations that had not been previously involved, notably speakers of Arabic and its variety of dialects, and all those who have wished to participate with their own experience, regardless of their menstrual status and their gender identity. This is one area of expansion: the study could be replicated to explore different other languages, and to include more menstruators and nonmenstruators. For instance, each of the categories devised within this project could be further expanded and fully explored individually, and the whole categorisation itself could be employed in research focusing on data from different languages.

Likewise, this research has touched on many of the demographic attributes of the participants, but some of them are worthy of deeper, more extensive and individual analyses. For instance, this project has endeavoured from its onset to include underrepresented communities and in doing so has uncovered a variety of metaphorical expressions that are largely shared by both the cisgender and the trans menstruating participants, but that nonetheless highlight different aspects tied to the particular embodiment and social coding of the menstrual event. It would be worth conducting such a study exclusively with the trans community and to explore the patterns of differences that might arise within it.

Furthermore, because of the interest of this research project to gather as many instances of metaphorical language as possible while surveying people and prioritising anonymity and avoiding bias, this project has relied on an online questionnaire as a data collection instrument. In addition, this is one more blank area of the menstrual research landscape focused on conceptual metaphors that this study has filled, since the only other works using a CMT approach have only utilised online forums and interviews. Hence, another way to build upon this present research as well as on previous studies is to expand its population even further and to diversify the methods to collect data. For instance, administering a questionnaire, then supplementing it by engaging in interviews with participants would provide more in-depth contexts and rationales behind each expression provided.

Additionally, where this research project explored data diachronically, it was mostly to provide historical background, explanations, and more context to understand the origins or at least the landscape that informed the construction of the more synchronically identified menstrual expressions. As such, another future research avenue could adapt the methodology devised within this project to explore the diachronic menstrual metaphors that existed, and to be more exhaustive as far as their histories are concerned. Likewise, the methodology of this research could be replicated and adapted to various topics of linguistic research as it has been shown to be successful and highly adaptable.

Finally, this research study, throughout Chapters 6 and 7, has demonstrated the sheer importance of menstrual language, and the crucial need to take it into consideration in medical contexts. As it has been shown, there are now

interrogations regarding the salience of the whole of the menstrual cycle in the overall health of the body, and postulations that health itself could be conceptualised as cyclical. Exploring the metaphorical language of menstruation could be used as a framework to identify the underlying thought processes that concern the current understanding of health in conjunction with the studies in biology and biomedicine to showcase the bodily realities and whether there exists or should exist a parallel.

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Appendix

Online Questionnaire

1. Participant Information Sheet

Metaphors of the Blood: How People Conceptualise Menstruation

Researcher: Kamilia Boughenout

You are being invited to take part in a research study. Before deciding to participate, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish. Get in touch with me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

This study is being carried out in order to find out the metaphors used by people from different cultural and linguistic backgrounds, and from across the gender spectrum when thinking and talking about menstruation. Your participation in this research is entirely voluntary. Aside from Section 2, all the questions are nonobligatory. Section 2 requires answers, as it is important for the study to gather demographics since the questionnaire is completely anonymous. However, in the event that you do not feel comfortable answering, you will have the option to opt out.

This questionnaire will take no longer than 20 minutes to fully complete.

Any data you provide to me will be stored on a password protected computer. I will be the only person with access to the data. In line with the University of Glasgow data retention guidelines, the data collected will be held for ten years.

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I anticipate that the data collected will be used in a number of ways. It is likely

to: be used in presentations across the University discussing the research project;

be used in presentations about the project to people external to the University;

and be used as data in publications submitted to academic journals. A report of

the final results will be provided to participants who wish to see them.

If you do wish to receive a report of the results or a copy of the entire project,

there will be a link for you to follow at the end of the questionnaire. On this new

page, you will be asked to tick a box and to input your preferred email address.

This is done on a separate page to ensure your confidentiality: your answers

cannot be linked to your email address.

You must be over 18 to participate in this project.

This questionnaire is fully anonymous and does not require you to reveal

identifying information.

Submitting a response will be taken as giving consent to taking part in the

study.

If you have any further questions about this research please contact me at

m.boughenout.1@research.gla.ac.uk

Research supervisors:

Prof Wendy Anderson: wendy.anderson@glasgow.ac.uk

Dr Stephen Greer: stephen.greer@glasgow.ac.uk

Ethics Officer:

Dr James Simpson: arts-ethics@glasgow.ac.uk

2. Demographics and personal details

This first section aims to gather demographic information. It asks questions regarding your age, ethnicity, religion, etc. Please pick whichever options you feel best describe your identity.

1. Age

If you wish to skip this question, please answer with 'rather not say'

2. Which one best describes your ethnic background?
Asian background; Black, African, or Caribbean background; Arab background;
White background; Mixed ethnic background; Other ethnic background; Prefer to self-describe; Rather not say.

Please specify: British, English, Northern Irish, Scottish, Welsh; Irish; Other White background/ African; Caribbean; North African / Maghrebi; Other Black background/ Bangladeshi; Chinese; Indian; Pakistani; Other Asian background.

3. Which of the following identities do you most closely identify with? Female; Male; Non Binary; Queer; Trans Man; Trans Woman; Other; Prefer to self-describe; Rather not say.

Please write here/specify.

- 4. Which of the following most closely describes your sexual orientation?
 Asexual; Bisexual; Lesbian; Gay Man; Gay Woman; Heterosexual; Pansexual;
 Queer; Other; Prefer to self-describe; Rather not say.
 Please write here/specify.
- 5. Mother tongue(s).
- 6. Which one of these most accurately describes your faith?

 Agnostic; Atheist; Buddhist; Christian; Hindu; Jewish; Muslim; None; Other;

 Rather not say.

 Please specify.
- 7. Where do you currently reside?

 If you wish to skip this question, please answer with 'rather not say'.

3. Menstruation - Thinking and talking about it

This section contains questions regarding metaphorical language use and menstruation.

First, here is a general question about metaphor:

- 8. Some expressions we use in everyday life are metaphorical in nature. Tick all expressions you have previously heard or used yourself:
 - You won the argument
 - · We are running out of time
 - Going this way will save me some time
 - I can see the wheels turning in your head
 - I ran out of steam halfway through the project
 - Her boss bit her head off
 - They sank into a deep sleep
- 8.a Please add any other such expressions that you have heard/used yourself (and feel free to use your native language and/or any other languages you usually speak).
- 9. What are some of the words that come to mind when thinking about menstruation? (Feel free to include words/expressions from your native language or from any languages you usually speak and think in)
- 10. How comfortable are you hearing about menstruation in general?

 Very comfortable; Somewhat comfortable; Neutral; Somewhat uncomfortable;

 Very uncomfortable.
- 11. How comfortable are you talking about menstruation in general?

 Very comfortable; Somewhat comfortable; Neutral; Somewhat uncomfortable;

 Very uncomfortable.
- 12. With whom do you talk about it?

13. To what extent was/is menstruation as a topic covered during your time in school?

Extensively; Significantly; Moderately; Insignificantly; Not at all.

4. Menstruation status

14. What is your current menstruation status?

Do not menstruate currently or at all; Have never menstruated;

Menopause/Perimenopause; Still menstruate; Still menstruate intermittently/not regularly; Other; Rather not say.

Please specify: Currently pregnant; Medical/Bodily condition; On birth control; Other; Rather not say.

5. You experience menstruation

This section contains questions regarding your feelings about and experience with menstruation, and questions about the language you use to talk about it.

15. How do you feel about menstruating? Very good; Good; Neutral; Bad; Very bad. Please explain why.

- 16. How would you describe your experience with menstruation? Enjoyable; Fine; Neutral; Poor; Not enjoyable at all.
- 17. When talking about your own menstruation, what expressions do you usually use to refer to it? (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)
- 18. In what contexts do you use those expressions?
- 19. With whom do you use those expressions?
- 20. What are some of the expressions you have heard used around you? (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)

- 21. Why do you think those expressions are used?
- 22. Would you say using some of those expressions makes it easier to talk about menstruation?

Yes, quite a bit; No, not really; It makes no difference.

- 22.a Which of those expressions do you find helpful in talking about menstruation?
- 22.b Which expressions do not make it any easier?

Bodies & menstruation management

This section contains questions in relation to bodies and the way menstruation is managed. Some questions are about menstrual products as they come into contact with the body and how you feel about that.

- 23. Write some of the words you would use to describe how you feel about your body when menstruating (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)
 23.a Why have you chosen those words?
- 24. Attitudes towards menstruation differ from culture to culture. There are thus instances where people might act as if they are not menstruating for a variety of reasons. Do you ever actively behave in a way to hide the fact that you are menstruating?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.

- 25. Do you ever say that you are not menstruating even though you are? Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.
- 26. There are also instances where people might want to signal that they are menstruating even if they aren't. Do you ever say that or act as though you are menstruating even though you aren't at that moment?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never.

Please state why.

27. What is the menstrual product you use most? Choose all that apply. Single-use pads/napkins; Tampons; Cloth/reusable menstrual pads; Menstrual cup; Period pants/underwear; None; Other. Please specify.

28. Why do you use this/these particular one(s)? Choose all that apply. Always available; The only one available; Affordable; Eco-friendly; Convenient; Discreet; Scented; Comfortable to wear; Other.

29. How comfortable are you with your hands coming into contact with your own menstrual fluid?

Very comfortable; Moderately comfortable; Neutral; Mildly uncomfortable; Very uncomfortable.

Please state why and/or add any clarification.

You do not experience menstruation, have never menstruated or menstruate intermittently.

This section contains questions regarding your feelings about and experience with menstruation (even if you do not menstruate yourself at the moment or at all, or have never menstruated), and questions about the language you use to talk about it.

You are free to skip any questions that do not apply to you.

30. How do you feel about the fact that you do not menstruate currently/at all or only menstruate intermittently?

Very good; Good; Neutral; Bad; Very bad.

30.a Please explain why.

31. If you usually menstruate and are only not experiencing it at the moment for any reason - How do you usually feel when menstruating?

Very good; Good; Neutral; Bad; Very bad.

- 32. How else would you describe your experience with menstruation (even if you do not menstruate yourself)?
- 33. When talking about menstruation in general, what expressions do you usually use to refer to it? (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)
- 34. In what contexts do you use those expressions?
- 35. With whom do you use those expressions?
- 36. What are some of the expressions you have heard used around you? (Feel free to include words/expressions in your native language or from any other languages you usually speak and think in)
- 37. Why do you think those expressions are used?
- 38. Would you say using some of those expressions make it easier to talk about? Yes, quite a bit; No, not really; It makes no difference.
- 38.a Which of those expressions do you find helpful in talking about menstruation?
- 38.b Which expressions do not make it any easier?

Bodies & menstruation management

This section contains questions in relation to bodies as they do not experience menstruation.

Please feel free to include words/expressions from your native language or from any other languages you usually speak and think in.

If you are not comfortable answering a question, you are free to skip it.

- 39. Write some of the words you would use to describe how you feel about your body, keeping in mind the fact that it does not experience menstruation at the moment or at all
- 39.a Why have you chosen those words?

- 40. If you usually menstruate and are only not experiencing it at the moment for any reason Write some of the words that come to mind in relation to how you usually feel about your body when menstruating 40.a Why have you chosen those words?
- 41. Attitudes towards menstruation differ from culture to culture. There are thus instances where people might act as if they are or are not menstruating. Do you ever actively behave in a way to signal that you are menstruating even though you are not?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.

42. Do you ever say that you are menstruating even though you are not? Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.

If you menstruate intermittently or your menstruation is interrupted at the moment for any reason.

- 43. Which one(s) of these do you usually use? Select all that apply.

 Single-use pads/napkins; Tampons; Cloth/reusable menstrual pads; Menstrual cup; Period pants/underwear; None; Other.

 Please specify.
- 44. Why do you use this/these particular one(s)? Choose all that apply.

 Always available; The only one available; Affordable; Eco-friendly; Convenient;

 Discreet; Scented; Comfortable to wear; Other.

 Please specify and/or add any clarification.
- 45. How comfortable are you with your hands coming into contact with your own menstrual fluid?

Very comfortable; Moderately comfortable; Neutral; Mildly uncomfortable; Very uncomfortable.

Please state why and/or add any clarification.

7. You are experiencing perimenopause/menopause.

This section contains questions regarding your feelings about and experience with menstruation, and questions about the language you use to talk about it.

46. How do you feel about the fact that you no longer menstruate or are on your way there?

Very good; Good; Neutral; Bad; Very bad.

Please explain why.

- 47. What were some of your thoughts when you knew you would no longer be menstruating?
- 48. How would you describe your overall previous experience with menstruation? Enjoyable; Fine; Neutral; Poor; Not enjoyable at all.
- 49. When talking about your own menstruation, what expressions do you usually use to refer to it? Please write as many as possible and feel free to include words/expressions from your native language or from any other languages you usually speak and think in.
- 50. In what contexts do you use those expressions?
- 51. With whom do you use those expressions?
- 52. What are some of the expressions you have heard used around you? (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)
- 53. Why do you think those expressions are used?
- 54. Would you say using some of those expressions makes it easier to talk about? Yes, quite a bit; No, not really; It makes no difference.
- 54.a Which of those expressions do you find helpful in talking about menstruation?
- 54.b Which expressions do not make it any easier?

55. Have you noticed a change in the way you talk about menstruation now as opposed to how you used to before experiencing perimenopause/menopause? Yes, clear change; Not sure; No, no change at all.

55.a What are some of the changes you noticed?

Bodies & menstruation management

This section contains questions in relation to bodies and the way menstruation is managed. Some questions are about menstrual products as they come into contact with the body and how you feel about that.

Please do feel free to include words/expressions from your native language or from any other languages you usually speak and think in)

- 56. Write any words that come to mind in relation to how you used to feel about your body when you were still menstruating.
- 56.a Why have you chosen those words?
- 57. Write some of the words you would use to describe how you feel now about your body as it no longer menstruates or as it goes through perimenopause.

 57.a Why have you chosen those words?
- 58. Attitudes towards menstruation differ from culture to culture. There are thus instances where people might act as if they are or are not menstruating. Do you ever actively behave in a way to signal the fact that you no longer menstruate?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.

- 59. Do you ever say that you are still menstruating? Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.
- 60. What is/are the menstrual product(s) you used most? Choose all that apply. Single-use pads/napkins; Tampons; Cloth/reusable menstrual pads; Menstrual

cup; Period pants/underwear; None; Other. Please specify.

61. Why do/did you use this/these particular one(s)?

Always/the only one available; Affordable; Eco-friendly; Convenient; Discreet; Scented; Comfortable to wear; Other.

Please specify.

62. How comfortable are/were you with your hands coming into contact with your own menstrual fluid?

Very comfortable; Moderately comfortable; Neutral; Mildly uncomfortable; Very uncomfortable.

Please state why and/or add any clarification.

8. You chose 'Other'

This section contains questions regarding your feelings about and experience with menstruation, and questions about the language you use to talk about it.

Please feel free to skip the questions that do not apply to you.

63. How do you feel about menstruation in general? Very good; Good; Neutral; Bad; Very bad. Please explain why.

- 64. What words would you use to describe your experience with menstruation (even if you do not menstruate yourself)? Feel free to include words/expressions from your native language or from any other languages you usually speak and think in
- 65. When talking about menstruation, what expressions do you usually use to refer to it? Feel free to include words/expressions from your native language or from any other languages you usually speak and think in
- 66. In what contexts do you use those expressions?
- 67. With whom do you use those expressions?

- 68. What are some of the expressions you have heard used around you?
- 69. Why do you think those expressions are used?
- 70. Would you say using some of those expressions make it easier to talk about? Yes, quite a bit; No, not really; It makes no difference.
- 70.a Which of those expressions do you find helpful in talking about menstruation?
- 70.b Which expressions do not make it any easier?

Bodies & menstruation management

This section contains questions in relation to bodies and the way menstruation is managed. Some questions are about menstrual products as they come into contact with the body and how you feel about that.

Please feel free to skip the questions that do not apply to you.

- 71. Write some of the words you would use to describe how you feel about your body when menstruating or how you would feel about a menstruating body.

 71.a Why have you chosen those words?
- 72. Attitudes towards menstruation differ from culture to culture. There are thus instances where people might act as if they are not menstruating for a variety of reasons. Do you ever actively behave in a way to hide the fact that you are menstruating?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never. Please state why.

73. There are also instances where people might want to signal that they are menstruating even if they aren't. Do you ever say that or act as though you are menstruating even though you aren't at the moment of saying it?

Yes, frequently; Yes, sometimes; Yes, rarely; I did so in the past; No, never.

Please state why.

74. What is the menstrual product you use most or think is the most effective? Choose all that apply.

Single-use pads/napkins; Tampons; Cloth/reusable menstrual pads; Menstrual cup; Period pants/underwear; None; Other.
Please specify.

75. Why do you use this/these particular one(s) or why do you think those are the most effective? Choose all that apply

Always/the only one available; Affordable; Eco-friendly; Convenient; Discreet; Scented; Comfortable to wear; Other.
Please specify.

76. How comfortable are you or would you be with your hands coming into contact with your own menstrual fluid?

Very comfortable; Moderately comfortable; Neutral; Mildly uncomfortable; Very uncomfortable.

9. You chose 'Rather not say'

This section contains questions regarding your feelings about and experience with menstruation, and questions about the language you use to talk about it.

If you are not comfortable answering the questions, please feel free to skip them.

77. How do you feel about menstruation in general? Very good; Good; Neutral; Bad; Very bad. Please explain why.

- 78. What words would you use to describe your general experience with menstruation (even if you do not menstruate yourself)?
- 79. When talking about menstruation, what expressions do you usually use to refer to it? (Feel free to include words/expressions from your native language or from any other languages you usually speak and think in)
- 80. In what contexts do you use those expressions?

- 81. With whom do you use those expressions?
- 82. What are some of the expressions you have heard used around you?
- 83. Why do you think those expressions are used?
- 84. Would you say using some of those expressions make it easier to talk about? Yes, quite a bit; No, not really; It makes no difference.
- 84.a Which of those expressions do you find helpful in talking about menstruation?
- 84.b Which expressions do not make it any easier?

Bodies & menstruation management

This section contains questions in relation to bodies and the way menstruation is managed. Some questions are about menstrual products as they come into contact with the body and how you feel about that.

Please feel free to skip the questions that you are not comfortable answering.

- 85. Write some of the words that you would use to describe how you feel about a menstruating body.
- 85.a Why have you chosen those words?
- 86. Attitudes towards menstruation differ from culture to culture. There are thus instances where people might act as if they are not menstruating for a variety of reasons. Are you aware of such instances where people around you have actively behaved in a way to hide the fact that you were menstruating? Yes, I have witnessed this; Yes, I have heard of this; No, I am not aware. Please describe what happened.
- 87. There are also instances where people might want to signal that they are menstruating even if they aren't. Are you aware of instances where people around you have said that or acted as though they were menstruating even though they weren't at the moment of saying it?

Yes, I have witnessed this; Yes, I have heard of this; No, I am not aware. Please describe what happened.

88. What is/are the menstrual product(s) you think is/are the most effective? Choose all that apply.

Single-use pads/napkins; Tampons; Cloth/reusable menstrual pads; Menstrual cup; Period pants/underwear; Other.
Please specify.

89. Why do you think this/those particular one(s) is/are the most effective? Choose all that apply.

Always/the only one available; Affordable; Eco-friendly; Convenient; Discreet; Scented; Comfortable to wear; Other.

Please specify.

90. How comfortable would you be with your hands coming into contact with menstrual fluid?

Very comfortable; Moderately comfortable; Neutral, Mildly uncomfortable; Very uncomfortable.

Please state why.

10. -

91. Do you have anything else you would like to add?

11. Further questions

The following questions are slightly more sensitive than the ones you have answered so far. If you would like to answer them, please keep reading. If you would rather not, you are free to disregard them.

92. Have you been treated or do you plan on being treated through Hormone Replacement Therapy (HRT)?

Yes; No; Not sure yet.

Please explain why.

93. Thinking of menstruation and sexual intercourse, what are some of the thoughts that come to mind?

94. If you are someone who does menstruate, would you consider having sexual intercourse while you are menstruating?

Yes; No; Maybe, it depends; Not applicable.

Please explain why.

95. If you are someone who does not menstruate, would you consider having sexual intercourse with a menstruating partner?

Yes; No; Maybe, it depends; Not applicable.

Please explain why.

12. Thank you for your participation!

Thank you for taking the time to complete this survey and for participating in this research project. The information you have provided is very important for the completion of this project.

If you have any further questions, please do not hesitate to contact me at m.boughenout.1@research.gla.ac.uk

Further optional participation & information

If you would like to receive a report of the results of the study once it is complete, click here as well to be redirected. Your answers will remain anonymous. Alternatively, you can contact me directly at the email address given above.

Your responses in this survey will always remain completely anonymous.

Link to further optional participation and information

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