

Modest Venus: Experiments in Seeing

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20 February 2019

This thesis is submitted in partial fulfilment of the requirements for a
Postgraduate Degree in Creative and Critical Writing at Cardiff University

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Abstract

A series of linked essays forms the basis of this thesis, their common thread being the argument that factual knowledge relating to female sexual anatomy is affected by taboo and sexual politics. Passages of self-reflective travel and memoir writing are juxtaposed with material gleaned from quantitative and qualitative research conducted with anatomists, clinicians, writers, artists and scholars. In Western Art female beauty has been traditionally associated with modesty; while the female genitals have been associated with sinful transgression and shame. I will argue that there remains a legacy within anatomical science of historical representations of the body based on myths, misconceptions and notions of gender difference. The story of the clitoris, for example, cannot be understood without taking into account social and cultural factors that frame our perceptions of what it is to be female; factors that need to be critically examined at a time when values based on a respect for accuracy and transparency in relation to factual knowledge are increasingly under threat in the public realm, with noxious implications for health and well-being.

Summary

My thesis begins with an account of becoming aware, as a child, of different ways of seeing. I then discuss Ludwik Fleck's contention that far from representing 'correct' thinking and observation, modern concepts of natural science are complex historically developed products that are embedded in the culture of their time. Examples of such concepts lead to a discussion of writers in whose works the boundaries between fact and fiction are blurred. Finally, I set out my aim: to investigate the possibility that representations of female sexual anatomy (contemporary and historical) are affected by symbolic modes of thinking which prevent us from seeing what it is really there 'in Nature'.

In Chapter One, a description of photographic works seen at an exhibition of Land Art serves to link a geographical blind-spot to the existence of taboo within the culture of Anatomy. Introducing research conducted by the Australian urologist Helen E. O'Connell and colleagues (published in 1998 and 2005), I highlight a key point made in their second paper: that the anatomy of the clitoris has been dominated by social and cultural factors, with implications for the preservation of female sexual function during surgery. In an account of an interview conducted with O'Connell, I provide a context for her alternative view of female genitalia. Examples of writers who offer contrasting views of the female body help to illustrate my point that the instability of anatomical knowledge that O'Connell *et al.* refer to reflects outdated moralistic attitudes towards female sexuality. I suggest that their research, based on cadaveric dissections and enhanced by advanced imaging techniques, represents a return to the basis of anatomy, that of first hand observation of what is inside the human body, in order to test existing knowledge.

In Chapter Two I continue to describe my research 'journey', outlining how on my return from Melbourne I met the then Head of Anatomy at Cardiff School of Biosciences, Professor Bernard Moxham. After summarising our plans to work together on a research project to measure medical students' awareness of issues relating to sexual politics within anatomical textbooks and teaching, I describe interviews conducted with anatomists and clinicians who attended a conference at Cardiff University, where I also presented a poster. I then write about my research into the personal essay form and my decision to include extracts of transcripts of my interviews and data collected as part of joint quantitative research, to give scientists a voice, as I do in this and subsequent essays.

In Chapter Three I draw upon childhood memories of living in temporary accommodation whilst waiting to leave South Australia for south Wales. It was during this time I made paper toys and books that I was reminded of when researching items known as flap books or fugitive sheets. I explain that though to contemporary eyes anatomical flapbooks might look like popular, erotic entertainment, in the 16th and 17th centuries they were advertised as being ‘true to nature’ copies of something that the artists had personally witnessed. I then suggest that a similar blurring of fact and fiction can be seen in anatomical textbooks by Andreas Vesalius, where illustrations of male and female surface anatomy combine aspects of ‘drawing from life’ with stories and symbols taken from classical art and the Bible. Tapping into concepts from film studies and art history such as ‘the male gaze’ and ‘the female nude’, I link ‘realist’ anatomical representations to artistic ideals relating to beauty and objectification. Finally I discuss works by contemporary artists who engage with gender issues, before asking what Anatomy might be like if it was seen through the eyes of women and was relevant to their lived experiences.

Chapter Four opens with an account of a conference which brought together anatomists, artists, scholars and medical illustrators to commemorate the 500th anniversary of the birth of Andreas Vesalius. I include extracts from my interviews with delegates from both sides of the ‘two cultures’ divide while suggesting that a book purporting to provide a factually accurate account of the form and structure of the human body, like the *Epitome* by Andreas Vesalius, reveals the female body symbolically and only partially through its appropriation of images taken from art. I also comment on Ryszard Kapuściński’s engagement in *Travels with Herodotus* with the Ancient Greek writer’s belief that emotions and superstitious beliefs play a key role in determining people’s actions and ways of thinking, which can lead to difficulties for those seeking to provide purely factual accounts of events – a tension that Kapuściński recognises in his own writing. I conclude by suggesting that this is also a problem for those studying anatomical descriptions and illustrations, particularly in relation to contested areas of the human body, such as female sexual anatomy.

Chapter Five begins with a description of Istanbul’s Grand Bazaar and a visit to an antique bookstore. This is followed by a reference to Orhan Pamuk’s novel, *My Name is Red*, and its portrayal of the difficulties faced by Ottoman miniaturists who were exposed to the Western realist tradition. After describing my research into visual representations of the female anatomical body, I discuss the responses of members of an international anatomical terminology group, when asked if they think the term *pudendum* is outdated and sexist, given its original meaning, which is modesty and shame. After considering Michel de Montaigne’s

views on censorship, I suggest that he tests the limits of taboo when celebrating bodily matters and sexual love. Examples of censored works of art featuring realistic nudes follow. In a brief historical survey of the anatomy and medicine of sex, I argue that concerns relating to obscenity also arise in science. Changing attitudes towards the objectification of women are then considered. I conclude by discussing the way sex educators in some parts of the world omit references to the clitoris and fail to address the effects of pornography.

In Chapter Six passages of travel and memoir writing enable me to compare different approaches to the female anatomical body as represented in life-size wax models made by Clemente Susini in the late 18th and early 19th centuries. A model of a young female torso (1802 – 1803) designed to give medical students at the University of Cagliari information useful for their professional training shows the structure of the female perineum with a level of detail unmatched until recent studies. Whole body ‘Anatomical Venuses’ made two decades earlier for the Museum of Natural History and Physics in Florence, by contrast, represent an aesthetic and symbolic approach towards female anatomy. I suggest that by imbuing so-called scientific models with the allure of high (and low) art anatomists, modellers and curators obscured what can be seen in the human body.

In my Conclusion, a self-reflective account of an incident in my teenage years leads to a discussion of how sex education can counter the effects of exposure to online pornography. I then consider issues raised in scholarly debates regarding the impact of social factors on medical education and practice. Further reflective comments on my thesis follow, including a discussion of how I set about including findings from quantitative and qualitative research in my personal essays. After suggesting that anatomical discoveries can affect the way we conduct ourselves as well as envision and understand our bodies, I argue that the role of cultural perspectives and sexual politics in framing such ‘discoveries’ is key, as they have the power to distort, omit or obscure difficult truths. I end my thesis by expressing the hope that scientists and artists alike can find ways to accept and depict natural variation in sexual anatomy without connotations of shame or the need for false modesty.

Acknowledgements

My sincere thanks go to my supervisors, Professor Richard Gwyn and Professor Martin Willis, at the School of English, Communication and Philosophy at Cardiff University, for the support, advice and encouragement they have given me over the years. I am immensely grateful to Professor Bernard Moxham, at the School of Biosciences at Cardiff University, for generously suggesting that we work on a research study, along with Dr. Odile Plaisant and Dr. Baptiste Lignier in Paris, and for introducing me to other colleagues when I was collecting data. The travel required for this dissertation would not have been possible without the support of the School of English, Communication and Philosophy at Cardiff University. It is a pleasure to thank all those who agreed to be interviewed. I am particularly indebted to Professor Alessandro Riva and Dr. Francesco Loy for their hospitality when I visited the Museum of Anatomical Waxes at Cagliari University, to Dr. Claudia Corti, for her help and advice when I visited the collection of anatomical wax models at the Natural History Museum, Florence (*La Specola*) and to Philip Oldfield at the Thomas Fisher Rare Books Library, Toronto University, for showing me around the exhibition he curated to celebrate the 500th anniversary of the birth of Andreas Vesalius. I am greatly obliged to Professor Helen E. O'Connell for being so generous with her time in early interviews and subsequent correspondence, as it was her ground-breaking work at the Royal Melbourne Hospital that originally inspired this thesis. I am grateful to Professor Ann Heilmann at Cardiff University for her assiduous attention to detail and helpful advice on how to improve my thesis in its early stages. For his advice and constructive feedback on later drafts of chapters, I am immensely grateful to Professor Andrew Sayer of Lancaster University. A special thank you is due to my external and internal examiners Professor Timothy Mathews (UCL) and Dr. Ailbhe Darcy, for their constructive and insightful comments. I would like to express my heartfelt gratitude to Rhian Rattray, Postgraduate Manager in ENCAP, for her exceptional support in helping me to negotiate the Byzantine rules and regulations surrounding doctoral research and organisational idiosyncrasies. Finally, I would like to dedicate my thesis to my husband Kevin Morgan and our sons Louis and Robin, who provided unfailing love and support during this entire process.

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This thesis refers to research papers written with co-authors and published in The Journal of Anatomy and Clinical Anatomy, and also transcripts of interviews. Please contact the author for further information if required (encap@cardiff.ac.uk).

Foreword

I walked with my brother to the village shop in Trimithi to buy what I now know to be *koulouri*. Did we ask for bread? Our father bought a phrase book (*Greek in Your House: A Practical Handbook for Home Use*) for what he called his four week ‘stint’ in Cyprus, so it is possible I was instructed to say *psomi*.¹ No doubt I stumbled over the word, just as I short-sightedly stumbled through the open doorway to the sweet-smelling darkness within. There were two women inside the shop, whose conversation we seemed to interrupt: one all in black, sitting on a low wooden chair; the other (her daughter?) appearing to float up from behind a looming counter piled high with produce displayed in countless boxes, bottles and jars. As we left there came a sudden peal of laughter, followed by a rapid exchange of words. Perhaps they knew who we were and found us comical? Winding our way slowly up steep cobblestone alleyways, Michael and I took turns breaking bits off the crust, to savour the toasted seeds. This was not what we called ‘bread’ at home. Rough and ready, sour and chewy, it spoke of other ways of doing things, not just food, I thought: everything, the whole of life.

Being open to new possibilities appealed to me – just as I relished the unfamiliar taste, smell and feel of the bread – I would not have been happy being told there was just one ‘legitimate’ way to live. Perhaps this is why, many years later, I found the work of the Polish-Jewish microbiologist Ludwik Fleck so compelling when I was doing research for this thesis. In his monograph, first published in German in 1935, Fleck challenges a common view of science as held by some eminent philosophers who:

believe that our present-day scientific opinions are in complete contrast with all other ways of thinking. As if we had become wise and our eyes had been opened, they believe that we have simply discarded the naïve self-consciousness of thought processes which are primitive or archaic. We are supposedly in possession of ‘correct thinking’ and ‘correct observation’, and therefore what we declare to be true *is ipso facto true*.²

¹ Caroline M. Hufford and Ileana Eliadou, *Greek in Your House: A Practical Handbook for Home Use* (Cyprus: Zavallis Press, 1956).

²Ludwik Fleck, *Genesis and Development of a Scientific Fact*, 1935, transl. by Fred Bayley and Thaddeus J. Trenn (Chicago: University of Chicago Press, 1979), p. 50.

Fleck likened this approach to that of an unknown “French philologist of the eighteenth century who claimed that while *pain, sitos, bread, Brot, panis* were arbitrary, different descriptions of the same thing,” only what is called bread in French was in fact the ‘real thing’.³ He believed science needed to be brought down to earth, because “excessive respect, bordering on pious reverence, for scientific facts” stops us studying the way it produces knowledge.⁴ Preferring not to see factual knowledge as non-human sets of ethereal things such as ‘ideas’ or immaterial ‘texts’, he looked upon it as the product of people *doing things*, situated in time and space. Modern concepts of natural science, he argued, are historically developed products that cannot be understood without taking into account what preceded them, how they evolved and who was doing the work that created them. Scientific ideas are also embedded in the culture of their time, indeed “at least three-quarters if not the entire content of science is conditioned by the history of ideas, psychology, and the sociology of ideas and is thus explicable in these terms,” he argued.⁵ This includes current research techniques, which are themselves the result of historical development.

According to Fleck, even the way we *see* depends on which community of thinkers we have been initiated into. To see, one must know what to look for. We have to know what is essential and what is not essential; we must distinguish the image from its background, and the background from the image; we must know to which category the object belongs. Fleck shows how scientific illustrations are styled to conform to existing theories, rather than to nature as it is observed. Also how they draw on philosophy and the arts.

Ideas like these helped to explain why, far from being a ‘dead’ subject, with all knowledge completed, Anatomy still gives rise to controversies. In the case of female genitalia cultural and social prejudices, including gender bias, make it particularly difficult to adopt a dispassionate point of view, even when advances in imaging technologies show there is something new to be discovered in the gross, visible anatomy of the human body. In the essays that follow, I suggest that the pose known as the *Venus Pudica*, or *Modest Venus*, which epitomizes female beauty in classical Western aesthetics, continues to have an impact on anatomical representations of the female body. Early modern studies of gross anatomy (based on first-hand observations made whilst dissecting cadavers) inspired intricate woodcuts and fine engravings that represent the body in great detail – yet in them female sexual anatomy is either absent, hidden from view, or expressed in symbolic or schematic

³ Ibid., p.50.

⁴ Ibid., p.47.

⁵ Ibid p.21.

styles that emphasize female inferiority. The term ‘*pudenda*’ in anatomy means both genitalia and shame. “And what shame? They are not for the eye!” writes Denise Levertov, in *Hypocrite Women*.⁶ In anatomical science, when the female perineum is made visible (or suggested, through veils, flaps, symbols and metaphors) something curious happens, linked with a loss of control. Fear of falling – into disgrace - leads to social constraints. Powerful taboos are faced by those seeking to know themselves, by uncovering the anatomy of their innermost parts.

Face-to-face interviews I conducted with medical scientists and health professionals, as well as artists and writers in whose work female anatomy features, greatly enriched my understanding of these issues, as did the collaborative quantitative study that I undertook, which resulted in papers published in the *Journal of Anatomy and Clinical Anatomy* (See Appendix). In order to juxtapose summaries of some of our findings, extracts from the interviews and personal reflections based on my knowledge of literature and the arts, I switch in my essays between very different sources, genres and styles, whilst considering what it means to ‘draw from life’, in terms of representations of the naked female body. Works by writers who explore the boundaries of fact and fiction suggested how I might go about presenting research findings in a personal account that includes self-reflection.⁷

It was when I was designing my interview questions that I turned to translations of works by Ludwik Fleck. Whilst commenting on the artistic symbols and allusions to philosophy and poetry that appear in early anatomical books, Fleck was struck by cases in texts where uncertainty comes to the fore. He refers to vertigo and uncertainty, for example, when discussing the work of Jacapo Berengario da Carpi (1466 – 1530), anatomist and professor of medicine at Bologna, suggesting that he was “full of contradictions, ever retreating and terrified by his own discoveries. When reading papers from that period,” he continues, “we begin to think that the respective authors suffered from a specific dizziness, that their eyes were jumping, that they saw alternately the medieval world and the path to the new world.”⁸ Berengario had been apprenticed to a printer and engraver before embarking on his medical career and he is credited with being the first to include ‘drawings from life’ in a treatise on anatomy. It seems he was also the first to doubt the existence of an anatomical structure called the *rete mirabili*, or ‘wonderful net’, a vital organ according to Galenic anatomists,

⁶ Denise Levertov, “Hypocrite Women” from *Poems 1960-1967*, (New York: Norton, 1966), p. 6.

⁷ Including: Giorgio Agamben, Roland Barthes, Walter Benjamin, John Berger, Anne Carson, Zbigniew Herbert, Ryszard Kapuściński, Jean-Luc Nancy, Anne Oswald, W. G. Sebald.

⁸ Ludwik Fleck, ‘Scientific Fact and Observation’, in *Cognition and Fact - Materials on Ludwik Fleck*, trans. by R. S. Cohen and T. Schnelle eds (Netherlands: D. Reidel Publishing Company, 1986), p. 76.

reputedly made from arteries at the base of the skull which extracted animal spirits from the blood.⁹ Failing to find such a structure in his dissections, but not yet ready to challenge Galenic authority, Berengario shifted the production of the animal spirits to the branches of the internal carotid artery in the pia mater. Anatomical illustrations continued to make the rete mirabili seem real, representing it as a structure located above the eyes, as can be seen in *Anatomiae* by Johann Dryander (1537). By fixing the image in the mind of the reader, medical students and others were taught to believe in something that could not be seen within the dissected human body.



J. Dryander, Sections of Human Head, from *Anatomiae* (1537), fol. 28r Engraving. (Wellcome Library, London.)

Not that Fleck thought problems of perception were much better solved in his day. In *To Look, To See, To Know* (1947) he provides a photographic image and asks us what we think it is, before commenting on it in detail himself: “From the black background the picture of a gray, wrinkled surface stands out. Some places look like rough folds, others like densely arranged warts, one place reminds us of the waves of a muddy liquid, others of clouds of smoke (perhaps because the picture in this border place is out of focus.) We find a place

⁹ Andrea Carlino, *Books of the body: anatomical ritual and Renaissance learning*, trans. by John Tedeschi and Anne C Tedeschi (Chicago and London: The University of Chicago Press, 1999), p. 202.

which looks like frizzly fur, yet this is no fur, for there are no hairs to be seen. Now what is it? Is it the skin of a toad under a magnifying glass or perhaps a part of the culture of the celebrated fungus to which we are indebted for penicillin? Or perhaps a close-up of the neck of an old mountaineer?”¹⁰

When he tells us what it actually is (a ‘perfect’ photograph of cirrocumulus cloud) he wants us to look at it again, this time from a distance. “Once we know what it is and in what way one should look at it, we see immediately the enormous depth of the sky, and a large fluffy cloud whose variable structure, while unimportant in the details of limited places, in its entirety reminds us of a sheep’s fur.”¹¹ In other words, we need to be taught how to look and what to see, how to ‘read’ images. Even those images that are mechanically produced can be difficult to interpret. Supposedly free from biased human interpretation, they can lack the precision, the colour, definition and depth of field of a good scientific illustration.

I found myself drawn to writers who explore the boundaries between fact and fiction, as well as those whose works resist classification. I saw how Michel de Montaigne, one the earliest essay writers (who was much enamoured of the form he called his ‘brain-child’), enlivened his works with digressions, double-backs, looping hair-pin bends and vertiginous drops. It helped that I was exposed to non-fiction writing at quite an early age. Though Montaigne’s *Selected Essays* was not amongst the books we took with us to Cyprus, I do remember dipping into *Bitter Lemons* by Lawrence Durrell. Perhaps because we were staying so close to Bellapaix where Durrell lived for three years, in a villa like his with a rough stone floor and a roof thatched with reeds, my father decided to bring his copy along. It was one of the books I chose as a keepsake, after his death; another came from his collection of Penguin paperbacks. The pages of his copy of ‘*À Propos of Lady Chatterley’s Lover’ And Other Essays* by D. H. Lawrence are now yellowed with age, even crumbling in places, but pleasantly scented, like well-seasoned wood. In *Pornography and Obscenity* Lawrence makes the point that “Man is a changeable beast and words change their meanings with him, and things are not what they seemed.”¹²

The German writer and literary scholar W.G. Sebald who, like my South African father, left the country of his birth to live abroad in a kind of self-imposed exile, was an inspiration. On a walking tour of Suffolk, afraid of succumbing to dizziness as he negotiates a crumbling

¹⁰ Ludwik Fleck ‘To Look, To See, To Know’, in *Cognition and Fact - Materials on Ludwik Fleck*, trans. by R. S. Cohen and T. Schnelle eds (Netherlands: D. Reidel Publishing Company, 1986), pp. 129 – 130.

¹¹ Ibid., p. 130.

¹² D.H. Lawrence, ‘Pornography and Obscenity’, in ‘*À Propos of Lady Chatterley’s Lover’ And Other Essays* (London: Penguin Books, 1961), p. 60.

cliff edge, the narrator in *The Rings of Saturn* (who is also called Sebald) thinks he sees “something of an odd, pallid colour move on the shoreline.”¹³ It is one of those moments, as so often with Sebald, when your eyes cannot be trusted; or when what you see cannot easily be taken in. In the next sentence the narrator seems to be quite drily reporting that what he has seen is a couple having sex, yet we are deflected from this bald fact by the use of a strangely ominous tone: “The couple lay down there, in the bottom of a pit, as I thought: a man stretched full length over another body of which nothing was visible but the legs, spread and angled.”¹⁴ ‘The bottom of a pit’ suggests a mass grave, or the location of a crime scene, yet as if that is not enough, Sebald directs our attention to the way the man’s feet twitched, which makes him think of “one just hanged.”¹⁵ Then the fictions multiply, seemingly without end. To explain why he might have thought he’d seen something misshapen: a “great sea-mollusc, washed ashore... a many-limbed two-headed monster that had drifted in from far out at sea”,¹⁶ Sebald introduces another writer, in whose tale an oval, half-fogged mirror features. A mirror reflected in a mirror, a tale within a tale, based on an observation made by the leader of a heretical sect in a story set in a fictitious place, Sebald’s narrator cannot even find the ‘true’ source of the original observation (which relates to what is disturbing about mirrors, and also the act of copulation: they multiply the number of human beings). A self-confessed spinner of tales, it is surely no accident that a fabric that repeatedly appears in Sebald’s work is made from that most slippery and precious of threads: silk. In his unique style of travel writing he introduces us to the most unlikely and out of the way places. He may be seeking to discover more about himself, but such truths as do emerge always seem to be on the verge of slipping through his fingers, as fleeting, elusive and unreliable as his memory and sense perceptions.

Allusions like these to fantastical transformations and bizarre body shapes reminded me of a card game that I played with my youngest brother Andrew, who was five years old at the time we visited Cyprus. We called it ‘Heads and Tails’ and enjoyed flipping over the coloured picture cards to match the heads and bodies of different animals, including humans. What we liked most was matching them incorrectly, in order to make a collection of hybrid monsters. When, quite recently, I came across a version of the game in the museum gift shop at Le Havre, I was interested to see that in France it is called ‘*Animaux Travestis*’. Quite often

¹³ W.G. Sebald, *The Rings of Saturn*, (London: Vintage Press, 2002), p. 68.

¹⁴ *Ibid.* p. 68.

¹⁵ *Ibid.* p. 68.

¹⁶ *Ibid.* p. 68.

during our stay at Trimithi the lights would suddenly flicker and go out, power cuts that could last for hours. On evenings like these we would pass the time bickering by candle-light, creating moving shadows on the walls like strange picture shows with bestial sound effects, as if our animal travesties had come to life.

When my father's work was finally done we left the little village in northern Cyprus to make a trip across the island: the six of us with our luggage somehow squashed into a hired Ford Escort. We had been invited to stay for a couple of nights in the family home of a friend and colleague of his, who lived near Paphos. It was during this time we visited the beach at Aphrodite's Rock, said to be the birthplace of the goddess of love. I must have been told something about her, because in the old school exercise book that I used as diary during that trip there is an entry that reads: "Saw Aphrodite's special foam on the pebbles." I somehow doubt I was given George Grote's account of the legend to read, as it appears in his *History of Greece*, which was first published in 1846. Alluding closely to the version written by the 8th – 7th centuries B.C.E. Theban poet Hesiod, it features a plot to maim Uranus (the God of the Heavens) as envisioned by Gaea (the Earth Goddess), who seeks revenge after he cruelly banishes some of their children to 'hidden places of the earth'. Only her youngest son Kronos (Cronus) is brave enough to take up his mother's call to avenge his siblings. Armed with a sickle specially crafted for the job by the wrathful Gaea, he hunts down Uranus, cuts off his penis and testicles and casts them into the sea. I certainly make no mention of the fact that it is Kronos's father's castrated genitals that cause the sea to froth and bubble up, as it does on the beach near Aphrodite's Rock.

Perhaps to protect me from exposure to such violent images of family strife, I was given a milder version of the legend, like that in the *Encyclopaedia Britannica*. Here we are told Kronos cuts the body of his father 'into pieces', which he throws into the sea, whereupon the water turns to foam. It is out from this spume that a most beautiful maiden emerges, so the story goes. At first the currents gently carry her toward the island of *Cythera*, until the western wind Zephyrus intervenes, guiding her to the shores of Cyprus at Paphos. As soon as she reaches land beautiful anemones and wild roses spring up, which to this day allegedly bloom on the rocks at Paphos. According to a local myth anyone who swims around the Aphrodite Rock will be blessed with eternal beauty. One of the friends Lawrence Durrell made while living in Bellapaix was working in Paphos at the time when they discovered the cone-shaped black stone, idol of Aphrodite, in an abandoned byre. Even in the late 1950s when Durrell lived in Cyprus, it seems the youths of Paphos still went out on a certain night of the year to anoint the stones of the temple with "oil and almond-water... while women

(would) leave their rings and fragments of their petticoats as *ex votos* against barrenness.”¹⁷ Durrell describes visiting the beach and listening to “the oldest sound in European history, the sighing of the waves as they thickened into roundels of foam and hissed upon the carpet of discoloured sand.”¹⁸

Another friend of Durrell’s – old Panos – travelled with him to what he describes as the “desolate and unvisited coast-line of the Paphos district.”¹⁹ Over wine and biscuits brought along for the trip, Panos “expounded the meaning of Aphrodite’s legend which he believed had been misinterpreted by the historians. She was a symbol, he said dryly, not of license and sensuousness, but of the dual nature of man – the proposition that lay at the heart of the ancient religions from which she had been derived, and to which her legend was the most enduring and poetic of European illustrations. She belonged to a world of innocence outside the scope of the barren sensualities which are ascribed to her cult; she was an Indian.”²⁰ Was he alluding, I wondered, to the different approach towards female sexuality that Kenneth Clark writes about, in relation to the cult of Aphrodite, which he suggests derived from Eastern religions that celebrated physical passion in terms of “luxuriant sensuality”?²¹

Perhaps I should not have been so surprised to see an illustration of Venus, as the Romans called Aphrodite, in an anatomical textbook by Andreas Vesalius. Not if it was used, like the *Encyclopaedia Britannica* version of the Greek myth, to deflect us from ‘the facts’, to stop us seeing something unpalatable. Or to legitimise the appearance of naked female body in a book of anatomical science with the allure of high art. There was a poet called Anyte of Tegea living at the beginning of the third century, who wrote an Epigram to Aphrodite, in which the marble gaze of the statue of the goddess of love is described as having magical powers. In translation it reads:

¹⁷ Lawrence Durrell, *Bitter Lemons*, (London: Faber and Faber, 1959), p. 94.

¹⁸ *Ibid.* p. 170.

¹⁹ *Ibid.*, p. 171

²⁰ *Ibid.*, p. 171.

²¹ Kenneth Clark, *The Nude: A Study in Ideal Form* (London: The Folio Society, 2010) p. 60.

This is the site of the Cyprian, since it is agreeable to her
to look ever from the mainland upon the bright sea
that she may make the voyage good for sailors. Around her the sea
trembles looking upon her polished image.²²

Perhaps Vesalius chose to include an image of the goddess in his textbook to celebrate a love of life, given how controversial anatomy was in his time: a practice some people found frightening and disgusting; at best an uncomfortable reminder of their mortality. Perhaps it was commissioned to act as a lucky charm, a talisman to protect us as we turn the pages of his textbook, uncovering layer upon layer of the fabric of our bodies, when seeking to understand its living reality.

Calling my collection of essays *Modest Venus: Experiments in Seeing*, I describe the different places I went to, the people I met there and our conversations, as well as the writers whose works I took with me to read whilst on my travels. Central to my enquiry is a word that appears in Fleck's monograph. David Östlund notes the way that the "profoundly *social* nature of *denken* (always being *interaction*) is Fleck's distinctive characteristic as a theorist of thought as *things done*."²³ Also, the playful and creative way in which he invents hybrid terms. Fleck deliberately chooses to use the compound word *Denkverkehr*, for example, rather than employing the German word *Kommunikation* (as in the American English translation of *Entstehung und Entwicklung einer wissenschaftlichen Tatsache: Genesis and Development of a Scientific Fact*.)²⁴ By consciously not using *Kommunikation*, Fleck was able to evoke the messy *lack* of communication that usually occurs when people interact. 'Thought intercourse' (for lack of a better compound term in English) is not seen as a tragic lack of understanding, however, so much as an enjoyable and possibly excitingly productive interaction, involving *creative misunderstandings*, with elements of chance out of which new modes of thinking might even emerge.

²² Anyte of Tegea, 'Epigram to Aphrodite', trans. by Marilyn B. Skinner, in Marilyn B. Skinner, 'Ladies' Day at the Art Institute: Theocritus, Herodas, and the Gendered Gaze', in *Making Silence Speak: Women's Voices in Greek Literature and Society*, ed. by André Lardinois, Laura McClure (Princeton: Princeton University Press, 2018), p. 210.

²³ David Östlund, 'Ludwik Fleck as a theorist of thought as *res gestae* — or, Does a pair of dots in Swedish matter?' *Transversal: International Journal for the Historiography of Science*, 1 (2016) 12-20 (p.12). <http://www.historiographyofscience.org>. [accessed 12 February 2018]

²⁴ Ludwik Fleck, *Genesis and Development of a Scientific Fact*, 1935, transl. by Fred Bayley and Thaddeus J. Trenn (Chicago: University of Chicago Press, 1979)

As someone with a background in the humanities, I thought if I was able to compare the views of those working on anatomical representations of the human body from both sides of the so-called two-cultures divide I might gain a better understanding of why our knowledge of female sexual anatomy is affected by symbolic or ‘imaginary thought styles’, which prevent us from seeing what it is really there ‘in Nature’. I hoped that, by investigating the warp and the weft of such modes of thinking, it might be easier for people to accept there are different ways of seeing the body and to “take delight in being conducted there” as Michel de Montaigne so memorably put it, so that they might “linger and love longer: as in poetry, which can show us love with an air more loving than love itself.”²⁵

²⁵ Michel de Montaigne, ‘On Some Lines from Virgil’ in *The Essays: A Selection* (London: Penguin Books, 1993) p. 309.

1. On parts of the body that disappear (and going down under)

Sections of England: The Sea Horizon, is the series of photographs that launched Garry Fabian Miller's career when he was nineteen. Four images from this body of work were selected for the exhibition *Open Photography 1978* at the Midland Group Gallery, Nottingham, which toured to the Serpentine Gallery, London. In the catalogue Miller stated that he worked "entirely in colour, working with and in the English landscape."²⁶ Landscape? You could be out at sea, under huge skies, transfixed by the effects of continuously changing light, waves and reflections.



Fig. 2, Garry Fabian Miller, *Sections of England: The Sea Horizon No.5* (1976 – 77)
HackelBury Fine Art.

²⁶ Quoted by Nicolas Alfrey, Joy Sleeman, Ben Tuffnell in *Uncommon Ground: Land Art in Britain 1966- 1979* (London: Hayward Publishing, 2013), p. 54.

The photographs were actually taken from the roof of Miller’s home at Clevedon, overlooking the Bristol Channel towards Wales, which is only intermittently visible as the faintest hint of a smudged line on the horizon.



Fig. 3, Garry Fabian Miller *Sections of England: The Sea Horizon* No. 21 Series 1 1976-77 HackelBury Fine Art

Seeing six prints from the series displayed in an exhibition of Land Art at the National Museum of Wales in Cardiff, I was struck by their variability, given the fact that the “lens, the film, the exposure, the viewpoint, and the arc of the sky were all fixed constraints”, according to the exhibition catalogue.²⁷ At first, the title of the series made me think of anatomical sections, though when I registered the fact that the only land in the photographs is the south-east coast of Wales, what came to mind was the infamous *Encyclopedia Britannica* entry: “For Wales see England”.²⁸ Not that land can always be seen, that depends on the weather conditions when each photograph was taken. Calling Wales a ‘sea horizon’ makes it seem elusive and distant, a mysterious un-reachable destination, the threshold of an unknown territory, which only served to increase my feelings of displacement. The wide expanse of

²⁷ Ibid., p. 54.

²⁸ Adam and Charles Black, *Encyclopedia Britannica*, 9th edn (Edinburgh: A & C Black, 1888), p. 325.

water that dominates each shot remains nameless, ignoring the fact that it is fed by the River Severn, which appears first as an obscure spring in the Plynlimon mountains in Ceredigion, from where it winds its way in and out of Wales, before flowing into the tidal estuary that still bears its name. Until Tudor times the estuary was called the Severn Sea, which remains its name in both Welsh and Cornish: Môr Hafren and Mor Havren respectively, Môr meaning Sea. It has one of the highest tidal ranges in the world, one of the reasons so many docks were built, outside which coal-bearing or ballast-balanced ships queued as they waited for the high tide. Photographs from the period make it look like the straits of Bosphorus, or a landscape painting depicting Commerce. “When we ‘see’ a landscape,” writes John Berger, “we situate ourselves in it.”²⁹ What if our place in that landscape is not recognised? Miller’s ‘English landscapes’, seascapes, or, given the Bristol Channel’s intimate relationship with the Severn Estuary, images of a strange place in-between, seemed to raise issues as slippery as these.

I was affected by similar feelings of uncertainty and dislocation when an article in the *New Scientist* caught my eye, with a rather startling lead sentence: “A new anatomical study shows there is more to the clitoris than anyone ever thought.”³⁰ The research paper being discussed, entitled ‘Anatomical Relationship between Urethra and Clitoris’ had been published two months earlier, in *The Journal of Urology*.³¹ Having undertaken detailed dissections on two fresh and eight fixed human cadavers (age range 22 -88 years), and compared what they found with information provided in standard medical textbooks, its authors – who included a urological surgeon and an expert in paediatric genital reconstruction – concluded that current anatomical descriptions of female urethral and genital anatomy were inaccurate and poorly presented. The recommendation that gained the most media attention concerned the need to redraw and redefine the clitoris. Far from being the tiny visible part it was generally assumed to be, this research suggested that it was a much larger and far more complex organ of many interrelated parts extending within the perineum. When H el ene Cixous was living with myopia she was aware that: “Everything was perhaps...What was not there was perhaps there. To be and not to be were never exclusive.”³² In my case it was not something ‘out there’ that was ‘perhaps’, it was a key part of my body. Not only was it

²⁹ John Berger, *Ways of Seeing* (London: Penguin Books, 1977), p. 11.

³⁰ Susan Williamson, Rachel Novak, ‘The truth about women’, *New Scientist*, 159 (1998) <http://www.cirp.org/news/clitoris/> [accessed 22 February 2018]

³¹ Helen E. O’Connell, John M. Hutson, Colin R. Anderson and Robert J. Plenter, ‘Anatomical relationship between urethra and clitoris’, *The Journal of Urology*, 159 (1998), 1892 – 1897.

³² H el ene Cixous, ‘Savoir’ in H el ene Cixous and Jacques Derrida, *Veils* (Stanford California: Stanford University Press, 2001), pp. 6, 7.

something that I could not actually see, but only feel as part of my innermost being, I could not turn to medical textbooks for accurate information because they lacked detail and failed to provide clear representations.

There was another surprising detail in the article, where Helen E. O’Connell, the lead author of the anatomical study, was quoted as saying: “There is a lot of erectile tissue down there that is not drawn in any anatomy textbooks, save perhaps a couple of really old dissections in the French and German literature.”³³ If detailed and accurate descriptions and illustrations of erectile tissue were available then, what happened to that information, I wanted to know. Why did it disappear? Twenty years previously, in the 1970s, modern micro-dissection techniques had greatly improved anatomical and clinical understanding of the nerves and blood vessels that supply the penis. Nerve-sparing surgical techniques were designed to reduce the risk of impotence in men following operations for diseases like prostate or bladder cancer. I wondered why it was not thought important to design comparable surgical techniques for female patients. The authors of *Anatomical Relationship between Urethra and Clitoris* clearly thought that the structures that together form female genitalia should be better understood by urologists and pelvic surgeons, in order to prevent damage to tissues responsible for female sexual function.

Oliver Sacks makes the point that some scientific findings are rejected by mainstream medical knowledge, for reasons that he finds “odd, complex, contradictory, and irrational.”³⁴ As a young neurologist in the mid-1960s, when he started work in a headache clinic he became interested in the disturbances known as ‘aura’ that sometimes occur in visual migraines. What surprised him was the fact he could find no mention of the phenomenon in current scientific literature. It was only when he went back to a nineteenth-century account by the astronomer, John F. Herschel (who suffered from visual migraines himself) that he found meticulous descriptions of the sometimes “complex geometrical patterns that appeared (such as) lattices, whorls, funnels, and webs, all shifting, gyrating, and modulating constantly.”³⁵ What intrigued Sacks was that such startling hallucinatory patterns should evade notice for so long. John Herschel made the observation and reported it, publishing a paper so that it would enter mainstream clinical perception, but for some reason his findings ‘disappeared’. Sacks wondered if this was because he was an independent observer following a private hunch,

³³ Susan Williamson, Rachel Novak, ‘The truth about women’, *New Scientist*, 159 (1998) <http://www.cirp.org/news/clitoris/> [accessed 22 February 2018]

³⁴ Oliver Sacks, ‘Scotoma: Forgetting and Neglect in Science’, in *Hidden Histories of Science* (New York: The New Review of Books, 1995), p.141.

³⁵ *Ibid.*, p.142.

rather than a doctor making medical observations. Did medical scientists have a resistance to taking seriously someone who called himself “an astronomer of the inward”?³⁶ According to Sacks some discoveries appear prematurely, before they can be connected by a series of simple logical steps into canonical or generally accepted thinking. This did not help to explain why detailed and accurate anatomical data relating to female sexual anatomy, as provided in early French and German textbooks, was omitted in later textbooks. What if those “really old dissections in the French and German literature” (by De Graaf in 1672 and Kobelt in the 1840s), rather than being ideas that arrived too early, were consciously rejected because examining women’s sexual organs in detail was affected by taboo, even in mainstream science?³⁷ Catherine Blackledge finds it significant that De Graaf suggests “that ‘the function of the clitoris... is to rouse torpid sexual feeling’. He enthuses about the sharp and perceptive sensitivity of the clitoral crown, commenting that it is not without justice called the sweetness of love, the ‘gad-fly of Venus’.” Interestingly, the 17th-century anatomist emphasises its role in reproduction, concluding that “If the clitoris had not been endowed with such an exquisite sensitivity to pleasure and passion, no woman would be willing to take upon herself the irksome 9-months-long business of gestation, the painful and often fatal process of expelling the foetus and the worrisome and care-ridden task of raising children.”³⁸

In their article *New Scientist* journalists Susan Williamson and Rachel Novak suggested that modern anatomists “got the clitoris wrong” because of their ‘Victorian’ prudishness.³⁹ I wondered why contemporary medical scientists should be so squeamish, after the Kinsey report, Masters and Johnson, sexual liberation and feminism. Was there something else going on, relating to the changing position of women in society and changing attitudes to male and female difference? Scholars in fields like Literature and Science and the history and sociology of medicine have explored the importance of thinking about the relations between the medical sciences and their social and cultural conditions. In *Vision, Science and Literature 1870 – 1920: Ocular Horizons*, for example, Martin Willis discusses ‘cultures of observation’ that characterise his chosen period, as represented in a ‘traffic’ between works of science and literature, concluding that there are many examples of Victorian and modernist

³⁶ Ibid., p.144.

³⁷ Helen E. O’Connell, Kalavampara V. Sanjeevan and John M. Hutson, ‘Anatomy of the Clitoris’, *The Journal of Urology*, 174 (2000), pp. 1189 – 1195 (p. 1193).

³⁸ Quoted in Catherine Blackledge, *The Story of V*, (London: Weidenfeld and Nicolson, 2003) p. 130.

³⁹ Susan Williamson, Rachel Novak, ‘The truth about women’, *New Scientist*, 159 (1998) <http://www.cirp.org/news/clitoris/> [accessed 22 February 2018]

works that share common approaches to perception – or ‘ways of seeing’ – which cannot be explained in terms of rigid notions regarding subjectivity and objectivity.⁴⁰ I also wanted to avoid representing the binary of science/humanities as oppositional. After all, evasions and disappearances in relation to the female body abound in works of literature too.

Richard Hamilton Green argues that mediaeval poets like Dante drew on classical writers like Macrobius, who in his commentary on Cicero's *Dream of Scipio* “describes the fictions of the poets as representations of truth beneath the veil of imagined things. He attributed to Virgil ‘the twofold gift of poetic imagination and philosophical truth,’ and spoke of Homer as ‘the fount and origin of all divine invention’ who taught truth to the wise beneath the ‘cover of fiction’ and through ‘fabulous images.’”⁴¹ I started to think about the implications of this traditional approach for those seeking to represent the female body as substance rather than symbol. In a Petrarchan sonnet the male lover typically hunts down his Muse, the fatal enchantress of courtly love, without ever coming into actual bodily contact with her. Laura’s skin is “whiter and colder than snow, not touched by the sun for many years.”⁴² She is idealised to the point of being turned to stone. Likened to Petrarch’s ‘hynde’, and wearing her own version of its collar studded with emblems of steadfastness and chastity, Thomas Wyatt’s beloved in the poem that begins ‘Whoso liste to hunt?’ is not to be touched because she is already taken (by Caesar, no less), though in the last line it seems that she is destined to remain out of reach because of something intrinsic to her mysterious female nature. The words on her collar read: “*Noli me tangere*, for Caesar's I am/And wild for to hold, though I seem tame.”⁴³ Highly contrived images are employed that bear no relation to the physical human body as it might be seen, let alone experienced by the woman herself.

Thinking it might be relevant that Helen E. O’Connell, the lead author of ‘Anatomical Relationship between Urethra and Clitoris’, was the first female urologist to practice in Australia, I started to look for examples of alternative approaches towards the challenge of representing the female anatomical body that see it from a female point of view. In the transcript of an interview with O’Connell that was broadcast by the Australian Broadcasting

⁴⁰ Martin Willis, *Vision, Science and Literature 1870 – 1920: Ocular Horizons* (London: Pickering and Chatto, 2011).

⁴¹ Richard Hamilton Green, ‘Dante's "Allegory of Poets" and the Mediaeval Theory of Poetic Fiction’, *Comparative Literature*, 9 (1957), pp. 118 – 128 (p. 126). <http://www.jstor.org/stable/1768878> [accessed 23 March 2018]

⁴² Francesco Petrarcho ‘Sonnet 30’, in *Petrarch's Lyric Poems: The Rime Sparse and Other Lyrics* (Harvard: Harvard University Press, 1976), p. 86.

⁴³ Thomas Wyatt, ‘Poems from the Egerton manuscript: VII’ in *Sir Thomas Wyatt Collected Poems* (London: Oxford University Press, 1975), p.7.

Corporation in 1998, she refers to a book entitled *A New View of a Woman's Body* that provided a different perspective regarding the anatomy of the female perineum which influenced her greatly.⁴⁴ Not being medical scientists, and therefore lacking access to cadaveric material, the feminist writers who wrote it based their research on self-observation. They wondered why drawings of female sexual organs were represented by areas of empty space, the vagina being shown as a gaping hole or open tunnel with the clitoris and other parts omitted, when there had been intricate cross-sections of the penis since those drawn by Leonardo da Vinci. They also argued that Masters and Johnson's important discovery – that male and female sexual responses are similar instead of complementary – might apply to the structure and the function of the sex organs as well as to generalized body responses. Hearing about *A New View of a Woman's Body* reminded me of a book called *Our Bodies Ourselves* that I was exposed to as a student when I shared a house with members of a women's group.⁴⁵ Believing that women needed to take back control of their bodies from the male-centred drugs-company-dominated western system of medicine, they went to women-only meetings and took part in shared self-examination sessions with mirrors and speculums, all the better to understand their genitals, because they suspected that the sensations and health issues they experienced in those parts did not accord with what they had been told was there (if they had been told anything). Now, many years later, what intrigued me about O'Connell's anatomical research was that it was being conducted by professional scientists who were investigating these same questions from within the medical establishment and that they had returned to the basis of human anatomy to come up with answers, by carrying out autopsies and the dissection of cadaveric tissues.

I was interested to come across an online advertisement for a Program in Clinical Female Anatomy, at the University of Houston, Texas, which sought to address the exclusion of the female body from traditional anatomy courses, where the norm for the human body is a 70 kg male. In such courses masculine characteristics are provided to describe and portray the body in standard anatomical textbooks, the assumption being that descriptions of the male body apply equally well to females. If unique female characteristics are described, they tend to be treated as deviations from the male norm. Noting that modern research and imaging techniques had identified biological gender differences throughout the body, Katherine Peek,

⁴⁴ US Federation of Feminist Women's Health Centres, *A New View of a Woman's Body* (New York: Simon and Schuster, 1981).

⁴⁵ Boston Women's Health Book Collective, *Our Bodies, Ourselves* (Boston: New England Press, 1971).

the founder of the course, thought it was time to challenge these examples of male bias.⁴⁶ Similar changes to medical education were being proposed in Canada.⁴⁷

I came across an example of a dissenting female voice in literature too. In *The Female Genitals (or Ode to the Quim)* the 15th century Welsh poet Gwerful Mechain ridicules poets whose unquestioning acceptance of the conventions of courtly love blinds them to the reality of a woman's body:

leaving the middle without praise
and the place where children are conceived,
and the warm quim, clear excellence,
tender and fat, bright fervent broken circle,
where I loved, in perfect health,
the quim below the smock.

Using the poetic convention of an address, Mechain goes on to unabashedly celebrate and praise the female genitals:

You are a body of boundless strength,
a faultless court of fat's plumage.
I declare, the quim is fair,
circle of broad-edged lips,
it is a valley longer than a spoon or a hand,
a ditch to hold a penis two hands long;
cunt there by the swelling arse,
song's table with its double in red...

...Sultan of an ode, it is silk,
little seam, curtain on a fine bright cunt,
flaps in a place of greeting,
the sour grove, it is full of love,
very proud forest, faultless gift,
tender frieze, fur of a fine pair of testicles,

⁴⁶ Program in Female Clinical Anatomy http://nba19.uth.tmc.edu/female_anat/pintro.htm [accessed 10 September 2001]

⁴⁷Christiane Kuntz, 'Medical curricula for the next millennium: responding to diversity', *Canadian Medical Association Journal*, 156 (1997), 1295-6. http://www.collectionscanada.gc.ca/eppp-archive/100/201/300/cdn_medical_association/cmaj/vol-156/issue-9/1295.htm [accessed 22 March 2018]

a girl's thick grove, circle of precious greeting,
lovely bush, God save it.⁴⁸

Incorporating subject matter, words and images not normally thought poetic, Mechain's ode is the product of an oral tradition, in which professional bards "performed mainly praise poetry in the houses of noble patrons" as well as those from lower down the social scale, including common minstrels or jongleurs.⁴⁹ Written in the spirit of performers who bragged about their disreputable exploits, Dafydd ap Gwilym's ode to the penis has been described as "an elaborate means of boasting about the poet's sexual prowess."⁵⁰ It has also been noted that Gwerful Mechain "engages in poetic dialogue with her male contemporaries, using similar forms, metre, tropes, and vocabulary."⁵¹ Was Mechain's ode a witty riposte to Dafydd ap Gwilym's, or its playful provocation?

Outside of erotic literature, such a robust and straightforward approach towards the human body and sexuality (particularly female sexuality) seems rare. Contemporary writers continue to use similes and metaphors that shy away from physical facts. In a poem entitled *An auditor thinks about female nature* Jamie Grant draws upon geographical images when tracing his auditor's imaginary journey over and into different sexualised parts of the body of a woman ("dome-smooth alps" for example, which are topped by a "cairn, circled with smaller stones", some distance away from something called 'The City' which is "located at the junction of two/highways." The City's harbour is where all the auditor's 'Commerce' is centred: "When the vessels/go there, they soon unload their cargo, their/ hard prows nudging into a salt-slick wharf.")⁵² Aware that female nature tends to be conflated in poetry with Art, the auditor admits to having tried "once, to imagine the form of its gaudy/turrets, the ornamental ponds, the groves/of statuary; but the room inside/[his] head remained unfurnished, its walls as blank/ as the lined sheets in life's stern ledger book." At least he admits to drawing a blank. The poem highlights for me how difficult it is to visualise certain aspects of female nature, because poetic symbols tend to fall so wide of the mark, being so disconnected from the world of anatomical knowledge. Angela Carter, comparing the bawdy

⁴⁸ Gwerful Mechain, 'Cywydd-y-Cedor', trans. by Dafydd Johnston in *Medieval Welsh Erotic Poetry* (Bridgend: Seren Books, 1991), pp. 36 - 39.

⁴⁹ Dafydd Johnston, Introduction to *Medieval Welsh Erotic Poetry* (Bridgend: Seren Books, 1991), p.17.

⁵⁰ Ibid. p. 25.

⁵¹ Katie Gramich, *Orality and Morality: Early Welsh Women's Poetry*, <http://www2.lingue.unibo.it/acume/acumedvd/Essays%20ACUME/AcumeGramichfinal.pdf> [accessed 24 March 2018]

⁵² Jamie Grant, 'An auditor thinks about female nature', in *The Refinery* (Australia, Angus & Robertson, 1985), <https://www.poetrylibrary.edu.au/poets/grant-jamie/an-auditor-thinks-about-female-nature-0047006> [accessed 1 March 2018].

treatment of women in terms of their physicality in Geoffrey Chaucer's *The Miller's Tale* with the way they appear in Jane's Austen's *Pride and Prejudice*, concludes that Austen's genteel scenario makes it impossible to represent female characters anatomically: "... linguistically, Elizabeth is not in possession of an arse [because] representations of women in English literature are much determined by contemporary notions of the position of women."⁵³

In the spirit of interdisciplinary (and non-binary) research, I therefore decided to conduct my own experiment: to ask people across a range of different professions the same questions, so I could compare their reactions to O'Connell's scientific findings relating to female sexual anatomy. (My first list included a psychoanalyst, a cultural historian, an anatomist, a sexual health specialist, an artist, a surgeon, a writer and a dancer.) I was inspired in no small part to do so by Alice Oswald's book-length poem *Dart*, in which extracts from interview transcripts with people connected with the river are juxtaposed with references to folk tales and local myths, creating a chorus to represent the babble of voices that she hears when following the Dart from its source to the sea. Discussing it with a film-making friend, he thought it was a great idea, as well as being a 'story' that needed to be told. The thought that someone might want to look seriously at the clitoris seemed to tickle him. Perhaps he thought that the enjoyable frisson afforded by such a line of enquiry might help to outweigh any negative effects. Apply for a travel grant, he said: go to Australia; speak to Helen O'Connell face-to-face!

It must be said that the thought of applying for funds made me nervous. It was not that I was fearful of flying; I was worried about the possible implications of sticking my neck out and going public, by submitting a grant application to do research that would draw attention to and make more visible a part of a woman's body that is normally kept hidden and referred to only in derogatory remarks or sexist jokes. I was aware of artists who bared their bodies in public, others who incorporated their bodily fluids into their practice. As the mother of teenage sons I thought how embarrassing it would be for them if people thought I was happy putting my "pussy/in the middle of the trees".⁵⁴ A photographer I spoke to assumed I would want to interview people about their sex lives. When I explained that I wanted to treat the subject as anonymously as possible, my aim being to highlight the medical implications of surgeons not knowing the gross anatomy of the female perineum, her eyes seemed to glaze over. She made no further comment when I mentioned the article in the *New Scientist*, in

⁵³ Angela Carter, 'Alison's Giggle', in *Nothing Sacred: Selected Writings* (London: Little Brown, 1982), p.10.

⁵⁴ Eileen Myles, 'I always put my pussy' in *I Must Be Living Twice* (New York: HarperCollins, 2015), p. 150.

which Cindy Amundsen, a gynaecologist at the University of Houston, Texas, is quoted as saying, “Lots of operations involve dissections around the urethra. That could affect patients’ sexual function. Just as doctors routinely ask men who have had prostate operations about any changes in their erections, they should ask female patients who have had comparable operations about any changes in their sexual function.”⁵⁵ What I hoped was that I could adopt a coolly detached point of view and hide behind ideas based on authoritative science. Staying out of the limelight appealed to me; I was shy to the point of being unable to eat alone in public. I had not travelled abroad on my own since the birth of my first child, who was now fifteen.

It was my friend’s amused disbelief on hearing all this that made me think that I should try to go to Melbourne. Spurred on by his encouragement and that of my family, I decided to apply to the Arts Council of Wales for a travel grant. I wrote to Helen O’Connell and very generously she agreed to answer my questions, which I duly posted to her. I was interested in what had inspired her to choose medicine as a career, whether being female meant that she had faced obstacles at school or college, and why she chose to specialise in urology. Did she think people still had a prejudicial attitude towards female sexual anatomy (it being more acceptable to discuss and depict those parts as if they were only connected with reproduction), or were we entering a new era of liberation as regards women’s sexual health and well-being? Being fortunate enough to be awarded two grants to travel to Melbourne: one from the British Council and one from the Arts Council of Wales, I was able to meet her in early November 2002, to continue this conversation face-to-face.

The flight seemed endless. To mark the passing of each tedious hour I would raise the window blind, to see if anything was visible thousands of feet below. At times pin-pricks of trembling light seemed to form web-like patterns of trailing threads, like glittering hieroglyphs whose meaning I was yet to glean. I assumed the blacked-out areas were large bodies of water, deserts, or other uninhabited regions. From the electronic map on the screen in front of me I could see that our plane was sometimes flying over places now deemed to be too dangerous to visit, due to what was then being called “the war on terror”. If any of my fellow passengers were making similar observations, it did not seem to quell the party spirit amongst those headed for Sydney’s gay pride weekend, whose numbers had increased on the second leg of the journey, after a brief stopover in Bangkok.

⁵⁵ Susan Williamson, Rachel Novak, ‘The truth about women’, *New Scientist*, 159 (1998) <http://www.cirp.org/news/clitoris/> [accessed 22 February 2018]

I had booked myself into a downtown apartment hotel in Melbourne so as not to be far from where Helen O'Connell worked. Air-conditioned and double-glazed, my rooms on the seventh floor felt completely cut off from the outside world. In my first few moments there, feeling claustrophobic as well as badly jet-lagged, I slid back glass doors, imagining I might step outside onto the narrow ledge of a balcony for some fresh air. The sudden exposure to heat and noise hit me like a body blow, so I hurriedly shut myself back in, afraid I might float away like a balloon, or swell in the heat until I burst. Still feeling restless and it being too early to go to bed, I decided to go for a walk to get my bearings and try to locate the tram-stop that I would need to use the following morning. Once outside in the teeming streets, the maze of sticky-sour alleyways and interlocking arcades proved difficult to navigate. Even in broad daylight multi-coloured neon signs flashed perpetually, brash colours streaming past or continuously flicking on and off. I was deafened by electronic music blaring out from gambling arcades and fast food joints. Street vendors yelled from brightly lit stalls selling sandals and sunglasses, fake designer bags, garish t-shirts and plastic toys. I had a street map but there was too much going on to make any sense of it. As well as the noise, there were far too many people and it was very hot and humid. People flowed around me as if I was a boulder in a stream, but no-one stopped to ask if I was alright. Something in my brain crashed. I stopped thinking of asking for directions and gave myself up to the flow until I recognised a restaurant I'd seen from the taxi on the way to the hotel. Finally I managed to find my way from there and into the hotel lift to my floor. Safely back in my room, I collapsed on the bed fully dressed and gave into sleep, even though it was still light outside.

I woke in the middle of the night with a headache, dry lips and a sore throat. The air conditioning had the effect of a drying wind, but when it was switched off humidity and heat from outside seemed to get in, as well as the surging roar of the city. That I could rationalise; Melbourne was a vibrant global city, its population, I had been told, was 'bigger than that of Wales'. I was staying in Chinatown, one of its most densely packed downtown areas, where businesses stay open throughout the night and neon signs burn like fires that are never doused. But it was not just physical discomfort that kept me awake. What startled me into full consciousness was what I glimpsed through the half-opened blinds. At first I thought it might be a special effects installation, a large scale lights display for nocturnal art lovers. It was mesmerising, a spiralling cloud of what looked like broken metallic pieces, twisting and curling like a gyre in the night sky. It was only when I went over to the window to get a better look that I could see that this was no man-made show, but something 'natural'. Were they bats, I wondered, or birds, confused by the city lights? Perhaps they were attracted by insects

caught in a thermal created by the air conditioning system of one of the high rise buildings behind the hotel. I had to wait until I returned home to Cardiff to be given an explanation. A friend who knew Melbourne told me they were fruit bats. There was a colony that roosted by day in trees growing in the Botanic Gardens, not much more than a mile away from where I was staying. As to their behaviour that night, no-one could say.

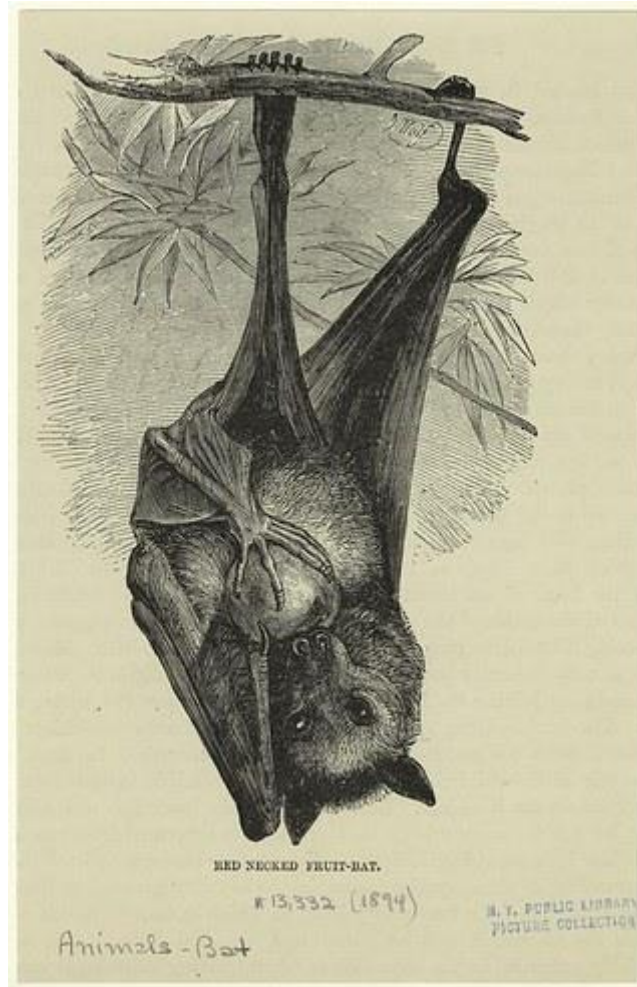


Fig. 4, Red-necked fruit bat *The Royal Natural History* Vol 1 (6 vols) edited by Richard Lydekker (London: Frederick Warne & Co 1893- 1894), p. 261

On Swanston Street the following day young men in black dinner jackets stood around the tram stop chatting while women wearing garish frocks and flamboyantly outsized hats tottered about on high heels, shrieking with laughter. Early morning traffic was held up by a horse-drawn carriage packed with revellers off to Ladies Day at the Races. Bored-looking waiters working at an outdoor café stopped to watch it clatter past, before getting back to

clearing away the remains of a champagne breakfast. Apart from the race-goers, the streets seemed deserted, department stores remaining shuttered up for the day. I was relieved to see that trams were still running and that I was able to catch one for Parkville. It was there the private hospital where Helen O’Connell worked was located, in the hub of biomedical research in Melbourne University, close to major general and specialist hospitals. An anonymous modern block, it contrasted with the older buildings, which were set back from the boulevard in formal gardens where vines had been trained to clamber up walls and people could stroll along gravel paths that bordered a lawn dominated by a monumental statue of Queen Victoria. Hundred-year-old trees in full leaf cast flickering shadows on laboratory buildings of glass and steel.

Because it was a public holiday, the hospital was officially closed, though a skeleton service of staff remained on duty. It didn’t feel like a hospital, more like a modern office block or an up-market hotel. Slick photographs of iconic buildings adorned the smoothly painted walls. From swishing lifts and pristine white blinds to polished floors, everything looked suspiciously perfect. While I sat waiting in the foyer to meet Helen O’Connell I squeezed one of the leaves of a potted plant to see if it was real.

I had hoped that meeting Helen O’Connell would make it possible to discuss the questions I had sent her and explore the issues in more detail. She was generous with her time, and as my friend had thought, more than happy to talk, surprised perhaps that I had taken the trouble to travel so far to discuss her research. I already knew from her written answers that born in 1962, she was the youngest of five children, and was brought up in a working class Melbourne suburb. Now she explained that her parents were strict Catholics involved in right-wing unions, her father a technical officer in the aviation industry and her mother a book-keeper who always wanted to be an auditor. At the all-girls Catholic school she attended academic excellence was not particularly encouraged. Despite the fact that she received a distinction in a national mathematics competition and was doing well in all her subjects as well as in sport, when she was asked about her career aspirations by one of the nuns, she was advised not to think of studying medicine, but to “be a little more realistic and to consider nursing instead.”⁵⁶ At that point she was in the straight science stream, but because of her teacher’s disparaging comment, she decided to switch streams so she could study a mix of the sciences and the humanities instead. Yet the impulse behind her original ambition remained and when one day she happened to ask her chemistry teacher if he thought

⁵⁶ Transcript of interview conducted with Helen E. O’Connell, Royal Melbourne Hospital, November 7, 2002.

she was bright enough to do medicine, he told her that it was a reasonable goal, with the warning that she would have to work very hard and be consistent.

She achieved her goal but once at medical school found it a challenge. Few of the teaching staff, certainly none of the senior staff, were female. Just one third of the medical students on the undergraduate course were women and the majority of them came from two or three major private schools. As an undergraduate student, she felt quite out of place, often finding it difficult to cope with what appeared to be irrelevant subject matter. Looking back, she could see that she hated 'rote-learning' and did not work out until quite late in her post-graduate experience that she had to develop exam technique. I was intrigued to hear that by failing her anatomy exams several times, she had to repeatedly study anatomical textbooks like *Lasts's Anatomy*, which is when she first noticed there was not even a paragraph with the title 'clitoris' and not a single description of the structure, let alone its blood and nerve supplies. This was a something that she was reminded of when working as a research fellow at the Key Centre for Women's Health in Melbourne. At the time she was studying for her surgical primary exams, when she was able to study a wider range of anatomical textbooks. Not only was female genitalia often described in denigrating and inaccurate terms (often as an inverted and inferior homologue to the male sex organs), there was no textbook available at the time that accurately charted the nerves and blood vessels supplying the clitoris. But *Lasts's* was always the worst: she never forgot the way that the female genitals are described as a *failure* in the embryo of the formation of the male genitals.

During her medical training in the 1980s, she was aware that when men complained of sexual difficulties to their doctor, they could be sent to a urologist, who would have had training in problems of male sexuality. Women with problems relating to sexual function were treated very differently. If it was not considered a gynaecological problem, they were sent to a psychiatrist. (Not until 1999, at a meeting in Boston, USA, did scientists settle on a definition of female sexual dysfunction that included physiological as well as psychological causes.) Part of the problem was the lack of a definition of 'normal' female sexual function in medicine, where women tended to be seen only in terms of reproduction. There was confusion as to what the clitoris actually was, what it should be called, and whether having one was considered normal, or even acceptable. Hélène Cixous's attitude towards her myopia again came to mind, the way she felt that it not only tricked her, but reigned over others,

leaving them unaware that it was “spreading its ambiguous veils” between them.⁵⁷

O’Connell, by contrast, seemed to represent a rejection of an imprecise way of seeing that kept the world forever “suspended, desirable, refused, (an) enchanted thing”, to want to cast aside the veil so as to see more clearly.⁵⁸

Exploring data on nerve-sparing surgical techniques for males and finding no equivalent data for females inspired her to conduct cadaveric research with John Hutson, an expert in paediatric genital reconstruction at the University of Melbourne. Their aim was to map the detail of nerves in females, in order to design more careful operations. As they started their work, however, they began to suspect something might be wrong with the gross anatomy of that region. Continuing with their dissections, which included cadavers of women in their thirties and forties, they found erectile tissues that could be seen to form a complex structure that wrapped itself around the vagina and the urethra. The external ‘head’ or tip of the clitoris was attached to a ‘body’, two ‘arms’ and a mass of tissue known as the ‘bulbs’. These, when they were subjected to tissue analysis, proved to be erectile too. Before these dissections, no-one had ever considered the possibility that the bulbs might be part of the clitoris. O’Connell emphasised that when considered together as a whole, the structure of the clitoris is complex, and much bigger than the textbooks show. One possibility is that when swollen with blood on arousal, or ‘engorged’, it squeezes the urethra shut during intercourse, thus preventing bacteria making their way up into the bladder and causing infections. The bulbs of the clitoris also swell up and hold the walls of the vagina rigid, thus aiding penetration. It would follow that any kind of pelvic surgery, like hysterectomy and incontinence surgery, even prolapse surgery, might put erectile tissues like these in danger.

I soon became aware that O’Connell’s work had its detractors. She told me that while some women could see that it was medically important, she thought most men either felt threatened by it, or looked upon it as irrelevant and trivial. A male colleague once suggested to her research assistant that their work was ‘pretty voyeuristic’. O’Connell was keen to point out that in the context of anatomical dissection, amidst the smell of cadavers and formalin, the idea of voyeurism or any kind of sexual feelings was ridiculous. For her the pursuit was intellectual and humanist. “How can this area be so poorly described when an orgasm feels so good! How can it be that so many women of the world have either been subjected to genital mutilation or culturally deprived of sexual enjoyment because of our profound ignorance

⁵⁷ Hélène Cixous, ‘Savoir’ in Hélène Cixous and Jacques Derrida, *Veils* (Stanford California: Stanford University Press, 2001), p. 7.

⁵⁸ *Ibid.*, p. 13.

about this aspect of human physiology?”⁵⁹ By the end of the interview I had written over ten pages of notes. As I left I was loaned a folder of press releases and various bits of correspondence linked to the publicity that followed the publication of O’Connell’s first research paper. These I promised to return at our next meeting, which we agreed should take place in a couple of days, when we could discuss any follow-up questions.

I was increasingly puzzled as to what form my account of this ‘story’ should take. Should it be a plain record of the facts, or should I adopt a more fictional approach? Medical descriptions of female sexual anatomy were certainly starting to sound fantastical. If information is not actually omitted, the veiled language of allusion is used for sexual parts in early works of anatomy, rather than the language of clear observation. For the body part we call the clitoris today Hippocrates used the term *columnella* (little pillar), Avicenna the *albatra* or *virga* (rod). Colombo used various terms: *amoris dulcedo* (sweetness of love) *sedes libidinis* (seat of lust) and gadfly of Venus. *Nympha*, etymologically linked to classical Greek for bride, was the name given until recently to the *labia minora*. Such terms reminded me of an essay by Jorge Luis Borges on a seventeenth-century British scholar who wrote a treatise on an artificial, universal language. *The Analytical Language of John Wilkins* is largely composed of lists. One concerns Dr Franz Kuhn (who existed) and his *Celestial Emporium of Benevolent Knowledge* (which was invented by Borges) in which animals are classified according to such categories as: a) belonging to the emperor, b) embalmed, c) tame, d) suckling pigs, e) sirens, f) fabulous, g) stray dogs, h) included in the present classification, i) frenzied, j) innumerable, k) drawn with a very fine camelhair brush, l) others, m) having just broken the water pitcher, n) that from a long way off look like flies.⁶⁰

Prior to my trip to Melbourne someone had recommended I read *The Anatomist* by Federico Andahazi, a fictional account of the life of Mateo Colombo, the sixteenth-century Italian surgeon who allegedly ‘discovered’ the clitoris. Colombo lived at a time when it was thought that a woman did not have a soul, being ruled by nothing more than the ‘will of the flesh’, which Colombo claimed was controlled by the clitoris. Andahazi has his anatomist call it the *Amor Veneris*, or the Pleasure of Venus. Suggesting women were slaves to its whims, he also calls it “the seat of the patient’s delight”, the key to the heart of all women, the anatomical cause of love.⁶¹ The book was described in a *New York Times* review as a

⁵⁹ Transcript of interview conducted with Helen E. O’Connell, Royal Melbourne Hospital, 7 November 2002.

⁶⁰ Jorge Luis Borges, ‘The analytical language of John Wilkins’, in *The Total Library. Non-Fiction 1922–1986*, ed. E. Weinberger (London: Penguin, 2001), pp. 229–232.

⁶¹ Federico Andahazi, *The Anatomist* (New York: Doubleday, 1997), p. 139.

“cheerful romp” for “readers who don't require much enlightenment with their titillation.”⁶² I was recommended another ‘rollicking tale’ containing a hilarious if exhausting list of 129 popular and sometimes scatological terms for the clitoris, including the Quim, Queynte and Split Fig.⁶³ I found few other examples of characters attempting to describe this part of female anatomy in the literary canon. When Molly in *Ulysses* by James Joyce ponders the fact that her husband Leopold knows “a lot of mixed up things especially about the body and the insides” she admits to often wanting “to study up that myself what we have inside us”. Yet when she tries to describe what is ‘inside her’ she has no words for that part of her body and she struggles to understand it. Her description of sexual desire and orgasm is full of contradictions and she ends up suggesting her genitals represent absence: “I couldn’t describe it it simply makes you feel like nothing on earth...a nice invention they made for women for him to get all the pleasure... whats the idea of making us like that with a big hole in the middle of us”.⁶⁴

A novelist friend I spoke to in Cardiff before leaving for Melbourne asked if I was going to adopt a comic tone in my writing, as if she thought a light-hearted approach to female sexual anatomy would be most appropriate. I remembered this when I read *Eroticism*, by Georges Bataille, where he argues that far from being precise, set, settled and preordained, the facts of sex belong more to the realms of dance, art and music than to the realm of mere ‘things’. Discussing the vast and seemingly exhaustive scientific project that generated *The Kinsey Reports*, he cannot accept that “true knowledge of man’s sexual life is [...] to be found in these Reports.”⁶⁵ Private feelings cannot be treated as ‘things’; therefore any knowledge of them has to exist beyond graphs and curves. Whilst accepting that the subjective responses and secret fantasies of our sex lives by definition tend not to be openly or widely shared and therefore cannot be observed or recorded as ‘raw data’, I could not see why this should stop us wanting to have a clearer understanding of the physiological facts of what Bataille calls the “surge in activity in question”. Our fantasies and experiences relating to sex might even be enhanced by better knowledge of our anatomy. Treating it as worthy of serious attention might lead to better treatments for sexual dysfunction.

It was the medical implications of a lack of accurate anatomical descriptions and knowledge of female sexuality that made me feel my ‘story’ did not lend itself to humour. In

⁶² Lisa Zeidner, ‘Private Parts’, *The New York Times on the Web*, 1998.

<http://movies2.nytimes.com/books/98/09/13/reviews/980913.13zeidnet.html>

⁶³ Erica Jong, *Fanny* (New York: W.W.Norton & Company, 2003), pp. 124 – 125.

⁶⁴ James Joyce, *Ulysses* (London: Penguin Books, 1972), p. 668.

⁶⁵ Georges Bataille, *Eroticism*, trans. by Mary Dalwood (London: Penguin Books, 2012), p.154.

Semmelweis Louis-Ferdinand Céline describes the appalling rates of mortality at the *Allgemeine Krankenhaus* teaching hospital in Vienna, due to what was then termed the *puerperal* (or child-bed) scourge. Calling it a scourge reminded me of Ludwik Fleck's identification of a "unique ethical emphasis in discussions of syphilis" including "the idea of syphilis as a carnal scourge, with strong moralistic connotations."⁶⁶ The Hungarian doctor Ignaz Semmelweis was appointed in 1846 as an assistant in obstetrics the *Allgemeine Krankenhaus*. Appalled by the "heavy sense of fatality which reigned in [these] wards" and unable to accept that puerperal fever was an inevitable feature of this branch of medicine, Semmelweis began to search for its cause.⁶⁷ By studying the routine behaviour of the medical students who were employed as assistants, he was able to observe that both they and the doctors often used dirty instruments when dissecting cadavers, sometimes infected themselves, and never washed their hands, even when going straight from the dissecting room to attend to pregnant women, to conduct internal pelvic examinations or to manipulate them in childbirth. The midwives or their trainees, by contrast, did not attend or participate in autopsies or handle cadaveric material.

Yet when he tried to insist that washing of hands and cleaning of instruments be made mandatory, Semmelweis encountered nothing but hostility. Flatly refusing to change existing procedures and accusing the young doctor of insulting his reputation, the professor (Klein) who was in charge of the ward promptly dismissed him, something that seems to Céline to epitomise the fragility of progress. Though he tried to continue with his research and secretly wrote up his findings in what was eventually published as a lengthy book, rather than being given recognition for his work he was blacklisted and ended in his life in a lunatic asylum. Alison Bashford, drawing upon documents and historical texts from the same period relating to hospitals in Australia as well as across Europe, suggests that the notion that the female body (especially the poor, unmarried female body) was unclean helped to create a tension surrounding puerperal fever. Until Semmelweis, few medical men were prepared to argue that it was contagious and that they might be implicated, preferring to blame external factors, or the women themselves. Dr Snow Beck, for example, spoke of "septicaemic or pyaemic puerperal fever arising in the patient's own system."⁶⁸ In a lecture by Robert Barnes the

⁶⁶ Ludwik Fleck: *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, University of Chicago Press, 1979, p. 77.

⁶⁷ Louis-Ferdinand Céline, *Semmelweis*, trans. by John Harman (London: Atlas Press, 2008), p. 52.

⁶⁸ Alison Bashford, *Purity and Pollution: Gender, Embodiment and Victorian Medicine* (London: Macmillan Press, 1998) p.77.

internal female body was characterised as being open to pollution: “a vast solution of continuity... (like) the gaping...open-mouthed vessels of an amputated limb.”⁶⁹

On my last night in Melbourne, I read a review of a film about Ned Kelly – the legendary outcast whose helmeted head is an iconic image in Australia.⁷⁰ Daniel Eisenberg suggests that the fact that viewer is able to look through the fugitive’s eyes, if only for a second, briefly glimpsing what might be seen from his point of view is what makes Gregor Jordan’s film so unusual. To me the captured image in the review resembled a painting of the helmet as much as what might be seen by the outcast wearing it. It reminded me of the first film I ever saw: an early black and white version of *The Man in the Iron Mask*.⁷¹ Sitting with my father and my oldest brother Peter in the overheated darkness of a crowded cinema in downtown Adelaide was so different to my experience of reading, usually lying on my side in bed, well under the covers, free to decide for myself what the locations and characters looked like as I read a book of my own choosing, at my own pace. *The Man in the Iron Mask* trapped me inside a story-line in which I could not imagine playing a part. My discomfort was only increased by the terrifying thought that with his head locked inside the mask, Philippe's growing beard would eventually suffocate him. O’Connell’s work produced the opposite effect – a feeling of release, a blessed relief. Her anatomical findings were like a key unlocking a door to unrestricted views of my body, leaving room for its real dimensions and structures – giving me freedom to live, develop and breathe.

⁶⁹ Ibid., p.78.

⁷⁰ Daniel Eisenberg, ‘The Camera in the Iron Helmet: *Ned Kelly*’, *Senses of Cinema*, <http://sensesofcinema.com/2011/key-moments-in-australian-cinema-issue-70-march-2014/the-camera-in-the-iron-helmet-ned-kelly-gregor-jordan-2003/> [accessed 8 December 2018]

⁷¹ *The Man in the Iron Mask*, dir. by James Whale (Edward Small Productions, 1939).

2. On shame and the female anatomical body

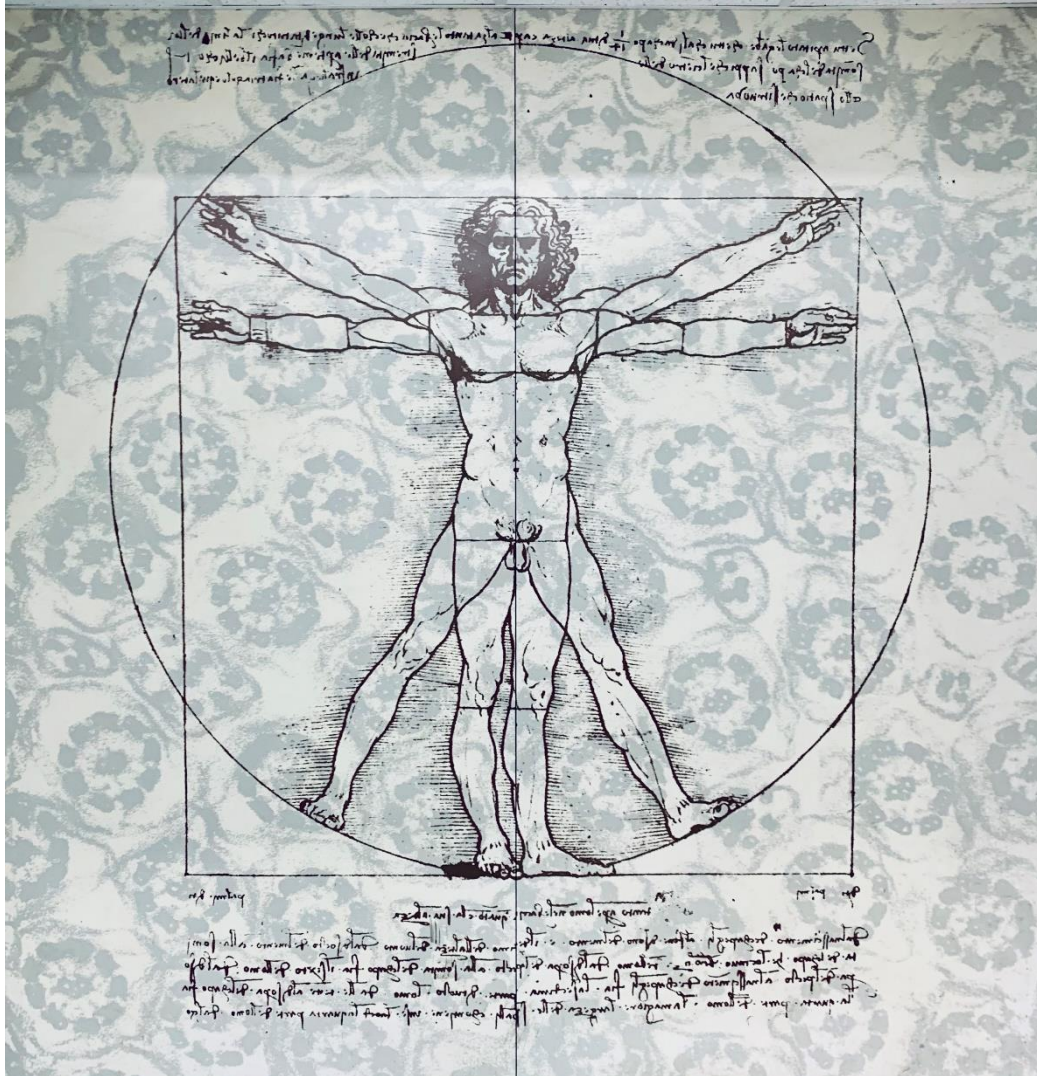


Fig. 5, Amoebae and Leonardo Da Vinci, *The proportions of the human body according to Vitruvius*, photographic print c. 1980, print designer unknown, Cardiff School of Biosciences

The first thing to greet me on entering Cardiff University's School of Biosciences through its back door was a large photographic print featuring Leonardo da Vinci's *Le proporzioni del corpo umano secondo Vitruvio*: "The proportions of the human body according to Vitruvius." When the Roman architect and military engineer Marcus Vitruvius set out rules of correct human proportions in 1 BCE, he suggested that, like a temple, a man's body is an ideal model of balance, symmetry and even proportions because with arms and legs extended it fits

exactly into a square and a circle, which are ‘perfect’ geometrical forms.⁷² When this treatise was re-discovered in 1414 it was translated into many languages and widely distributed, becoming a key text for artists and sculptors who were producing work based on classical ideas of harmonious form. Arriving early at the School of Biosciences, I had time to contemplate the image, as well as circumnavigate two large display cases containing the skulls and skeletons of monkeys and primates, ranging in size from a baby monkey to an adult gorilla. Next to them, Vitruvian man looked like a blazon of symmetry and balance: a true measure of man. His imperious gaze made me feel like an imposter; coming here as a non-scientist to suggest that the female body might be misrepresented in anatomy seemed like bad form.

A friend of a friend had recommended that I try to arrange a meeting with Professor Bernard Moxham. Since returning from Melbourne, where I had discussed with Helen O’Connell her findings relating to female sexual anatomy, I had been corresponding with a gynaecologist and a research fellow, both based at University College London, who invited me to a symposium on Female Sexual Dysfunction.⁷³ In his Welcome Address Dimitrios Hatzichristiou, the president of the European Society for Sexual Medicine, explained that, as the first such event to take place in Europe, one of the aims of the symposium was to explore the notion that recent research into men’s sexual health including treatments for erectile dysfunction did not apply to women, because of genital and physiological differences, as well as medical, socio-cultural and psychological factors related to gender whose implications should not be ignored. I remembered when he was saying this how astonished I had been when O’Connell told me that prior to 2002 women were referred to psychiatrists if they reported sexual problems, unlike men who were referred to urologists. It still seemed shocking that the term ‘female sexual dysfunction’ was such a recent innovation.

A few months later I interviewed a consultant genitourinary physician from Wrexham Maelor Hospital in North Wales, with whom, along with my contacts in London, I started to work on a bid for a Wellcome Trust SCIART grant. The idea was to interview anatomists and clinicians (as well other health professionals, artists, writers and scholars in whose work the female anatomical body features) whilst writing about O’Connell’s ground-breaking research, arguing that her findings offered a radical new view of female sexual anatomy, as compared to descriptions and illustrations in current anatomical textbooks. Working with medical

⁷² Vitruvius Pollio: *The Ten Books on Architecture*, trans. by Morris Hicky Morgan (Cambridge: Harvard University Press, 1914).

⁷³ *The First European Symposium on Female Sexual Dysfunction*, University College London, April 15, 2003.

practitioners and anatomists was important to me, as their hands-on knowledge regarding ‘scientific’ data on female sexual anatomy and whether gender differences and taboo affected the way it is taught would ground the project. Though we were shortlisted, we ultimately failed to secure the grant, so I was looking for another way to continue working on these issues. A meeting with Professor Bernard Moxham to learn about the impact of O’Connell’s research at Cardiff University seemed to be a step in the right direction. Even so, I was feeling nervous and hoped that he would be open to such discussions.

It soon became clear that Professor Moxham was passionately interested in the history of anatomy and its connections with art. He told me that in his roles as Professor of Anatomy and Head of Teaching, he had introduced life drawing classes for the medical students as well as courses on the history and philosophy of science. He encouraged students to think about their feelings and to write poetry after their practical sessions in the Dissecting Room and he regularly gave seminars on representations of medicine in art. As a lifelong collector of art himself, he had commissioned original works, some of which were on display in the Biosciences building. SCIART projects he had been involved in included *Dance of Death* with Ian Breakwell and *Anatomy Lessons* with Karen Ingham and he had contributed to exhibitions, including *The New Anatomists*, in 1999, at the Wellcome Trust’s Two10 Gallery. On the day I met him in his office, which was filled with floor to ceiling shelves stacked two deep in places with books of literature and art as well as science, a large anatomical drawing caught my eye. *Osteology* by Nick Cudworth (1981) was the fruit of discussions between Bernard Moxham and the artist about producing a set of drawings that embraced anatomical themes. It includes a drawing of a woodcut by Jan Stefan van Calcar as it appears in Andreas Vesalius’s seven-volume *De Humani Corporis Fabrica* (1543), depicting a skeleton standing by a plinth, resting his head on one hand whilst contemplating a human skull.

We discussed my interest in O’Connell’s findings, as described in her first paper, a copy of which I left for him to read. He arranged for me to attend a practical session as well as a First Year undergraduate lecture on the pelvis and perineum. A couple of weeks later I found myself in the Dissecting Room, a vast space at the rear of the Biosciences building, with a viewing balcony, steeply angled windows set high into the ceiling and clinically bright lights. In some ways it resembled a surgical ward, being filled with rows of trolleys rather like hospital beds, except that these bore the remains of embalmed cadavers – next to which metal trays with instruments had been neatly laid out. Like the students, demonstrators and other staff members I had to don a gown, mask and gloves before taking my place alongside one of the trolleys, so I could observe the practical session. My time there proved to be an ordeal,

mainly because of the overpowering stench of formalin. What helped was the fact that the atmosphere in the Dissecting Room was straightforward and ‘workmanlike’ – this being the Spring semester, it was one of the last practical sessions the students would attend in their first year. Having started the anatomy course during their first few weeks at the university, their studies based on cadaveric dissections were almost complete. Soon the collected remains of the donated cadavers would be cremated, the cremations followed by a memorial service, which the students would be invited to attend.

The students I was observing were dissecting a male cadaver, I was told. Prone, bloodless and almost completely dissected, it could not have been more different from da Vinci’s *Vitruvian Man*. To my untutored eye these preserved human remains looked as if they had been retrieved from damp estuarine clay, being much paler than those I had seen in a translated copy of a book by the marvellously named Danish archaeologist P.V. Glob. Photographs of Iron Age bodies preserved in bogs that were discovered in the 1960s had fascinated me, as had poems in Seamus Heaney’s collection entitled *North* which was published when I was a First Year student studying English.⁷⁴ Heaney likens Grauballe Man to something that has been ‘poured in tar’, a reference to punishment beatings in Northern Ireland during the sectarian violence known as ‘The Troubles’, when those considered traitors were hooded, tarred and feathered. Such beatings reminded me that in the early days of anatomy dissection was thought to be a justifiable part of the death penalty meted out to criminals. Now, watching the students at work in the Dissecting Room on cadavers provided through a voluntary donor programme, by people they were taught to think of as their ‘first patients’, I was struck by what a valuable opportunity medical students were being offered – to experience human dissection for themselves. What might they discover? Bernard Moxham had told me that in his view cadaveric dissection is irreplaceable in anatomical education, because nothing else can give students such a good appreciation for the three-dimensional relationships of structures and for variation within in each human body. He disagreed with the notion that there is nothing new to be discovered in the gross, visible, anatomy of the human body, believing that there are still regions of the body where knowledge is incomplete or gives rise to controversies. Ludwik Fleck touches upon this in his monograph, when he writes about the scale and audacity of Vesalius’s project, which was to “dispense with a completely elaborated, hundred-per-cent consistent, highly respected science” and in its place to “consistently build a new one from confused, unstable, changeable, intertwined masses of

⁷⁴ Seamus Heaney, ‘The Grauballe Man’, in *North* (London: Faber and Faber, 1975), pp. 35 – 36.

flesh, such as the scholars of that time would have considered it to be beneath their dignity even to touch.”⁷⁵ I could not help thinking, however, that there might be one part of this ‘new’ experimental body which it was beneath the dignity of Vesalius to see, represent and touch. After all, he had argued against the existence of the clitoris, alleging that it was a ‘new and useless part’, a mere ‘sport of nature’ that could only be ‘observed in some women’, and should therefore not be called an organ, as it could not be seen in ‘healthy women’.⁷⁶ By choosing to deny its existence and the role it plays in female orgasm, did Vesalius, with his focus on reproductive organs, create a barrier to knowledge that still exists today?

I joined the First Year students again a week or so later, for an early morning lecture on the pelvis and perineum. The focus here was on clinical matters – the anatomy of illness – the lecturer talking about hysterectomies and incontinence, male prostate cancer, ectopic pregnancy and cancers of the uterus and cervix. As well as palpitation, percussion and auscultation, internal examinations were mentioned, both rectal and vaginal. Male external genitals featured, because of scrotal swellings. The difficulty of dissecting the perineum was touched upon (for practical reasons relating to problems of access; taboo was not mentioned.) I was sorry that I was not sitting closer to the front when the lecturer held up a real female pelvic girdle, for a better view of its complex three-dimensional sculptural shape, which to me looked rather beautiful, not unlike a large rounded water vessel. Yet as I left the lecture theatre that day it was with the impression that I wasn’t meant to be affected by what was being shown or discussed, beyond feelings of concern for what can go wrong. I was also struck by the fact that female sexual function and dysfunction were not covered in the lecture. This made me think of something I had seen in Helen O’Connell’s file of correspondence and press releases following the publication of her first paper on female sexual anatomy. Lisa Douglass, then a PhD student, had with her sister just published a popular book about sex aimed at women.⁷⁷ She had written to O’Connell with a list of questions, including one relating to why so little attention was given to female genital anatomy within medical education. She wondered if it was because it was not considered a site of major disease, and was therefore of less interest to the medical profession than the uterus, for example. She also

⁷⁵ Ludwik Fleck, ‘On the Crisis of “Reality”’, in *Cognition and Fact: Materials on Ludwik Fleck*, edited by Robert S. Cohen, Thomas Schnelle (Dordrecht: D. Reidel Publishing Company, 1985), p. 53.

⁷⁶ Quoted in Helen E. O’Connell, Kalavampara V. Sanjeevan and John M. Hutson, ‘Anatomy of the Clitoris’, *Journal of Urology*, 174 (2005) 1189 – 1195 (p. 1192).

⁷⁷ Marcia Douglass and Lisa Douglass, *Are We Having Fun Yet? The Intelligent Woman’s Guide to Sex* (New York: Hyperion, 1997).

suspected that it might have something to do with the notion that women care less about their sexual function than men: that it was not thought to be so important to them.

I found further references to a lack of information about female sexual anatomy within textbooks in research papers by sociologists and historians of science. Susan Lawrence and Kae Bendixen analysed the ways in which male and female bodies are represented in anatomical textbooks published between 1890 and 1989 in the USA, concluding that, “In illustrations, vocabulary and syntax, these texts primarily depict male anatomy as the norm or standard against which female structures are compared.”⁷⁸ Despite wider debates in society relating to gender matters, textbooks perpetuate “long-standing historical conventions in which male anatomy provides the basic ‘model’ for ‘the’ human body.”⁷⁹ Lisa Jean Moore and Adele Clarke also make the point that “Anatomies are ruled by conventions.”⁸⁰ They found that even new media reconfigurations perpetuate older visual cultures, along with their “hierarchical, stratified cultural baggage regarding sex, sexuality and gender.”⁸¹ As to the implications of this conventional approach, Helen E. O’Connell *et al.* argue that “the gross and histological anatomy of the human female perineum is often described in cursory or comparative terms [and] briefly described only in terms of its differences from the male”⁸² with the result that it is usually described without reference to the clitoris. They note that in current medical literature the clitoris is either pictured as minute or not described at all, and “its neurovascular supply is rarely described.”⁸³ Nancy Tuana identifies an ‘epistemology of ignorance’ with respect to clitoral structures, stating that “Because medical knowledge focused on reproductive systems, the components of women’s so-called genitalia, which were seen as including the clitoris and labia, have been ignored in contemporary accounts of female anatomy.”⁸⁴

One of the questions I was keen to ask Bernard Moxham was whether he thought taboo affected those teaching anatomy, especially in situations where female sexual anatomy featured. I wanted to tell him Helen O’Connell’s story about a male colleague of hers, who

⁷⁸ Susan C. Lawrence and Kae Bendixen, ‘His and Hers: Male and Female Anatomy in Anatomy texts for U.S. Medical Students, 1890 – 1989’, *Social Science & Medicine*, 35 (1992), p. 925.

⁷⁹ *Ibid.*, p. 925.

⁸⁰ Lisa J Moore and Adele E. Clarke, ‘The Traffic in Cyberanatomies: Sex/Gender/Sexualities in Local and Global Formations’, *Body and Society*, 7 (2001), p. 59.

⁸¹ *Ibid.*, p. 61.

⁸² Helen E. O’Connell, John M. Hutson, Colin R. Anderson and Robert J. Plenter, ‘Anatomical Relationship Between Urethra and Clitoris’, *The Journal of Urology*, 159 (1998), 1892 – 1897 (p. 1892).

⁸³ *Ibid.*, p.1894.

⁸⁴ Nancy Tuana: ‘The speculum of ignorance: the woman’s health movement and epistemologies of ignorance’, *Hypatia* 21 (2006) p.6.

had suggested to her research assistant that their work was ‘pretty voyeuristic’. O’Connell had to emphasise that in the context of anatomical dissection, amidst the smell of cadavers and formalin, the idea of voyeurism or any kind of sexual feelings could not be further removed. For her the pursuit was always intellectual and humanist. “How can this area be so poorly described when an orgasm feels so good! How can it be that so many women of the world have either been subjected to genital mutilation or culturally deprived of sexual enjoyment because of our profound ignorance about this aspect of human physiology?”⁸⁵ Yet shame, as Andrew Sayer puts it, in *Why Things Matter to People*, is “commonly a response to the real or imagined contempt, derision or avoidance of real or imagined others, particularly those whose values are respected.”⁸⁶ He suggests that someone who through no fault of their own has a body shape that is not culturally valued has done nothing shameful, but the maintenance of dignity depends not only on how we conduct ourselves, but on whether we have things which others regard as essential. I wondered whether female sexual anatomy is poorly described because a woman’s sexual fulfilment is not thought to be important, let alone essential to her health and well-being, in the culture of medicine and medical education. If showing an interest in female genitals is also seen as potentially transgressive, is acknowledging it seen as detrimental to those striving to succeed in a male-oriented profession?

Unfortunately, because of his work commitments at home and abroad, it was not possible to arrange a follow-up meeting with the professor. But several months later, out of the blue, I received a phone call from his personal assistant, informing me that he could now report back on the paper I had given him. He told me that he thought it was very well-conducted research, also that he had checked the anatomy textbooks currently in use in his department and found no change to what he called the ‘traditional view’ of female sexual anatomy. He promised to contact a gynaecologist friend to see if she thought that people in her field were aware of this research. If they did, the question remained as to why people were carrying on with the old view in their teaching. He thought it was most likely due to a mixture of inertia and it being ‘a delicate topic’. Also, because anatomical research was increasingly done at a microscopic or bio-molecular level people possibly saw no need to review the gross anatomy, which was of course wrong. As it happened, I did not hear from him and not wanting to bother him, did not try to get in touch myself. Life intervened. I did, however, continue to think about

⁸⁵ Transcript of interview conducted with Helen E. O’Connell, Royal Melbourne Hospital, 7 November 2002.

⁸⁶ Andrew Sayer, *Why Things Matter to People: Social Science, Values and Ethical Life* (New York: Cambridge University Press, 2011), p. 167.

O’Connell’s research. What puzzled me was why it was not having more of an impact within anatomical education. It had been published in a highly respected peer-reviewed medical journal and as such, represented a challenge to accepted knowledge from within the medical establishment. Surely that was a key facet of scientific work – revising existing data after making first-hand observations? One of my many misconceptions at this early stage in the project was that progress in science was linear, like the philosophers Ludwik Fleck mentions, who believe that “our present-day scientific opinions are in complete contrast with all other ways of thinking”⁸⁷ as if we have finally arrived at the end of our search for the absolute truth. What I learned in the years that followed was that scientific knowledge is unstable; as an integral part of culture it is subject to changing social attitudes towards subjects that are regarded as being morally controversial. O’Connell *et al.* argue that accurate medical and anatomical knowledge relating to female genitalia dating from the sixteenth and nineteenth centuries was omitted from textbooks in the twentieth century.⁸⁸ I started to suspect that the scientific research that O’Connell had been involved in and the discoveries that she was making might be subject to the same controversies.

When, I next returned, several years later, to the School of Biosciences, it was to teach Creative Writing, having designed a course at Cardiff University’s Centre for Lifelong Learning called *Writing the Body* that invited students to explore literary and artistic as well as medical representations of the anatomical human body and to write poems and short prose pieces in response. I was grateful to Professor Moxham for arranging the use of a teaching room within the Anatomy Department for this ten week module. Being on site made it easier to invite a research scientist to talk to us about her work on the eye as well as for Bernard Moxham to give us a presentation on anatomical art. He also organised a brief visit to the Dissecting Room (at a time when no dissections were taking place), where he read to us from James Joyce’s short story *The Dead*. On another occasion my students wrote about some rather neglected Victorian plaster anatomical models that were still being kept in the department. Spending time in the School of Biosciences also meant that it was possible to discuss my own project once more with Professor Moxham. I explained that I was still interested in exploring the possibility of a legacy within the culture of medicine of symbolic representations of the female body, including the *Venus Pudica* pose. He thought it might

⁸⁷ Ludwik Fleck: *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, University of Chicago Press, 1979), p. 50.

⁸⁸ Helen E. O’Connell, Kalavampara V. Sanjeevan and John M. Hutson, ‘Anatomy of the Clitoris’, *Journal of Urology*, 174 (2005) 1189 – 1195 (p. 1189).

make an interesting interdisciplinary research project and we decided to make an application together for a ‘small arts’ grant.

It was while I was doing the background research for this bid that I learned that Leonardo da Vinci did not complete the illustrated anatomical treatise he was working on in his notebooks.⁸⁹ It is Andreas Vesalius (1514 – 1564) who is remembered for revolutionizing anatomy by using artistic images within medical education and for incorporating them into a number of ground-breaking textbooks. He found it useful to make rapid charcoal sketches during dissections and he designed large illustrated charts as visual aids for his students. These were later collected, expanded upon and published as *Tabulae Anatomicae Sex* (1538), six anatomical plates drawn by the artist Jan van Calcar that were heavily based on sketches by Vesalius himself. The woodcut illustrations that he commissioned (over 250 of which appeared in the first edition of his greatest textbook *De Humani Corporis Fabrica*) are valued today for their artistic excellence as well as their contribution to science. Its companion piece, a 30-page student textbook known as the *Epitome*, was designed to accompany practical sessions. Structured like a guide, it takes the reader systematically through image and text as in a dissection. Starting with the centrefold, the figures representing male and female surface anatomy can be studied. Once the relevant terms for the different regions have been learned, the student then proceeds backwards plate by plate to the beginning of the volume. Turning the pages, first the skin is ‘removed’ to uncover the layer below; then, folio by folio, leaf by leaf, parts relating to different systems are revealed and lifted away, until only the skeleton remains.

The art critic T.J. Clark begins his account of a “six-month stint at the Getty Research Institute in Los Angeles” by stating that certain pictures repay repeated study.⁹⁰ However slow the work, giving oneself “over to the process of seeing again and again” proves fruitful, he suggests, because “aspect after aspect of the picture seems to surface, what is salient and what incidental alter bewilderingly from day to day, the larger order of the depiction breaks up, recrystallizes, fragments again, persists like an afterimage.”⁹¹ Then he asks an interesting question: “What is it, fundamentally, I am returning to in this particular case? What is it I want to see again?”⁹² We realise, by the end of the book, that he keeps returning to *Landscape with a Man Killed by a Snake* by Poussin because it is a painting in which a death

⁸⁹ Emily Blair, *Anatomy Illustrated* (New York: Simon and Schuster, 1979), p. 24.

⁹⁰ T. J. Clark, *The Sight of Death: An Experiment in Art Writing* (New Haven and London: Yale University Press, 2006), p. 1.

⁹¹ *Ibid.*, p. 5.

⁹² *Ibid.*, p. 5.

or terror is represented. He implies that this is something he needed to “experience again in this harmless, ordered, palliative mode” because he is struggling to come to terms with the death of his mother.⁹³ What I found myself repeatedly returning to were reproductions of the woodcuts that represent surface anatomy in the *Epitome* by Vesalius (See Fig. 5 below), because they seemed to articulate something crucial in terms of attitudes towards the category of ‘female’ and its difference from ‘the male’ that was central to my enquiry. Two naked human figures almost fill a space in the centrefold of the textbook that is shaped like a rough cross, framed by the printed text and its marginal notes. The male nude looks resolutely down, while the female gazes across the trench of the book towards him. Directing his gaze past the human skull that he holds against his thigh to the earth beneath his feet, his expression is one of thoughtful resignation. While her face is equally grave, the female figure’s pose is very different to that of the male. While he seems to have no qualms about exposing his body in a full frontal display to the viewer, the deliberate positioning of her right hand has the effect of drawing attention to the very part of her that she seems so anxious to conceal.



Figs. 6 & 7, Male and female surface anatomy, woodcut engraving, *Folio 9r and 10v* from the *Epitome of Vesalius*, Basel, 1543, Wellcome Library, London

⁹³ *Ibid.*, p. 8.

Like a frozen still from a motion picture, the female figure's protecting hand not only denies the viewer the benefits of what is known as 'the anatomical position', it shifts the balance away from the real to the symbolic. Despite appearing in a book of anatomy intended to show, simply and clearly, what can be seen in Nature, the real shape and appearance of the woman's genitals remain a mystery. I wondered if it was relevant that Vesalius began his medical studies in Paris under Johannes Guinther (1487-1574), a humanist scholar who had recently published translations into Latin of key anatomical works, including those by Galen, the second century Greek physician, philosopher and writer. Galen's rediscovered work was valued for its precision and for the extent of his exposition, which had never been surpassed. Particularly important for Vesalius was Galen's experimental method – the idea that first-hand visual inspection of a cadaver during a dissection was essential when seeking to understand how the human body functions (and malfunctions), rather than relying on book based learning and existing scholarship. It was his application of this experimental method, by insisting on his own visual inspections that empowered Vesalius to challenge some of Galen's theories, for which he is primarily remembered. What puzzled me was why, in the case of female sexual anatomy, Vesalius remained faithful to Galen and stuck to earlier scholarship, and as a result, perpetuated notions of femaleness that connected it with imperfection.

Nancy Siraisi points out that, like Galen, Vesalius believed a body used for dissection in a public anatomy should be one that demonstrated the 'best constitution', against which other bodies could be compared, as one might do with the statue of Polykleitos known as the *Doryphoros* (or spear carrier).⁹⁴ Galen had alluded to this statue (also known as *The Canon*) by Polykleitos in his treatise *On the opinions of Plato and Hippocrates*, where the principles of ideal symmetry and proportion in the human body were laid out. Even in private anatomies, where opportunities were provided for students to witness demonstrations at close hand and where matters were less exalted, Vesalius suggested it was important to study as many cadavers as possible in order to develop skills in dissection and to learn about bodily variations and the effects of diseases. A private anatomy was more like an autopsy, where the importance of direct observation was stressed. (Etymologically, autopsy is 'an eye-witnessing, a seeing for oneself' from the Latin *autopsia*, from *autos*, or 'self' and *opsis*, 'a sight'.) At a private dissection, every available body was to be used, even if it exhibited what

⁹⁴ N. G. Siraisi, 'Vesalius and human diversity in *De humani corporis fabrica*', *Journal of the Warburg and Courtauld Institutes*, 57 (1994) pp. 60-88 (p. 68).

were then thought to be ‘monstrous’ variations. Sachiko Kusakawa suggests that when Vesalius was faced with disturbing cases of ‘imperfection’, he recommended finding ways to refer to the “*historia* of the perfect man” by way of contrast, just as Galen had done.⁹⁵ Illustrations based on classical statues could provide the necessary representation of ideal perfection in terms of proportions and external bodily structure, locating and legitimising anatomy within a world of classical values, which were assumed to be rational, universalistic and accurate.

Nanette Salomon notes that the figure representing male surface anatomy in Vesalius’s *Epitome* closely resembles the *Doryphoros* (or spear carrier). Though the original bronze statue was lost, it is generally thought to have been cast around 440 B.C.E. In Vesalius’s time it was probably known, as it is today, from marble copies that were created in Roman times. She also notes that the figure representing female surface anatomy was based on a statue that is usually called the *Knidian* or *Cnidian Aphrodite* by Praxiteles.⁹⁶ Understood to have been created around 350 B.C.E., it is often considered to be the first female nude, though this is disputed by the historian Christine Mitchell Havelock.⁹⁷

⁹⁵ Sachiko Kusakawa, ‘Andreas Vesalius and the canonisation of the human body – res, verba, pictura’, Paper presented at Princeton University Colloquium, Seeing Science: Image, Text, and Nature: 1500 – 1800, Princeton, 2005 <https://www.princeton.edu/~hos/Seeing%20Sciences%20Wkshp/SeeingSciencePapers/paper-kusakawa.pdf> [accessed 6 April 2018]

⁹⁶ Nanette Salomon, ‘The Venus Pudica: uncovering art history’s “hidden agenda” and pernicious pedigrees,’ in Griselda Pollock, *Generations and Geographies in the Visual Arts* (New York: Routledge, 1996), pp. 70 - 71.

⁹⁷ Christine Mitchell Havelock, *The Aphrodite of Knidos and Her Successors: A Historical Review of the Female Nude in Greek Art* (Ann Arbor: The University of Michigan Press, 1995).



Figs. 8 & 9, *Doryphoros*, Polykleitos ~ 450-400 B.C.E., Roman marble copy of Herculaneum, Naples National Archaeological Museum. Italy and *Aphrodite of Knidos*, Praxiteles ~ 350 B.C.E., marble copy, Aphrodite of Cnidos. Rome, Roman National Museum, Palazzo Altemps

Comparing male and female Greek classical nude statues, Salomon suggests that “The male figure is portrayed as coherent and rational from within; the female figure is portrayed as attractive from without; the male body is dynamically explored as an internally logical, organic unity; the female body is treated as an external surface for decoration.”⁹⁸ Surely though, the greatest difference between them is the fact that female body is connected with the need for *pudor*: modesty and shame? An early description of Praxiteles' sculpture in *the Erotes* by Lucian, introduces the word ‘*pudica*’ which is etymologically related to ‘*pudenda*’, meaning both genitalia and shame, because of the double meaning buried in its Greek root *aidos*, *aidoios*.⁹⁹ Salacious accounts of the statue describe its effect on certain young men who visited the shrine in which it was displayed, suggesting, as Lynda Nead puts it, that: “The female nude is both a cultural and a sexual category; it is part of a cultural industry whose institutions and language propose specific definitions of gender and sexuality

⁹⁸ Nanette Salomon, ‘The Venus Pudica: uncovering art history's “hidden agenda” and pernicious pedigrees’, in Griselda Pollock, *Generations and Geographies in the Visual Arts* (New York: Routledge, 1996), p. 71.

⁹⁹ *Ibid.*, p. 74.

and particular forms of knowledge and pleasure.”¹⁰⁰ Another image lies behind the ideal female form in classical high art: its hidden companion, that of the obscene.

Christine Havelock, however, argues that such an approach betrays contemporary cultural attitudes and biases. If the statue at Knidos illustrates Aphrodite’s divine birth from the sea, in her role as the goddess of beauty, love and procreation, the *pudica* gesture would have emphasized fertility, while the vase would have referred to eternal youth through ritual cleansing and renewal. Havelock suggests that the classical Greeks saw nudity as a display of power and liberty. Indeed, the placing of her hand might have been designed to protect the viewer from the celebrated power the goddess, to “save the observer from Acteon’s fate and Tiresias’s blindness.”¹⁰¹ If so, it seems an even less suitable choice of image for use within a book intended for anatomical education and medical training.

Things got even more complicated when I discovered that the Vesalian figures were sometimes referred to not as engravings of classical sculptures, but as Adam and Eve. In the summer of 2014, I visited the Thomas Fisher Rare Books library in Toronto, Canada, which was hosting an exhibition marking the 500th anniversary of the birth of Andreas Vesalius. Several floors of shelving in climate-controlled galleries housed the permanent collection, but down in the exhibition space, everything was locked away behind glass in sealed display cases. Drawn to a case containing a rare copy of the *Epitome* which had been opened to reveal the centerfold, I was finally able to see for myself the beautiful woodcuts of male and female figures representing surface anatomy that I had been reading about. Looking at the label, to my surprise I noticed that they were called Adam and Eve. When I mentioned this to the History of Science and Medicine librarian Philip Oldfield, who was curating the exhibition, he suggested I take a look at *Adam and Eve in the Protestant Reformation*, by Kathleen Crowther. She is in no doubt that these figures would have been immediately recognizable to 16th-century readers. Indeed, she argues that their appearance in an anatomical treatise was consciously intended to encourage readers to contemplate the physical consequences of ‘the Fall’ as they studied the anatomy of the human body, contrasting its original created perfection with its flawed humanity.¹⁰² When Venus becomes Eve it is her undisciplined, covetous nature that we are meant to see, along with her role in

¹⁰⁰ Lynda Nead, *The Female Nude: Art, Obscenity and Sexuality* (Oxford: Routledge, 1992), p. 59.

¹⁰¹ Christine Mitchell Havelock, *The Aphrodite of Knidos and Her Successors: A Historical Review of the Female Nude in Greek Art* (Ann Arbor: The University of Michigan Press, 1995), p. 36.

¹⁰² Kathleen M. Crowther, *Adam and Eve in the Protestant Reformation* (New York: Cambridge University Press 2010), p. 92.

‘the Fall’. The Devil assumes a female form. Associated with corruption, degradation and abjection, her sexual organs are forbidden from view.

An even more blatantly Christianised version of the same figures appears in the *Compendiosa*, an illustrated work of anatomy that was published in 1545 by Thomas Geminus. Plagiarising images from Vesalius, Geminus engraved 40 copper plates of his own, copying the originals fairly closely, whilst making significant alterations. Not only are the anatomical explanations omitted, the male figure carries an apple, and the skull lying between the two figures is derived from another Vesalian illustration, to which Geminus has added a snake. In a letter of 1546 Vesalius strongly attacked ‘incompetent imitators’ for doing an injustice to the anatomical and artistic quality of his original blocks, but plagiarism was rife; what could be done to prevent it?

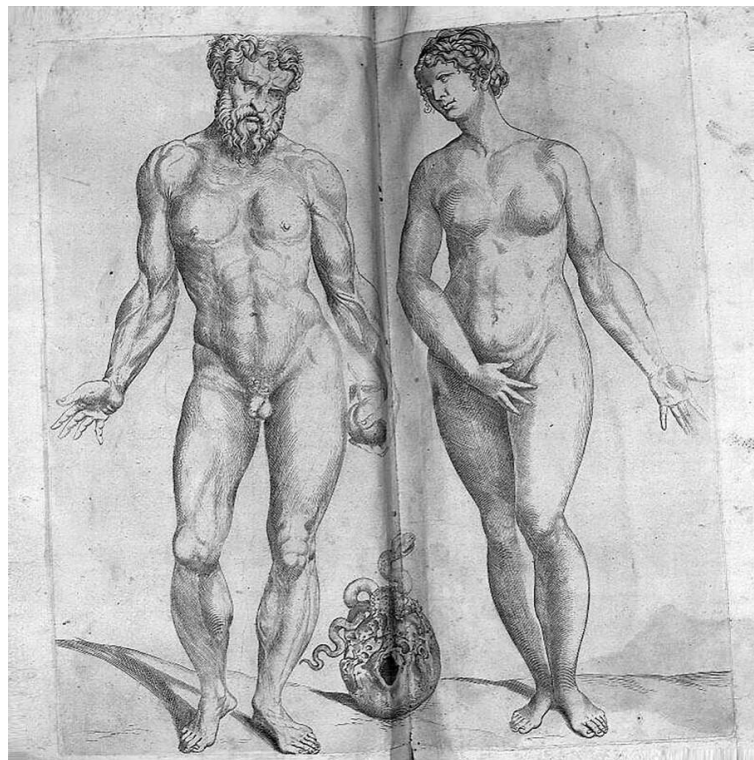


Fig. 10, Thomas Geminus, *Compendiosa*, 1545, engraved copperplate, Wellcome Library, London

On my return from Toronto I continued to explore links between anatomical and artistic representations of the female body. It seemed relevant that the revival of anatomy in the 16th century coincided with a great recovery of classical art, which provided models for realistic representations of the human body. Sachiko Kusukawa highlights the fact that by the 1530s, the Belvedere gardens at the Vatican contained one of the most prestigious collections of

classical statues in Renaissance Europe. He argues that Renaissance anatomists were highly attuned to the persuasive qualities and aesthetic effects of ancient Greek and Roman representations of nude figures. For their own illustrations they drew on works by contemporary artists who had made studies of classical sculptures. Michelangelo used a headless and armless torso, thought to represent Hercules, as a model for one of his male figures in the Sistine Chapel, allegedly referring to it as the ‘most perfect’ in Rome. Vesalius commissioned an engraving of it for the *Fabrica*, where it depicts renal and seminal veins.¹⁰³

When analysing the ‘cultural work’ that is done by the female nude, scholars and critics have concentrated on the idealisation of the female body, and its metonymic power, its embodiment of Aesthetics. In this tradition ‘Beauty’ is understood to have an abstract value, like Goodness, Justice and Truth, an objective quality existing in its own right. And yet, as with a shadow or a fleeting reflection glimpsed in a mirror, there are shades and contrasting layers rich with opposing meanings, for in this same tradition the female body is also equated with loss of reason, uncontrollable sexual feelings, transgression, sin and death.



Fig. 11, Hans Baldung Grien, *Death and the Maiden*, 1518 – 20, oil on panel, Offentliche Kunstmuseum, Basel

¹⁰³ Sachiko Kusukawa, *Andreas Vesalius and the canonisation of the human body – res, verba, picture*, (Princeton University, Seeing Science Papers, 2005)
<https://www.princeton.edu/~hos/Seeing%20Sciences%20Wkshp/SeeingSciencePapers/paper-kusukawa.pdf>
[accessed 10 May 2018]

Grien's maiden is a living sculpture, a sexual lure entwined with a cadaver, Sex 'manhandled' by Death. Her shroud-like drapery forms a V whose apex is also the apex of the V of her groin, focusing attention on the place where a female most entraps and endangers men. The cadaver is there to warn us that, however beautiful and alluring she may appear, a youthful female also represents corrupt and corrupting flesh. In *The Plowman from Bohemia*, by Johannes von Tepl, which was composed around the year 1401, Death reminds its victim that he was "conceived in sin [and] nourished in the maternal body by an unclean, unnamed monstrosity," a hatred of the body that he turns upon himself, suggesting that he too is "a wholly ugly thing, a shitbag, an unclean food, a stinkhouse, a repulsive washbasin, a rotting carcass, a mildewed box, a bottomless bag... a foul-smelling piss-pot, a foul-tasting pail..."¹⁰⁴

The possibility that those in the medical profession and their patients might still be affected by taboo with regard to the female body had emerged during interviews I conducted with a community midwife based in the Newport area and a GUM specialist consultant working at a clinic attached to a hospital in North Wales. Characterising her profession as a grassroots service, the community midwife told me that her focus was always on her patients, not on sexuality or gender (as if these were irrelevant issues). While she was aware that her patients wanted "to deal with the nitty gritty [connected with child-birth]"¹⁰⁵ she was equally aware that they did not want to talk about their sexuality as such. When I asked her if greater clarity regarding sexual anatomy would be of any use to her in her work, she told me that "If you talk to women about their anatomy they glaze over. We don't use those words....I'm not even sure if anatomical models would work, as it's not relevant to women at that time. Their anatomy is not their concern when they are pregnant."¹⁰⁶ She was far more aware of their fears regarding childbirth, on what they were going to experience and how they were going to cope with the pain. She also made the point that these were women who "hand over responsibility to the doctors and midwife. We try to encourage [them] to take responsibility for how they labour, but most women want to transfer that responsibility to the professionals."¹⁰⁷ She thought it would be marvellous if they were more aware of recent developments in science, like O'Connell's anatomical findings, but the midwives would have

¹⁰⁴ Johannes von Tepl, *Der Ackermann aus Böhmen* (The Plowman from Bohemia), illuminated manuscript composed around 1401. Quoted in Joseph Leo Koerner, *The Moment of Self-Portraiture in German Renaissance Art* (Chicago: The University of Chicago Press, 1993), p. 333.

¹⁰⁵ Transcript of anonymised interview with Community Midwife, Cardiff, November 10, 2011.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

to be trained too. The trouble being, “midwives are set in their ways, old-school, doing it one way forever. It is notoriously difficult to change practice. It would have to begin in education and training.”¹⁰⁸ As to how easy it would be to encourage women to gain more understanding and ‘ownership’ of their anatomy, she was aware of great reluctance amongst her patients even to use a mirror or to feel their genitals, or even to feel the baby’s head as it was crowning. “Either women really want to do that or they are absolutely horrified at the thought, even postnatally, if they have stitches I say to them get a mirror, and I’d say 99% of women don’t want to look, they ask me to look at the stitches, to check healing... they are so detached.”¹⁰⁹

A consultant in genito-urinary medicine (GUM) who was working in a sexual health was aware of interest in new information relating to the clitoris in the media but she did not think there was much evidence of attention being given to it in the scientific domain. What she found most concerning was a lack of knowledge of female sexual anatomy amongst medical professionals. “The chances are when someone presents with vulval swellings after sex they will be sent for allergy tests by their GP.”¹¹⁰ As to why there was so little knowledge, she herself could not remember doing a single class that mentioned female erectile tissue in medical school. Like the community midwife I interviewed, she was aware of patients not wanting to apply medicinal creams to their genitals, preferring the professionals to do it for them. “Sometimes we have to change the treatment [for genital warts] because they are not happy to go there. It’s just a little pack with a tube and a mirror and instructions on how to examine yourself, but even this is too much for some women.”¹¹¹ Thinking about possible historical reasons for attitudes like these, she told me she had recently been making a programme for S4C on the history of sexually transmitted infections (STIs) in Wales, and discovered that the first sexual health clinics, which were known as VD clinics, were set up in the 1920s and they were focussed on men. Men were able to seek help for such conditions without loss of face, while women were not. “If you were a woman with a STI you were a prostitute unless proven otherwise, so historically women would not come forward. I went into our local asylum, or poorhouse, and researched the archives. People were being admitted for syphilis, mainly women, and they were locked up without treatment, there being such an issue of sexual politics regarding STIs.”¹¹²

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Transcript of anonymised interview with consultant in GUM, Cardiff, November 21 2011.

¹¹¹ Ibid.

¹¹² Ibid.

In order to measure how aware medical students might be of issues relating to sexual politics within anatomical textbooks and the teaching that they received, Professor Bernard Moxham and I designed a questionnaire that included six images of anatomical art that he thought they were likely to be exposed to during their training.¹¹³ We invited second year medical students at Cardiff University and at the University of Paris, Descartes to participate in the study and once the questionnaires were returned (293 in Cardiff and 142 in Paris) we collated the results. After receiving statistical results from the data set, we began work on a paper to disseminate our findings and designed a poster to be submitted to an international conference that took place at Cardiff University.¹¹⁴ Displaying images of anatomical art such as *The external genitalia and vagina, with anal sphincter*, by Leonardo da Vinci, *Der Arzt (The Doctor)* by Ivo Saliger, and a photographic image of a *Plastinated preparation of dissected pregnant cadaver*, by Gunther von Hagen, the poster was entitled *Are Anatomists Sexist?* As well as sample images, it included some of the questions we had devised to assess the attitudes of medical students regarding the possibility of sexism within the culture of medicine.

The three-day conference also gave me the opportunity to conduct interviews with anatomists and clinicians from Europe as well as the United States. I began each interview by explaining that I was working with Professor Moxham, that we were looking into the possibility of gender imbalance in textbooks and teaching and that this stemmed from an earlier project of my own that was informed by research on female sexual anatomy conducted by the Australian urologist Helen E. O’Connell. The first professor I interviewed was not aware of sexual discrimination in anatomical teaching, though one of his male students had refused to look at the clitoris when it was pointed out, because he was offended by the suggestion “that the female also has a penis”.¹¹⁵ Making the point that this is where the professionalism on the part of the teacher comes in, he said, “You have to make it clear at the beginning of the lecture that this part of the body is like any other part of the body, so there is no taboo, you have to talk about it.”¹¹⁶ He was keen to add that that this had nothing to do with pornography, but that “there you have to be very careful that you don’t cross the line [because] some of the students may be offended, also it’s very easy to make a joke.”¹¹⁷ He

¹¹³ For a copy of the questionnaire please see Appendix.

¹¹⁴ The joint winter meeting of the Anatomical Society, British Association of Clinical Anatomists, and the Institute of Anatomical Sciences, 19 - 21 December 2011, Cardiff University, Wales.

¹¹⁵ Transcript of anonymised interview with Anatomist A, Cardiff University, 20 December 2011.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

added that, “One has to distinguish between two things: one is anatomy and the other is sexuality and those are two very different issues; one is emotional and the other is hard facts.”¹¹⁸ This was echoed by the second anatomist I interviewed, who said, “I think the students need to know the facts first... It is not the major objective of anatomy, dealing with cultural aspects...The one thing is sexuality and the other is anatomy, which is a science.”¹¹⁹ I was struck by the confidence in the reliability of the scientific method that was being expressed, with no consideration being given to the possibility of the impact of ‘social factors’, such as taboo or gender bias.

The third anatomist I interviewed was the only one who had heard of Helen O’Connell’s research on the clitoris. He had come across her work when conducting a literature review whilst working with colleagues on sexual differentiation during embryonic development. He explained that he used it in his lectures, “because it gives a better description of (female sexual anatomy) and it’s the similarity between the male and the female in the basic pattern with the urethra being covered on three sides instead of 360 degrees, rather than a completely different structure.”¹²⁰ He later added that he did not take her work as “a change in stylistic approach (but) as for once someone has done it properly.”¹²¹ He thought that it was interesting that “she was a urologist and not an obstetrician gynecologist, so it gave her a different insight, she wasn’t part of the natural childbirth movement. This was something else, and quite focused. It saw the whole of the relationship of that area with the urethra and the similarities and differences with the male.”¹²² When I expressed surprise that he had never discussed this subject with anyone else before, he said, “I do the teaching on this; it’s my business.”¹²³ He was aware that there might be a problem within anatomy in terms of the uptake of information like this and that “the understanding might be getting worse, because very few people are doing embryology now.”¹²⁴ He was also surprised at students’ lack of knowledge of their own bodies: “totally surprised. They have no idea.”¹²⁵ When I mentioned my earlier interview with a community midwife, he said, “I’ve tried to avoid mentioning that, but out of desperation you do feel like saying to students get yourself a mirror, take a look yourself.”¹²⁶

¹¹⁸ Ibid.

¹¹⁹ Transcript of anonymised interview with Anatomist B, Cardiff University, 20 December 2011.

¹²⁰ Transcript of anonymised interview with Anatomist C, Cardiff University, 20 December 2011.

¹²¹ Ibid.

¹²² Ibid.

¹²³ Ibid.

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ Ibid.

The anatomy lecturer I interviewed next was of the opinion that in Ireland, where she trained and now worked, “huge strides” were being made in terms of women’s health, for example, “making labour as safe an experience as possible. In Ireland,” she added, “obviously there are male biases, but we aren’t as bad as some places, because there is a hangover from culture. In Brehon laws women are equal with men... and women have always had a relatively strong role in society. Women could divorce their husbands by putting their shoes outside the door.”¹²⁷ When I replied, “Oh, so that’s why shoes are put outside hotel rooms: I always thought it was because they wanted them cleaned...” she said, “No, that’s his marching orders.”¹²⁸ A female professor from France, however, was aware that there was a legacy of discrimination against women within the culture of medicine and that this made it difficult to be dispassionate about female sexual anatomy. “When this part of the body is taught it is usually by a man, and there are jokes, so immediately you have something going on.”¹²⁹ Even though there were at that time more female students than males studying medicine (70% female) she said that “most of the high positions in French medical school are taken by men.”¹³⁰ She thought that the world of anatomy in particular was strongly male, much more than other disciplines like psychiatry or psychology or even neurology. She was also aware, from her own clinical work as a psychiatrist, that many of the young women who were her clients, and even those who were not so young, “perhaps 26, 27, even 30 years old (had) no knowledge of their body... because nobody teaches them.”¹³¹

I was surprised how few anatomists were aware of O’Connell’s findings. Some seemed so keen to avoid any mention of female sexual anatomy that I could only assume it was still affected by taboo. One clinician I interviewed on hearing about my project said, “Oh my lord!” and tried his best to cut short the interview by saying it was not his specialism, so that “by definition [his] encounters with the areas you are referring to will be zero.”¹³² He thought I should be targeting trainee and practising urologists and gynaecologists in my research and when, as with all my interviewees, I offered to give him copies of O’Connell’s research papers, he said that, though he appreciated the detail, he would decline the offer. It was reactions like these that made me feel that my line of enquiry was not thought to be entirely

¹²⁷ Transcript of anonymised interview with Anatomist D, Cardiff University, 20 December 2011.

¹²⁸ Ibid.

¹²⁹ Transcript of anonymised interview with Anatomist E, Cardiff University, 20 December 2011.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Transcript of anonymised interview with Anatomist F, Cardiff University, 20 December 2011.

legitimate or appropriate in a professional setting. I had hoped, by undertaking an objective study into the attitudes of anatomists and medical students, as well as by conducting interviews, to discover why it is so difficult to break free from stereotypical ways of seeing when we think about the fabric of the female body. What seemed to be happening was that communication might not be all that forthcoming, let alone straightforward.

My interviews with anatomists and clinicians involved in medical education showed that providing medical students with information relating to the social and cultural contexts and historical background of scientific facts was not thought to be part of their role. Nor was it thought important to teach students to be critical of texts and illustrations, or to remind them that Anatomy, when it was taught alongside humanities subjects, was called Natural History. Calling the first stage of scientific visual representation ‘truth to nature,’ Peter Galison compares early anatomical atlases - which he says offer ‘metaphysical’ images, with later ones - which provide ‘objective or mechanical’ images. Early ‘truth to nature’ anatomists worked with artists to produce illustrations which corrected ‘unnatural imperfections’ so that a perfect body could be revealed in accordance with platonic ideals – the ideal form ‘behind’ the visible.¹³³ Around 1830, according to Galison,¹³⁴ as artists were replaced by cameras or other imaging devices, mechanical images start to appear. Martin Kemp, however, finds “a concerted ambition in science and technology from about 1850 to achieve “style-less” images, in which there has been nothing more in the presentation than the direct communication of objective information in the most functional manner.”¹³⁵ Galison identifies a third phase of anatomical representation, which he characterises as one in which the scientist, armed with new imaging technologies, “begins to emerge as an intellectual, an expert, with a trained eye that can see patterns where a novice sees nothing [this being a time when] interpolation, highlighting and abstraction emerge as subtle interventions needed to elicit meanings from the objects or process and convey that meaning in the representation itself.”¹³⁶ As discussed in Chapter One, Martin Willis questions such clear distinctions between objectivity and subjectivity, suggesting that even with the introduction of new ‘ocular horizons’ provided by mechanical devices such as the microscope and telescope there

¹³³ Peter Galison, ‘Judgment against Objectivity’, in *Picturing Science Producing Art*, ed. by Caroline A. Jones and Peter Galison (New York: Routledge, 1998) p. 328.

¹³⁴ *Ibid.*, p.328.

¹³⁵ Martin Kemp, ‘Style and Non-style in Anatomical Illustration: From Renaissance Humanism to Henry Gray’, *Journal of Anatomy*, 216 (2010), 192 – 208 (p.192).

¹³⁶ Peter Galison, ‘Judgment against Objectivity’, in *Picturing Science Producing Art*, ed. by Caroline A. Jones and Peter Galison (New York: Routledge, 1998) p. 347.

continued to be an overlap between the sciences and the humanities regarding attitudes towards perception.¹³⁷

This notion made me even more interested in what it means to ‘draw from life’, in relation to the female body. Alluding perhaps to the legend of Aphrodite’s birth, in which the goddess of love emerges from a foaming sea perfectly formed, Jean-Luc Nancy describes drawing as “the gift, invention, uprising (*surgissement*), or birth of form.”¹³⁸ Nancy adds that “To exist is also to sketch oneself.” A translation of one of the three inscriptions on the Temple of Apollo at Delphi: *γνῶθι σεαυτόν* (*gnōthi seautón*), meaning Know Thyself, is to be found in many early modern anatomical textbooks. Do we have to be aware that drawing from life might have another role – that of manipulating ‘the truth’? Orhan Pamuk’s story-teller (also known as the ‘curtain-caller’) is shown perching “on a raised platform beside the wood-burning stove [having] unfolded and hung before the crowd a picture,” to which he gives a voice: “pointing, from time to time, at the drawing.”¹³⁹ But what if you are not in the mood for story-telling, and instead want to draw attention to the naked body in terms of what can be seen, in order to impart anatomical knowledge? Might an understanding of its solid material form be even more alluring, for the owner of that body, herself?

¹³⁷ Martin Willis, *Vision, Science and Literature 1870 – 1920: Ocular Horizons* (London: Pickering and Chatto, 2011)

¹³⁸ Jean-Luc Nancy, *The Pleasure in Drawing* (USA: Fordham University Press, 2013), p. 3.

¹³⁹ Orhan Pamuk, *My Name is Red* (London: Faber & Faber, 1998), p. 12.

3. On drawing from life

The anatomie of the inward parts of woman, very
necessary to be knowne to physitians, surgians, and all
other that desire to know themselues ¹⁴⁰

My father gave me his 1947 paper-back copy of *Alice in Wonderland and Through the Looking Glass* when I was a child. Tenniel's drawings captivated me and I loved the way the story begins with a Fall – in this case down a rabbit-hole, whereupon certain substances are taken that induce shape-changing. A squalling baby turns into a piglet and a Cheshire cat appears only to disappear in stages: “beginning with the end of the tail, and ending with the grin, which remained some time after the rest of it had gone.”¹⁴¹ Accused of being a serpent, Alice manages to shrink herself back to her original size by nibbling on a mushroom. “How puzzling these changes are!” she cries. “I’m never sure what I’m going to be, from one minute to another!”¹⁴²

I was given the book soon after being told that we were going to leave Adelaide, South Australia where we had lived for the past three years, to begin a new life in Swansea, south Wales. Prior to our departure we stayed for a while in a rented bungalow in a seaside suburb known as Brighton, where I briefly attended the local primary school. I remember skipping class one afternoon and hiding in long dry grass outside the school buildings with some other children, until we were discovered by an irate teacher. This early taste of rebellion came shortly after being invited to the front of the class to ‘celebrate’ my first pair of glasses, which mortified me, because I so hated their pink frames.

Being introduced to Alice coincided with a very strange period in my life. Most of our belongings had already been put into storage in preparation for the journey to the UK: my parents packing everything away into big trunks and wooden crates to be transported in the hold of the *Castel Felice*, the passenger ship that would be our home for the six-week voyage. In Brighton there was a beach, which we visited (often accompanied by a skinny black dog

¹⁴⁰ Medical Broadside Imprinted at London in the Blacke Friers: [s.n.], 1559. See Helen King, *The One-Sex Body on Trial: The Classical and Early Modern Evidence* (London: Routledge, 2013).

¹⁴¹ Lewis Carroll, ‘Alice in Wonderland’, in *Alice in Wonderland and Through the Looking-Glass* (London: Pan Books, 1947), p. 69.

¹⁴² *Ibid.*, p. 59.

that always seemed to appear just as we started to walk down the street and followed us, limping pathetically, until we reached the wide sandy beach, when it would miraculously recover and race away to find sticks and stones for us to throw.) Being a family of six, things were very cramped in the ‘holiday’ bungalow. Tempers would fray and I would take to the room where the three of us older children slept, which was dominated by an oppressive dressing chest with elaborately carved drawers and triple mirrors. This I set about decorating with origami animals and birds, most likely following instructions in a book borrowed from the school library. I also made little books by folding and sewing the leaves of blank pages together and decorating the covers. (Not only books – strings of cut-out paper figures, made by folding paper in pleats, drawing a figure on the top fold and cutting around it carefully, while leaving the side edges uncut.)

Many, many years later, whilst researching early anatomical books, I came across illustrated works known as flap-books or fugitive sheets, which reminded me of my paper constructions. Popular in sixteenth and seventeenth-century Europe, they were often unashamedly erotic. One illustration depicts an *Adulterous Couple in a Wine Barrel*, another is entitled *Treacheries of Love Transformation*, while yet another shows the ‘wiles of women and the dangers of Lust.’¹⁴³ Pietro Bertelli published a series of prints of courtesans, each with a flap that could be lifted to reveal, beneath an elaborately clothed and opulently bejewelled exterior, a glimpse of the carnal pleasures for which Venice, as a city of excess, was so famous. The story goes that what enraged the civic authorities (and impressed foreign visitors) was the way in which the courtesans so successfully created such a misleading resemblance to ‘honest women.’¹⁴⁴

¹⁴³ See Catalogue A: European Single-Sheet Interactive Prints 1450-1700 Accompanying Interactive and Sculptural Printmaking in the Renaissance Suzanne Karr Schmidt
https://brill.com/fileasset/downloads_products/93604_Catalogue_A.pdf

¹⁴⁴ Art and Love in Renaissance Italy, Metropolitan Museum of Art (New York, N.Y.), Kimbell Art Museum Metropolitan Museum of Art, 2008.



Fig. 12, Pietro Bertelli, *Courtesan and Blind Cupid*, (Flap print with liftable skirt), 1588, engraving and etching, The Metropolitan Museum of Art, New York.

Aimed at a lay audience, illustrated paper sundials, globes, astrolabes and anatomical flap books offered the possibility of a hands-on experience, an opportunity for the reader to manipulate moving parts, some used as a tempting reveal. One of the most commercially successful subjects was female anatomy. Superimposed flaps were designed to be raised sequentially as if viewing the anatomy of a female body at different stages of dissection. Simple diagrams and illustrations were provided that drew on medieval magical traditions, as if an organ's anatomical location and function were of secondary importance to its metaphorical significance. Even so, fugitive sheets, especially anatomical flap books, were presented as being 'true to nature'. Indeed, *imago contrafacto*, a name by which they came to be known, is a term that Andrea Carlino argues carries a double meaning: a faithful copy of another image, or a realistic representation of something that the artist claimed to have personally witnessed.¹⁴⁵ This made me wonder what it actually means, to 'draw from life'. In an art class, in the presence of a nude model, it might seem to be a case of 'simply' looking and representing what is seen, but surely it is never that simple, looking at someone who is naked in order to 'make something' of them?

¹⁴⁵ Andrea Carlino, 'Paper Bodies: a catalogue of anatomical fugitive sheets, 1538-1687', trans. by Noga Arikha, *Medical History, Supplement*, 19 (Wellcome Institute for the History of Medicine, 1999) <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/S0025727300073038> [accessed 9 December 2018]

Rather than assuming that scientific illustrations correspond in an unmediated way with material reality, Ludwik Fleck acknowledged their complexity. Calling them ‘ideograms’, he argued that they were graphic representations of current ideas. This helped to explain why 16th and 17th century anatomical books contain illustrations that do not appear in contemporary textbooks, depicting figures or human skeletons as actors taking part in well-known narratives, with expressive poses and faces. Also why, when searching for more accurate comparisons in modern textbooks, he still failed to find a single ‘correct’ or ‘faithful’ one. “All had been touched up in appearance, and were schematically, almost symbolically, true to theory but not to nature.”¹⁴⁶ This led him to conclude that, “There is no emotionless state as such nor pure rationality as such. How could these states be established?”¹⁴⁷ Rather than attempting to separate ‘subjectivity’ and ‘objectivity’ he thought that it would be more helpful to think about how factual knowledge evolves: “Only through continual movement and interaction can that drive be maintained which yields ideas and truths.”¹⁴⁸ More recently, the authors of *The Visible Woman* have adopted a similar approach, asking why new imaging technologies are taken up as if they can resolve questions definitively. They write that “Despite growing recognition of complexity and ambiguity in production and interpretation across cultural domains...the notion of transparent representation and correct interpretation persists as a dominant theme in the imaging literature”.¹⁴⁹ By contrast, in their book of essays they aimed to “look closely at the cultural and political filtering” performed by the lenses of new imaging technologies.¹⁵⁰ I wondered if it might be useful to combine both approaches, by looking, as Fleck does, at the evolution and development of styles of representation relating to the female body and the possibility that there remains a legacy today within the culture of medicine, whereby certain biases are perpetuated.

Andreas Vesalius is thought to be the first anatomist to have included in his textbooks drawings and descriptions based on direct observation. Commenting on their importance in one of the revised editions of *De Fabrica Corporis Humani*, he suggested that “no student of geometry and other mathematical disciplines can fail to understand how greatly pictures assist the comprehension of these matters and place them more exactly before the eyes than

¹⁴⁶ Ibid., p. 35.

¹⁴⁷ Ludwik Fleck: *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, University of Chicago Press, 1979, p. 49.

¹⁴⁸ Ibid., p. 51.

¹⁴⁹ Paula A. Treichler, Lisa Cartwright and Constance Penley, eds, *The Visible Woman: Imaging Technologies, Gender, and Science* (New York: New York University Press, 1998), p. 4.

¹⁵⁰ Ibid., p. 4.

even the most precise language.”¹⁵¹ Vesalius was not the only anatomist of his time to express such confidence in ‘ocular proof’. Charles Estienne in *De dissectione partium corporis humani* (1545) suggests that it is the purpose of anatomy to open to sight “those parts of the body which are less perceived by our eyes, or of which we have a knowledge otherwise uncertain or to a high degree hidden.”¹⁵² Images function differently from text, he contends, being easier to remember. They reveal form and position in ways that words cannot. However mute, images can bring things to the eyes such that no further speech will be required.

The challenge is how much to (un)cover, as this is where subjective responses involving the emotions come into play. In an address to his readers the essayist Michel de Montaigne suggests that we cannot help but impose limits on how much we expose (and can admit to wanting to know), in texts as well as in graphic illustrations. He explains that though he would like to be seen in his “simple, natural, everyday fashion”, for example, he could never paint himself nude.¹⁵³ Had he been born one of “those peoples who are said still to live under the sweet liberty of Nature’s primal laws ... [he] would most willingly have portrayed [himself] whole, and wholly naked.”¹⁵⁴ Not being one of those peoples, he cannot represent ‘the naked truth’.

In *On Some Lines from Virgil* Montaigne continues to explore the topic of sexuality and by adding layer upon layer of meaning makes more and more of the body, further obscuring what otherwise might be ‘seen’. A slow reveal, as in a strip-tease, is an effective way to keep your readers hooked, of course. Vacillating between exposure and concealment helps to sustain interest and creates a desire to know more. As to what is finally going to be uncovered, images and symbols can be called upon rather than bald facts; the result being yet more veiling (some would say obfuscation). Elements of transgression and danger add to the allure. Especially in the case of love-making; Montaigne believes that both the sexual act and its portrayal should have the savour of theft. Like interlopers or trespassers, “We should take delight in being conducted there as through splendid palaces, by varied portals and corridors, long and pleasant galleries and many a winding way – such stewardship would turn to our advantage, there we would linger and love longer: as in poetry, which can show us love with

¹⁵¹ See Charles O’Malley, *Andreas Vesalius of Brussels, 1514 – 1565* (San Francisco: University of California Press, 1964) p. 276.

¹⁵² Quoted in *Paper Worlds: Printing Knowledge in Early Modern Europe*, exhibition at CHSIM 2010, http://chsi.harvard.edu/docs/PW_Pt5.pdf

¹⁵³ Michel de Montaigne, ‘To the Reader’ in *The Essays: A Selection* (London: Penguin Books, 2004) p. 3.

¹⁵⁴ *Ibid.*, p. 3.

an air more loving than love itself.”¹⁵⁵ Perhaps, as Nora Martin Peterson suggests, “the naked truth cannot be found on the naked body in any straightforward way.”¹⁵⁶

While Montaigne openly decried those who “excessively strive to flee from Venus” he was also aware that shame relating to the appearance and activities of the genitals can so easily turn to disgust¹⁵⁷. Emphasising the complex contradictions inherent in our attitudes towards the sexual act, he calls it “the most disturbing of activities, the one most common to all creatures,” before accusing Nature of making a mockery of us, because, “on the one hand [she] incites us to it, having attached to this desire the most noble, useful and agreeable of her labours: on the other hand she lets us condemn it as immoderate and flee it as indecorous, lets us blush at it and recommend abstaining from it.”¹⁵⁸

Literary and religious symbols alluding to shame and transgression certainly appear in Johannes Remmelin’s *Catoptrum microcosmicum*, alongside anatomical images. Packaged for a popular readership, it was introduced in its English version as “a survey of the microcosme: or, The anatomie of the bodies of man and woman, wherein the skin, veins, nerves, muscles, bones, sinews and ligaments thereof are accurately delineated, and so disposed by pasting, as that each part of the said bodies both inward and outward are exactly represented.”¹⁵⁹

¹⁵⁵ Michel de Montaigne, ‘On Some Lines from Virgil,’ in *The Essays: A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004) p. 309.

¹⁵⁶ Nora Martin Peterson, ‘The Impossible Striptease: Nudity in Jean Calvin and Michel de Montaigne’, *Renaissance and Reformation / Renaissance et Réforme*, 37 (2014), pp. 65–85.

¹⁵⁷ Michel de Montaigne, ‘On Some Lines from Virgil’, in *The Essays: A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004) p. 270.

¹⁵⁸ *Ibid.*, p. 305.

¹⁵⁹ Johannes Remmelin, *Catoptrum microcosmicum*

http://eebo.chadwyck.com/search/full_rec?SOURCE=pgimages.cfg&ACTION=ByID&ID=V137666 [accessed 23 April 2018]



Fig. 13, Johannes Remmelin and Lucas Kilian, *Visio Tertia* from *Catoptrum Microcosmicum* (1613, reprinted 1619) Anatomical broadside, copperplate engraving and etching, Wellcome Library, London

In the illustrated plates, detailed engravings of labelled cross-sections of body parts resemble images used in a dissection room, while allegorical symbols and religious figures and texts tell another story.



Fig.14, detail, Johannes Remmelin and Lucas Kilian, *Visio Tertia* from *Catoptrum Microcosmicum* (1613, reprinted 1619) Anatomical broadside, copperplate engraving and etching, Wellcome Library, London

Eve rests her foot on a human skull through which a wily serpent wriggles. The branch it holds aloft bears an apple, reminding readers of the Biblical Tree of Knowledge and Eve's role in the Fall. Looking at these images I could see how symbols like these spin us away from considerations of embodiment into religious narratives which invite us to dwell on a profusion of concerns relating to fertility, reproduction, sexuality and death. As T.J. Clark perceptively notes, the snake in Poussin's *Landscape with a Man Killed by a Snake* "is all flow. A creature of death, but also vital and self-renewing, a Phoenix without the fire, movement without measurement, a limbless body that can constantly recreate its form and seems to have "no 'given' or optimum disposition in space."¹⁶⁰ Clark adds that "Metamorphosis, we know, was a subject that Poussin spent much of his working life imagining. Ovid was his Bible."¹⁶¹

It is interesting, then, that in the space between Eve's legs a phoenix emerges from a volcanic funeral pyre, while smoke from the flames billows up onto the flap that covers her genitals. Flames which in Roman poetry symbolized erotic passion now represent purgation, the purifying instrument of chastity, excising desire (and bodily organs).

¹⁶⁰ T. J. Clark, *The Sight of Death: An Experiment in Art Writing* (New Haven and London: Yale University Press, 2006), p. 179.

¹⁶¹ *Ibid.*, p. 181.

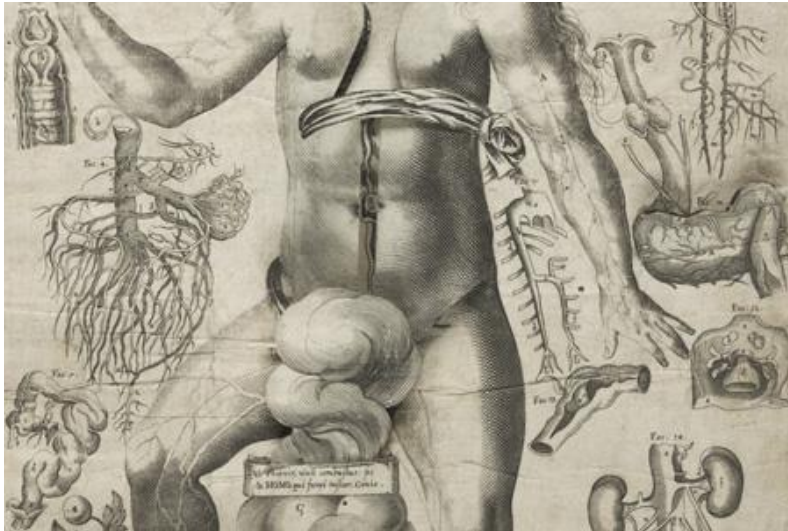


Fig.15, detail, Johannes Remmelin and Lucas Kilian, *Visio Tertia* from *Catoptrum Microcosmicum* (1613, reprinted 1619) Anatomical broadside, copperplate engraving and etching, Wellcome Library, London

Far from being an exact representation of every part of the body (‘both inward and outward’), as promised by Remmelin, when the flaps are lifted, the woman’s genitals are represented as a gaping hole, reminiscent of Leonardo’s drawing of *The external genitalia and vagina, with anal sphincter*, or the image for female sexual anatomy as depicted in the thirty-ninth edition of Gray’s Anatomy, as recently as 2004.



Fig.16, detail, Johannes Remmelin and Lucas Kilian, *Visio Tertia* from *Catoptrum Microcosmicum* (1613, reprinted 1619) Anatomical broadside, copperplate engraving and etching, Wellcome Library, London

The anatomist Helkiah Crooke suggested that images of the naked human body were by their very nature “Too obscene [sic] to look upon.”¹⁶² In *Mikrokosmographia* (1615), he was aware that some readers might abuse his medical texts and use them as pornography. In the preface to the fourth book, *Of the Naturall Parts belonging to generation, as well in Men as in Women*, he insisted that his book was educational and was not intended to “ensnare men's mindes by sensual demonstrations.”¹⁶³ There were anatomists who were less scrupulous. Charles Estienne in *De dissectione partium corporis humani* (1545) commissioned illustrations based on erotic drawings. The figures in the section on the female reproductive system were borrowed from engravings of erotic illustrations known as *The Loves of the Gods*.



Figs., 17 and 18, Charles Estienne, *Demonstration of the Abdomen of a Woman to Show the Womb*, from *La Dissection des parties du corps humain*, 1546, engraving, Wellcome Library, London; Jacopo Caraglio, one of a series of prints known as *Loves of the Gods*, 1527, engraving, University of Michigan Library

¹⁶² Helkiah Crooke, *Mikrokosmographia. A description of the body of man: Together with the Controversies there belonging*, (London, William Laggard, 1615) Quoted in *Use and Abuse: Anatomy and Pornography*, The University of Chicago Library Web Exhibits, Special Collections Research Center, <https://www.lib.uchicago.edu/e/webexhibits/bookusebooktheory/useandabuse.html> [accessed 24 Jan 2017]

¹⁶³ Helkiah Crooke, *Mikrokosmographia. A description of the body of man: Together with the Controversies there belonging*, (London, William Laggard, 1615) p.197. *Early English Books online* <http://eebo.chadwyck.com/home> [accessed 1st August 2018]

Jacopo Caraglio's series of engravings drew on an earlier set of prints by Marcantonio Raimondi entitled *I Modi* (*The Positions*). Because they depicted contemporary Roman courtesans engaged in sexual acts with their clients, the *I Modi* prints were banned almost as soon as they were published in 1524, censorship that resulted in their almost full-scale destruction and serious legal repercussions for both engraver and publisher. By contrast, in his series, Caraglio clothed the salacious content in classical allegories and got away with it. Caraglio's prints then served as templates for Charles Estienne's depictions of dissected female cadavers in his anatomical atlas, exposing organs that were understood to signify female difference. The most explicit sexual postures were chosen, because they provided full frontal displays. With their splayed legs, the female figures are represented lying back with voluptuous abandon in sumptuous bedrooms. Bette Talvacchia sees in such images an intertwining of an anatomical view of sex with classical forms, both being "channelled through the eroticised gaze."¹⁶⁴

Talvacchia concludes her historical account of the *I Modi* drawings with an exploration of their impact on science and anatomy in the 16th and 17th centuries, arguing that "The visualization of scientific knowledge came clothed in the mythological discourse of female sexuality, which in the end had to be gutted to carry the new forms of knowledge."¹⁶⁵ She argues that the implications of this procedure "still resound in contemporary cultural structures, so that an unravelling of the eroticism-mythology-medicine triad, so deftly woven in the imagery of the Renaissance, reveals patterns that lurk within the fabric of our own discourses of sexuality, and that are worth pondering."¹⁶⁶

Part of the trouble, according to Talvacchia, is that a Venus figure, whilst representing ideal beauty, is also associated with the obscene. Both anatomy and surgery, as bodily interventions, she writes, depend on being able to "reveal elements of the female body normally hidden to the eye."¹⁶⁷ This was represented in some Renaissance illustrations as a 'violation', in which the "opening of the concealed...is achieved only through an act of violence, performed by the 'historian of the human body', a recorder and explicator, but also an interpreter, of facts, who cuts away from the extracurricular, mythological frame to expose

¹⁶⁴ Bette Talvacchia, *Taking Positions: On the Erotic in Renaissance Culture* (Princeton New Jersey: Princeton University Press, 1999), p. 163.

¹⁶⁵ *Ibid.*, p. 187.

¹⁶⁶ *Ibid.*, p. 187.

¹⁶⁷ *Ibid.*, p. 187.

the truth of the visible.”¹⁶⁸ When anatomists sought to represent internal parts of the female body, it was not to high art that they turned.

As to how aware contemporary anatomists might be of erotic elements within anatomical illustrations, I could not be sure. I had assumed that the kind of images medical students would be exposed to as part of their training would be free from such connotations. Yet after discussions with Professor Moxham and interviews with other anatomists, I gathered there was widespread use within medical education of historical and contemporary images of the female human body in which there is a blurring of boundaries between art and erotica, which surely has implications for students’ understanding of female anatomy. I decided to conduct more interviews, and this time to ask artists as well as anatomists what it meant to them to ‘draw from life’. Did it give them the opportunity to confront the real thing, the body itself, as informed by anatomical knowledge? Or did they think cultural taboos have a part to play in determining what parts of the body can be ‘simply’ represented? I also wondered if they thought the concept of the ‘male gaze’ was relevant. Were they aware that their gender might have a bearing on the way they viewed, understood and depicted the female body?

Locating sexual feelings in an inferior corrupted realm of the obscene, Immanuel Kant assumed that it was possible to distinguish between artistic work that embarrasses, or seduces and leads the viewer astray, and that which offers ‘proper consideration of form’. When an image becomes an incentive to action, it enters the inferior realm, from which there is no imaginative escape from the ‘real’. Dutifully following this lead, Kenneth Clark begins his study of the nude in Western art with an examination of the Aphrodite of Knidos, the statue ascribed to Praxiteles. Whilst acknowledging its sensual function, Clark still maintains ‘she’ is an ideal creation who embodies “a harmonious calm, a gentleness even, much at variance with the amatory epigrams which she inspired.”¹⁶⁹ Finding its appeal mild and restrained he explains that this is because “the luxuriant sensuality” of the Syrian divinity who inspired the Song of Songs has been “modified by the Greek sense of decorum, so that the gesture of the Aphrodite’s hand, which in Eastern religions indicates the source of her powers, in the *Knidian* modestly conceals it.”¹⁷⁰ This does not stop Clark reminding us that the original statue of Aphrodite no longer exists. Also that we only know about it through salacious accounts of the statue’s effect on certain young men, and the countless copies that were made to decorate homes, gardens and temples in the late second century BC, at the time of Rome's

¹⁶⁸ Ibid., p. 187.

¹⁶⁹ Kenneth Clark, *The Nude: A Study in Ideal Form* (London: The Folio Society, 2010), p. 61.

¹⁷⁰ Ibid., p. 60.

rise to power in the eastern Mediterranean. Placing a high premium on Greek ideals of elegance, derivative works were commissioned and as copies proliferated, they displayed local variations.

Citing Plato's identification of two Aphrodites: one Vulgar and the other Celestial (*Venus Naturalis* and *Venus Coelestis*) Clark argues that not only did this become a key axiom of medieval and Renaissance philosophy, it also provided a justification for the female nude in High Art.¹⁷¹ Calling them the Vegetable and the Crystalline Aphrodite, he uses the term vegetable to denote abundance, as well as passivity, because he thinks that "there are more women whose bodies look like a potato than like the Knidian Aphrodite. The shape to which the female body tends to return is one that emphasises its biological functions, or, to revive [his] opening metaphor, Aphrodite is always ready to relapse into her first vegetable condition."¹⁷² As the classical style disintegrated with time, falling prey to outside influences (Clark blames what he calls Oriental styles and Egyptian sculpture) and "the standard popular deformations that take place whenever the discipline of an ideal scheme is relaxed"¹⁷³ as with all popular art, the drift is towards the lowest common denominator.

John Berger is disinclined to look upon the female nude (vegetable or mineral) as an admirable expression of classical idealism. For him it epitomizes sexual inequality. On the one hand there is the individualism of the artist, thinker, patron, owner (who is assumed to be male); on the other the person who is the object, the woman, who is treated as a mere thing or an abstraction. This unequal relationship is so deeply embedded in our culture, Berger argues, it still structures the consciousness of many women today. "Men survey women before treating them. Consequently how a woman appears to a man determines how she will be treated... Every one of her actions – whatever its direct purpose or motivation – is also read as an indication of how she would like to be treated."¹⁷⁴ Women are depicted in quite a different way from men because of the way women are seen and the essential use to which images of them are put. Not because the feminine is different from the masculine, but because the 'ideal' spectator is always assumed to be male and the image of the woman is designed to flatter him. On representations of supine nakedness, Berger suggests that the female nude is metaphorically and literally couched in passive terms – and plays a key role in a male

¹⁷¹ Kenneth Clark, *The Nude: A Study in Ideal Form* (London: The Folio Society, 2010) p. 53.

¹⁷² *Ibid.*, p.69

¹⁷³ *Ibid.*, p. 69.

¹⁷⁴ John Berger, *Ways of Seeing* (London: Penguin, 1977), p. 46.

bonding ritual – a public display of heterosexual desire providing males with a common ‘natural’ and ‘essentially manly’ site of mastery over women.

It seems highly relevant in this regard that Helen O’Connell was influenced as a student by a work written by a women’s health collective, at a time when issues of control and identity were central to the political agenda.¹⁷⁵ In the 1970s and 80s both art and medicine were regarded by feminists, as well as some on the left, as repressive mechanisms working to regulate and contain women’s rights to self-determination. By providing radical alternatives, feminists involved in women’s health movements hoped to reclaim power and control over the medical regulation of the female body and over the ways in which it was represented within culture. Amongst feminist artists, too, there was a growing resistance to the female nude, which was seen to be “part of a cultural industry whose institutions and language propose specific definitions of gender and sexuality and particular forms of knowledge and pleasure.”¹⁷⁶ The life drawing class was increasingly seen to be the aesthetic endorsement of patriarchal power. Feminist critics and scholars in the 1980s and 1990s saw a masculine, heterosexual point of view in images featuring the female nude and suggested that images like these contributed to the sexual objectification of women. In *Visual Pleasure and Narrative Cinema*¹⁷⁷ the film theorist Laura Mulvey analysed the ways in which looking can be an erotic activity associated with the male as subject and the female as object. Mulvey argued that in a world ordered by sexual imbalance, pleasure in looking has been split between active/male and passive/female. The determining male gaze projects its fantasy onto the female figure, which is styled accordingly, in order to maximize its erotic impact. Art critics applied her theory to works of art, analysing paintings of the female nude in order to identify what they henceforth termed ‘the male gaze’, as well as re-evaluating the work of hitherto neglected female artists (Griselda Pollock in *Old Mistresses*, for example, and Linda Nochlin in *Why Have There Been No Great Women Artists?*).¹⁷⁸ Nanette Salomon, too, criticized what she understood to be an elevated regard for classical works of art within the culture of art history, as if classicism is a “reservoir of powerful archetypal images which lay

¹⁷⁵ The Federation of Feminist Women’s Health Collectives, *A New View of a Woman’s Body* (New York: Simon and Schuster, 1981).

¹⁷⁶ Linda Nead, *The Female Nude: Art, Obscenity and Sexuality* (Oxford: Routledge, 2002), p 59.

¹⁷⁷ Laura Mulvey, “Visual Pleasure and Narrative Cinema.” *Film Theory and Criticism: Introductory Readings*. Eds. Leo Braudy and Marshall Cohen (New York: Oxford University Press, 1999), pp. 833–44.

¹⁷⁸ Roszika Parker and Griselda Pollock, *Old Mistresses: Women, Art and Ideology* (New York: Pantheon Books, 1981); Linda Nochlin, ‘Why Have There Been No Great Women Artists?’, in *Women, Art, and Power and Other Essays* (USA, Harper & Row, 1988), 145 – 178.

claim to some privileged kind of truth about human nature.”¹⁷⁹ One such trope she identified as rape.



Fig. 19, Tintoretto, *Susanna and the Elders*, 1555, oil on canvas, Kunsthistorisches Museum, Vienna

¹⁷⁹ Nanette Salomon, “The Venus Pudica: uncovering art history’s “hidden agendas” and “pernicious pedigrees”, *Generations and Geographies in the visual arts* (London: Routledge, 1996), p. 69.



Fig. 20, Artemisia Gentileschi, *Susanna and the Elders*, 1610, oil on canvas, Schloss Weißenstein, Pommersfelden, Germany

In Tintoretto's *Susanna and the Elders*, Susanna's absorption in her reflected form whilst 'at her bath' renders her complicit with her male admirers. Closer to the original narrative, Artemisia Gentileschi, the first female painter to become a member of the *Accademia di Arte del Disegno* in Florence, presents a young woman being harassed by two older men who loom over her, conspiring together against her. Rather than being made witness to a coy display posing as a high-minded aesthetic experience, the viewer is directly engaged, drawn into a narrative that problematizes sexual politics by permitting a female point-of-view.

Linda Nochlin makes the point that Gentileschi was an anomaly; painting at that time being an almost exclusively male preserve. Women continued to be excluded from training in the visual arts in academies, just as they had been from artisanal workshops. Those seeking professional careers in the fine arts trained instead in the studios of established artists or studied in private academies, following a reduced curriculum. Denied access to higher levels of professionalism, they were also prevented from participating in state commissions and purchases and official competitions that offered lucrative and prestigious scholarships for continued study. Gentileschi was the daughter of an artist, and her talent was recognized and fostered by her father, which made it possible for her to earn a reputation as a talented and accomplished Baroque painter. While most women were accepted as portrait artists in the

seventeenth century, Gentileschi also worked in the more highly esteemed genres of historical, mythological, and religious paintings. Unlike her male contemporaries, however, Gentileschi often depicted strong female figures with emotion, intensity, and power. Some suggest that her art was informed by her own experiences. Helen McDonald describes the trial in 1612 of Agnosti Tassi, the artist who was charged with the rape of Gentileschi. “Much attention was given to whether Artemisia had made a display of herself by being visible from her window, for instance, or whether she had revealed her naked body to her ‘betrothed’. Finally, it was she, not her assailant, who was subjected to the physical torture of the thumbscrew, in order to determine whether she was telling the truth.”¹⁸⁰

The exclusion of women from life drawing meant that they were unable to receive the necessary training for the production of the most prestigious works. Many turned to subjects that were not held in such high esteem, as one student implied in 1860, when describing her studio training: ‘The severity of Monsieur Ingres frightened me ... because he doubted the courage and perseverance of a woman in the field of painting. He would assign to them only the painting of flowers, of fruits, of still lifes, portraits and genre scenes.’¹⁸¹ Those few women who were accepted to take part in formal art training were not allowed to study the body in educational institutions. One artist, Jacques-Louis David, did allow women to study with him while making it absolutely clear that they would not be allowed to participate in the study of nudes. In this regard Linda Nochlin mentions a photograph by Thomas Eakins dating from about 1885 of the Women’s Modelling Class at the Pennsylvania Academy, a life drawing practical in which the female students were provided with a cow as a model. She goes on to explain that it was only at the very end of the 19th century, in the relatively liberated and open atmosphere of Repin’s studio and circle in Russia, that female art students could be seen working “uninhibitedly from the nude – the female model, to be sure – in the company of men. Even in this case, it must be noted that certain photographs represent a private sketch group meeting in one of the women artists’ homes; in the other, the model is draped; and the large group portrait, a co-operative effort by two men and two women students of Repin’s, is an imaginary gathering together of all of the Russian realist’s pupils, past and present, rather than a realistic studio view.”¹⁸²

¹⁸⁰ Helen McDonald, *Erotic Ambiguities; The female nude in art* (London: Routledge, 2001), p. 66.

¹⁸¹ Quoted in ‘Women Artists in Nineteenth Century France’, Nicole Myers, http://www.metmuseum.org/toah/hd/19wa/hd_19wa.htm

¹⁸² Linda Nochlin, ‘Why Have There Been No Great Women Artists?’, in *Women, Art, and Power and Other Essays* (USA, Harper & Row, 1988), p. 162. http://www.writing.upenn.edu/library/Nochlin-Linda_Why-Have-There-Been-No-Great-Women-Artists.pdf



Fig. 21, Thomas Eakins' life-class at the Pennsylvania Academy around 1855, photograph, Pennsylvania Academy of the Fine Arts

A male figurative artist in his late seventies told me that he felt very connected to what he called the 'earlier tradition' of life drawing. Having been trained by an anatomist/illustrator, he spoke of tapping into a convention in his paintings of (young) women when he said, "We have been doing that for the last 400 years, ever since the Renaissance."¹⁸³ He saw himself as working within a conventional framework against which he occasionally pushed, a framework that he thought that most figurative painters would be aware of too. (Whether or not they could actually draw human figures accurately was another matter!) At no point in the interview did he think about this tradition in gendered terms, of it being a male preserve.

¹⁸³ Transcript of anonymised interview with Artist 1, Cardiff, 24 May 2012.

As a man he tended to look at form, he said, this being one of his main interests: “the roundness of things, and the actual stuff, the weight, the materiality of form,” but he thought that he also looked at things like beauty, which he called “this move to the ideal”, probably more than women did. He admitted to wanting to paint young women rather than men and said that he had been doing so for forty years, because he wasn’t interested in men. “It’s the way women behave, you know, all ages, from young women right the way up to old women, they behave differently (to men), they stand differently, their world, it’s fascinating.”¹⁸⁴ He admired the way women look at differences between women. In fact he wished there were more women painters of nudes and was sure there would have been had it not been for the “rather strident... (feminist critique of the female nude).”¹⁸⁵

When I mentioned the use of symbolic representations of the ideal male and female in early anatomical textbooks, he said that as a classicist he was also interested in exploring ideas of ideal form and beauty, which he was seeking to portray as accurately as possible through his technical ability in drawing and painting. When I left the studio where the interview had been conducted, too early to ask his twenty-four year old model (at his suggestion) what she thought of nude modelling, I thought again of Artemisia Gentileschi and an essay on Perseus and the Medusa, in which it is pointed out that while “the representational image is capable of truthfulness; it is capable too of illustrating those things that are mortally dangerous”.¹⁸⁶

An animation artist I interviewed told me that as a child she only drew men, because drawing women meant you were saying something quite different. At that time she felt that the male body represented a ‘generic’ form. By contrast, when representing a woman you are confronted by labels, she said. It was when she went to college that she started questioning this attitude and made a conscious effort to force herself to draw women, which is why she made an animation film called *Girls Night Out* which had only women in it. She did this when she was nineteen. She was surprised at some people’s reactions to it – she knew she’d created strong women characters but when she and her friends were getting onto a bus after the first screening of it at a big animation festival she was shocked when a man came up to her and said, “You really hate men don’t you?”. She thought that animation as an industry had become even more male dominated, “because things have got a lot more technical, with

¹⁸⁴ Ibid., p.7.

¹⁸⁵ Ibid., p. 7.

¹⁸⁶ Francis Gooding, ‘The Shield of Perseus’, in *Black Light: Myth and Meaning in Modern Painting* (2009, Oxford: Wiley-Blackwell) p. 21.

3D animation and so on, which is all computers and stuff,”¹⁸⁷ though in her teaching she made a real effort to get the students to be daring and to challenge stereotypes.

An artist who studied art between 1975 and 1982 said that although she was aware that life-drawing was part of a tradition, at first she felt uncomfortable with the nakedness of the nude model in a life drawing class because of its associations with sex. She did not remember being given any preparation for this by the teachers. In fact on her foundation course she did very little life drawing as the course concentrated on video and abstract painting – life drawing being seen as too traditional. Later, at the Royal College, she took a week-long intensive course which was seen as an introduction to life drawing. There the models were involved in choosing their poses and she appreciated this because it offered more possibilities in terms of drawing. She was not taught life drawing from an anatomical point of view – perhaps because at that time such an approach was regarded as old-fashioned and irrelevant. Realism was seen as the preserve of photography. The things painting could do because of its materiality were very different from photography. She herself was more interested in formal elements in a picture which took her away from the human figure. She has taught and continues to teach life drawing classes but for her this is always more about the craft of drawing – thus avoiding questions of sexuality and pornography.

She thought I might be interested in those female artists who have challenged the way female body is represented in art, Claude Cahun and ORLAN for example, also Grayson Perry, all of whom she saw as artists who “present themselves as the key to their work.”¹⁸⁸ ORLAN in particular was interesting, she thought, because she had cosmetic surgery done on herself to imitate classical ideas of beauty.

¹⁸⁷ Transcript of anonymised interview with Animator, Cardiff University, 29 February 2012

¹⁸⁸ Transcript of anonymised interview with Artist 2, Cardiff, 15 May 2012



Fig. 22, ORLAN, *Striptease occasionnel à l'aide des draps du trousseau*, photograph, 1975, collection of the artist.

In an interview conducted by Kim Willsher for the Guardian newspaper, ORLAN explains that in the first striptease shot she sees herself as a “kind of Madonna”. Then, as she undresses, she uses her body to emulate the history of art in terms of its representations of the female figure. In the penultimate shot she poses as the nude in *The Birth of Venus* by Botticelli. Finally, she leaves the viewer with a pile of sheets on the floor that might represent a chrysalis.

This was done in 1975. The idea is that striptease for a woman is impossible because, even as she undresses, she is re-dressed by other images, thoughts, preconceived ideas and prejudices, none of which she can remove. Viewers don't see a nude woman – they see what's in their own head. The sheets were part of my *trousseau*, the gifts my mother prepared for my marriage. When I was a young girl, every time I wanted to go out, she would insist I help with these sheets. I asked all my lovers to put their sperm on them, then I used dye to

bring out the pretty stains. Later, as part of a performance, I took a large needle and thread and embroidered the stains while blindfolded or looking straight at the audience.¹⁸⁹

Another work by ORLAN, entitled *The Origin of War* was inspired by *The Origin of the World*, by Gustave Courbet. While Courbet's notorious painting features a truncated young woman's body posed to reveal her genitalia, the photograph shot by ORLAN "shows a modest-size penis that is half-erect. As an image, it is absolutely mutilating, like the work of a serial killer. It was shown at the Musée d'Orsay in Paris and they put it quite high up on the wall. I realised afterwards that they were not allowed to show erect or even semi-erect penises so they put it up high so that if anyone asked, they could say: 'No, no, it's not an erection. It's just a question of perspective.' Most newspapers and magazines have refused to publish the work, but it has been on television, which is a strange reversal."¹⁹⁰

Though in 2016 she felt she was finally being acknowledged as an artist, she was aware that her work was not very well understood by those outside the artistic world. In 1976, for example, she performed *The Kiss of the Artist* at a contemporary art fair in Paris, sitting behind a slot machine that had been made to look like her nude torso. In return for a kiss, she invited visitors to the fair to put money in a slot between its breasts. The coins dropped into a transparent box situated at the pubis. Though she intended the work to be seen as an exploration of moral values in art it led to her losing her job at the private school where she had been teaching. Having been told that her attitude was incompatible with her role as a teacher, she without an income, with debts and a studio to run. In the interview she admits that the work caused a scandal, also that she was insulted, called a prostitute and told that her work was 'absolutely disgusting'. Her neighbours would kick the door of her flat as they passed.

The difficulties faced by ORLAN reminded me that even in the 1970s and 80s, the 'ideal' spectator was usually assumed to be male and most images of women were produced for male consumption. Even so, as Lynda Nead suggests, some of the most radical women's art produced around that time included representations of the female body that explored subjectivity in relation to the politics of the body. Aware that "Historically, there has been a powerful alliance between the discourses of art and medicine in the definition of femininity

¹⁸⁹ Kim Willsher interview with ORLAN <https://www.theguardian.com/artanddesign/2016/jan/07/orlan-best-photograph-birth-of-venus-striptease-with-trousseau> [accessed 16 December 2018]

¹⁹⁰ Ibid.

which has continued to exercise power in contemporary society”¹⁹¹ Nead argues that by working with their own bodies rather than using models, through performance work and unflinching representations of previously taboo subjects such as menstruation, such artists as Carole Schneeman, Mary Kelly and Jo Spence explored the idea that the fetishization of the female object could be subverted by women’s body performance. Helen McDonald, too, mentions Schneeman, along with Judy Chicago and Suzanne Santoro, seeing them as “setting out to create alternative ‘positive’ images of the female body by making visible those parts that had been censored in traditional art.”¹⁹² Projecting a space for a speaking female subject and asserting the female body as pure matter was seen as liberatory, some feminist artists even suggesting that the erotic excess of porn shatters the illusory unity of the viewing subject and forces a critical fissure in the system of bourgeois values underpinning classical high art.

I began to wonder if the notion of mastery being central to the male gaze might usefully be applied to anatomical representations of the female body. In *Dream Anatomy*, historian Michael Sappol suggests that mastery over the dead body is akin to mastery over oneself, even a kind of mastery over death. He notes, too, the attempts of early anatomy texts to shock the reader, and the pleasure of that shock; the sense that anatomists and anatomical artists exploited the erotic potential afforded by “undressing” or uncovering layers of the body.¹⁹³

Carol Tavis writes that, “In medicine students learn anatomy and physiology and, separately, female anatomy and physiology; the male body is anatomy itself.”¹⁹⁴ As a result, female sexual anatomy has been poorly described and represented – because anatomy has been considered primarily in male-centred terms. Helen O’Connell and her colleagues also wrote about advertent or inadvertent sexism in the descriptions of female anatomy in otherwise authoritative texts. They concluded that “the typical textbook description of the clitoris lacks detail, describes male anatomy fully and only gives the differences between male and female anatomy rather than a full description of female anatomy.”¹⁹⁵ This was confirmed in the study I worked on with Professor Bernard Moxham at Cardiff School of Biosciences and two of his colleagues at the University of Paris Descartes, and Université Paris Ouest Nanterre La Défense. We looked at ten commonly used textbooks including two

¹⁹¹Lynda Nead, *Art, Obscenity and Sexuality* (Oxford: Routledge, 2002), p. 61.

¹⁹² Helen McDonald, *Erotic Ambiguities: The Female Nude in Art* (Oxford: Routledge, 2001), p. 81.

¹⁹³ Michael Sappol, *Dream Anatomy* (Washington DC: National Library of Medicine, 2006).

¹⁹⁴ Carol Tavis, *Mismeasure of Woman: Why Women are not the better sex, the inferior sex or the opposite sex* (New York: Simon and Schuster, 1992), pp. 17,18.

¹⁹⁵ Helen E. O’Connell, Kalavampara Sanjeevan, John M, Hutson JM, ‘Anatomy of the Clitoris’, *The Journal of Urology*, 174 (2005), p. 1193.

of the most recent editions of *Gray's Anatomy*, as well as atlases of surface anatomy, counting the images to find what percentage depicted female anatomy. In three books of surface anatomy, for example, we found that two contained very few illustrations of female anatomy, apart from the breast and perineum. Both editions of *Gray's Anatomy* favoured male anatomy; in the 39th edition illustrations of female genitalia were very old-fashioned, lacking in detail and described the female anatomy as a brief adjunct to the male, as noted by O'Connell *et al.* in 1998.¹⁹⁶ When checking the texts to look for evidence of gender bias and stereotyping, we noticed that when clinical cases were provided in *Gray's Anatomy for Students*, males predominated and females were provided only in cases thought to be specific to women. In the paper we wrote to publish these results, we argued that students need to be taught to be more critically aware of possible gender bias and stereotyping in their textbooks.¹⁹⁷

What would anatomy be like if it was seen through the eyes of women and included accounts of what we feel, given 'all that we have'? Firstly, barriers to change would have to be overcome, given institutional inertia within a male-dominated profession. When Dr Kathryn Peek introduced a ground-breaking Program in Clinical Female Anatomy at the University of Texas in the early 2000s, which was designed to counter traditional views of the anatomical female body, by responding to "current research and modern imaging techniques [that were] identifying numerous biological gender differences throughout the body... differences [that carried] great potential for influencing women's health"¹⁹⁸ she found the path to promoting equality and inclusion within the culture of medicine was far from straightforward. With the arrival of a new head of teaching at the university who did not see the need for this programme of studies and was not willing to support it, Peek's program of studies was shelved.

In our study we found that medicine continues not only to display male bias but also a lack of awareness of it. Our hypothesis was that medical students would perceive gender bias as reflected in the historical images of anatomical art. We designed and distributed a questionnaire that invited second year students to address the possibility that gender factors within anatomical imagery (both historical and contemporary) hindered the dispassionate

¹⁹⁶ Helen E. O'Connell, John M. Hutson, Colin R. Anderson and Robert J. Plenter, 'Anatomical Relationship between Urethra and Clitoris', *The Journal of Urology*, 159 (1998), p. 1894.

¹⁹⁷ Susan Morgan, Odile Plaisant, Baptiste Lignier and Bernard J. Moxham, 'Sexism and anatomy, as discerned in textbooks and as perceived by medical students at Cardiff University and University of Paris Descartes', *Journal of Anatomy*, 224 (2014) p. 362.

¹⁹⁸ Program in Female Clinical Anatomy http://nba19.uth.tmc.edu/female_anat/pintro.htm [accessed 10 September 2001]

representation of anatomy. To our surprise we discovered that most images provided (works of anatomical art that were specifically chosen because in our view they represented a gendered view of medical science) were not perceived as sexist. We wondered if the students had become desensitized to male bias and whether they had learned to tolerate sexism as a fixed aspect of medical culture that could not be challenged or changed by those hoping to succeed in the profession.¹⁹⁹

In *Written on the Body* Jeanette Winterson confronts the linguistic problems of writing about love and sex, in terms of the female body. Reading it, I was reminded of Ludwik Fleck, where he considers the inescapable influence upon each individual of his or her social environment, into which each person is initiated and by which she or he is conditioned.²⁰⁰ We work with images and words offered by our societies and cultures: what else do we have? In Winterson's 'love-poem to Louise' the narrator admits that the subject of love has been written about so extensively that it is almost impossible to write anything new about it. Her subject is less love than the problems associated with describing it in narrative or textual form, as she attempts to resist clichés and introduce some life into worn-out phrases. "It's the clichés that cause the trouble."²⁰¹

Experimenting with different registers, from Biblical language to that used in medicine and anatomy, the narrator, whose gender is never made clear, searches for a new way to write about sexual desire and love. "Why is the measure of love loss?" is the opening sentence of the novel: Winterson suggesting that love needs and is constituted by loss, just as desire is defined by what is missing. No sooner does the (ungendered) narrator succeed in luring Louise away from her husband than s/he chooses to absent him/herself from the relationship. The register of desire is raised, desire being consistently associated with absence or unobtainability in the relationship. Are the thoughts thinking (or constructs constructing) the lovers, or are the lovers thinking the thoughts (constructing or making love)?

What if sexuality is a "historical construct: not a furtive reality that is difficult to grasp, but a great surface network in which the stimulation of bodies, the intensification of pleasures, the incitement to discourse, the formation of special knowledges, the strengthening of controls and resistances, are linked to one another, in accordance with a few major

¹⁹⁹ Susan Morgan, Odile Plaisant, Baptiste Lignier, Bernard J. Moxham, 'Medical students and professional anatomists do not perceive gender bias within imagery featuring anatomy', *Clinical Anatomy*, 30 (2017) pp. 711 – 732.

²⁰⁰ See Ludwik Fleck, *Genesis and Development of a Scientific Fact*, trans. by Fred Bradley and Thaddeus J. Trenn (Chicago: University of Chicago Press, 1979), p. 47.

²⁰¹ Jeanette Winterson, *Written on the Body* (London: Vintage, 1993) p. 10.

strategies of knowledge and power.”²⁰² So Michel Foucault would have it, in *The History of Sexuality*. I wondered what part was played by the statue known as the Modest Venus or *Venus Pudica* in the ‘great surface network’ of anatomical knowledge of sexuality. Did it help to form part of that ‘special knowledge’, or did it act like a barrier to enlightenment, if the knowledge required is that which can be made visible? Perhaps, as Terry Eagleton points out: “The beautiful is ... political order lived out on the body, the way it strikes the eye and stirs the heart.”²⁰³

It was around this time that I was awarded funding to attend the Vesalius Continuum, a conference that was due to take place on Zakynthos, the Greek island where it is believed that Andreas Vesalius died and was buried. To commemorate the 500th anniversary of his birth, anatomists, artists, researchers and medical illustrators were invited to present papers on his contribution to descriptive anatomy and medicine as well as his inspiration for artists and writers of the human body to this day. I was intrigued at the opportunities this gathering seemed to offer, not least to extend the scope of my questionnaire study, by including experts from both sides of the two-cultures divide, but also to conduct more interviews, during which I hoped to discuss issues like these.

²⁰² Michel Foucault, *The History of Sexuality*, Vol. 1, trans. by Robert Hurley (London: Penguin Books, 1981) p. 106.

²⁰³ Terry Eagleton, ‘The Ideology of the Aesthetic’, *Poetics Today*, 9 (1988), pp. 327-338 (p.336).

4. On female anatomy - fact or fiction?

My hotel room faces Solomos Square, as rebuilt after the last major earthquake on Zakynthos in 1953, which destroyed almost the entire town. (A safety notice on the door gives instructions on what to do in the event of an earthquake, as well as a fire.) Beyond the town square, main road and broad curve of harbour wall, a distant wooded hill, the sea and where it meets the sky, the dark line of a horizon. There is a glass door that opens onto a small balcony with table and chairs, but the heat of the sun keeps me indoors, along with traffic noise, music from the hotel bar, loud chatter and laughter and an unrelenting wind blowing in off the sea, restless, disturbing. Inside my room, the tiny desk that doubles up as a bedside table is so cluttered with ‘work things’ – lap top, voice recorder, tangle of leads, adaptor plugs and rechargers that it is impossible to work there. I sit cross-legged on the bed instead, in a sea of loose papers and open books, dipping into glossy exhibition brochures, a lavishly illustrated book on anatomical waxes, a travelogue, taking notes. In *Shah of Shahs* Ryszard Kapuściński confesses to compulsively creating a disorderly mess in a hotel room, “because then the ambiance has the illusion of some kind of life, a substitute warmth and intimacy, a proof (though illusory) that such a strange uncanny place, as all hotel rooms in essence are, has been at least partially conquered and tamed.”²⁰⁴ He found a jumble of things more conducive to and symptomatic of writing; things, like words “all piled, mixed up together, helter skelter, like a flea market...”²⁰⁵ Working as a foreign correspondent he struggled to act the part of the dispassionate observer, wise before the event, objectively recording facts as they present themselves. He felt more like one who is cast adrift; caught up and swept along by “flowing, agitated rivers of people; on cassettes – the wail of the muezzins, shouted orders, conversations, monologues; in photos, – faces in ecstasy, exaltation...”²⁰⁶

Kapuściński has been criticised for playing fast and loose with the facts; truth and accuracy being sacrificed, it is argued, in favour of ‘literary reportage’. It is true that lyrical descriptions enrich his work, also that his narratives wander back and forth in time with the flexibility of fiction. He has a keen observational eye for detail, a talent for uncovering patterns and correspondences, yet perception in his books is revealed to involve more than

²⁰⁴ Ryszard Kapuściński, *Shah of Shahs*, trans. by William R. Brand and Katarzyna Mroczkowska-Brand (London: Penguin Books, 2006), p. 4.

²⁰⁵ *Ibid.*, p. 4.

²⁰⁶ *Ibid.*, p. 4.

what J.M. Coetzee crisply terms “the cold clarity of the visual apparatus”.²⁰⁷ In an interview available online Kapuściński explains that a suspension of factual reality has allowed him the freedom to share the touch, feel and smell of ‘what is really there’ with his readers. It is a cause of some frustration to him that his work has been presented and classified in bookshops as non-fiction, a classification that comes with certain expectations – of factual accuracy and authenticity, an unambiguous presentation, in which the text is expected to summon forth the thing itself, based on a rationalistic ideal.

Such an approach, he suggests, is overly reductive, incapable of describing the chaotic multifariousness of life and the power of emotions. It seems likely he would disagree with those who insist on a strict separation between art and science, in the belief that art aims to depict a different truth from that which is pursued in science. Some writers who see themselves as artists give facts (and lifelikeness in art) a bad name. For Jeanette Winterson, art offers “freedom, outside of the tyranny of matter.”²⁰⁸ She compares art with factual truth as if the latter is the “truth of railway timetables”²⁰⁹ and quotes Clive Bell’s story of a visit to the Grafton Galleries in the company of one of “the ablest ...one of the most enlightened of contemporary men of science”²¹⁰ who, on seeing works by Matisse, declared the artist an astigmatic. When admonished by Bell, the scientist bawls him out: “Do you mean to tell me ...that there has ever been a painter who did not try to make his objects as lifelike as possible? Dismiss such silly nonsense from your head.”²¹¹ Winterson is on the side of Clive Bell: “Matisse’s distortions are not faulty Realism, they are a different kind of reality.”²¹²

Helene Cixous takes another approach. In *Veils*, writing about her feelings of loss after having her severe myopia surgically ‘corrected’, she suggests that, for her, seeing can never be trusted. “From then on she did not know. She and Doubt were always inseparable: had things gone away or was it she who mis-saw them?” When her short-sight is corrected at first she believes “science had just vanquished the invincible...” and what made her “jubilant was the ‘Yes, I’m here’ of presence, non-refusal, non-retreat. Yes, said the world...”²¹³ Yet what

²⁰⁷ J.M. Coetzee, *Disgrace* (London: Secker & Warburg, 1999), p. 22.

²⁰⁸ Jeanette Winterson, ‘Testimony Against Gertrude Stein’, *Art Objects* (New York: Vintage Books, 1996), p. 59.

²⁰⁹ *Ibid.*, p. 54.

²¹⁰ *Ibid.*, p. 48.

²¹¹ *Ibid.*, p. 49.

²¹² *Ibid.*, p. 49

²¹³ Hélène Cixous, ‘*Savoir*’, in in Hélène Cixous and Jacques Derrida, *Veils*, trans. by Geoffrey Bennington (Stanford California: Stanford University Press, 2001), p. 9.

she soon begins to miss is what myopia gave her, the ability not to see herself as seen, which she now realises was “the great liberty of self-effacement.”²¹⁴

Questions of objectivity in science and the reliability of perception, given various and often conflicting points of view, are some of the issues I am hoping to explore on Zakynthos, where I have travelled to attend the Vesalius Continuum. As a conference it is unusual in that it includes people from both sides of the cultural divide that continues to separate the arts and the sciences. Anatomists and artists, researchers and medical illustrators have been invited to present papers on the contributions of Andreas Vesalius to descriptive anatomy and medicine as well as his continuing inspiration for artists and writers of the human body. I am here to record interviews with some of the delegates, using what suitable space becomes free when someone can make the time to slip away from the conference proceedings to answer my prepared questions. When I listen to the recordings later, in the background I will hear the chirring of cicadas, dogs barking, a cockerel crowing, rumbles of distant thunder. One of the interviews takes place in a back room filled with large humming fridges and each time the door is opened by one of the catering staff coming in for bottles of chilled wine or soft drinks the hubbub of conference attendees can be heard on the recording as they mingle over lunch. I am curious to discover if they think that scientific understanding has affected the way in which the female body is portrayed in works of art and literature. And to turn that question around, if they think that literary and artistic portrayals of female bodies have had an impact on scientific and medical understanding of female anatomy. The Modest Venus pose - the covering of female sexualised parts while at the same time drawing attention to them - is an artistic convention that we tend to overlook; we are so inured to it we see no reason to query it. I wonder what artists and anatomists will say about its effect on anatomical understanding of female sexual anatomy, given its place in a tradition that finds that part of a woman's body shameful and transgressive. As an enduring symbol and metaphor of feminine beauty has the *Venus pudica* become a barrier to understanding? Is it possible that anatomy is telling stories governed by emotions, even though we tend to assume that as a science, it is concerned primarily with 'hard facts'?

In early September 2014, to commemorate the 500th anniversary of the birth of Andreas Vesalius, a specially commissioned monument of the anatomist is unveiled in Solomos Square in Zakynthos, on the island of Zante, which is understood to be the place where he died. Town elders, dignitaries and bearded priests gather after the ceremony to linger over

²¹⁴ Ibid., p. 12.

small cups of intense black coffee in the shade of their particular version of a Tree of Idleness (a large green umbrella in the main hotel's outdoor bar). The hotel receptionist, a student who speaks English, tells me that they cannot understand why Vesalius, the 'father of modern anatomy', had been portrayed in the early stages of dissection himself. I wonder why they do not see the statue's similarity with the 'muscle men' figures in Vesalius's great textbook, the 1543 *De humani corporis fabrica (On the Fabric of the Human Body)*, where the human form, as an *écorché* (nude depicted without skin) is presented like a figurative work of sculptural art from Ancient Greece.

Vesalius presented a dedicatory copy of the *Fabrica* to Charles V, the ruler of Spain and the Holy Roman Empire that was covered in purple silk velvet, with linings of vellum, hand-coloured woodcuts and initials with highlights in liquid silver and gold. According to a Christie's catalogue: "The rich palette used for the illustrations, such as the frontispiece, portrait and initials includes vivid deep shades of red, blue, yellow, green, brown and purple combined with the use of silver for the dissecting instruments and abundant highlights in liquid gold ... colouring that is comparable with the best of 16th century miniature painting and must have been applied by a skilled professional miniaturist."²¹⁵ The anatomical illustrations, they add, are equally skilful in execution and surely must have been carried out under Vesalius's supervision, being coloured in scientifically applied "natural shades to bring out anatomical details that might otherwise escape notice." In his dedicatory address Vesalius describes the book as one in which "pictures of all the parts are inserted into the context of the narrative, so that the dissected body is placed, so to speak, before the eyes of those studying the works of nature."²¹⁶ Yet it seems clear that scientific accuracy is not his only concern. As a humanist, Vesalius seeks to locate the practice of anatomy in a philosophical tradition. He adopts the Latin version of the ancient Greek dictum *γνῶθι σεαυτόν (gnōthi seautón) nosce te ipsum* – know thyself, as inscribed on the Temple of Apollo at Delphi.

Yet I surmise that out of the entire Apolline discipline of
medicine, and indeed all natural philosophy, nothing
could be produced more pleasing or welcome to your
Majesty than research in which we recognise the body and

²¹⁵ Christie's Client Service, 'The Haskell F. Norman Library of Science and Medicine, Part Sale, Lot 213 Vesalius, Andreas (1514-64). *De humani corporis fabrica libri septem*. Basel: Johannes Oporinus, June 1543. <http://www.christies.com/lotfinder/lot/vesalius-andreas-de-924151-details.aspx?intObjectID=924151> [accessed 13/07/2018]

²¹⁶ See Logan Clendening, *Source Book of Medical History* (New York: Dover Publications, 1960), p. 137.

the spirit, as well as a certain divinity that issues from a harmony of the two, and finally our own selves (which is the true study of mankind)...²¹⁷

The statue in Zakynthos town square contemplates a human head not only to remind us of our own mortality but to ennoble a body-of-knowledge and make an opened-up and taken apart bloodless body-of-death a glittering prize.

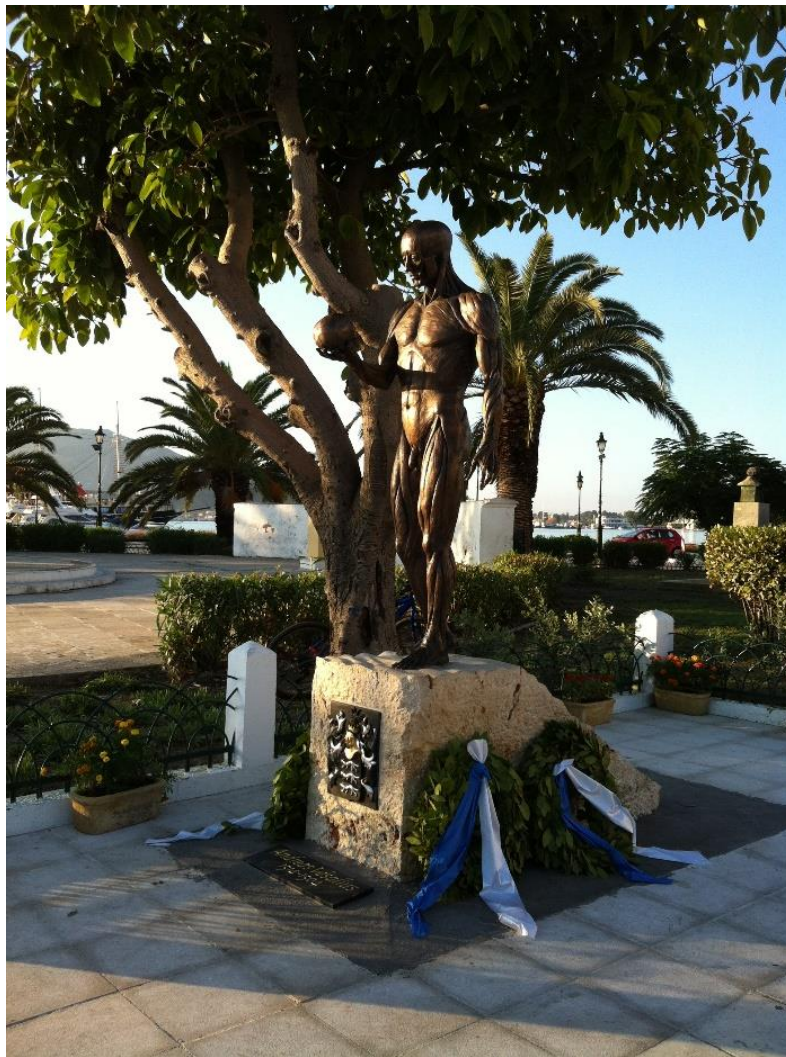


Fig. 23, Richard Neave and Pascale Pollier, Vesalius monument, photograph, Susan Morgan 2014

²¹⁷ Andreas Vesalius , *De humani corporis fabrica*, trans. By Daniel Garrison and Malcolm Hast. The Vesalius Project at Northwestern University, IL. Book 1 released 19 March 2003. 12 Jan. 2009. <http://vesalius.northwestern.edu/noflash.html> [accessed 13/07/2018].

The following day early morning sun lights up the bronze carapace of the statue so that it glints like heraldic armour. Standing proud in Solomos Square like the visual equivalent of an arousing trumpet fanfare, it speaks to me of the very masculine world of modern anatomy, reminding me that apart from references to reproduction or cases seen to be specifically female, women's bodies hardly feature in the scientific literature. Is this because anatomy is conceived of as a seemingly benign revelation of the nature of the human body, unaffected by gender? What if it can be shown that when that body is portrayed as female, writing about its penetration (in accordance with the true meaning of the term *autopsy*: to see for yourself, with your own eyes) becomes less than straightforward, especially when it is not seen in terms of reproduction, but in relation to sexual function? Then writing about certain 'parts' and 'functions' becomes a source of uncertainty and unease. The fragility of the anatomical contract and its conventions, its interconnectedness with symbolism and myth all come to the fore, despite anatomy's professed agenda: to base facts on repeated personal observations of the body, rather than on the reports of others in scholarly works.

The statue is where we assemble each morning before being taken by coach some six or seven kilometres inland to the Theatre of Sarakinado where the Vesalius Continuum is being held. It is not long before winding streets with shaded coffee shops and stalls piled high with red and white onions and other vegetables and fruits are left behind, as the outskirts of town give way to village houses and carefully tended plots of land. There are vineyards aplenty. Small dark grapes have been laid out to dry under the sun to make Zante currants in the small field right next to the theatre. The sun has clearly had an effect on the paintwork of the theatre outbuildings; I take photographs of peeled and faded doors, signs and noticeboards, but there is little time to look around. As well as distributing the questionnaires and attending conference sessions, my plan is to meet up with those delegates who have agreed to take part in face-to-face, recorded interviews. They include several artists, an art historian and a historian of science, a number of anatomy professors and the editor-in-chief of *Gray's Anatomy*.

On the first day of the conference Professor Vivian Nutton gives a paper on a recently discovered copy of a second edition *De humani corporis fabrica* (1555), heavily annotated by Vesalius himself in preparation for a never published third edition. In Nutton's view the hundreds of marginal notes show Vesalius's willingness to correct the smallest detail and emphasise his conviction that anatomy could and should be studied only on the basis of human dissection. One of the additions Vesalius makes in these notes, it seemed, concerned

the custom of ‘both male and female circumcision continuing today for religious reasons in Ethiopia among the Scevani.’ Nutton argues that this was the first reference in a medical text to female genital mutilation for non-medical purposes.

When I interview him later, I ask him if he thinks this annotation contradicts Vesalius’s original description of female genitalia, where he denies the existence of the clitoris and questions the competence of anatomists who report seeing one in a cadaver, because he regards it as an abnormality, a useless part of the body that might appear in hermaphrodites but not in healthy women. Professor Nutton agrees, adding that Vesalius in his note does not refer to any source for the information about female genital mutilation, though he does make a comment about a Greek surgeon from the 6th century BC.

- Aegina?

- Yes, Aegina, about cutting the genitals and also about those that are ‘over-enlarged’, that might be seen as abnormal, that comes into the literature and reappears in the *Fabrica*. In the annotated copy he refers to female circumcision as something found in Ethiopia, practised for religious reasons, though he never goes there, and the informant gets it wrong. A Portuguese traveller goes to Abyssinia and he reports it and the report is then translated and that becomes a fairly well known book, so Vesalius is quoting it third hand, so to speak. What is interesting is that there is a note in the margin of his annotated copy, as if he finds it interesting, and he’s wondering what it is but goes no further.

- So on the one hand he says the clitoris is a sport of nature, and that it might appear in hermaphrodites and is not to be seen in normal women, but then he mentions its abuse by women who find pleasure together – it seems to exist and then not exist.

- It goes right back to the Greek versions – the link between the clitoris and pleasure; as it appears in obscene poetry.²¹⁸

This comment inspires me to track down Anne Carson’s translation of the fragments of lyric poetry found on papyrus that are ascribed to Sappho, the poet and musician cited by Plutarch. Though all traces of the music she composed are lost, papyrus rolls on which the

²¹⁸ Transcript of interview with Professor Vivian Nutton, Zakynthos, Greece, 5 September, 2014

words to her songs were written down during or soon after her lifetime have survived in pieces of varying size and legibility. Carson's book makes use of a layout that is consciously designed to replicate the fragmentary nature of what remains of Sappho's work and emphasises textual gaps, breaks and silences. The broken-up text and irregular empty spaces on the page also seem to embody fleeting feelings of pleasure, in lines like:

Eros the melter of limbs (now again) stirs me –
sweetbitter unmanageable creature who steals in²¹⁹

along with their urgency:

you came and I was crazy for you
And you cooled my mind that burned with longing²²⁰

while also touching upon difficulties and hesitations:

I want to say something but shame
prevents me²²¹

yet if you had a desire for good or beautiful things
and your tongue were not concocting some evil to say,
shame would not hold down your eyes
but rather you would speak about what is just²²²

Names of parts of the anatomical body may not feature, but motifs recur and set up resonances, while missing sections and 'imperfections' in the text suggest a ghostly presence. I begin to wonder how modern anatomy deals with the body 'made strange', as expressed by Jean-Luc Nancy in *Corpus*, the body that is "certitude shattered and blown to bits."²²³ Do those involved in medical education encourage self-reflection and provide students with the space they need to recognise those moments when their eyes cannot be trusted, or when what

²¹⁹ Anne Carson, *Fragments of Winter* (London: Virago, 2014), p. 265.

²²⁰ *Ibid.*, p. 101

²²¹ *Ibid.*, p. 279

²²² *Ibid.*, p. 279.

²²³ Jean-Luc Nancy, *Corpus* (New York: Fordham University Press, 2008), p. 5.

they see cannot be taken in; or do they treat visual perception as unproblematic, and present images as faithful copies, by artists claiming to be simple eyewitnesses?

Even a book purporting to provide a factually accurate account of the form and structure of the human body, like the *Epitome* by Andreas Vesalius, reveals the female body symbolically and only partially through its appropriation of images taken from art. Information is withheld. Rather than being able to access reliable factual information, we enter a world of metaphysical doubt where vision is confounded and rational thought impaired. Effects are created that go beyond words.

Historical accounts of Andreas Vesalius's life highlight the fact that his was a humanist education.²²⁴ Being taught by scholars who were at the forefront of a drive to convert Arabic and Medieval Latin works to their original Greek and Latin meant that he was exposed to recent translations of Claudius Galen's *Anatomical Procedures*. Galenic anatomy had presided over medicine for centuries. *Anatomical Procedures* was considered an authoritative source, containing received wisdom that it was thought unnecessary to question, despite the fact that Galen (c.129 -216 AD) did not conduct human dissections himself. He did, however borrow from works of those who did, including the Alexandrian anatomists Herophilus of Chalcedon (c330 – 260 B.C.E.) and Erasistratus of Ceos (c330 – 255B.C.E.), who based some of their findings on the results of vivisections.

Matriculating with distinction at the University of Padua in 1537, Vesalius was immediately appointed to its chair of surgery and anatomy. It was whilst he was there that he published his textbooks, and conducted the public and private dissections for which he is so famous. The fact that he could refer to more accurate translations of Galen's original work while conducting human dissections himself meant that he could more thoroughly review that body of anatomical knowledge. The story goes that Vesalius was willing to reject scholastic 'facts' as they were known and the theories that explained them if what he saw in the body contradicted them.²²⁵

Where Vesalius's critical revisions of existing knowledge based on defining the anatomy of the human body from direct observation most spectacularly fail, however, is in cases where the body is female. Then it seems he was less than willing to challenge the authority of inherited textual information that could not be clearly demonstrated at the dissecting table. In his textbooks and public demonstrations, by accepting Galenic and earlier views of the

²²⁴ Vivian Nutton, 'Vesalius Revised. His Annotations to the 1555 *Fabrica*', *Medical History*, 56 (2012), 415 – 443.

²²⁵ Morris Keeton, 'Andreas Vesalius: His Times, His Life, His Work', *Bios*, 7 (1936), pp. 97–109.

inferiority of women, he continued to present the female as imperfect and as O'Connell has emphasised, argued against the existence of the clitoris in normal women. "What constituted the clitoris, what it was called, what characterised normal anatomy and whether having a clitoris at all was normal were controversial issues."²²⁶

Yet the unwritten statement underpinning scientific papers and essays is that these are words and images that reliably 'represent' what can be observed in a living or anatomised body, recorded diligently with honest rigour. They are meant to be believed. Text and image are expected to summon forth the thing itself, based on a rationalist ideal, of a 'demonstrative, atomistic discourse consistent with communal standards of verifiable knowledge',²²⁷ as James Paradis puts it, quoting Robert Boyle. The spell must not be broken, we must not be told in the last sentence that 'it all was a dream'. For me as a writer what was interesting was what happens when the authority of factual material starts to look doubtful. Is it in that most intimate of places, the female genitals, for example, where anatomy fails to provide medical professionals, artists and others with accurate information about bodily structure, form and function? Far from being satisfied that the text, diagrams or photographs for female sexual anatomy are to be trusted, guaranteed 'authentic', such textbooks start to look evasive and untrustworthy. Illustrations are provided that bear no relation to the way a woman sees and experiences her body herself. In the view of one scholar: "The male body continues to be taken to be the stable norm or standard against which the female body has been compared and implicitly judged as underdeveloped, weak or faulty."²²⁸ This made me wonder where it left artists, or literary writers, who like to assume they can refer to a straightforward 'representation' of a seemingly cohesive anatomical female body as existing 'out there', somewhere beyond language. The fragility of the anatomical contract comes to the fore, when the name for an organ or even its shape cannot be agreed upon, when so-called facts about parts of the body appear and disappear, or are obscured by symbols that come to us from an age when, as Charles Simic describes it in his poem: 'two times two was three... when the earth was still flat...when there were 13 signs to the zodiac...'²²⁹

²²⁶ Helen E. O'Connell, Kalavampara V. Sanjeevan and John M. Hutson, 'Anatomy of the Clitoris', *The Journal of Urology*, 174 (2005), p. 1189.

²²⁷ James Paradis, 'Montaigne, Boyle and the Essay of Experience', in *One Culture: Essays in Science and Literature*, ed. by Alan Rauch (Wisconsin: University of Wisconsin Press, 1987), p. 60.

²²⁸ A Peterson, 'Sexing the body: representations of sex differences in Gray's anatomy, 1858 to the present day', *Body and Society*, 4 (1998), 1 - 15.

²²⁹ Charles Simic, 'The Chicken without a Head', in *The Chicken Without a Head: A New Version* (Portland: Trace Editions, 1983), p. 3.

As in earlier interviews, I begin by referring to Helen O’Connell’s research, to try to gauge what impact it might have had. I had previously found that very few scientists are aware of her work. In December 2011, at the joint winter meeting of the Anatomical Society, British Association of Clinical Anatomists, and the Institute of Anatomical Sciences in Cardiff University, a professor of anatomy told me that he had been working on sexual differentiation of the brain with a colleague who was interested in sexual differences and developmental differentiation and they conducted an extensive review which had included O’Connell’s papers. He said that he cited this work in his lectures because it provided an improved description of female sexual anatomy.

She was one of the first people who did a good dissection of the erectile tissue of the clitoris, because it (the cadaver) was a young woman...I think the interesting thing is that she is a urologist and not an obstetrician or gynaecologist, so it gave her a different insight, she wasn’t part of a natural childbirth movement. This was something else, and quite focussed. It saw the whole of the relationship of that area with the urethra and the similarities and differences with the male.²³⁰

When I ask a female artist at the Vesalius Continuum the same question about O’Connell’s research and whether it had affected her work, she thinks not, though she tells me it sounds familiar, the kind of thing that she would have come across ‘peripherally’. She seems keen to make it clear that as an artist she actually tries to avoid having to address gender, because she does not want to be seen as a female artist. “I look at bones or brains or whatever as a [neutral] body.”²³¹ She explains that what she is interested in exploring is a philosophical approach to the idea of identity and consciousness and how that manifests in the body. As a mixed race woman she sees herself not so much as a female but as a third culture person.

Another female artist I interview, who is from Australia, has not heard of O’Connell’s work. She thinks that there continues to be a focus on reproduction within anatomy as regards the female body. In her own case she has actually worked more on the male body – drawing large male nudes. She tells me that when she was hired as a prosector at an Australian

²³⁰ Transcript of interview with Anatomist C, Cardiff University, 20 December 2011.

²³¹ Transcript of interview with Artist 3, Zakynthos, Greece, 5 September, 2014.

medical school the professor was aware of her drawings and wanted to hang them in the hall of the medical school, but a petition was set up to take them down because they were thought to be offensive. “If they had been women it would have been okay,”²³² she says. She is aware that people think of her as quite ‘sweet’ and that they are horrified to think that early on in her career she did these life-size drawings of nude males.

People have this notion that women do nice little delicate things ... but when I had space in a studio my drawings were very, very large and male. Also when I teach anatomy I have a few models that I go back to and they are all male. I know the students are surprised – that I am a female teacher with a male model.²³³

She thinks that better knowledge of anatomy could potentially influence the way women think about and visualise themselves.

Yes absolutely, I think anatomical images in general have been naturalised into popular culture and I don’t think we actually realise how much we think of ourselves as being an anatomical body. I see anatomy as a construct so the fleshy materiality of my body is one thing, but my anatomy is conditioned by being female, I’m sure I don’t look at it as much as I should, but there is a difference in the way women get to see the body, I mean we are often excluded in a lot of ways, oppressed in many ways.²³⁴

A young female artist from the UK has not heard of O’Connell’s work either, though as she explains, she has just returned from a three-day workshop for artists interested in gender issues, organised by Nicky Canovan, called *Raising the Skirt*, which was designed to explore the mythology around the gesture, in order to stimulate artistic work including performance. Aware that the workshop was informed by the work of female artists from the 1960s and 70s including Judy Chicago, Carolee Schneemann and others, she speaks about the backlash against such work by some feminists at that time who were afraid that a focus on genitalia

²³² Transcript of interview with Artist 4, Zakynthos, Greece, 6 September, 2014.

²³³ Ibid.

²³⁴ Ibid.

replicated pornography and encouraged the objectification of women. When I ask if she thinks there might be parallel concerns within medicine she says, “Yes, it is a question of looking.”²³⁵

In *Art and Feminism*,²³⁶ Peggy Phelan investigates different phases of thirty years of feminist art, arguing that feminist literary criticism, heavily influenced by poststructuralism and French feminism, and psychoanalytically-based feminist film theory, was a potent influence on feminist visual art in the early 1980s. Art historians Rozsika Parker and Griselda Pollock helped articulate a growing discomfort with some feminist art made in the 1970s, especially work about women’s bodies and experiences of embodiment, whether erotic, abusive or metaphorical. Declared ‘essentialist’, the claim was made that it showed insufficient awareness of the complex codes of representation that framed the female body. In the 1990s feminist art historians and critics including Jane Blocker and Mira Schor re-examined the debate on essentialism that had divided the women’s movement in the 1960s and ’70s and rejected the notion that because it did not easily lend itself to established paradigms of poststructuralist thought that it should be dismissed as naïve. They pointed out that an artist like Ana Mendieta, for example, should not be dismissed as being ‘essentialist’ when in fact she explored identity categories and played “between the one and the many, between essence and inessence.” Rather than positioning the self on one side or another she worked strategically with inherent contradictions regarding the ‘essential’.

Meeting young female ‘anatomical’ artists at the Vesalius Continuum, some of whom are engaging directly with a scientific approach, one working as a prosector in an anatomy department, for example, another as an artist in residence, with a responsibility for teaching life drawing to medical students, I start to think that notions regarding objectification of the female body, pornography, identity and desire are being re-evaluated once again, in the light of changing social attitudes towards gender and sexual politics.

I am not so sure if the same can be said for attitudes within the culture of medicine. At the 2011 Joint Winter Anatomical Meeting in Cardiff most anatomists I interviewed thought that the female pelvis and perineum tended to be avoided as a subject area. According to them, when clinical matters were raised, it was usual to focus on reproduction, rather than on sexual dysfunction. Rather than blaming this on bias or taboo, however, they tended to think it was a problem connected with the availability of material resources.

²³⁵ Transcript of anonymised interview with Artist 5, The Vesalius Continuum, Zakynthos, Greece, 6 September, 2014.

²³⁶ Peggy Phelan, ‘Survey’, in *Art and Feminism*, ed. by Helena Reckitt (New York: Phaidon Press, 2012).

I am certainly aware of that being a problem for us in terms of teaching because we select our cadavers very well, but you can't select for pre-menopausal women, you can select for body weight, brain size, good musculature but that's all ²³⁷

There is a problem with the availability of material, for most of the descriptions have been based on our typical elderly cadaveric dissections.²³⁸

Yes, most of them are older...80 years old...things like that you would need to point out. ²³⁹

At *The Vesalius Continuum* on Zakynthos, a male professor of Clinical Anatomy does not think that female genitalia is a taboo area in science, though he believes it is 'technically very difficult to dissect in between the legs, literally, physically, so it tends to get I won't say forgotten but it tends to get pushed aside...'²⁴⁰

The fact that lack of time might play a role was raised in Cardiff in 2011 as well as here in Zakynthos:

There are so many aspects now being taught within what we used to call anatomy ... that it's very difficult to find time to do something else when they just need to know where the bits are. They need to know that before they can go into the nuances of things. You know they have a day in their medical career that is called the perineum and that's it, there are 150, 100 nerves, veins, arteries, structures and so on to learn in that area, so I think that's one of the big problems.²⁴¹

²³⁷ Transcript of interview with Anatomist C, Cardiff University, 20 December 2011.

²³⁸ Ibid.

²³⁹ Transcript of interview with Anatomist D, Cardiff University, 20 December 2011.

²⁴⁰ Transcript of interview with anatomist H, Zakynthos, Greece, 6 September, 2014.

²⁴¹ Ibid.

In Cardiff in 2011 when I asked my interviewees if they thought that social or gender factors might also hinder the dispassionate representation of female sexual anatomy, these were some of the responses:

We don't do living anatomy on that part of the body.²⁴²

Today with the internet there are so many porn sites it is very difficult to have an objective representation, so that's why you have to be careful about what you are representing.²⁴³

When this part of the body is taught it is usually by a man, and there are jokes, so immediately you have something going on. So it may be down to male behaviour, but you never know.²⁴⁴

Here on the island of Zakynthos an art historian with a particular interest in scientific anatomical illustrations thinks that not only gender biases but also a whole series of social factors including class bias are bound to affect anatomical representations.

No one is innocent... There is no such thing as an innocent, un-noisy, de-contextualised mode of viewing... You can't really get outside them but at least you can develop an antenna that starts twitching... an awareness of gender, of age, of disability and try not to categorise... I am not a relativist who doesn't think there is any [factual basis in] knowledge, [but] there is a cultural discussion to be had ... [anatomical representations] have an intricate explanatory framework to them... The act of looking is not wholly arbitrary, it's driven by imperatives...²⁴⁵

A professor of Clinical Anatomy thinks that pornography in particular has a role to play in affecting the visibility of female bodies:

²⁴² Transcript of interview with Anatomist C, Cardiff University, 20 December 2011.

²⁴³ Transcript of interview with Anatomist A, Cardiff University, 20 December 2011.

²⁴⁴ Transcript of interview with Anatomist E, Cardiff University, 20 December 2011.

²⁴⁵ Transcript of interview with Art Historian, Zakynthos, Greece, 6 September, 2014.

(Female sexual anatomy) for most of society is slightly off limits. [It might be said] that medicine has cornered the market in the human body apart from pornography so effectively you are either a serious doctor or you are in the pornography trade ²⁴⁶

A male performance artist mentions the way the naked body was traditionally covered up in art, dating from classical times:

In Classical Greek sculpture the female typically wasn't naked; it was draped, you know the wet drapery that clings, which was marvellous sculpturally, because it didn't hide the form underneath...²⁴⁷

In Cardiff a Professor of Anatomy when asked if social and gender matters should be addressed formally within medical courses said that he did not think it would be possible because of time restrictions.

It's not a topic we do. As a teacher I am obliged to teach the anatomy as best I can, not be influenced by culture, we do not discuss iconoclastically women or men, that would be quite difficult, it would last too long. What I think is the students need to know the facts first...it is not the major objective of anatomy, dealing with cultures²⁴⁸

A female lecturer in anatomy, despite having had opportunities to raise gender issues in her teaching, found her own scientific education meant that she lacked the necessary background knowledge to prompt informed discussions.

I do a lot of tutorial discussions and we talk about the differences between the male pelvis and the female pelvis, in terms of anatomy, but never do we talk about the differences in the history of the male

²⁴⁶ Transcript of interview with Anatomist H, Zakynthos, Greece, 6 September, 2014.

²⁴⁷ Transcript of interview with Performance Artist, The Vesalius Continuum, Zakynthos, Greece, 6 September, 2014.

²⁴⁸ Transcript of interview with Anatomist B, Cardiff University, 20 December 2011.

and female. It would be difficult for me, being very much a factual person in terms of anatomy.²⁴⁹

At the conference on Zakynthos, however, an historian of science is very aware of the need to teach students about social and gender matters:

That was one of the things we were teaching our students: that there are unspoken prejudices and if you are reading a text one has to penetrate behind the text, you can start off looking at things at face value, but the more you learn about interpreting it – this is cultural and literary studies, yes... One of my aims in my 40 years of teaching was to teach them in ways that would make them question what they were doing, to make them aware of how much uncertainty there is behind our accounts of certain aspects of say medical history, we did have Roy Porter who taught a course that included one part on gender, so we felt that it was important, that the notion of the fixity of science has to be interrogated and if you are a doctor you have got to make the best use of what you have at the moment but it may not be the best thing... It is worth knowing that behind all these statistics are a whole series of assumptions and biases²⁵⁰

A female artist thinks that as a teacher it is good to be aware of the cultural contexts that inform art but does not see the same awareness amongst scientists:

I think that meaning always arises in a [historical] context and I think that scientists often lack a [sense of history] and it's so much more meaningful if you can see where you fit into all of this. [Cultural aspects] are hugely important, I don't think scientists are sometimes aware how much these [anatomical] images are entering into popular and the current visual media, they're not aware how much we are engaging with this... I don't see art and science as marrying; I see

²⁴⁹ Transcript of interview with Anatomist E, Cardiff University, 20 December 2011.

²⁵⁰ Transcript of interview with Historian of Science, Zakynthos, Greece, 6 September, 2014.

them as incommensurable but it sets up what I call a productive tension, [which] really helps my art practice.²⁵¹

An artist involved in the medical humanities echoes her thoughts on such matters:

The body is social and cultural, [but] the female anatomists and demonstrators that I've met don't tend to mention it. I've not really come across it as an issue... Visual artists that use anatomy, the inside of the body, they might be [aware of it] but not anatomists [whereas] I quite like how a space [like a dissecting room or pathology lab] can be a representation of the wider world and opening doors for the students to see that what is happening here is exactly what is happening out there and bridging that [divide]²⁵²

A professor of anatomy that I interviewed in Cardiff in 2011 believed that one can distinguish between sexuality and sexual anatomy, as if these are two very different things, one connected with the emotions and the other with hard facts.

One really has to distinguish between two things: one is sexuality and the other is anatomy and those are two very different issues, one is emotional and the other is hard facts²⁵³

Responses like these make me wonder if issues relating to sexuality (and the female nude) as raised by feminist artists and writers are not seen as relevant by scientists working with the anatomical body. At the Vesalius Continuum I am especially curious to find out what people thought of the tradition in art and literature that finds the female genitalia shameful and transgressive. I am struck by what the art critic Carol Duncan wrote: that that the driving impulse of much modern art is one in which a male artist's sexual desire is opposed to his need to transcend the realm of matter, a conflict she sees in work by Picasso, for example, with his images of ethereal Madonnas and debased whores.²⁵⁴

²⁵¹ Transcript of interview with Artist 4, Zakynthos, Greece, 6 September, 2014.

²⁵² Transcript of interview with Artist 5, Zakynthos, Greece, 6 September, 2014.

²⁵³ Transcript of interview with Anatomist A, Cardiff University, 20 December 2011.

²⁵⁴ Carol Duncan, *Civilising Rituals: Inside Public Art Museums* (London: Routledge, 1995), p. 111.

When I interviewed anatomists and clinicians in Cardiff in 2011 the responses I received to questions relating to feminism were very varied. In reply to whether gender medicine should be taught a Professor of Anatomy replied: “It certainly merits reflection”.²⁵⁵ Another professor thought feminism had made a great difference to anatomy in terms of raising awareness of individual rights:

This movement of course has had an impact on the perception of the science of anatomy, not that we look with special emphasis on women, but to see all individuals as individuals, as persons, even if they are diseased, they are individuals with certain rights. I would think in terms of personality rights, this movement is sometimes like the second age of enlightenment, individuality came up and individual rights became more emphasised also in legislation, so it was of course a necessary movement.²⁵⁶

A younger lecturer in anatomy, however, emphasised how goal-driven and blinkered his students could be.

Students are never critical, they just want to know what they need to get through the exam, they’re not willing to put in any effort to get there themselves, it’s not self-directed learning.... They wait for the teacher to tell them, thinking that’s all they need to know, it’s a rote thing... There has been a loss in terms of teaching time, the contraction of teaching hours²⁵⁷

The first person I interview in Zakynthos is a male Professor of Clinical Anatomy. He claims to be very aware of feminism, because he feels that he has been at the receiving end of it, in terms of attacks on his freedom of speech:

²⁵⁵ Transcript of interview with Anatomist A, Cardiff University, 20 December 2011.

²⁵⁶ Transcript of interview with Anatomist B, Cardiff University, 20 December 2011.

²⁵⁷ Transcript of interview with Anatomist E, Cardiff University, 20 December 2011.

Feminism has definitely had a negative impact on my work, because when I stand up and lecture if I make any form of joke, not a sexist joke but a joke that has a sexual word in it or a concept with a sexual connotation there is a feminist lobby that will clamp down in every way on it and take you to the Dean literally and it has a negative impact even if you say she was beautiful... Amongst the female audience there are some very rabid feminists and they are doing themselves and society a disservice because you can't be then as free in talking about anything sexual as you like... ²⁵⁸

Later, a performance artist, originally from Melbourne, Australia, tells me that he was made aware when he first started performing (in the early 1970s) that feminists thought his work was patriarchal and that the terminology he used could be regarded as particularly male. (One of his earliest performances was called *Amplified Modified Monitored Man*, which he still maintains is, in the main, gender neutral.) When I ask him if he thinks that anatomy has the potential to influence the way women visualise and relate to their bodies and how they negotiate what it means to be feminine, he replies:

That's a difficult one. Because the feminist movement was really about the exposing of the female body in social and cultural discourse, it's been more focussed on the social and political rather than the anatomical. This is partly because anatomy is regarded as being a factual science, or supposedly an objective science, that is also seen to be patriarchal. In other words, sciences weren't really questioned because they were supposedly factual and objective ²⁵⁹

He is aware that as a male artist and that by basing his performances upon the notion that there exists a non-gendered anatomical body that this set up a tension. Yet he is aware of gender issues:

²⁵⁸ Transcript of interview with Anatomist H, Zakynthos, Greece, 6 September, 2014.

²⁵⁹ Transcript of interview with Performance Artist, Zakynthos, Greece, 6 September, 2014.

A lot of my feminist friends in the past would assert it's a failure, a project that fails because [I have] a male body and whatever [I am] doing, it is as a gendered body, but what I would argue is that my interest is not in gender as such ²⁶⁰

He thinks that this is a complex question, because at the time when he started there were different strands of feminism:

In early feminist discourse you either went in the direction of nostalgia for what was considered feminine, the mother earth figure, the goddess, or the other tendency which was to say why shouldn't I act in a male way, why shouldn't I dress in a suit, why shouldn't I have a short haircut... asserting that if a male can do that then a female should be able to act that way ²⁶¹

When I ask a female artist about issues relating to the objectification of women in art she talks about her own experience:

When I was younger... I had a huge amount of unwelcome attention from men, and at the time, having a cold, absentee father: I craved attention; but at the same time I didn't want that kind of attention. If at that time there had been this general awareness of everyday sexism then I think I would have been able to stand up to it. I didn't. I felt I owed something to these men because they were attracted to me, so somehow it was my problem, my responsibility. I can now see how much I was objectified. It got to a point when in my early thirties I had a crisis and I shaved my head. Up until then I had always had long hair... it was interesting to note the immediate difference in the kind of attention I received – people asking what I had done to myself, my beautiful hair. I am not my hair ²⁶²

²⁶⁰ Ibid., p. 5.

²⁶¹ Ibid., pp. 5,6.

²⁶² Transcript of anonymised interview with Artist 3, Zakynthos, Greece, 6 September, 2014.

An art historian is aware of the impact upon male identity of gendered representations of the body:

You know in Vesalius and Charles Estienne, where they are showing those great heroic warriors in their nude stoic dramas, revealing themselves, pulling their breasts aside to show what lies inside, it cuts both ways... a complex nuanced one in the historical context of women but also a certain kind of masculinisation of the male bodies that I don't feel completely comfortable with... this idea that the men somehow are heroic warriors of self-revelation in anatomy is a gendered attitude ²⁶³

A Professor of the History of Medicine tells me that a great weakness of the medical humanities was the simplistic way it was taught. He is not surprised that some of those courses have disappeared. Yet he also feels that the current focus of education funding going to 'hard science' is a problem because it "fits ill with medicine."²⁶⁴

One of the presentations at the Vesalius Continuum conference concerns the number of contradictory versions of the events leading to his death. We are told about a story spread by a diplomat serving Charles V, for example, which had Vesalius being accused of murder in 1564 for the dissection of a Spanish nobleman who, his disputants said, was still alive at the time of the autopsy. (Another account suggests it was a woman.) For this, and an accusation of atheism, Vesalius was condemned to death by the Inquisition. When King Philip II stepped in the sentence was reduced to a pilgrimage of penitence to the Holy Land. On his return, however, the sailing ship Vesalius was travelling in was badly damaged in a storm. Rescued from the sea, he died shortly afterwards on the island of Zakynthos, where he was buried.

An alternative version has it that Vesalius, after a serious illness, left Madrid to undertake a pilgrimage to Jerusalem in gratitude for his recovery. On his return, hoping to deliver up to the Emperor valuable papers and books he had been ordered to collect in the Holy Land, the ship was becalmed and Vesalius died on its eventual arrival at the island of Zakynthos. In this

²⁶³ Transcript of anonymised interview with Art Historian, Zakynthos, Greece, 6 September, 2014.

²⁶⁴ Transcript of interview with Historian of Medicine, Zakynthos, Greece, 6 September, 2014.

story, he is not shipwrecked, but dies from exhaustion and illness, “caused by many weeks of dwellings at sea”, according to a letter found in the archives of Simancas in Spain.²⁶⁵

Yet another account, of 1573, suggests that what happened to Vesalius had happened to many pilgrims before, and presumably, was expected to happen again. Though the captain of the sailing vessel would have been paid to provide sufficient provisions and water for the needs and comforts of the pilgrims he was transporting, either he did not live up to the agreement or did not adequately prepare for such emergencies as extended journeys due to adverse weather conditions. In some accounts of Vesalius’s death the delay at sea was due to stormy weather; in others the vessel was becalmed, ‘for forty days’. It is now thought likely that the deadly illness that broke out amongst the passengers, while not affecting the crew, was an outbreak of scurvy, caused by the duration of the pilgrims’ journey and the limited diet that would have been available to them. One account mentions Vesalius’s mind being disturbed by the casting of the dead into the sea, asking that he might not, like the others, become food for the fishes. And as soon as the ship landed at Zakynthos it is said that he jumped down from it, making his way to the city gates “where he fell to the earth dead.”²⁶⁶

The churchyard in the Santa Maria della Gratia where Vesalius was allegedly buried no longer exists, due to the destruction of the church during several earthquakes. Shown city plans and early stage digital maps of the area, we are told that a private house will have to be demolished to access the site of the burial. The quest for the lost remains of the anatomist, recruiting the sponsorship of Agfa HealthCare, requires that his bones are recovered for DNA verification. In the meantime the town gets on with life. Winding my way through a maze of small backstreets, chosen for their shade, I catch sight of fruit-bearing trees, vines and leafy climbers overhanging the high walls of gardens, their heavy wooden doors stolidly shut. Clear trills of caged birds compete with distant church bells and the sound of speeding scooters and cars from the main seafront road. Heading down to the esplanade with its fragrant flowering trees, I look out to sea towards the horizon, trying to imagine a small sailing ship appearing first as a dot, then a smudge that grows bigger and bigger as the vessel makes steady progress towards the harbour entrance. Having heard so many different accounts of the way in which Vesalius died, what lingers in my mind is his intense fear of being ‘buried’ at sea. Was he fearful of limbo; what hybrid monsters disturbed his dreams?

²⁶⁵ Quoted in the paper given by Maurits Biesbrouck, MD at the Vesalius Continuum, Zakynthos, Greece, September 5th 2014.

²⁶⁶ See C. D. O’Malley, *Andreas Vesalius of Brussels, 1514 – 1564*, *Isis*, 45 (1954), pp. 138–144, (p. 142).

“That line between the sky and sea, very, very far away...” writes Ryszard Kapuściński, imagining it as it was once thought to be: the end of the world.²⁶⁷ In *Travels with Herodotus* he describes the way a child might look up from making sandcastles to ask himself: “could it be that there is another world beyond that line? What kind of world might it be?”²⁶⁸ When he writes, “The child starts to seek answers. Later, when he grows up, he may have that freedom to seek even more persistently” it feels like a self-portrait, despite the fact that Kapuściński spent his childhood in landlocked Pinsk in Poland, where he was born in 1932.²⁶⁹

In Herodotus he recognises a kindred spirit; a traveller and writer motivated by curiosity about the world and “the desire to be there, to see it at any cost, to experience it no matter what.”²⁷⁰ He calls *The Histories* “world literature’s first great work of reportage.”²⁷¹ Impressed by its writerly style, he suggests the ancient Greek was inspired by the works of his contemporaries, the great tragedians Aeschylus, Sophocles and Euripides, who wrote about the history of the world through the fortunes of flesh-and-blood named individuals, with distinct personalities that affect the decisions they make and the way they respond to people and events. He observes how in *The Histories* “Myths blend with reality, legends with facts” because Herodotus “knows to what degree a man’s way of thinking and his decision-making are determined by an inner realm of spirits, dreams, anxieties, and premonitions.”²⁷² When gathering material, he finds that every witness of an event remembers something different, also that “people remember what they want to remember, not what actually happened.”²⁷³ Like Herodotus, in the end Kapuściński concludes that “The past does not exist. There are only infinite renderings of it.”²⁷⁴

When I return to my original question: is the anatomical female body fact or fiction, Kapuściński’s insights into Herodotus seem to ring true. Herodotus “is entangled in a rather insoluble dilemma” Kapuściński suggests, because: “he devotes his life to preserving historic truth” while using as his “main source of research... not first-hand experience, but history as it was recounted by others, as it appeared to them, therefore ... selectively remembered and later more or less intentionally presented. In short, not primary history, but history as his

²⁶⁷ Ryszard Kapuściński, *Travels with Herodotus*, trans. by Klara Glowczewska (London: Penguin Books, 2007), p. 259.

²⁶⁸ *Ibid.*, p. 259.

²⁶⁹ *Ibid.*, p. 259.

²⁷⁰ *Ibid.* p. 258.

²⁷¹ *Ibid.*, p. 259.

²⁷² *Ibid.*, p. 261.

²⁷³ *Ibid.*, p. 262

²⁷⁴ *Ibid.*, p. 262.

interlocutors would have had it.”²⁷⁵ What if anatomical accounts of certain parts of the body, which taboo prevents us from learning about from ‘first-hand experience’ are based on the accounts of others, as it appeared to them and is therefore selectively remembered and more or less ‘intentionally presented’? Is there a way around what Kapuściński calls “this divergence of purpose and means”?²⁷⁶ In the case of history, or reportage, he suggests that “we can try to minimise or mitigate it, but we will never approach the objective ideal. The subjective factor, its deforming presence, will be impossible to strain out...however evolved our methods, we are never in the presence of unmediated history, but of history recounted, presented, history as it appeared to someone, as he or she believes it to have been.”²⁷⁷ This, Kapuściński believes, was perhaps Herodotus’s greatest discovery.

Anatomists I interviewed told me they tried to teach students to look at textbooks with scepticism:

I always tell my students: books to one side; anatomy doesn’t follow books. Have a clear look at the cadaver itself, or at the person, because things are very different. Right from the start, I tell them books give a very limited amount of information, especially relating to controversial issues.²⁷⁸

The textbook is not the Holy Bible.²⁷⁹

Books are educational tools. If one of my students asks me which books to rely on, I say rely on the cadaver, rely on the things you can see: the patients; books can only give you a limited view.²⁸⁰

I think this would be very difficult in France. Firstly, very old textbooks (by Rouviere, for example, and Delmas) are still being promoted. The second reason is in France you do not have many possibilities for criticism. Students can ask questions but the teacher

²⁷⁵ Ibid., p. 272.

²⁷⁶ Ibid., p. 272.

²⁷⁷ Ibid., p. 272.

²⁷⁸ Transcript of anonymised interview with Anatomist B, Cardiff University, 20 December 2011.

²⁷⁹ Ibid.

²⁸⁰ Ibid.

is a god... in Paris we have professors with their own textbooks...it's not possible to criticise²⁸¹

Such mistrust of texts and the opinions of others is not new, of course. Asked by students to share his understanding of the movements of the heart during a dog vivisection, Vesalius is reputed to have replied: "I do not want to give my opinion, please do feel for yourselves with your own hands and trust them."²⁸² And yet, if as seems to be the case, images in Vesalian anatomical textbooks are informed by gendered cultural readings of the body and portray sexual difference in accordance with religious, social and cultural norms, this may be, as Ludwik Fleck suggests in his pioneering monograph, because "...the path from dissection to formulated theory is extremely complicated, indirect and culturally conditioned...In science, just as in art and in life, only that which is true to culture is true to nature."²⁸³

I had originally assumed that if there was ignorance of newly available data that this would be regarded as a gap in knowledge, a gap that scientific and medical professionals would be eager to set about filling, not least to ensure that surgery was guided by accurate anatomy. I soon began to suspect that the condition of knowing is not that simple. As O'Connell *et al.* suggest, "The tale of the clitoris is a parable of culture, of how the body is forged into a shape valuable to civilisation despite and not because of itself."²⁸⁴ People in positions of authority come to accept and promote certain beliefs as true and feel the need to deny and suppress others. If new data threatens the status quo, strategies are found to ensure that awkward findings can be avoided. Efforts are made to ensure that what does not fit the system remains invisible, by not acknowledging it, discussing it or giving it validation. Explanations are found to frame the exception in such a way that it does not contradict the system. We see what we want to see, and find opportunities to illustrate and corroborate preferred views, to give them substance.

In my next chapter, I describe another journey, this time to give a presentation on sexism in the images medical students might be exposed to whilst studying anatomy. The thought of travelling to Istanbul excites me. What would be the response of the people I met there at the

²⁸¹ Transcript of interview with Anatomist E, Cardiff University, 20 December 2011.

²⁸² Eyewitness account of Vesalius's first public anatomy classes, written by German student Baldaser Heseler

²⁸³ Ludwik Fleck, *Genesis and Development of a Scientific Fact*, trans. by Fred Bradley and Thaddeus J. Trenn (Chicago: University of Chicago Press, 1979), p. 35.

²⁸⁴ Helen E. O'Connell, Kalavampara V. Sanjeevan and John M. Hutson, 'Anatomy of the Clitoris', *The Journal of Urology*, 174 (2005), p. 1194.

boundary of the East and West, to questions relating to anatomical and artistic work and representations of women?

5. On censored bodies in Anatomy and Art

‘Science must be dispassionate; but it is made by passionate entities.’²⁸⁵



Fig. 24, Nizami, *Khosrow discovers Shirin bathing in a pool*, mid 16th century, ink, opaque watercolour, silver and gold on paper, Freer Gallery of Art and Arthur Sackler Gallery, Smithsonian Institute, Washington

When I ask to see miniatures at an antique book stall in Istanbul’s Grand Bazaar, I am shown single-leaf pages taken from plump folders stacked on floor-to-ceiling shelves. Confident that my interest is genuine, the bookstall owner then slips behind a curtain at the back of the store to bring out older more expensive items, which he carefully lays out on the counter; some painted in subtle colours, others vividly ablaze. In all of them perspective is skewed, with figures flattened to two-dimensions and key details delicately outlined in dark ink. They invite me to look closely, as I used to pore over pictures in my favourite storybooks as a

²⁸⁵ Transcript of anonymised interview with Anatomist I, Zakynthos, Greece, 6 September, 2014

child. In my mind's eye I can still see the characters (man, woman or beast) that I spent so much time with in settings I seemed to inhabit, I grew to know them so well.

As well as pages of ancient calligraphy, brightly coloured maps and almost comical illustrations of painful looking dental procedures, I am shown miniatures illustrating scenes from well-known stories and legends, some very familiar, like Noah's Ark, featuring a rotund vessel stuffed full to bursting with plump animals wearing almost human expressions. I look in vain for the Persian love story that runs like a thread through Orhan Pamuk's novel, *My Name is Red*, which tells the story of Khosrow and Shirin.²⁸⁶ So many obstacles are put in the way of this lovelorn pair, it seems they will never get together, as in early Western love literature where what counts is bittersweet anticipation, a reaching out towards something not yet known, holding onto and relishing each moment for as long as possible as a way of never quite arriving at the desired end. It is the exquisite delights and pain of delayed gratification that the twelfth-century Persian poet Nizami of Ganjeh also seeks to portray in his version, the version most often illustrated by the Ottoman miniaturists. One of the key scenes they depict is the moment when Khosrow discovers Shirin bathing in a pool in an emerald field, the moment he falls in love with her: "At the sight of her, his heart caught fire and burned; he trembled with desire in every limb."²⁸⁷ In the poem Khosrow sees Shirin sitting in the shimmering water like a lily. The poet refers to the luminosity of her body again when he describes Shirin as a moon surrounded by a dark night. These images are ignored by the miniaturists. Their Shirin has loosened her long black hair to partially conceal her breasts. She is depicted sitting in the water with her legs drawn up beneath her in much the same way the female body is presented in pre-scientific anatomical books, but because she is still wearing the harem trousers she put on to go out riding that morning, she remains modestly covered.

Of course Shirin's nakedness could not have been made more explicit (unless the book was intended to be blatantly erotic), any more than a completely naked female body could be revealed in paintings in the Western realist tradition. Such paintings also depict beautiful young women being spied upon as they bathe, *Susannah and the Elders* for example, or *Diana and Acteon*²⁸⁸. They may be called 'nudes', but these female figures are never

²⁸⁶ The Turkish name Hüsrev is used for Khosrow, while Shirin remains the same in Orhan Pamuk, *My Name is Red*, trans. by Erdag M. Goknar (London: Faber and Faber, 2001).

²⁸⁷ Peter J Chelkowski, *Mirror of the Invisible World Tales from the Khamseh of Nizami* (New York: Metropolitan Museum of Modern Art, 1975), p. 27.

²⁸⁸ Tintoretto, *Susanna and the Elders*, 1555 – 56, oil on canvas, 146 cm × 194 cm, Kunsthistorisches Museum, Vienna; Titian, *Diana and Acteon*. 1556 – 59, oil on canvas, 185 cm × 202 cm, National Gallery, London.

completely naked; key parts of them are hidden; demurely draped with gauzy veils or strategically placed bits of greenery. Not only that, the models who sat for these paintings were asked to adopt modest poses. They are not pictures to turn to for accurate anatomical information.

I had travelled to Istanbul to give a paper at an international conference of anatomists and to record some interviews with members of FIPAT (the Programme for Anatomical Terminology of the International Federation of Associations of Anatomists [IFAA]) who had gathered there for their annual meeting. While the paper I was giving explored attitudes towards visual representations of the female anatomical body, in my interviews I was curious to discover whether my interviewees, as scientists, were aware of cultural factors affecting anatomical terms, in particular the use of the term *pudendum* for the genitals, given its original meaning, which is modesty and shame. My main question centred on whether they thought anatomy was affected by taboo. How could scientists be dispassionately factual when seeking to represent those parts of the body that are normally hidden from view because they are thought to be obscene? In one textbook I came across, the *pudendum* is described as being “a word meaning the human external genitalia, especially of the female. It comes from the Latin verb *pudere*, to be ashamed. The *pudendum* is that part which modesty dictates should be covered. You find the stem also in our word impudent. The obsolete meaning was without modesty. Today it is used more in the sense of cocky and lacking in concern for others.”²⁸⁹

While I found few references to an awareness of any concern over such matters in anatomical textbooks or research papers, the complexities surrounding representations of the naked body were discussed in works of literature. The avowed aim of the sixteenth-century French essayist Michel de Montaigne, for example, as set out in “On some lines of Virgil,” was to dare to bare all, and to write about everything, including his sexual drive.²⁹⁰ He makes no apologies for introducing references to it in his essay, because he wants to openly confess all, “in public, sincerely and scrupulously.”²⁹¹ He hungers to make himself known. It is not that he is vain or full of pride. As an ‘older’ man, he is ruefully aware of the gap between the still richly powerful erotic life of his imagination and the limitations imposed upon him by

²⁸⁹ Ronan O’Rahilly, Fabiola Muller, Stanley Carpenter, Rand Swenson, ‘Etymology of Abdominal Visceral Terms’, in *Basic Human Anatomy: A Regional Study of Human Structure* (W. B. Saunders 1983) online version developed for Dartmouth Medical School:

<https://www.dartmouth.edu/~humananatomy/resources/etymology/Pelvis.htm> [accessed 23 January 2017]

²⁹⁰ Michel de Montaigne, *Book III, The Essays, A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004), p. 266.

²⁹¹ Michel de Montaigne, *Book III, The Essays, A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004), p. 268.

what he considers to be his ageing body.²⁹² By reminding his readers that God can see through all human artifice and ritual, conventions and evasions (those “silly rags which cover over our morals”²⁹³) he asks us readers to see sex for what it is, and to unashamedly accept our naked bodies “with our tattered rags ripped off our pudenda.”²⁹⁴ That he might be flirting with his readers is suggested when he claims to be glad that his words will be read by ladies in their private drawing rooms, because he prefers his “dealings with women to be somewhat private; the public ones lack intimacy and savour.”²⁹⁵

Perhaps it is Montaigne’s confessional style that allows him to test the limits of taboo, by celebrating bodily matters, which he considers to be ‘wondrously corporeal.’ In his essay entitled ‘That our desires are increased by difficulty’, he adopts the guise of an arch libertarian, citing the works of classical writers in support of his argument, which centres on the notion that “to forbid us anything is the ready way to make us long for it.”²⁹⁶ His tone is knowing when he asks, “Why are those beauties veiled down to the heels, which all desire to show, which all wish to see?”²⁹⁷ As in the popular *contrafacto* flapbooks of his time, his readers are invited to explore the boundaries of what should and should not be seen, by taking part in a mildly erotic game. As if to underline the fact that they are already enlisted in such entertainment, Montaigne moves from the first person singular to the first person plural: ‘we’. Blaming his advancing years for his love of this subject, Montaigne quips, “When saying our goodbyes we feel warmer affection than usual for whatever we are giving up. I am taking a last farewell of this world’s sports: these are our final embraces. But let us now get round to our subject.”²⁹⁸ With that he launches into a robust defence of his inclusion of sexual matters in his essay, arguing:

The genital activities of mankind are so natural, so necessary and so right: what have they done to make us never to dare to mention them without embarrassment and to exclude them from serious orderly conversation? We are not afraid to utter the words *kill*, *thieve* or *betray*; but those others we only dare to mutter through

²⁹² The Essays were mostly written when de Montaigne was in his late thirties and forties; Volumes 1 and 11 were published when he was 55.

²⁹³ Ibid., p.268.

²⁹⁴ Ibid., p.318.

²⁹⁵ Ibid., p.269.

²⁹⁶ Michel de Montaigne, *The Complete Essays*, trans. by M.A. Screech (London: Penguin Books, 1993) p.465.

²⁹⁷ Ibid., p. 465.

²⁹⁸ Michel de Montaigne, *Book III, The Essays, A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004), p. 269.

our teeth. Does that mean that the less we breathe a word about sex the more right we have to allow it to fill our thoughts?²⁹⁹

What follows is a description of censorship relating to the words used to describe sexual matters, words that “are printed on each one of us without being published; they have no voice, no spelling.”³⁰⁰ Unable to refer to sex directly, openly and honestly, we “dare not even flog it except by periphrasis and similitude.”³⁰¹ Even so, this only makes the subject more appealing. In the same way that books attract greater publicity and higher sales the more they are suppressed, so the sexual allure of the human body can be greater when it is covered up.

The erotic value of ‘now you see it, now you don’t’ is nowhere more apparent than in striptease. In his short essay on the subject, Roland Barthes suggests that striptease functions by announcing some of the ritual signs of eroticism. They act like barriers preventing access to the body, while at the same time implanting the idea of sex in the mind of the viewer. Exoticism, for example, using the classic props of the music hall like furs, fans, gloves, feathers and fishnet stockings, disguises the body and locates it ‘elsewhere’, in a fantastical world of legend or romance. The G-string, covered in diamonds or sequins, “bars the way to the sexual parts like a sword of piety.”³⁰² Barthes sees the artistic dance as being the show’s grand finale, with its ritual gestures that hide nudity under a superfluity of clichéd movements. He concludes “thus we see the professionals of striptease wrap themselves in the miraculous ease which constantly clothes them, makes them remote, gives them the icy indifference of skilful practitioners, haughtily taking refuge in the sureness of their techniques: their science clothes them like a garment.”³⁰³

The female characters we are introduced to in Orhan Pamuk’s novel *My Name is Red* know all too well that veils, clothing or poses that purport to cover up what should not be revealed can actually be used to suggest a great deal more. They are integral parts of a performance, when taking part in the ritualised act of storytelling that is romance. The plan Shekure devises to create an opportunity for her childhood lover Black to see her on his return from his long exile, by revealing her face in an upstairs window, is an ingenious way to signal her availability and interest and to rekindle their courtship. Shekure readily admits to enjoying every moment she is looked upon by a lover, to know that she is desired. “I’m an

²⁹⁹ Ibid., p. 269.

³⁰⁰ Ibid., p. 269.

³⁰¹ Ibid., p. 269.

³⁰² Roland Barthes, ‘Striptease’, in *Mythologies*, trans. by Annette Lavers (London: Jonathan Cape, 1985), p. 85.

³⁰³ Ibid., p. 86.

attractive and intelligent woman,” she says, “and it pleases me that I’m being watched.”³⁰⁴ She also loves the way that Black so skilfully portrayed her in his copy of a painting of Hüsrev and Shirin; no matter that he was punished for it, expelled from the workshop by her father, Enishte Effendi, who had previously employed him as one of his apprentice painters of miniatures.

Black was punished for using his talent and skills as an artist to reveal them both in a copy of an illustration depicting the moment when Hüsrev spied the naked Shirin bathing in a lake at midnight, the moment he falls in love with her. The trouble being, as pointed out by Tree, the more skilful the artist, the more realistic the painting. Realist artists in the Western European tradition (Tree calls them ‘the Frank painters’) paint likenesses of “kings, priests, noblemen and even women in such a manner that after gazing at the portrait, you’d be able to identify that person on the street.”³⁰⁵ Tree is aghast at the thought. “Their wives roam freely on the street anyway,” he says, “now just imagine the rest.”³⁰⁶ He thanks Allah that he was not drawn with such intent, not because if he had been all the dogs in Istanbul would have assumed that he was a real tree and pissed on him, but because he doesn’t want to be a tree; he wants to be its meaning.

In Pamuk’s novel everyone involved in the production of these beautiful illuminated manuscripts is faced with the same dilemma; the Sultans and other patrons who commissioned them as well as the calligraphers, gilders, illuminators and book binders who were employed to do the work. As the rise and fall of the Ottoman Empire became inextricably linked with the expansion of the Venetian Republic, previously faithful followers of deep-rooted traditions were challenged to question their adherence to conventional ways of doing things by exposure to new techniques and ideas from other parts of the world. Did pictures have to be created anonymously in workshops by teams of talented artists and craftsmen, all working together to beautify a manuscript? While depicting the most vital scenes of well-loved stories, did they have to portray not what they could see with their own eyes, but, in imitation of God, represent what might be seen from an exalted perspective, as their attempt to reach the ineffable, that which cannot be depicted? Or, as in Venice and other parts of the Frankish world at the time in which the novel is set, could paintings be regarded as beautiful objects in their own right, made by named artists, individuals who could pride themselves on their unique abilities? Such artists were given the freedom to develop a

³⁰⁴ Orhan Pamuk, *My Name is Red*, trans. by Erdag M. Goknar (London: Faber and Faber, 2001), p. 51.

³⁰⁵ *Ibid.*, p. 61.

³⁰⁶ *Ibid.*, p. 61.

personally recognisable style so that they could compete for the term ‘genius’, because their ultimate goal was to be considered exceptional, to imagine they could set themselves apart, to portray the world not from on high, but from a point of view unique to themselves, as if that is what is to be human.

Being able to depict life-like objects and paint realistically was a sign of talent and skill for a miniaturist too, of course. In *My Name is Red* Pamuk’s murdered miniaturist (it is his soul that is doing the talking) explains that when he was alive he “illuminated the edges of pages, colouring their borders with the most life-like designs of leaves, branches, roses, flowers and birds.”³⁰⁷ He also “painted scalloped Chinese-style clouds, clusters of overlapping vines and forests of colour that hid gazelles, galleys, sultans, trees, palaces, horses and hunters.”³⁰⁸ He even used his talents to represent sexy bodies, often (and with great enthusiasm) making “pictures of those wide-eyed houris,” the beautiful virgins mentioned in the Glorious Koran.³⁰⁹ Then, as if suddenly aware that he might be misunderstood, he makes it clear that of course “the staggering power of such a book arises from the fact the impossibility of its being depicted.”³¹⁰

In Western cultures there were also concerns relating to what should and should not be revealed, lest it be considered obscene. Religious leaders and purity campaigners in the nineteenth century ordered the covering up of classical nude sculptures with plaster fig leaves and tin or stucco drapery. Paintings on public display that featured nude figures were also tampered with so that sexual parts were hidden by clothing. A panel of Jan van Eyck’s Ghent Altarpiece was removed, for example, so that it could be replaced by ‘properly clothed’ copies of Adam and Eve, presumably because the degree of realism indicated the use of living models.³¹¹

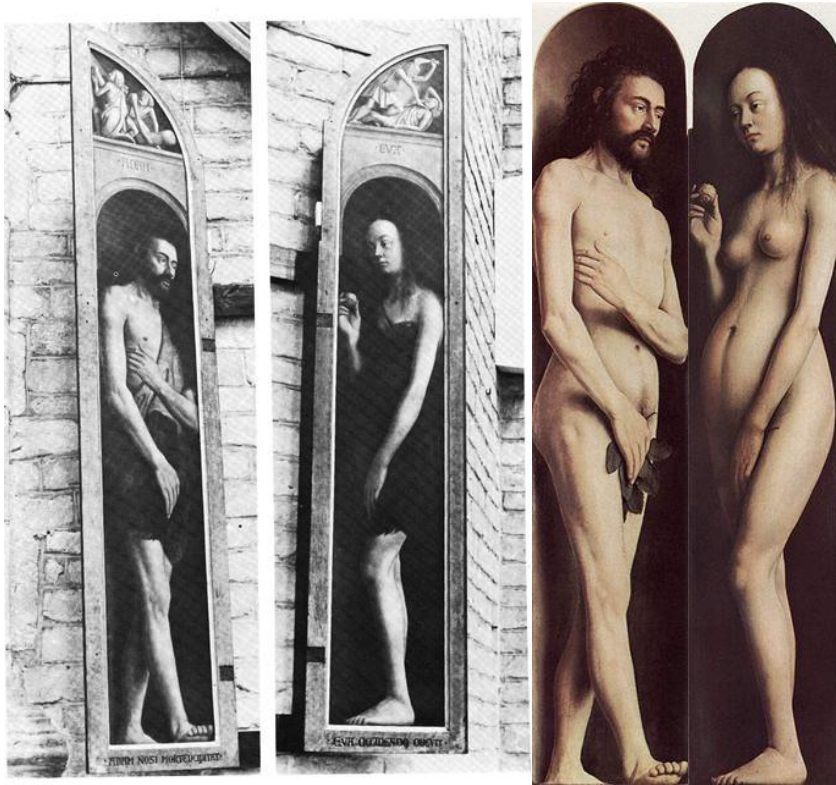
³⁰⁷ Orhan Pamuk, *My Name is Red* (London: Faber and Faber, 2001) p. 3.

³⁰⁸ *Ibid.*, pp. 3 -4.

³⁰⁹ *Ibid.*, p.4.

³¹⁰ *Ibid.*, p.6

³¹¹ Victor Lagye, *Adam and Eve in Animal Skins*, 1865, Nave of St. Bavo’s Cathedral, Ghent. Jan van Eyck, *Adam and Eve*, end panels from the upper register of the inner wings, c. 1430 – 1432, Ghent Altarpiece, St. Bavo’s Cathedral, Ghent.



Figs 25 & 26, Copy of Jan van Eyck's Ghent Altarpiece Adam and Eve by Victor Lagye, 1865, <http://albertis-window.com/2012/11/jan-van-eycks-eve-on-the-ghent-altarpiece/> [accessed 16 December 2018] Jan van Eyck, Adam and Eve from the Ghent Altarpiece, 1430 – 1432, oil on panels, St Bavo's Cathedral, Ghent, Belgium

If by realistically portraying the naked body an artist or writer risks inciting sexual feelings and arousing his readers or viewers, it is understood that checks have to be put in place. After all, there is no knowing how a book might be read, or a work of art viewed, by whom, or in what context. As Francesca and her lover Paulo discovered, in Dante's *Inferno*:

One day we read together, for pure joy
how Lancelot was taken in Love's palm.
We were alone. We knew no suspicion.
Time after time the words we read would lift
our eyes and drain all colour from our faces.
A single point, however, vanquished us.
For when at last we read the longed-for smile
Of Guievere – at last her lover kissed –
He, he who from me will never now depart,
Touched his kiss, trembling to my open mouth

The book was a Gulehault – pander-penned, the pimp!

That day we read no further down those lines.³¹²

That being a ‘pander’, or provider of obscene material, might also be an issue for anatomists is evident in *Mikrokosmographia*, the best known work of anatomist and court physician Helkiah Crooke. In the preface to his fourth volume, *Of the Naturall Parts belonging to generation, as well in Men as in Women*, he admits to having to examine his conscience over whether to include it. What stops him ‘silently passing it by’ is the thought that his anatomical tract should “exhibit the wonderful wisdom and goodnesse of our Creator, which as in all parts is most admirable, so in this (if perfection will admit any degrees) it is transcendent.”³¹³ Not only that; he is aware that the diseases issuing from these parts cause such fear and anxiety, especially in women, and are the hardest to cure, in his opinion because “the parts are least knowne as being veiled by Nature, and through our unreasonable modesty not sufficiently uncovered.”³¹⁴ Insisting that his book is educational and not intended to “ensnare men's mindes by sensual demonstrations” he states that it is to “be wished that all men would come to the knowledge of these secrets with pure eyes and ears, such as they were matched with in their creation” and that we should not forfeit such knowledge just “because some men cannot containe their lewd and inordinate affections.”³¹⁵ Even so, as a necessary precaution, he sees fit to arrange for this particular section of the book to be detachable for private reading, and easily disposed of, should the need arise.

The problem of the obscene in anatomical education was acknowledged in religious terms by John Moir in 1620, when he identified a tension between what can and cannot be shown. On the one hand there is self-knowledge: “Self-knowledge can, and ought, to apply not only to the soul, but also to the body; the man without insight into the fabric of his body has no knowledge of himself.”³¹⁶ On the other, there are parts of the body that cause problems: “A consideration of the genital members is very difficult, and everything should not be revealed particularly with youths, because sin makes the subject of generation diabolical and full of

³¹² Dante Alighieri, *The Divine Comedy 1, The Inferno*, transl. Robert Kirkpatrick (London, Penguin Classics, 2006), pp. 46-7.

³¹³ Helkiah Crooke, *Mikrokosmographia. A description of the body of man: Together with the Controversies there belonging*, (London, William Laggard, 1615) p.197. *Early English Books online* <http://eebo.chadwyck.com/home> [accessed 1st August 2018]

³¹⁴ *Ibid.*, p. 197.

³¹⁵ *Ibid.*, p. 197.

³¹⁶ John Moir, *Anatomical Education in a Scottish University*, 1620, annotated translation of the lecture notes of John Moir, trans. R.K. French (Aberdeen: Scotland, Equipress, 1975), p. 1.

shame, and a discussion might excite impure acts.”³¹⁷ In the mid-nineteenth century medical treatises show that morality and ethics remained areas of professional concern, as Jill L. Matus point out. She goes on to suggest that texts like these “form what Foucault calls ‘the medicine of sex’, a discourse largely directed to ‘ensure the physical vigor and moral cleanliness of the social body.’”³¹⁸ Elizabeth Blackwell, too, argued that “Medicine and morality being related to function and use, are therefore inseparable in a Christian state.”³¹⁹

One century later, in more secular times, Georges Bataille wrote about the clash between a social obligation to hide references to sexuality and a scientific project that requires us to seek factual knowledge of it:

Certain reactions...cannot be entirely identified with scientific data. These are the ones which sometimes reduce men to the level of beasts by generally accepted standards. More, these standards require them to be hidden, not to be spoken of, and not to be wholly accepted in man’s conscious awareness. Ought the study of this sort of behaviour, usually common to men and animals, be accorded a place apart?³²⁰

Even more recently, in a special issue of the journal *Clinical Anatomy* on the anatomy of sex, Dr Shane Tubbs admits that the anatomical sciences may have “glossed over or sidestepped the detailed anatomy of human sex.”³²¹ In his editorial piece he suggests that an attitude like that expressed by Leonardo da Vinci, who used the word ‘repulsive’ when describing “the act of procreation and the members employed therein” could be one reason why more research in this field has not been performed.³²² To redress the imbalance he provides a platform for papers by international experts who discuss the terminology of sexual anatomy as well as clinical issues relating specifically to the topic. I wondered why it was thought possible in 2015 to be dispassionate about representing sexual anatomy if this was not the case before. Was it because, as once suggested by sociologist Susanne Kappeler,

³¹⁷ Ibid., p. 41.

³¹⁸ Jill L. Matus, *Unstable Bodies: Victorian Representations of Sexuality and Maternity* (Manchester: Manchester University Press, 1995), p. 2.

³¹⁹ Elizabeth Blackwell, *The Human Element in Sex: Being a Medical Enquiry into the Relation of Sexual Physiology to Christian Morality*, 2nd edn. (London: Churchill, 1884), p. 12.

³²⁰ Georges Bataille, *Eroticism* (Paris: Les Editions de Minuit, 1957) trans. by Mary Dalwood (San Francisco, City Lights Books, 1986), p.149.

³²¹ R. Shane Tubbs, “The art of procreation and the members employed therein are so repulsive, that if it were not for the beauty of the faces and the adornments”, *Journal of Clinical Anatomy*, 28 (2015), p.289.

³²² Ibid., p.289.

“Those who argue for the total freedom of expression on the grounds of a modern atheism in sexual mores are telling us that today all forms of sexuality and representation of sexuality are clean enough, that the standards of cleanliness have advanced”?³²³

Anatomists I had spoken to at an earlier conference were of the opinion that sexual anatomy is still considered to be difficult to teach:

When this part of the body is taught it is usually by a man, and there are jokes, so immediately you have something going on. So it may be down to male behaviour, but you never know.³²⁴

Today with the internet there are so many porn sites it is very difficult to have an objective representation, so that’s why you have to be careful about what you are representing.³²⁵

Yet the common-sense view in anatomy, as expressed in the *Stanford.edu* site is that while “anatomy textbooks for medical students are sexually explicit - they depict exposed genitalia, for example [they] are rarely, if ever, viewed as pornography. Sexual explicitness may be a necessary condition for material to count as pornographic, but it does not seem to be sufficient.”³²⁶ Pornography is here defined as “sexually explicit material (verbal or pictorial) that is *primarily designed to produce sexual arousal in viewers.*” Presumably it is felt that anatomical representations can be free of such an effect by sticking firmly to the facts and denying the viewer an arousing sexual context or narrative. Leonore Tiefer writes that the “hallmarks of the medical model include mind-body compartmentalization, generalizations about human function and experience and a focus on the individual, all of which create a universalized, function-focused sexuality in which physiology dictates sexual conduct. This model,” she argues, “has probably allowed at least some sex education and research in a culture still paralyzed by its history of prudery and hypocrisy in which embarrassment and value conflicts about sex remain pervasive. Medicalization offers a vocabulary of biological

³²³ Susanne Kappeler, *The Pornography of Representation* (Minnesota, The University of Minnesota Press, 1986) p. 33.

³²⁴ Transcript of anonymised interview with Anatomist E, Cardiff University, 21 December 2011.

³²⁵ Transcript of anonymised interview with Anatomist A, Cardiff University, 20 December 2011.

³²⁶ <https://plato.stanford.edu/entries/pornography-censorship/> [accessed 24 January 2017]

innocence – the kneebone is connected to the anklebone – to purge the lubriciousness from any discussion of sexuality, and there may have been advantages to that in the past.”³²⁷

I was therefore very curious as to what anatomists who sat on the nomenclature committee might say if I asked them if they thought there was a problem in their profession, regarding what can and cannot be named, because of taboos relating to sexual anatomy. At dinner on my first night in Istanbul, I found myself sitting next to an Emeritus Professor of Anatomy whom I had invited to take part in the interviews. She made the point that there was a mass of objective data on human sexuality in the public domain, as well as in medical textbooks, so where was the censorship? When she cited the *Kinsey Reports* I was reminded once again of Georges Bataille, who argues that though part of the originality of the Reports rests on their making it possible to discuss sexual conduct as one discusses other ‘things’, this was surely not the whole story. Whilst on the surface it would seem that Kinsey’s gigantic enquiry was successful in ensuring that “the sexual behaviour of our fellows has ceased to be so completely hidden from us”³²⁸, Bataille finds it important to “dispute this clumsy business of bringing man’s sexual life down to the level of objective data.”³²⁹ What if the unintended effect of the Reports is to “make it obvious in the long run that the facts of sex are not ‘things’”?³³⁰

Bataille identifies a “contagiousness” that he thinks rules out truly dispassionate observation because of the effect on the observer of being a witness to sexual activity.³³¹ The observer is either aroused or disgusted, and thus incapable of rational thought, for as Bataille suggests, “even a hardly perceptible agitation or clothes in disarray easily induces in a witness a feeling of participation – which is a disturbed state of mind, participating in an emotion from within oneself.”³³² Because of such an effect, he likens the demonstration of sexual activity to poetry, which to his mind helps to explain the “breadth and oddness of the methods used in the Reports” and their “impotence to treat their material as an object, as something that can be considered objectively.”³³³

³²⁷ Leonore Tiefer, ‘A new view of women's sexual problems: Why new? Why now?’, *The Journal of Sex Research*, 38. 2 (2001), p. 89.

³²⁸ Georges Bataille, *Eroticism* (Paris: Les Editions de Minuit, 1957) trans. by Mary Dalwood (San Francisco, City Lights Books, 1986), p.151.

³²⁹ *Ibid.*, p. 152.

³³⁰ *Ibid.*, p. 152.

³³¹ *Ibid.*, p. 152.

³³² *Ibid.*, p. 152.

³³³ *Ibid.*, p. 153.

Perhaps, even in the twenty-first century, scientists cannot be free from the effects of taboo, however hard they try to present themselves as objective, dispassionate observers. Perhaps the problem is objectivity itself. Georges Bataille certainly found that such a stance encouraged the neglect of key aspects of sexuality, to the detriment of science:

If we affirm that guilty sexuality can be regarded as innocently material, our awareness, far from seeing sexual life as it is, neglects entirely those disturbing aspects which do not fit in with a clear picture. ... by exonerating our sexual life from every trace of guilt science has no chance of seeing it for what it is. Our ideas are clarified but at the cost of being blinkered. Science with its emphasis on precision cannot grasp the complexity of the system in which a few factors are pushed to extremes when it rejects the blurred and indistinct realities of sexual life.³³⁴

Bataille identified an “abyss” that “yawned beneath the facts they report.”³³⁵ Desire is never simple, as suggested by Anne Carson in her translations of and responses to the work of classical Greek poets. She shows how they managed to evoke feelings of ambivalence and loss of equilibrium when writing about ‘love’. Complicated feelings of love and hate just happen to Catullus without him knowing why. Sappho, too, loses herself in a vortex of sweetbitter “limb-loosener” desire.³³⁶ It whirls her around; she cannot fight it off. In poetry the act of love can be recognised as a mingling of bodies, desire and a melting of limbs. Anatomical boundaries of body and strict categories of thought are confounded. Bataille suggests there are some “reactions” that cannot be entirely identified with scientific data – “the private feelings as opposed to the things that the Reports suggest must exist beyond the graphs and curves. This element defies investigation from outside and cannot be classed under the headings of frequency, modality, age, profession and class.”³³⁷ As a result, “true knowledge of man’s sexual life is not to be found in these Reports; statistics, weekly frequency, averages mean something only when we clearly have a picture of the surge of activity in question. Or if they really do enrich our knowledge.”³³⁸

³³⁴ Ibid., p. 162.

³³⁵ Ibid., p. 155.

³³⁶ Anne Carson, *Eros the Bittersweet*, 4th edn (London: Dalkey Archive Press, 2005), p. 3

³³⁷ Bataille, p. 154.

³³⁸ Ibid., p. 154.

A maze of narrow paved passageways, the Grand Bazaar is lined with shops so small their wares spill out onto storefront stalls. Restaurants fill the air with enticing smells of cooking. There are stalls selling traditional Turkish sweets and spices, dried fruits and nuts; perfumes and fragrant rose-petal decorated soaps; intricately designed gowns, robes and tunics made from lavish fabrics including silks; glasswork and jewellery; sumptuous carpets; brightly painted ceramic bowls and plates; finely woven baskets and rugs; gleaming brass and copper household items. When I left the antique bookstall it was to be caught up and swept along by streams of people who had to raise their voices to be heard above the din. Shouted orders competed with jocular calls and hoots of laughter. Every now and then a rushing porter burdened down with packages would block the way. In such a crowded bustling place it was easy to lose my bearings. When I eventually found my way out I decided to climb to the Süleymaniye Mosque by taking one of the many narrow crooked alleyways that wind their way around the hill. Narrow and deep, rarely visited by the sun, I hoped their shade would offer some relief from the oppressive heat.

Once through the gate of the mosque I walked alongside a line of headstones, delicately carved and as white as porcelain. I did not enter the modest tomb the mosque architect had built for himself at the rear of the garden.³³⁹ It was to the far wall of the garden that I was drawn, where I could stop to catch my breath and, like the many other visitors who also stood there, marvel at the view. No wonder this hill top had been chosen as the site on which to build a mosque; its call to prayer would be heard for miles. From such an elevated position I could gaze out over red-tiled rooftops, in between pencil-thin minarets and plump domes, to spy, in the far distance, fishing boats, tourist craft and ocean-going cargo ships busily making their way up and down the silvery Bosphorus. On that particular day a waning moon was just visible, in a vast sky that would have been blue had it not been for the heat haze and traffic pollution.

My walk back to the university quarter took me past rundown shops and shuttered houses. I glimpsed a crumbling villa through a broken grille in its high garden wall. Heat and smoke gushed out of a small forge where copper and brass goods were being made. Examples of the finished wares were displayed on the pavement outside. I wandered into an arcade of clothes stalls where crowded lines of mannequins were propped up against the walls, in tight jeans and t-shirts, short leather jackets, clinging lace bodices as well as harem trousers, tunics and colourful head scarves. From a small restaurant set in a quiet herb garden there came the

³³⁹ Sinan died in 1588, at the age of 98.

sound of splashing water. As a fountain gently played, I ordered a light meal and to wile away the time, a glass of Turkish tea. It seemed the right place and time to take out my copy of *My Name is Red*, to look again at the passages in the novel where Shekure secretly watches her lover through a peephole in the door to her father's workshop. Each time he visits him there she also gets her children to pass him secret messages, which turn out to be blank pieces of folded up paper (albeit perfume-scented).

The 24th International Symposium on Morphological Sciences took place at Istanbul University's massive Faculty of Science. Built in the 'brutalist' style, it boasted large square inner courtyards surrounded by imposing rectangular blocks. Views could be had of the city from some of the upstairs windows, but other than a gigantic projected image of Atatürk in the main lecture theatre and the odd gloomy photograph of a former Director in distant corridors, the walls were starkly bare. My first interview was with a professor from Portugal who told me that at the end of the 19th and the beginning of the 20th centuries Portuguese anatomical textbooks followed the example of other European countries in adopting a literal translation from the French and the Latin, using the word *pudeur* (meaning modesty or shame) when referring to the genitals, a word that has absolutely nothing to do with the structures themselves. "Of all the possible names they chose one with a social connotation: this is the shameful one, the shameful artery, the shameful nerve."³⁴⁰ Furthermore, he said that even today, when the genitals were referred to during a lecture or practical session in a dissecting room there were regional differences regarding the terms used, even though Latin terminology as promoted by the *Terminologia Anatomica* was employed in textbooks. "In the north of the country, for example, the word adopted by anatomists was *vergonhosos*, a noun in Portuguese that means shame, as you might say to a child or a woman who is exposing too much, so it's shameful what you are doing, you should be covering up... it's even more intense."³⁴¹

When we discussed the possibility of a link between this attitude to the female genitals and the unstable history of the clitoris I found myself thinking of Helen E O'Connell *et al.*'s historical review of the anatomy of the clitoris.³⁴² Comparing their findings based on cadaveric dissections with information provided in textbooks, they suggest that in its representations of the clitoris, anatomy historically was not only on the receiving end of

³⁴⁰ Transcript of anonymised interview with Anatomist J, Istanbul, Turkey, 3 September 2015.

³⁴¹ *Ibid.*, p. 2.

³⁴² Helen E. O'Connell *et al.*, 'Anatomy of the Clitoris', *Journal of Urology*, 174 (2005) 1189-95, pp. 1189, 1190.

ensorship, but was also implicated in it. While some anatomists from the 16th century (including Colombo, Falloppia, Swammerdam and De Graaf) referred to the clitoris, there were others (notably Andreas Vesalius) who regarded the vagina as the equivalent of the penis and discounted the existence of the clitoris in normal women. Its deletion from scientific work was noted by Falloppia in 1561, who stated that “modern anatomists have entirely neglected it...and do not say a word about it...and if others have spoken of it, know that they have taken it from me or my students.”³⁴³ Over a hundred years later, in 1672, De Graaf wrote about ‘the discovery’ of the clitoris as if knowledge was still unavailable: “We are extremely surprised that some anatomists make no more mention of this part than if it did not exist at all in the universe of nature. In every cadaver we have so far dissected we have found it quite perceptible to sight and touch.”³⁴⁴ Kobelt provided a clear description of clitoral anatomy in the 1840s, acknowledging in his essay that “I have made it my principal concern to show that the female possesses a structure that in all its separate parts is entirely analogous to the male; I scarcely dare to expect the same sort of success as in my studies of the male, as all previous attempts of this nature have always come to nought because our knowledge in regard to these female structures is still full of gaps.”³⁴⁵ As he suspected, the information was buried. O’Connell and colleagues point out that despite Kobelt’s ‘superb’ account of clitoral anatomy, including drawings: “few other comprehensive accounts ... were identified in the historical literature.”³⁴⁶ The typical textbook being used in medical schools at the time they were writing (the paper was published in 2005) lacked detail and while describing male anatomy fully, only gave the differences between male and female anatomy rather than a full description of female anatomy. Even in classic texts where one would expect to find accurate anatomical information about pelvic structures, such as *Gray’s Anatomy*, the *Hinman Urological Atlas* and sexuality texts such as Master and Johnson’s *Human Sexual Response* or any standard gynaecological text, they found that “detailed information (was) lacking in each of these sources.”³⁴⁷ As with the work of earlier anatomists, “for periods as long as 100 years anatomical knowledge of the clitoris appears to have been lost or hidden, presumably for cultural reasons.”³⁴⁸

³⁴³ As cited in Helen E. O’Connell et al. ‘Anatomy of the Clitoris’, *Journal of Urology*, 174 (2005) 1189-95, p. 1192 and referenced ‘Classic pages in obstetrics and gynecology: Gabrielis Fallopii – Observationes anatomicae ad petrum manniam medicum cremonensem. Venetiis, M.A. Ulmum, 1561’. *Am J Obstet Gynecol*, 117 :114, 1973.

³⁴⁴ Ibid., p.1193.

³⁴⁵ Ibid., p.1193.

³⁴⁶ Ibid., p.1193.

³⁴⁷ Ibid., p.1189.

³⁴⁸ Ibid., p.1193.

In my second interview, the female professor of anatomy I had met before was reminded of her own training, where there was a definite difference in attitudes towards male and female genitalia amongst students in the dissecting room.

I remember the attitude of my colleagues, I remember being in a dissecting room and colleagues of mine saying I'm not going to touch female genitalia, so I was to get on with it and do the dissection and they would come and observe once I had cut it up. (These were your male colleagues?) Yes, my male colleagues, who were students at that stage. They didn't want to touch the female genitals. They're very able to go there when it's alive, but not when it's dead...³⁴⁹

Taking a break from the conference proceedings, I found a quiet courtyard where I could sit on a bench to read in the shade of flowering trees. Watched closely by several stray cats, I dipped into *The Secret Museum*, by Walter Kendrick, which includes a history of the word 'pornography'. The modern meaning of the word first appeared during the mid-nineteenth century when the original Greek term '*pornographos*', meaning to write about prostitutes, evolved into 'pornography', meaning salacious art and literature that deserved to be destroyed because of moral concerns relating to its power to arouse sexual feelings. Obscene artefacts from earlier periods in history might escape such treatment, as long as they were kept safely hidden away in secret museums, or 'Secretum', where access was severely restricted.

Walter Kendrick describes what happened in the middle of the nineteenth century when frescoes were discovered by archaeologists at Pompeii that were deemed to be 'pornographic'. Shortly after they were "locked away in secret chambers safe from virginal minds."³⁵⁰ Flaubert's novel *Madame Bovary* was put on trial in January 1857 for harbouring the same danger and Kendrick makes the point that, "A century-long parade of court cases ensued, deliberating the perniciousness of *Ulysses*, *Lady Chatterley's Lover*, *Tropic of Cancer*, and scores of other fictions, many of which now appear routinely on the syllabi of

³⁴⁹ Transcript of anonymised interview with Anatomist K, Istanbul, Turkey, 3 September 2015.

³⁵⁰ Walter Kendrick, *The Secret Museum: Pornography in Modern Culture* (University of California Press, 1996), p. xii.

college literature courses,” wrote Kendrick. “All these *things* were ‘pornographic’ once and have ceased to be so.”³⁵¹

Kendrick cites the historian M. L. Barré who wrote a book that was published in 1875 about the collection of antiquities held in what was then called The Pornographic Collection in Naples. Forced to describe objects that by contemporary standards were deemed obscene, Barré assured his readers that a strict scientific approach was the solution:

We have endeavoured to make its reading inaccessible, so to speak, to poorly educated people, as well as to those whose sex and age forbid any exception to the laws of decency and modesty. With this end in mind, we have done our best to regard each of the objects we have had to describe from an exclusively archaeological and scientific point of view. It has been our intention to remain calm and serious throughout. In the exercise of his holy office, the man of science must neither blush nor smile. We have looked upon our statues as an anatomist contemplates his cadavers.³⁵²

Kendrick goes on to suggest that such texts “never stood alone”³⁵³ because, and here he quotes Barré, they were “surrounded by a veritable retinue of ancient authors who explicate for us the profane debris of antiquity,”³⁵⁴ just as sculptors are “forgiven the overgrowth of foliage that sometimes screens the nudity of their human figures.”³⁵⁵ Disdaining fig leaves, Barré’s engravers chose a much stranger device, as he explains:

Our draughtsmen have obeyed an analogous rule; but instead of tacking on draperies or other accessories to their designs – which might have spoiled the spirit of the composition or distorted the thought of the ancient artist – they have restricted themselves to miniaturising a few things. The truly erotic nudity of these rare subjects has thereby been stripped of the excessively crude and impertinent features that marked the originals. They have lost their importance, sometimes without detriment. They have utterly vanished.³⁵⁶

³⁵¹ Ibid., p. *xii*.

³⁵² Ibid., p. 15.

³⁵³ Ibid., p.15.

³⁵⁴ Ibid., p.16.

³⁵⁵ Ibid., p.16.

³⁵⁶ Ibid., p.16.

Kendrick describes the results vividly: “As a result phalluses, naturalistic in the originals, taper off like uptilted icicles in Barré’s engravings, since instead of genitals they are only endowed with patches of fog.”³⁵⁷

Kendrick believes that Barré’s comical anxiety arose from a pair of dilemmas that haunt all those who wish to set up secret museums, especially in print. He maintains that it is impossible to display things – as museums do – and keep them hidden at the same time; internal safeguards, no matter how ingenious, can hardly take the place of living gatekeepers. “Any museum (or catalogue) gives publicity to its exhibits; if those exhibits promote lewdness, no amount of self-justification by the curator can dispel the impression that he is playing the role of the pander.”³⁵⁸ Could the same be true, I wondered, for the anatomical textbook?

Once back at the hotel with access the internet, it was not long before I came across examples of censorship in anatomy, where works that were regarded as not suitable for viewing by the general public had been removed, having been re-designated erotica.³⁵⁹ The first concerned a wax model known as an Anatomical Venus. Often the centrepiece of late Victorian Anatomical Museums, a model of a reclining female anatomical body made from wax gave visitors the opportunity to encounter a life-sized figure with removable viscera. Designed to be beautiful works of art, as well idealised forms of anatomical perfection, female figures like these, with “pleasing, relaxed expressions... sometimes clothed and reclining on beds with linen and pillows,”³⁶⁰ according to the art critic Ludmilla Jordanova, ran the risk of being perceived as erotic. When it was suspected that they might be capable of gratifying prurient tastes, they were duly censored. A. W. Bates describes how, by the end of the eighteenth century, “realistic anatomical models had come to be seen as perverted by the French because the depiction of decay seemed sensual (the Marquis de Sade found them so) or repulsive rather than a dignified *memento mori*.”³⁶¹

³⁵⁷ Ibid., p.16.

³⁵⁸ Ibid., p 16.

³⁵⁹ Such censorship can be seen in the context of changing perceptions of what is permissible in art and literature, as depictions deemed offensive demand a reorganisation of the cultural inheritance, “moving certain objects or words into a shadowy zone of recent invention,” as Walter Kendrick suggests on page 57.

³⁶⁰ As quoted in A.W.Bates, ‘Indecent and Demoralising Representations: Public Anatomy Museums in mid-Victorian England’, *Cambridge Journals of Medical History*, 52 (2008), 1-22.

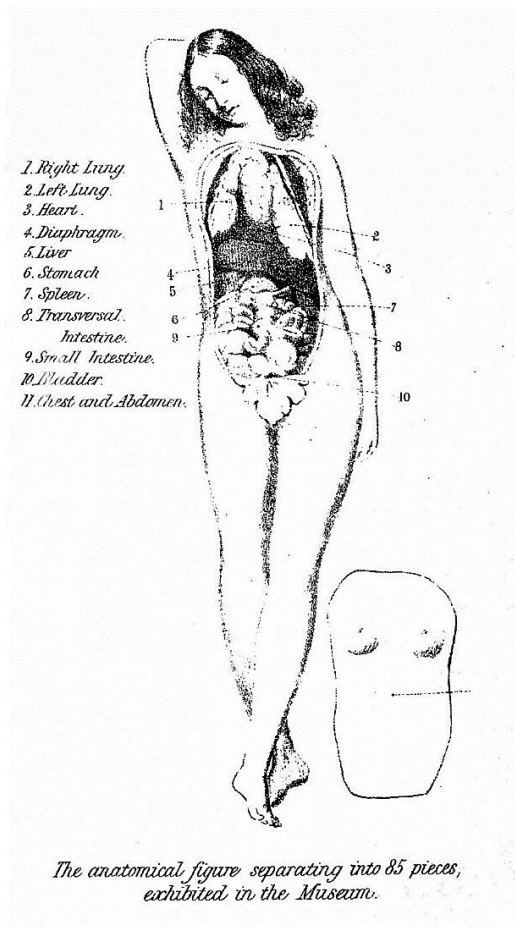
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2175054/> [accessed 3 August 2018]

³⁶¹ A.W.Bates, ‘Indecent and Demoralising Representations’: Public Anatomy Museums in mid-Victorian England’, *Cambridge Journals of Medical History*, 52 (2008), 1 – 22.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2175054/> [accessed 3 August 2018]

One such anatomical museum in London was forced to close down after several legal cases were taken out by self-appointed representatives of the medical profession and anti-vice campaigners. A *Times* newspaper report dated 19 December 1873 covered a session held the previous day at the Marlborough Street magistrates' court when three employees of the museum pleaded guilty to offences under the Obscene Publications Act of 1857. After the magistrate ordered that their property, which had been held by the court since February, be destroyed, the prosecuting solicitor was given permission to accompany a police inspector and a sergeant so that he could begin the destruction himself. Looking upon this as a 'privilege', it was reported that he "proceeded to smash with a hammer a collection of wax anatomical models, the fragments of which were then handed back to the defendants. The destroyed models 'which were of the most elaborate character, and said to cost a considerable sum of money' had formed part of Dr Kahn's Anatomical Museum that for more than twenty years had been the best-known popular medical exhibition in Britain."³⁶²

³⁶² A.W.Bates, 'Indecent and Demoralising Representations': Public Anatomy Museums in mid-Victorian England', *Cambridge Journals of Medical History*, 52 (2008), 1 – 22.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2175054/> [accessed 3 August 2018]



Figs.27 & 28, Kahn's anatomical Venus and Dr Kahn in 1851 from A W Bates Dr Kahn's Museum: obscene anatomy in Victorian London *Journal of the Royal Society of Medicine*, 99(2006) pp. 618–624
<https://journals.sagepub.com/doi/pdf/10.1177/014107680609901209>[accessed 16 December 2018]

The successful prosecution of Dr Kahn's Anatomical Museum under the Obscene Publications Act of 1857 branded all public displays of anatomical specimens potentially obscene. Thereafter, anatomical education was restricted to medical professionals and public anatomy survived only in sideshows. The remains of the self-styled 'Doctor' Kahn's collection was shipped to New York, to be displayed as part of sensational dime shows, while the Liverpool anatomy museum was absorbed into Louis Tussaud's waxworks. A. W. Bates describes how, by the 1870s, "the practice of anatomy was the hurdle that initiated, and sometimes deterred, entrants to the medical profession. Though it enhanced the reputation of medical men as professional and dispassionate observers, anatomy was also seen as a potentially demoralizing science."³⁶³

³⁶³ W. Bates, 'Indecent and Demoralising Representations': Public Anatomy Museums in mid-Victorian England', *Cambridge Journals of Medical History*, 52 (2008), 1 – 22.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2175054/> [accessed 3 August 2018]

I was also intrigued to read about a twentieth-century textbook aimed at first-year medical students entitled *The Anatomical Basis of Medical Practice* that was withdrawn from the market.³⁶⁴ Written by Professors Becker, Wilson, and Gehweiler and published in America in 1971, it emphasised surface anatomy, embryology, and radiographic anatomy. It was the authors' use of illustrations from female nude photographs that caused such controversy. It was not just the images, purchased from California photographer Peter Gowland, of a type typically seen in *Playboy* centrefolds or 'pin-up girl' calendars that caused upset and consternation at the time. The fact that throughout the text the authors included sexually suggestive and 'cheeky' comments about women led to criticism in the press and scholarly journals. When a boycott of the book was organized by the *Association of Women in Science* the authors claimed they were the victims of a witch hunt by feminists and that they thought that they were writing a witty, engaging, and funny book.³⁶⁵

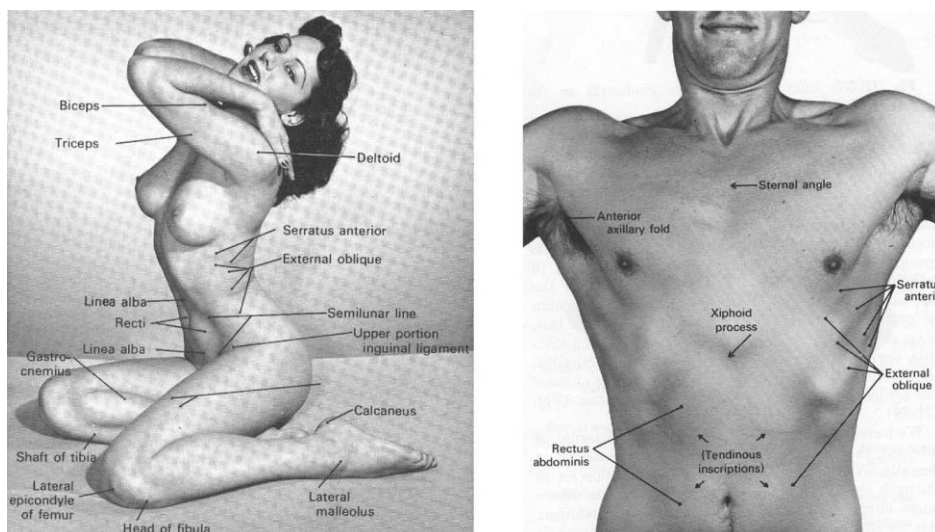


Fig. 29, *Figure III --59, 'Adult female, landmarks of the abdomen'* & *Figure III --58b, 'Male torso, landmarks of the abdomen'* from *The Anatomical Basis of Medical Practice* (Baltimore:Williams & Wilkins, 1971) photographs by Peter Gowland, in Edward C. Halperin, 'The Pornographic Anatomy Book? The Curious Tale of *The Anatomical Basis of Medical Practice*' *History of Medical Education*, 84 (2009), pp. 278 – 283.

³⁶⁴ Edward C. Halperin, 'The Pornographic Anatomy Book? The Curious Tale of *The Anatomical Basis of Medical Practice*', *History of Medical Education*, 84, 2 (2009) [accessed 24 January 2017]

³⁶⁵ <http://streetanatomy.com/2012/09/04/the-objectification-of-female-surface-anatomy/> [accessed 24 January 2017]

The Anatomical Basis of Medical Practice featured in an exhibition entitled *OBJECTIFY THIS: Female Anatomy Dissected and Displayed* that took place in Chicago in 2012, showing the work of anatomical artists. (Visitors to the exhibition were also treated to a burlesque show with female performers and offered ‘anatomically themed’ drinks.) In a flyer for the exhibition, the curator, medical illustrator Vanessa Ruiz, quoted from the preface, where Becker, Wilson and Gehweiler justified their use of female nudes:

Perhaps we should have included photographs of garden-variety, American males and females who have let their physiques go to pot. Instead, we used female models as model females. The student will see the ordinary specimen every day. Only on rare occasions will the attractive, well-turned specimen appear before him for consultation. He should be prepared for this pleasant shock. For the growing ranks of female medics, we included the body beautiful of a robust, healthy male. We are sorry that we cannot make available the addresses of the young ladies who grace our pages. Our wives burned our little address books at our last barbecue get-together.³⁶⁶

The fact that Vanessa Ruiz used reproductions and quotations from the book to advertise the exhibition seemed to indicate that there had been a marked change in attitude regarding the use of erotic elements in representations of the female body. As compared to the feminist outcry in the 1970s, this was Ruiz’s response to the book in 2012:

Feminism aside, I do have to say that after going through the book myself, it is rather fun and entertaining. The writing style is conversational and the “pin-up girl” photographs make learning surface anatomy quite engaging. The women in the photographs are not the stick thin models that we are used to seeing today, but curvy healthy women that happen to be in very feminine and oftentimes seductive poses. While not everyone will agree with me, I do applaud

³⁶⁶ <http://streetanatomy.com/2012/08/07/street-anatomy-presents-objectify-this-female-anatomy-dissected-and-displayed/> [accessed 24 January 2017]

the authors for trying to create a different experience in anatomy education and overall for having fun with it.³⁶⁷

The trailer for the exhibition alluded to the book when it posed the question: “Is it objectification of women or is it simply appreciation of the beauty that is the female form? You can decide by seeing the book in person at the OBJECTIFY THIS exhibition.”³⁶⁸

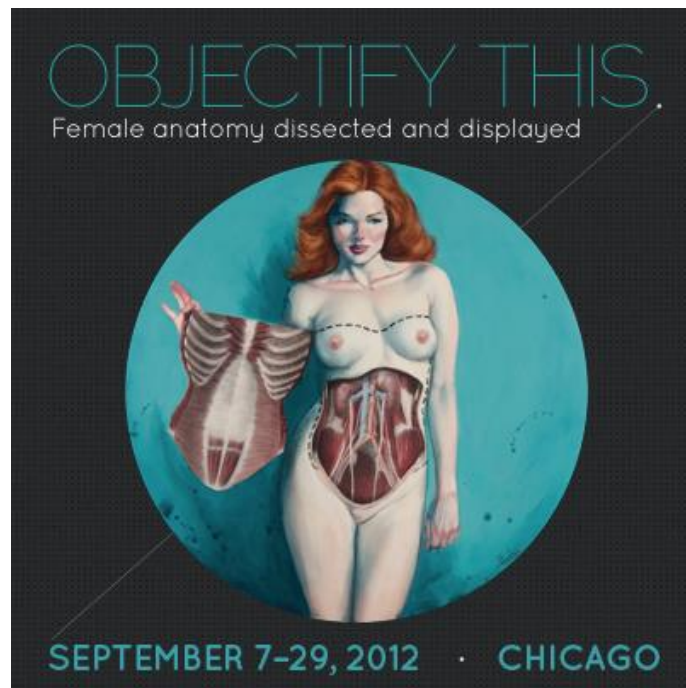


Fig. 30, Poster advertising OBJECTIFY THIS exhibition and events, featuring anatomical art by Fernando Vicente, digital print, 2012, designed by the curator, Vanessa Ruiz, Chicago

The paper I was giving at the conference concerned a survey I had conducted comparing the attitudes of medical students to potentially sexist images taken from anatomical art commonly used in medical teaching. Seven historical and contemporary images of anatomical art were provided that students were likely to be exposed to on their medical course. No students perceived sexism in the image of the Susini Anatomical Wax Venus, for

³⁶⁷ Ibid.

³⁶⁸ Poster advertising *OBJECTIFY THIS: Female Anatomy Dissected and Displayed* exhibition and events, Chicago in 2012.

example, despite its provocative pose. Our findings relating to questions about possibly sexist statements in textbooks also pointed to a lack of concern amongst younger women.

As a result, I was interested to read in *Manifesta: Young Women, Feminism and the Future* that the authors were anxious to make it clear that having liberal and positive views regarding sex did not mean that they lacked awareness of gender inequalities or issues in society relating to the abuse of power. The anti-pornographic movements of the 1970s and early 1980s might seem antiquated to younger feminists, but they clearly saw a need to be involved in consciousness-raising, to open their minds to the fact that male domination continues to affect them. Indeed, they saw it as a problem that “The presence of feminism in our lives is taken for granted. For our generation, feminism is like fluoride. We scarcely notice we have it – it's simply in the water.”³⁶⁹

That there might be reasons to continue to be vigilant came to light during a later search on the internet that revealed examples of censorship in anatomical education at school level in many different countries around the world. Lynchburg City School Board in the USA for example agreed in 2000 to approve the purchase of 200 anatomy and physiology textbooks only if an illustration of a vagina was removed. Despite its approval by a committee made up of parents, teachers and students, school officials were instructed to either black out, tear out or place some sort of irremovable label over the illustration before the book was given to the high school juniors taking the class.

A similar story was reported in 2014 in Turkey's English-language *Hürriyet Daily*. The paper described the way that some sixth-grade science and technology textbooks had been revised to replace anatomical diagrams of penises and vaginas in a chapter on reproduction with pictures of mother/baby pairings of humans, polar bears, ducks, and dolphins.³⁷⁰ In the report Abdullah Tunalı, a psychologist, was reported as saying that “In the past, the inner structure of genitalia was explained to children in appropriate ways for their development, just like the heart and kidneys.” Tunalı was concerned that the relevant material was now being taught “superficially and in a slapdash manner”³⁷¹ because information and diagrams previously provided had been censored. He was also concerned that if scientific information was not taught at schools, a child’s development might be harmed. He thought

³⁶⁹ Jennifer Baumgardner and Amy Richards, *Manifesta: Young Women, Feminism and the Future* (New York: Farrar, Straus and Giroux, 2010), p. 71.

³⁷⁰ Turkey's English-language *Hürriyet Daily* in 2014. <http://www.hurriyetdailynews.com/genitalia-wiped-out-of-some-turkish-school-books-74193> [accessed 15.12.2018]

³⁷¹ http://www.slate.com/blogs/the_slatest/2014/11/13/turkish_biology_textbook_culture_wars_censorship_replace_genitalia_with.html [accessed 24 January 2017]

that censorship like this might lead children to look for adult-only or misleading material on the Internet.

Stories like this suggest that far from being the historical legacy of a pre-scientific understanding of the body and its functions, conservative views were still being imposed. In an age of internet porn, as well as religious beliefs that require women to wear veils, how should one approach the teaching of human sexual anatomy? One of the professors I interviewed when we were discussing this issue quipped: “We don’t do living anatomy on that part of the body.”³⁷²

Yet anatomical detail in sex education can be seen to play a key role in a struggle for gender justice and equality. A report of a TV documentary called *Sex in Class* that was broadcast in 2015 revealed that children as young as 12 and 13 admit to being addicted to pornography.³⁷³ Despite this, and in contrast to Denmark and other European countries, topics like pornography, sexual pleasure and sexual agency are omitted from children’s education in the U.K. The documentary followed Goedele Liekens, a UN Goodwill Ambassador for sexual health, during the two weeks she spent giving a comprehensive sex education course to Year 11 pupils at a Technology College in Accrington. After discussions about their use of pornography, the thirteen students who had volunteered to take part were asked to complete certain tasks for homework. One male pupil revealed that he first saw a porn film at age 10 and that he now looked at similar content two or three times a day. Many boys had used pornography for years and masturbated to it two or more times a day. One boy expressed the view that swallowing semen and/ or welcoming ejaculate on her face was to be expected of a girl. Initial consent to have sex with him implied automatic consent to this form of male orgasm and showed ‘respect’. Moreover, he would ‘dump’ any girl in possession of pubic hair, in contrast to the shaved genitals of pornography performers.

While in class the boys were encouraged to write a sexual script where girls experience sexual pleasure, and to draw female genitalia, their homework was to shave their pubic hair on a daily basis so that they could identify with the discomfort and itchiness felt by the girls. Liekens was shocked at the ignorance of the girls’ lack of knowledge of the shape and position of the clitoris and urethra. Girls were given hand-held mirrors so that in private, if they chose, they could learn about their bodies. As the lessons progressed girls became more

³⁷² Transcript of anonymised interview with Anatomist C, Cardiff University, 20 December 2011.

³⁷³ Patrick Howse, ‘Pornography addiction worry’ for tenth of 12 to 13-year-olds’, BBC News online, 31 March 2015, <http://www.bbc.co.uk/news/education-32115162> [accessed January 2017]

confident about discussing their resistance to the idea that they liked having ejaculate on their face and in their eyes, as well having to shave their pudenda on a daily basis in order to possess what the boys described as desirable rather than revolting ‘fannies’. By the last class, by contrast, the boys had become more reflective and less confident of their sexual ‘entitlements’.

Lieken’s educational approach was based on the belief that open and frank discussion about pornography enabled teenagers to reflect critically upon it. She spoke about the way that conventional sex education in the U.K. fails to challenge sexual attitudes to women which are clearly taken from pornography. Although the anatomy of genitalia is often shown in such classes, the clitoris is omitted from representations, something that she felt mirrored the silence of girls regarding their own sexual pleasures.

The miniature I brought back from Istanbul I placed for safekeeping inside a copy of *The Book of the Thousand Nights and One Night*³⁷⁴ (where it features the Second Tale of Sindbad the Sailor.) A border of flowing calligraphy gracefully frames the image of a highly decorated sailing boat. More like a tub than a merchant ship, it does not look big enough to cross a lake. Its sails are painted to look like scalloped Chinese-style clouds, one blue, one pink, beneath which sit three turbaned sailors or merchants who seem to be debating something, or telling stories. They are as rotund as the boat, two are bearded, one sports a fine moustache. Both sky and sea are painted gold, crisscrossed by white and black swirls representing the wind and the waves. The miniature evokes memories of a city teetering on the brink: the way young men employed as porters would run headlong down a tramway with huge plastic-wrapped bales of clothing strapped to their backs, before disappearing into teeming side streets and markets. The brashness of scrawny boys selling bottled water and the sadness of homeless families begging on the pavements at night in the restaurant quarter seemed to bear no relation to the soft whirring sound made by grey turtle doves that dropped gently into a herb garden to drink at a water fountain. Istanbul was a city of such contrasts, where strongly coloured spices displayed in piles as if sifted through an invisible hour glass could be seen alongside stalls featuring semi-naked mannequins, while women went about their shopping wearing head scarfs like fashion accessories. On my last day there in a restaurant over lunch a fashionably dressed young woman stared at her cell phone and

³⁷⁴ *The Book of the Thousand Nights and One Night*, Selected Excerpts (New York: Assouline Publishing, 2005).

laughed. I wanted to call her Shirin, and the writer of the text she was reading Khosrow, or Husrev. At the ‘Anatomists’ Ball’ a young belly dancer after her routine gyrations, obligingly sat on middle-aged male laps for photo opportunities, her scanty costume little more than ribbons, belt and tassels. It could only happen on a tourist party boat where more wine is poured than food served – strictly off shore, away from the laws of the land – one of Georges Bataille’s places apart.

6. On anatomical wax models



Fig. 31, Susini/Boi 'Head and body of a young girl' c. 1805, wax anatomical model, Museum of Anatomical Waxes, University of Cagliari, Sardinia, photograph Susan Morgan, Cagliari 2016

It was in the middle of my second night on the island of Sardinia that I was awoken by a tremendous thunderstorm. Increasingly ominous rumbles built up to a thunderclap so loud I thought a nearby building must have been struck by lightning and in my mind's eye I saw a bolt speeding out of a riven sky. Blinding electric flashes continued to intermittently light up my narrow room followed by terrifying crashes of thunder, as torrents of rain pounded the windows, so furiously it seemed the glass panes would shatter. As long as the storm remained overhead, I felt ill at ease, with a metallic taste in the mouth and a prickly feeling all over the body, but especially the scalp.

It was not the first time that my sleep had been disturbed that night. An hour or so earlier a fire-door had been allowed to slam and heavy footsteps could be heard in the corridor outside my room in the small guest house where I was staying. Keys were rattled before another door noisily banged shut, after which taps were run and a toilet flushed. Then loud rhythmic music with a heavy bassline began to reverberate through the wall behind my head,

accompanied by a raised but toneless female voice making repetitive guttural sounds as if taking part in a punishing exercise routine. Without any build-up of emotion or sense of intimate exchange; the joyless, almost mechanical monotony of the woman's cries made me think the event was being staged and that what I could overhear was the soundtrack of a porn flick. Strangely, I was reminded of the time I visited a wood-panelled library in the dome of the National Museum of Wales, where I sat for over an hour turning the pages of bestiaries, compendiums of natural philosophy in which stones are portrayed as having similar characteristics to birds and beasts, including magical powers. It happened to be a day when heavy rain was also falling and a wild wind blowing that made the rope and tackle on a flagpole on the museum roof outside bang together with an insistent high-pitched ringing sound that seemed destined to go on forever. There was a decidedly odd atmosphere in the museum library that day, with its dim lights flickering and sounds of water dripping: the roof was leaking and buckets had been strategically placed about the floor to catch the drips. Reading accounts of fantastical beasts including stones with magical powers only added to the feeling that something was amiss. Whether or not I came across any references to thunderstones I can no longer recall, though 'firestones' definitely made an appearance. Fire-bearing stones, I gathered, are male and female. When they are kept apart no fire is ignited; it is when they make contact and are rubbed together that a whole mountain can be set on fire, the moral being that men should stay clear of women, to avoid kindling lust. In a book that seemed to have been designed to cast spells, an inanimate natural object is treated as a symbol in order to remind the reader of the link between sexual desire and sin, as if this is an unquestionable fact written in stone, a law of nature.

Luxurious gold leaf dominates the illuminated illustration featuring firestones in the thirteenth-century *Aberdeen Bestiary*, as I found later, when continuing my research online. Accompanying a moralizing text instructing the monks for whom it was intended to avoid all contact with women, its background is bright with burnished gold. In the first 'frame' a nude couple can be seen standing beside a tree on a hummock described in the text as "a certain mountain in the East"³⁷⁵ that looks as if it has already been set alight and is about to burst into flames. The man and woman are exchanging meaningful glances, while holding aloft stones that could easily be mistaken for fruits from the tree of knowledge of good and evil, though around none of its stylized branches is there coiled a sinuously suggestive serpent. In the

³⁷⁵ Aberdeen University Library, MS Folio 93v, Aberdeen Bestiary Project, trans. by Morton Gauld and Colin McLaren, (online) <http://www.abdn.ac.uk/bestiary/translat/94r.hti> [accessed 23 November 2017]

second frame of this before-and-after tale of magnetic attraction, the mountain is blazing away so vigorously it obscures the wayward pair's lower regions, now that they are so perilously close to coming together 'as one', engulfed by limb-licking flames: *in flagrante delicto*.



Fig. 32, Aberdeen Bestiary, MS Folio 93v *Fire-bearing stones*, which in Greek are called *terrobolem*, twelfth century, The Sir Duncan Rice Library Special Collections Aberdeen

“The heart, therefore,” the text continues, “should be guarded and guided by all forms of divine teaching. For the love of women, which has been the cause of sin from the beginning, that is from Adam to the present day, rages uncontrolled in the sons of disobedience.”³⁷⁶ Coming across a morality tale that links sexual desire with sin (and blames women for it) in a religious text dating from the twelfth century aimed at trainee monks was almost to be expected. Finding a reference to sinful Eve in an anatomical textbook from the sixteenth century was more of a surprise. The German copy of an anatomical textbook by Andreas Vesalius entitled *De humani corporis fabrica librorum epitome* that I saw displayed at the Thomas Fisher Rare Books Library in Toronto had been opened to display its centrefold. I was struck by the fact that the two fine woodcuts of classical statuary that Vesalius had commissioned to illustrate surface anatomy had been labelled Adam and Eve. When I asked

³⁷⁶ Aberdeen Bestiary Project, (online).

the curator of the exhibition, Fisher librarian Philip Oldfield about this, he referred me to a scholarly book in which it is suggested the Biblical couple were incorporated into an anatomical treatise so that readers could consider the physical consequences of the Fall. As they studied external aspects of the human body, they could contrast its original created perfection with its flawed humanity.³⁷⁷

Numerous scholars have commented on the ways in which Vesalius sought to imbue his scientific books of anatomy with the allure of high art. Andrea Carlino describes how skillfully he used the power of the press to reproduce images and, in a new way, to integrate the verbal and the visual.³⁷⁸ Vivian Nutton argues that in such images “the anatomist’s/artist’s penetrating gaze un-covers the body beautiful [...] and transmutes the reality of dissection and of the subjects’ often modest social station, possibly also diseased bodies, into classically beautiful and healthy-looking exemplars.”³⁷⁹ Martin Kemp points out that while in his texts Vesalius may have insisted on “direct representation of the ‘real thing’” the bodies he commissioned artists to portray are “part of a *historia*” and artistic sources for his illustrations can readily be found.³⁸⁰ The classical pose known as the ‘*pudica* gesture’ was appropriated by Christian artists producing works in which a naked young woman is seen suggestively covering up her genitalia to illustrate the Biblical story. Art historian Patricia Simons cites works by Masaccio and Raphael that can be seen in the Brancacci chapel and the workshop at the Vatican, where Eve is portrayed leaving the Garden of Eden “plunged in penance (as if) trying to expiate by her contrite appearance the disgrace of that first crime and the shame of having brought ruin to humanity.”³⁸¹ Simons points out that *pudica* has its Latin root in the verb *pudeo*, meaning ‘to be ashamed’. She suggests that it “requires shame, scandal, disgrace or at the very least modesty (...) and a desire for approval (*pudor*). It is the word of an honor culture that deploys the term to police hierarchy, order and social value.”³⁸²

As to the effects of such a legacy within anatomy, most anatomists and medical students in a questionnaire survey I conducted expressed little if any concern about the image of

³⁷⁷ Kathleen Crowther, *Adam and Eve in the Protestant Reformation* (Cambridge: Cambridge University Press, 2010), p.92.

³⁷⁸ Andrea Carlino, ‘Paper Bodies: A Catalogue of Anatomical Fugitive Sheets 1538-1687’, *Medical History, Supplement*, 19 (1999), p. 38-58.

³⁷⁹ Nutton, Vivian. “Introduction.” *Andrae Vesalii De humani corporis fabrica libri septem*. <http://vesalius.northwestern.edu/books/FA.aa.html>. [accessed 12 December 2018]

³⁸⁰ Martin Kemp, ‘Style and non-style in anatomical illustrations’, *Journal of Anatomy*, 216 (2010) p. 196.

³⁸¹ Patricia Simons, ‘Anatomical Secrets: Pudenda and the Pudica Gesture’, in *Das Geheimnis am Beginn der europäischen Moderne*, ed. by Gisela Engel, Brita Rang, Klaus Reicher and Heide Wunder (Frankfurt: Vittorio Klostermann, 2002), pp. 302 – 27.

³⁸² *Ibid.* pp. 306-7.

Aphrodite/Eve as it appears in the *Epitome* by Vesalius. We provided second-year medical students at Cardiff University and the University of Paris Descartes with a questionnaire that included six images (historical as well as contemporary) that featured female anatomy that were specifically chosen because we considered them to reflect gender bias and sexist attitudes within the culture of medicine. The woodcuts featuring male and female surface anatomy from Vesalius's *Epitome*, for example, were understood to reveal "gendered conceptions and assumptions [...], the male body being seen as the standard norm displaying classical standards of perfection, symmetry and proportion, while the female, in accordance with the statue of the goddess of love on which it was based, adopts the Venus Pudica pose, symbolic of a culturally perceived need for modesty given an awareness of shame, as if the female body signifies imperfection."³⁸³ We were surprised at the low levels of concern that were expressed by the medical students and professional anatomists. What seemed noteworthy was that female anatomists in particular expressed so little concern, regardless of their professed degree of sympathy with gender politics, leading us to conjecture that in order to succeed within their chosen profession, they had learned not to question sexism or gender bias, even when it arises within the existing culture of medicine.

It seemed significant, too, that such low levels of concern were expressed when the medical students and anatomists were asked about the continued use of the term *pudenda* within anatomy.³⁸⁴ (The index to recent editions of *Gray's Anatomy* includes the instruction: "for *pudenda* see vulva" while the *Webster* and *Oxford Dictionaries* define *pudenda* as: "A person's external genitals, especially a woman's" and "the external genital organs of a human being and especially of a woman — usually used in plural".) On the questionnaire, the derivation of this anatomical term was given, as stemming from the Latin 'to be ashamed'. Though some anatomists I interviewed felt that as a historical term *pudenda* should not be judged by today's standards of political correctness, others were aware of it being difficult to access reliable data and images because of taboo. I also learned from a university librarian that until recently at a certain medical school in Ireland anatomical textbooks were held under lock and key in a building off-site where special permission had to be granted to

³⁸³ Susan Morgan, Odile Plaisant, Baptiste Lignier, Bernard J. Moxham, 'Medical students and professional anatomists do not perceive gender bias within imagery featuring anatomy', *Clinical Anatomy*, 30, (2017), pp. 711- 732.

³⁸⁴ Susan Morgan, Odile Plaisant, Baptiste Lignier and Bernard J. Moxham, 'Sexism within anatomy as perceived by professional anatomists and in comparison with the perception of medical students', *Clinical Anatomy*, 29 (2016) pp. 892- 910 (p. 901).

students and staff wishing to see them. That university staff should create their own Index of Forbidden Books and restrict access to vital learning resources for those training to be surgeons, in a society where representations of all parts of the body are so ubiquitous as to be barely worth mentioning, seemed incomprehensible to me, as well as counterproductive to medical study. I thought of an essay by Michel de Montaigne in which he argues that desires are increased by difficulty.³⁸⁵ The more dangerous the assignation and the greater the possibility of being discovered, the more relish and savour is added to pleasures dulled by access too easily achieved.

Stories like this made me eager to look for examples of anatomical texts that provided accurate descriptions of parts of the body affected by taboo without recourse to shame, by achieving an objective distance from the whole business of sin and need for modesty. I had recently been loaned a symposium issue of the *Journal of Anatomy* on the art of anatomy that includes an article by Professor Alessandro Riva, the-then Director of the Museum of Anatomical Waxes at the University of Cagliari, Sardinia. I was struck by a photograph of one of the models in the Cagliari collection, which the figure legend says is a model dating from 1803-05 that represents the dissection of the female perineum, revealing “the relationship of the bulbs of the vestibule with the urethra and the clitoris.”³⁸⁶

³⁸⁵ Michael Lord of Montaigne, ‘That Our Desires Are Encreased By Difficultie’, in *The Essayes of Michael Lord of Montaigne*, trans. by John Florio, 2 vols (London and Toronto: J. M. Dent and Sons Ltd., 1910) 2, p. 335.

³⁸⁶ Alessandro Riva, Gabrielle Conti, Paola Solinas and Francesco Loy, ‘The evolution of anatomical illustration and wax modelling in Italy from the 16th to early 19th centuries’, *Journal of Anatomy*, 216 (2010), 209-222 (218).

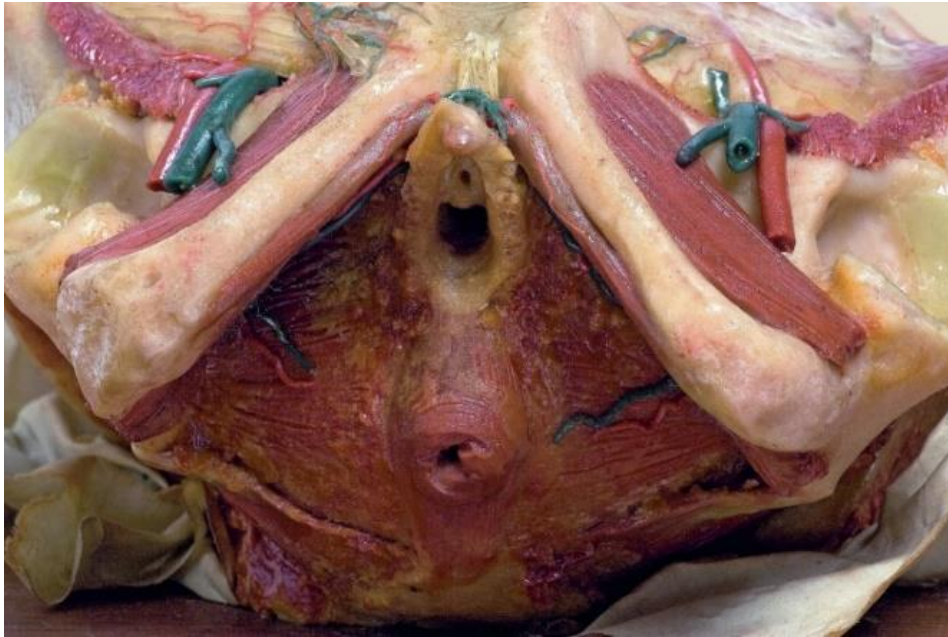


Fig. 33, Susini/Boi *Front view: glans of clitoris following removal of prepuce, external urethral orifice, corpora spongiosa of clitoris, hymen, perineal body, external ani sphincter, pelvic diaphragm and perineal vessels* Photograph by Dessi & Monari in *Flesh and Wax*, ed. by Alessandro Riva (Cagliari: University of Cagliari Press, 2007), p.9

O'Connell and colleagues argued that apart from a couple of excellent accounts of clitoral anatomy (by Kobelt in the 1840s and Poirier and Charpy in 1901), that include references to the bulbs of the vestibule, there is noticeable lack of accurate information about these details of female anatomy in the historical literature. It was a situation they sought to address in their own research based on cadaveric dissections in 1998.³⁸⁷ I was therefore intrigued to find that the wax anatomical model in Cagliari provided accurate information including details not found in most textbooks. I mentioned this to Professor Riva when I wrote to arrange my trip to Sardinia and he confirmed that the model represents the clearest possible view of the three-dimensional arrangement of organs, nerves, arteries and blood vessels in the female perineum. I wanted to see for myself whether it was an example of a dispassionate approach to representing parts of the female body connected with sexual function without reference to notions of sin or shame. It would be interesting, for example, to see if the term *pudenda* appeared in any of the labels. I was also keen to learn about the model's historical background and discover who had been involved in its production, as I was aware of

³⁸⁷ Helen E. O'Connell, Kalavampara V Sanjeevan and John M. Hutson, 'Anatomy of the Clitoris', *The Journal of Urology*, 174 (2005), 1189 -1195 (p.1193).

scholarly concerns with mixed messages in relation to the more famous full-length anatomical models of the female body known as the ‘Venus’ figures, like those exhibited at Bologna Institute of Sciences (now known as the *Palazzo Poggi* Museum) and at the Royal Museum of Physics and Natural History at Florence (commonly known as *La Specola*).³⁸⁸ Even in the age of Enlightenment, when anatomical illustration supposedly inclined towards truth-to-nature,³⁸⁹ it seems aesthetic concerns and notions of perfect forms in nature continued to dominate scientific representations of the body.³⁹⁰

It seemed pointless trying to get back to sleep until the storm was over, so I gingerly turned on the light to read. Two of the books I had brought along with me were by Sir Thomas Browne (1605–1682), whom I had first come across in W.G. Sebald’s *The Rings of Saturn*, where he is described as someone who “left behind a number of writings that defy all comparison.”³⁹¹ After languishing in the university’s repository for ‘older, less-used items’ the hardback copy of Volume 1 of *The Works of Sir Thomas Browne, containing four books of Vulgar Errors* was coming apart at the seams; its pages were yellowed with age and were so brittle to the touch that tiny fragments of the rough-cut edges easily crumbled and fell away. Published in 1890, it bore a nameplate dated 1892 showing that it had once belonged to the University College of South Wales and Monmouthshire Library. I wondered who had last turned its musty pages. Aided perhaps by Sebald’s endorsement, the seventeenth-century writer was enjoying something of a revival; the *New York Review of Books* had recently published an edition of *Religio-Medici* and *Urne Buriall* in its Classics Original series, which I had also brought along with me. I was aware, too, that Browne was about to be made the subject of an exhibition at the Royal College of Physicians in London, to celebrate the near completion of a new edition of his complete works, including all his letters and notebooks. I wanted to read his short prose pieces because I understood he wrote in the spirit of Montaigne.³⁹²

Browne includes an account of a violent storm at his home town of Norwich in *Miscellanies*, where he describes the noise and lightning as being “so terrible, that they put

³⁸⁸ See Monika von Düring, Georges Didi-Huberman and Marta Poggese, *Encyclopaedia Anatomica: A Complete Collection of Anatomical Waxes* (Cologne: Taschen, 1999), p. 13. Also Anna Maerker, *Wax anatomies and Enlightenment in Florence and Vienna, 1775 -1815* (Manchester: Manchester University Press, 2011), p. 6.

³⁸⁹ Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), pp. 70 – 74.

³⁹⁰ Corinna Wagner, ‘Replicating Venus: Art, Anatomy, Wax Models and Automata’, in *Interdisciplinary Studies in the Long Nineteenth Century*, 24 (2017) p. 3. DOI: <http://doi.org/10.16995/ntn.783>

³⁹¹ W.G. Sebald, *The Rings of Saturn* (London: Random House, 1998), p. 9.

³⁹² Stephen Greenblatt and Ramie Targoff, Introduction to *Religio Medici and Hydrotaphia, or Urne-Buriall* by Thomas Browne (New York: New York Review Books, 2012), p. xvii.

the whole city under their amazement, and most unto their prayers. The cracks seemed near over our heads during the most part of the thunder.”³⁹³ He lists several other entries for ‘Thunder’ in the General Index:

- Thunder compared with the report of gunpowder
- in a clear sky
- attributed to the fall of a meteoric stones
- of old called thunderbolts
- Thunderbolts, what³⁹⁴

Browne was famous for his private collection of curiosities that included the skulls of two whales, all manner of stuffed animals, birds and fish and tray upon tray of dried insects, as well as geological specimens. In ‘Miscellany Tracts’ he pokes fun at collecting mania by listing the contents of an imaginary collection kept in what he calls his *Musaeum Clausum* or *Bibilotheca Abscondita* (Lost Library).³⁹⁵ Perhaps unsurprisingly, given his medical training (at Oxford, Montpellier, Padua and Leiden) a number of these items feature anatomists and what would then have been called ‘natural philosophy’. Not that Browne could ever be accused of being a sceptic. A man of strong religious beliefs, he readily admits to being prepared to accept the defeat of his reason, confessing in *Religio Medici* that “I love to lose my selfe in a mystery,”³⁹⁶ it being his natural inclination to follow the example of Tertullian, who, when challenged to explain how he could believe in the Resurrection, said: “It is true because it is impossible.”³⁹⁷ The same Tertullian, I assumed, who ‘thundered’ according to Patricia Simons, “in the early third century, reminding women: ‘You are Eve... You are the Devil’s gateway; you are she who first violated the forbidden tree and broke the law of God.’”³⁹⁸

In Browne’s most successful book, *Pseudodoxia epidemica* or *Vulgar Errors* (1646), which ran to seven editions in his lifetime and was much translated, much of the discussion rests on matters of religion and he adopts a cautious approach if he comes close to rejecting long-held beliefs. Bullet-shaped ‘thunderstones’ or ‘thunderbolts’, for instance, were

³⁹³ Thomas Browne, ‘Miscellanies’, in *The Works of Sir Thomas Browne*, 3 vols (London, George Bell and Sons, 1889) 3, p. 341.

³⁹⁴ *Ibid.*, p. 550.

³⁹⁵ *Ibid.*, pp. 267 – 278.

³⁹⁶ Thomas Browne, ‘Religio Medici’, in *Religio Medici and Urne-Buriall* (New York: New York Review Books, 2012), p.12.

³⁹⁷ *Ibid.*, p.12.

³⁹⁸ Patricia Simons, ‘Anatomical Secrets. Pudenda and the Pudica Gesture’, in *Das Geheimnis am Beginn der europäischen Moderne*, ed. by Gisela Engel (Frankfurt a.M.: Klostermann, 2002), pp. 302–27 (p. 307).

commonly understood to have fallen to earth with bolts of lightning. According to the *Aberdeen Bestiary*: “If you wear one and behave chastely lightning will not strike the spot upon which you stand, and no storms will arise. A thunderstone will also help you in war and to achieve your purpose. It bestows sleep and sweet dreams. It has two colours.”³⁹⁹ As to whether such stones even exist, Browne chooses to suspend judgement, writing that: “Of other thunderbolts or *lapides fulminei*, I have little opinion. Some have I by me under that name; but they are of *e genere fossilium*.”⁴⁰⁰ Which is not to say that as a man of the seventeenth century he would have looked upon these fossils as they might be seen today (the remains of the boniest parts of belemnoids, squid-like animals related to cuttlefish, long extinct) because, like his contemporaries, he would have thought of them as minerals. Given his love of mystery, he may even have treated them as allegorical symbols, just as firestones in bestiaries symbolise the dangers of lust, which renders men powerless to resist the flames that devour or fragment their identities and turns them into beasts. I wondered if such objects represented early forms of ideas still in circulation, informing attitudes and opinions, not only in works of literature or art but also in science. Tracing the genesis and development of scientific facts back to their early beginnings in “prescientific, somewhat hazy, related proto-ideas or pre-ideas,”⁴⁰¹ the epidemiologist Ludwik Fleck suggested that “Words, then, were not originally names for objects [but were] originally phonetic and mental equivalents of the experiences coinciding with them. This explains the magical meaning of words and the dogmatic, reverential meaning of statements.”⁴⁰²

What made me next catch my breath was not a sudden clap of thunder or unexpected flash of lightning, as the storm was thankfully receding, but the discovery that Browne continued to believe in the existence of witches, despite the fact that most educated people of his time found charges of witchcraft to be grotesque and fantastical. Montaigne had eloquently voiced his opposition to witch trials in an essay published sixty years earlier, in 1580, arguing that uncertain religious beliefs should not prevail in cases where sentences might have dreadful consequences. “So does our sight often represent to us strange images at

³⁹⁹ Aberdeen Bestiary Project, trans. by Morton Gauld and Colin McLaren, (online) <https://www.abdn.ac.uk/bestiary/ms24/f103r> [accessed 25 November 2017]

⁴⁰⁰ Thomas Browne, ‘Account of a Thunderstorm at Norwich’, in *The Works of Sir Thomas Browne*, 3 vols (London: George Bell and Sons, 1890) 3, p.549.

⁴⁰¹ Ludwik Fleck, *Genesis and Development of a Scientific Fact*, 1935, transl. by Fred Bayley and Thaddeus J. Trenn (Chicago: The University of Chicago Press, 1979), p. 23.

⁴⁰²Ibid., p. 27.

a distance that vanish on approaching near”⁴⁰³ he had written, adding: “Report is never fully substantiated.”⁴⁰⁴ How differently Browne approaches the subject! One of his commonplace books contains a passage on possession and his role as an expert witness at a trial on 10 March 1664, at Bury St Edmunds is said to have led to the deaths of Amy Duny and Rose Cullender, two elderly widows accused by young girls of bewitching them. Asked for his judgement on this matter in his capacity as a renowned doctor, Browne’s response was to cite a similar case in Denmark, where witches made effigies of their victims and stuck them with pins in order to cause such ‘afflictions’. In his view the girls’ fits “were natural, but heightened by the Devil’s co-operating with the malice of the witches, at whose instance he did the villainies.”⁴⁰⁵

The notion that the female body, being soft and malleable, could be easily moulded to do the work of the Devil, was one that the renowned doctor seems to have been unable to resist. In his first essay on ‘popular errors’, entitled ‘The Infirmary of Human Nature’, Browne suggests that Eve was easy prey for the Devil, being female and therefore weaker than Adam. As the ‘First Woman’ she was readily corrupted by her senses and compelled to eat the fruit of the ‘Tree of Knowledge’ by the “lust of the flesh, the lust of the eye, and the pride of life.”⁴⁰⁶ Browne dedicates much of the rest of his book to dismissing common misconceptions regarding toads, frogs, salamanders, vipers and mandrakes, objects traditionally associated with folk medicine and witchcraft, while citing the endeavours of Satan as being one of the main causes of these mistaken beliefs.

Browne understands Nature to be evidence of God’s design, the perfection of each form in nature according with the “constituted and forlaid principles of his art.”⁴⁰⁷ Only one form is excluded from this harmonious scene, and that is because it is female. “The whole woman was made for man,” he writes: “man is the whole world and the breath of God, woman the rib onely and crooked piece of man.”⁴⁰⁸ Warming to this theme, Browne fervently wishes that “we might procreate like trees, without conjunction, or that there were any way to perpetuate the world without this trivial and vulgar way of coition; It is the foolishness of a wise man

⁴⁰³ Michel de Montaigne, ‘On the Lame’, in *The Essays: A Selection*, trans. by M.A. Screech (London: Penguin Books, 2004), p. 355.

⁴⁰⁴ Ibid. p. 355.

⁴⁰⁵ Supplementary memoir by Simon Wilkin, *The Works of Sir Thomas Browne*, 3 vols (London: George Bell and Sons, 1890), 1. p. lv.

⁴⁰⁶ Thomas Browne, ‘Pseudodoxia Epidemica’, in *The Works of Sir Thomas Browne*, 3 vols (London: George Bell and Sons, 1890), 1, p. 9.

⁴⁰⁷ Thomas Browne, ‘Religio Medici’, in *Religio Medici and Urne-Buriall* (New York: New York Review Books, 2012), p. 18.

⁴⁰⁸ Ibid. p. 78.

commits in all his life, nor is there anything that will more deject his cold imagination, when hee shall consider what an odde and unworthy piece of folly hee hath committed.”⁴⁰⁹

Rather like making the discovery that someone introduced to you by a trusted friend – and whom you therefore assumed would be good company – actually holds views that are highly objectionable, I was beginning to wonder why people are not more critical when discussing Thomas Browne. Despite his reputation as a highly respected doctor and Fellow of the Royal College of Physicians, it seemed I was being unrealistic in hoping that he might, as a writer of non-fiction, have been interested in representing factual knowledge and countering popular errors. Seeking to leave his dark world of superstitious beliefs, which was making me feel uneasy, I swapped the musty-smelling tome for a collection of essays written by Montaigne. In ‘On some lines of Virgil’, first published in 1580, he agrees with Plato that men and women share a common ‘mould’ and that nowhere is this seen more clearly than in our sexual drives, which he discusses with evident relish, without seeing the need for shame. Erotic love (*amour*) is compared to the loving friendship (*amitié*) that Montaigne thinks characterises the best kind of marriage and though he presents *amour* positively, as a perfectly acceptable pursuit of pleasure, this does not mean that it has anything to do with the coarse pornographic verses of classical Priapics, their Renaissance imitators or his contemporary Rabelais. Unlike Rabelais, for whom there was a gulf of difference between male and female, Montaigne sees similarity. Women may be brought up to be bashful and timorous but their minds and desires are not, he argues, and because he regards sexual activity as one that, while not always wise, is “health-bringing and appropriate for loosening up a sluggish mind and body,” for men to criticise and demean women for being lustful is tantamount to “the pot calling the kettle smutty.”⁴¹⁰ In fact he thinks it “a more chaste and fruitful practice to bring women to learn early what the living reality is rather than to allow them to make conjectures according to the licences of a heated imagination.”⁴¹¹ Montaigne seemed an ideal companion for my journey to the Museum of Anatomical Waxes at the University of Cagliari. An admirer of what he terms “straightforward way of thinking” he is full of praise for Virgil and Lucretius, whose writing he finds ‘solid’, because it “has sinews, it does not so much please you as invade you and enrapture you, because it is not only said well but thought well.”⁴¹² While accepting that sexual love is not without its difficulties,

⁴⁰⁹ Ibid. p. 78.

⁴¹⁰ Michel de Montaigne, ‘On some lines of Virgil’, in *The Essays, A Selection*, trans. by M.A. Screech (London: Penguin, 2004), p. 321.

⁴¹¹ Ibid, p. 284.

⁴¹² Ibid., p. 300.

Montaigne includes a long list of the good that it can do: “It is a vain pastime, it is true, indecorous, shaming and wrong; but ... as a doctor I would order it ... as readily as any other prescription to liven (him) up and keep (him) trim until (he) is well on in years and to postpone the onset of old age.”⁴¹³

I slept well for the remainder of the night and the following morning was pleased to find no evidence of damage caused by thunderstones. Setting off after breakfast in nearly 30 degrees heat, I walked first up a steep narrow street to the bottom of *Viale Regina Elena*, before following its graceful curve to the craggy pinnacle that dominates the skyline of Cagliari. The blue of the sky might have been a little clearer than the previous day and the piled up cumulonimbus clouds more achingly white and safely distant, but the air, already stifling, carried with it only the faintest scents of dampened soil and fragrant pine needles.

At various points along *Viale Regina Elena* there are small terraces where those intent on making their way on foot up to the Citadel of Museums can stop to catch their breath while taking in wide views over the rooftops of this part of town. From one such vantage point I watched a silvery plane descending on its approach to the airport while a bulky ferry ponderously left the docks and sunlight glinted on the turning blades of a windfarm located on distant salt flats. The Citadel, a walled medieval town, once the site of a fortress as well as a royal armoury, is now home to the Ethnographic and National Art Museums and the Museum of Anatomical Waxes at the University of Cagliari, which was where I was heading.

Once there in its welcome shade, I walked up a generous flight of well-worn stone steps to the first floor, tracing smooth marine fossils that I could see embedded in the giant sandstone blocks that make up the ancient walls. On the landing where the reception desk is located I could gaze out through wide balcony doors and windows at the golden townscape below and the thin dark line of the horizon where the pale blue waters of the *Golfo degli Angeli* meet the sky, a view that induced in me a marvellous sensation of buoyancy and lightness, as if anything was possible.

⁴¹³ Ibid., pp.321 – 322.



Fig. 34, View from inside the Museum of Anatomical Waxes, Cagliari, photograph Susan Morgan, 2016

The spacious interior and emptiness of much of the building in the Cagliari University Museum complex in *Piazza Arsenale* (also known as the Cagliari Citadel of Museums) made it feel like a series of airy caves in a high coastal cliff, its thick sandstone walls helping to maintain a constant cool temperature within. In the gallery housing the collection I could see that floor-to-ceiling curtains were kept tightly drawn to protect the contents of the display cases from the effects of strong sunlight and high summer temperatures. It was there I had arranged to meet its recently retired Director, Professor Alessandro Riva, and his successor Dr Francesco Loy, who had kindly offered to give me a private tour. While I was waiting for them to arrive, the security guard working at the museum, a young man who told me his name was Emmanuel, generously set up a makeshift table for me so that I could take notes from a beautifully illustrated book of essays on the anatomical models at the museum in Cagliari. In the opening essay, Professor Riva explains that Francesco Boi was born in a small village in central Sardinia in 1767 to a farming family.⁴¹⁴ After initially studying to join the clergy he enrolled as a medical student in Cagliari, where shortly after obtaining his

⁴¹⁴ Alessandro Riva, 'The Collection of wax anatomical models by Clemente Susini at the University of Cagliari', in *Flesh and Wax*, ed. by Alessandro Riva (Cagliari: University of Cagliari Press, 2007), p.9.

degree, he was appointed *Professore Straordinario* in medicine and later that same year, at the impressively young age of 33, to the Chair of Anatomy. In 1801, having been awarded a sabbatical to further his studies, he went first to Pavia, where Antonio Scarpa (1752–1832) was Professor of Anatomy and Surgery.⁴¹⁵ Then, following a spell in Pisa, he travelled to Florence, where he stayed on until 1805, firstly attending anatomical lectures and demonstrations at the anatomy laboratory of the general hospital (*Arcispedale of Santa Maria Nuova*) given by Paolo Mascagni, then assisting him in his teaching. It was during this time that the twenty-three cases of anatomical wax models in the collection at Cagliari were produced in the ceroplastics workshop at the Museum of Natural History and Physics. The Viceroy of Sardinia, Carlo Felice, who had recently founded a Museum of Antiquities and Natural History in Cagliari, funded their transport there before donating them to the university to enrich its educational provision.⁴¹⁶

When I entered the gallery housing the collection, Professor Riva told me that compared to other collections it is small: with twenty three showcases for a total of seventy eight pieces. (*La Specola*, the museum of natural history and physics in Florence, contains several hundred cases with over a thousand specimens.) Though the models in Cagliari were manufactured in the ceroplastics workshop at *La Specola*, in 1803 – 1805 its Director, Felice Fontana, no longer supervised the production of the wax models. It has been suggested that Fontana's absence meant that the chief wax modeller at the workshop, Clemente Susini, finally gained recognition for his artistic talents.⁴¹⁷ In the museum at Cagliari, for instance, all the cases display a card bearing the date and Susini's signature, an acknowledgement of his role that is absent in all the other collections he was involved in.

No models of whole human figures are to be found in the collection in Cagliari, though the most complete preparation, in Case III, was the one I was most interested to see, being a demonstration of the head and torso of a young female. Professor Riva had come to the museum that day armed with a small torch as this particular model is dimly lit, making it difficult to examine closely, especially from the rear. A number of other visitors had entered the gallery by the time we began our inspection, but any feelings of incongruity were soon dispelled because what the professor was speaking about was so fascinating and his manner so robust and straightforward. Agreeing that the models here in Cagliari were different to

⁴¹⁵ Ibid., p.10.

⁴¹⁶ Ibid., p.10.

⁴¹⁷ Alessandro Riva and Gabriele Conti, 'Art and Science in the anatomical waxes of Susini-Boi of the University of Cagliari', *Museologia Scientifica Memorie*, 14 (2015), 101 -107, (p.102).

those on display in Florence, he suggested that this was because they had been designed with a different audience in mind. In order to give medical students information useful for their professional training, they include references to clinical anatomy which are absent in the models in the collection at *La Specola*. He explained that not only does the model in Case III demonstrate the exceptional skill of Boi as a dissector, it shows the structure of the female perineum with a level of detail that was unmatched until recent studies. Aspects of internal sexual anatomy that it provides include the relationship of the glans of the clitoris, the urethra and the bulbs of the vestibule (now renamed *corpora spongiosa clitoridis*) which are not present in the collection in Florence.

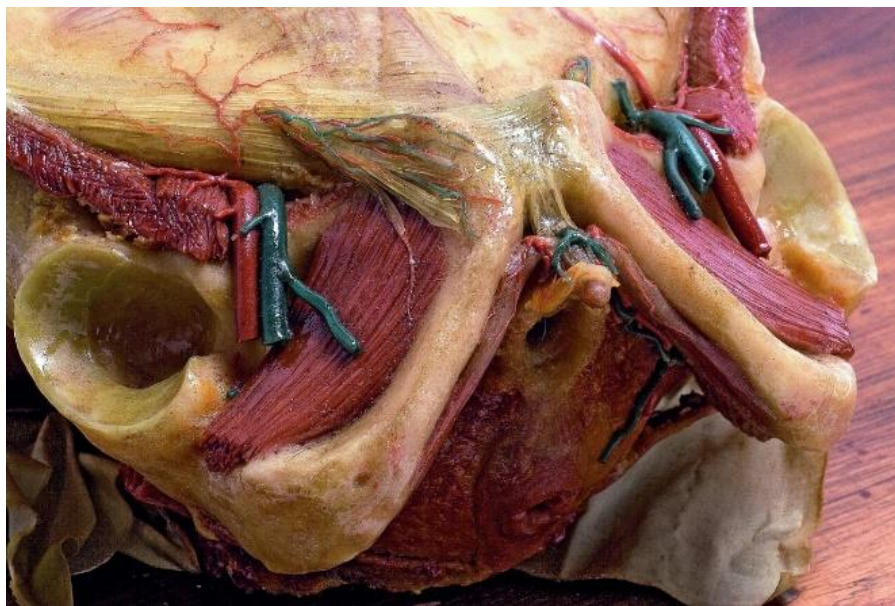


Fig. 35, *Oblique view: suspensory ligament of the clitoris, corpora spongiosa of the clitoris, dorsal veins of the clitoris, hymen, perineal artery and vein, internal (“pudendal”) vessels, perineal body, external ani sphincter, pelvic diaphragm, gluteus maximus*, photograph by Dessi & Monari in *Flesh and Wax*, ed. by Alessandro Riva (Cagliari: University of Cagliari Press, 2007), p. 9.

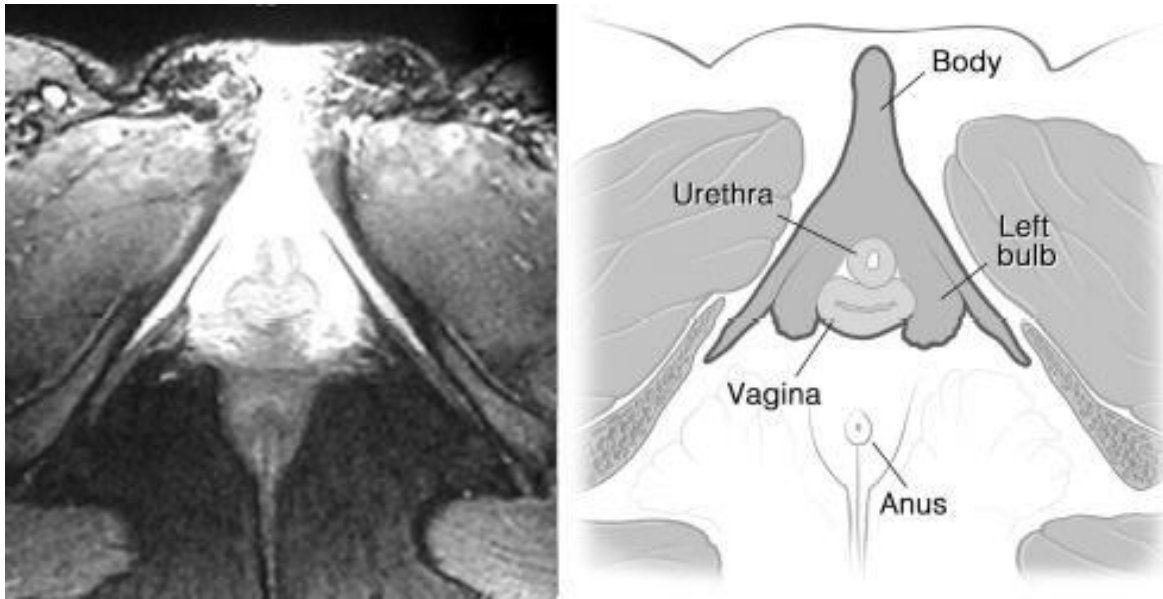


Fig. 36, *Clitoris and its components in axial plane in premenopausal nullipara, including bulbs, crura and corpora*, MRI and drawing, O’Connell, Helen E., Kalavampara V Sanjeevan and John M. Hutson, ‘Anatomy of the Clitoris’, *The Journal of Urology*, 174 (2005), p. 1191.

Seeing the model, what struck me was how well it revealed the complexity of female genitalia. In a research paper published in 1998 Helen E. O’Connell and John O.L. DeLancey make the point that erectile tissues in the female are relatively difficult to display, because of the composite three–dimensional relationships of the bulbs, urethra, vagina and body and arms of the clitoris.⁴¹⁸ Professor Riva told me that he finds the Cagliari model exemplary and believes it should be valued for its scientific value and for its demonstration of the way that bulbar erectile tissue is so intimately related to other components of the clitoris and urethra. He also made the point that it fits perfectly with requirements as laid down for the uses of waxes in anatomy by Antonio Scarpa. While not believing that wax models could ever be a substitute for cadaveric dissections, Scarpa thought that they could be conveniently used for demonstrating parts of the human body that cannot be preserved for long periods, as well as those that cannot be entirely demonstrated from a single point of view, those that are hardly visible and especially those that require the use of a microscope.⁴¹⁹

I found it intriguing that at a time of tumultuous change in Tuscany during the French Revolutionary Wars (when the Grand Duchy was dissolved and replaced by the short-lived

⁴¹⁸ Helen E. O’Connell, John M. Hutson, Colin R. Anderson and Robert J. Plenter, ‘Anatomical Relationship between Urethra and Clitoris’, *The Journal of Urology*, 159 (1998), 1892 -1897 (p.1896).

⁴¹⁹ Alessandro Riva, Gabriele Conti, Paola Solinas and Francesco Loy, ‘The evolution of anatomical illustration and wax modelling in Italy from the 16th to the early 19th centuries’, *Journal of Anatomy*, 216 (2010), 209 -222 (p. 220).

Kingdom of Etruria) it seems to have been possible for an anatomist to demonstrate details of female genitalia useful for the teaching of clinical medicine that rarely appear in anatomical textbooks even today. Given the accuracy of the model known as the ‘Head and Torso of a Young Female’, what puzzled me was why it is not more widely known and celebrated. The attraction of the Venus models endures, despite (or because of) their lack of information. Contemporary writers respond in often gushing ways to their appeal, stressing their life-like qualities and even personifying them. The iconic female model in Florence known as ‘The Anatomical Venus’ (or sometimes the ‘Medici Venus’) has been described, for example, as a ‘she’ who “swoons.”⁴²⁰ More attention in such accounts is given to the soft furnishings and fashion accessories (silk sheets, stuffed cushions, ribbons, bows and strings of pearls) and the figure’s pose (smooth shapely legs with thighs modestly placed together, head gently thrown back), facial expression (slightly-parted lips and half-closed eyes) and loosened braids of real human hair, rather than scientifically relevant anatomical details that might be of clinical interest.

Having read much about them and seen many sumptuous photographs, I was surprised by what I actually found when, six months later, I travelled to Florence. Expecting to be impressed by a grand Enlightenment project, a showcase for the Grand Duke Pietro Leopoldo’s vision of a modern nation state organised according to empirical scientific principles, it seemed strange that the museum itself was so difficult to locate. Making my way down a narrow winding street after passing the wide open expanse of sloping frontage to the Palazzo Pitti that helps to further elevate it, on my first attempt to find *La Specola* I missed it completely, walking right past the arched entrance to its dark courtyard, without even noticing it was there.

When I did manage to find the unlit stone staircase that leads to the floor where Dr Corti’s office is situated, I was finally able to meet up with her, but because of her busy schedule we arranged to tour the galleries containing the wax anatomical model collection later that day. In the meantime, on her recommendation, I walked through a maze of Zoology galleries displaying countless taxidermy specimens (including a fierce-looking hippopotamus) before finally settling down in a little room off the main staircase to watch a documentary film outlining the history of the museum. Sitting hunched up because of the cold beneath a stuffed crocodile trussed in leather and suspended by heavy chains from the ceiling, I felt as if I was yet one more object in a private cabinet of curiosity, like that owned

⁴²⁰ Meg Schoerke, *Anatomical Venus* (Cincinnati: Word Press, 2004) p.17.

by Ole Worm (1588–1654), as pictured on the frontispiece of its catalogue, a copy of which was found in Thomas Browne’s library, where ‘nature’s oddities’ including turtle shells and snake skins are displayed alongside preserved exotic specimens without any attempt to categorise them.

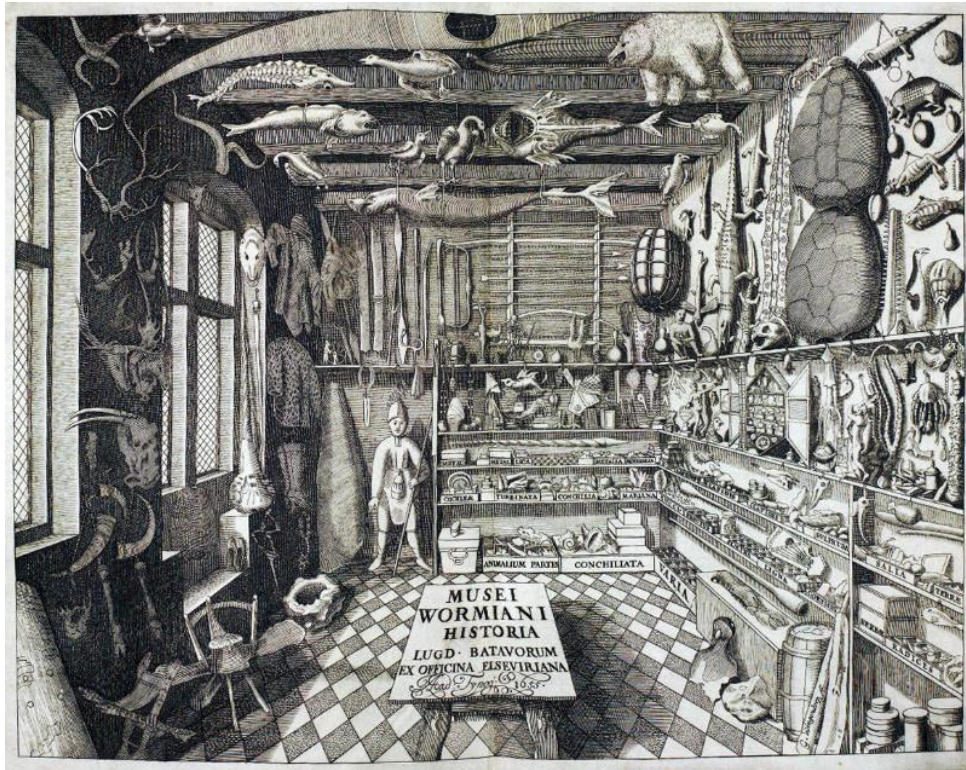


Fig. 37, *Museum Wormianum* in Kunstkammer, ‘Museum Wormianum’ (1655), engraving, Photographer: Jamie Carstairs, University of Bristol Special Collections

I learned from the film that it was the Grand Duke Leopold’s intention to create a public museum that would be a neoclassical monument to the empirical sciences, staffed by professors of various disciplines who would help to oversee a collection that would be “organized in a unified manner according to an exhibition design passing from the earth to the sky.”⁴²¹ I already knew from reading an article in the *Journal of Anatomy* that Felice Fontana, the abbot and professor of physics, had been entrusted in 1771 by the Grand Duke Peter Leopold to oversee the scientific development of the Museum of Natural History and Physics in Florence. Fontana, so the authors suggested, greatly admired the anatomical wax models he had seen at Bologna’s Institute of the Science as a student. He also recognised the

⁴²¹ Home Page, *universita degli studi Firenze, museo di storia naturale* (last update 12 December 2017) <https://www.msn.unifi.it/vp-342-history.html?newlang=eng>, [accessed 03/01/2018].

sculptor Giuseppe Ferrini's expertise as a modeller.⁴²² After setting up his own ceroplastics workshop, Fontana engaged Ferrini and the 19-year-old Clemente Susini so that the production of models for display in the Museum of Natural History and Physics could begin. Fontana initially conducted the necessary dissections of cadavers himself, before Antonio Matteuci was taken on as chief dissector, followed by other anatomists, including the famous Paolo Mascagni. The modellers involved were all artists by training (Susini was a student of sculpture and glass engraving at Florence's Academy of Fine Arts), but the scientific accuracy of the models they created was guaranteed by the careful supervision offered throughout the production process by professional anatomists who prepared the cadaveric specimens and parts required for the commissions.⁴²³

In the film it was suggested that the Museum of Natural History and Physics in Florence was one of the first museums of its type to be opened to the general public when it was established in 1775 and the first to present Nature on such an ambitious scale. As the collection grew the building proved to be too small and some departments were moved to different premises across the city. I thought of the stuffed hippopotamus I had just seen, which, according to an account I read, was one of the most famous animals in the Medici family's menagerie, living in a fountain, "perhaps the one in front of the Pitti Palace."⁴²⁴ It was just one of the many items in the collection that came from the Medici's cabinets of curiosities. Perhaps the accumulation of these objects was so great they reached the ceilings, as in the university literature department described by W.G. Sebald, where one of his colleagues had an office in which there was an "amazing profusion of paper, a virtual paper landscape (that) had come into being in the course of time, with mountains and valleys" so much so that "the paper had begun climbing from the floor, on which, year after year, it had settled, and was now up the walls as high as the top of the door frame, page upon page of memoranda and notes pinned up in multiple layers."⁴²⁵ By the late 1880s only Zoology and the galleries displaying Galileo's Instruments remained, along with a door leading to a corridor connecting the museum to the Palazzo Pitti and from there over the river to the Uffizi via the famous 'Vasari Corridor', seen by some to be a testament to its history as a physical route connecting the arts and sciences.

⁴²² Alessandro Riva, Gabriele Conti, Paola Solinas and Francesco Loy, 'The evolution of anatomical illustration and wax modelling in Italy from the 16th to early 19th centuries', *Journal of Anatomy*, 216: 2 (2009), 209–222 (p. 214).

⁴²³ *Ibid.*, p. 215.

⁴²⁴ Liv Emma Thorsen, 'The Hippopotamus in Florentine Zoological Museum "La Specola", a Discussion of Stuffed Animals as Sources of Cultural History', *Museologica scientifica*, 21 (2006), 269-281 (p. 272).

⁴²⁵ W.G. Sebald, *The Rings of Saturn* (London: Random House, 1998), pp. 8-9.

Most accounts of the wax model collection at Museum of Natural History and Physics in Florence (it was when a glass observatory was installed in its roof in 1790 that it became known as *La Specola*)⁴²⁶ make the point that they are ‘anatomically accurate’.⁴²⁷ *The Mirror of Literature*, a London based magazine that ran from 1822 – 1849, featured original essays including traveller’s tales. In one it is suggested that the series of anatomical sculptures in coloured wax at *La Specola* were superior to preserved body parts: “They imitate equally well the form, and more exactly the colouring of nature, than injected preparations; and they have been employed to perpetuate many transient phenomena of disease, of which no other art could have made so lively a record.”⁴²⁸

Even so, I imagined those visitors who made the journey to *La Specola* in search of factual information about female anatomy would have felt let down. Not only are there twice as many models of male anatomical bodies as females on display; male and female models are styled differently. As in anatomical textbooks, the male body is understood to represent the anatomical norm, in order to display the three-dimensional relationships of organs of the human body, as well as skeletal, muscular, nervous and vascular systems, in an idealised figure. None of the whole body male figures, whether posed in upright supposedly active poses or supine and seemingly ‘lifeless’, are presented with skin intact. Like *écorché* textbook anatomical illustrations of flayed cadavers, each figure represents a different system of the body as it might be seen after layers of skin and fat have been removed during dissection. In complete contrast to the models of male bodies, the whole body female wax figures were modelled so as to appear life-like. Their ‘skin’ is intact and painted to look flushed, and they have been provided with long flowing tresses of real human hair and carefully arranged items of jewellery. Though one female model portrays the lymphatic system (with one leg elegantly raised so that its thigh presses demurely against the other) and another the digestive system (wistfully gazing into the distance while idly twisting a plait of long blonde hair) the others all display reproductive anatomy, though no female whole body model features genitalia. I understood from my reading that the only demountable figure in the collection – the iconic ‘Anatomical Venus’ – displays no visible signs of pregnancy externally. It is only when the model is disassembled that a foetus is revealed, one that is too

⁴²⁶ Anna Maerker, *Wax anatomies and Enlightenment in Florence and Vienna, 1775 -1815* (Manchester: Manchester University Press, 2011), p. 20.

⁴²⁷ See Roberta Ballestriero, ‘Anatomical models and wax Venuses’, *Journal of Anatomy*, 216 (2010), 223 – 234 (p.225). Also Anna Maerker, *Wax Anatomies and Enlightenment in Florence and Vienna, 1775 -1815* (Manchester: Manchester University Press, 2011), p. 128.

⁴²⁸ Thomas Byerly, *The Mirror of Literature* (London: J. Limberd 1824), pp. 318- 319.

advanced in its development to be the size it has been given.⁴²⁹ Strangely, I found such inaccuracies are rarely commented upon, as if it continues to be acceptable to represent the ideal female body as one that is young, sexually appealing and fertile, rather than one that is anatomically accurate.

Annotated watercolour paintings and explanatory notes kept in drawers inside the cases were designed to help locate and learn the anatomical terms for key parts of the body. The aim of the collection, however, was not just to educate, but also to ‘elevate’ the museum visitor, by introducing them to works of classical art and ideas of perfect proportion. Art historian Roberta Ballistrerio likens them to figures from Renaissance art that represent an “ideal”.⁴³⁰



Fig. 38. Decomposable statue of a pregnant woman (The Medici Venus), 1782. C. Susini and G. Ferrini, Museum *La Specola*, Florence, Italy, modelled by Clemente Susini (1780- 1790) *J Anat.* 2010 Feb; 216(2): 223–234.

Perhaps Susini was required to adopt an aesthetic approach when modelling anatomical figures for the collection in Florence because his instructions were to ensure that they would be considered ‘beautiful’. In the paper written by my hosts at Cagliari it is suggested that the founder of the museum, the Grand Duke Leopoldo, was repelled by anatomical preparations based on cadaveric dissections.⁴³¹ It seems likely his court scientist was under pressure to remove what were considered to be the more appalling aspects of models based on dead bodies or body parts. Roberta Ballestrerio notes that Fontana is said to have remarked that

⁴²⁹ Roberta Ballestrerio, ‘Anatomical models and wax Venuses’, *Journal of Anatomy*, 216 (2010), 223 – 234 (p.231).

⁴³⁰ *Ibid.*, p.227.

⁴³¹ Alessandro Riva, Gabriele Conti, Paola Solinas and Francesco Loy, ‘The evolution of anatomical illustration and wax modelling in Italy’, *Journal of Anatomy*, 216 (2010), 209-222 (p. 214).

“the interest of the Royal museum demands that the defects be removed and the works be perfect.”⁴³²

That afternoon, when making my way around *La Specola*'s anatomical wax collection with Dr Corti, alongside a noisy and distracted looking school party, my biggest surprise was that the supposed star of the show, the ‘Anatomical Venus’, was not actually on display. Sensing my disappointment, Dr Corti generously took me behind the scenes to the darkened storeroom where the model was awaiting essential repairs to some very dingy-looking tattered silk sheets and cushions on which it was laid. By using her mobile phone as a torch, she let me have a quick sighting of it and I was struck by how different it looked to the glossy photographs I had seen in a recently published book (that I now realised made it seem almost too perfect to be true.) When I asked Dr Corti how accessible it would have been to visitors historically, having been led to believe that it was a model that allowed “the expert as well as the amateur and even the unschooled virtually to do human dissection themselves,” she told me that though there are reports that modellers were sometimes called upon to demonstrate its disassembly to eminent guests at private viewings, most visitors to the museum would not have been able to handle the wax figure themselves.⁴³³

Even those Sleeping Beauties (known by some as *Le Grazie Smontate*, the Dissected Graces) that were on display could not be seen up close or walked around that day because their cases were situated in roped off areas. If this was a display intended to disseminate scientific information it was difficult to see how this could be achieved, given the security measures in place, similar to those in the art gallery in Cardiff's National Museum of Wales, where a museum assistant had recently warned me not to lean too far over a barrier wire (looking worryingly like an electric fence) as a security alarm might be set off by my slightest breath. Glimpsed from afar, they could have been princesses in glass coffins, though if they were the stuff of fairy tales, these would have been fairy-tales for adults. You would think most people today would find them incongruous in a scientific setting, given their resemblance to the titillating wax models known as Anatomical Venuses that were the most popular attraction in touring fairground shows in the early and mid-eighteenth century. With their legs archly raised and shapely thighs pressed together, they reminded me of photographs of a 1960s celebrity actress (or was it the American ‘First Lady’?) trying to extricate herself

⁴³² Roberta Ballestriero, ‘Anatomical models and wax Venuses’, *Journal of Anatomy*, 216 (2010), 223–234 (p. 227).

⁴³³ Rebecca Messbarger, ‘The Re-Birth of Venus in Florence’s Royal Museum of Physics and Natural History’, *Journal of the History of Collections*, 25 (2012), 195–215 (p. 195).

from the passenger seat of a luxury car in a tight pencil skirt and high heeled shoes whilst following strict rules of feminine deportment.

Above waist-high stacks of smaller display cases containing models of anatomised body parts, the gallery walls were crammed with framed annotated watercolours of the models. In the gallery known as the *Sala dell' Ostetricia* there were cases containing wax models of dissected preparations of female reproductive anatomy including the vagina. Stuck to wooden boards, they made me think of marine specimens, or bits of flotsam and jetsam in an art installation featuring an ecological disaster. As presentations of female sexual anatomy they seemed old-fashioned as compared to the model produced by Susini and Boi that I had seen in Sardinia, like left-overs from the age of the earliest textbooks, by Vesalius for example, who disputed the existence of the clitoris in normal women. The vagina for Vesalius was the structural equivalent of the penis. In 1540, a German student, Balthasar Heseler, attending Vesalius' dissection at Bologna, reported that he taught the students (in the absence of a female cadaver) that:

Galen says that the organs of procreation are the same in the male and in the female, only that in the female all is reversed to the male, in whom that which is inside in the female is outside. And again in the male all is contrary to the female. For if you turn the scrotum, the testicles and the penis inside out you will also have all the genital organs of the female, like they are in the male. (Yet the penis of the male is more solid, the neck of the uterus of the female more excavated and concave and much more extendable in time of coitus and parturition.) Vice versa, if you turn inside out the genital organs of the female, you will have all the organs of the male. Thus, they differ only by being reversed. The reason of this reversion in the female is that they have all their genital organs inside, and that is, I maintain, owing to their lack of natural warmth.⁴³⁴

⁴³⁴ R. Eriksson, *Andreas Vesalius' First Public Anatomy at Bologna, 1540, an eyewitness report by Baldasar Heseler, medicinae scholaris, together with his notes on Matthaeus Curtius' lectures on Anatomia Mundini*, trans. by R. Eriksson (Uppsala: Almqvist and Wiksell, 1959) pp.181–183.

I began to think that part of Fontana’s problem (with scientific accuracy) was his approach to female anatomy. As a student at the Institute of Sciences in Bologna, he would have been exposed to wax anatomical models styled according to aesthetic principles. Despite its name, the Institute housed both the Academy of Science and the Clementina Academy of Fine Arts. Historian Lucia Dacombe describes it as a setting where “canons and maps of fortifications stood alongside scientific instruments, anatomical models, the school of drawing, and the library, all gathered together under the same roof.”⁴³⁵ Objects in the collection were housed in specially designed cabinets and the cabinet of anatomy, commissioned by Pope Benedetto XIV, took six years to complete. It contained eight wax statues and exhibits of single bones and muscles made by such artists as Ercole Lelli and Giovanni Manzolini, along with the sculptor Domenico Piò. Such displays were designed to offer medical students practical training, since “Anatomy must be studied more with eyes than with ears”⁴³⁶ there being at the time an Academy Institutional Act making it compulsory.

Models produced by Ercole Lelli in the 1740s included spectacular life-sized wax figures representing different stages of dissection based on textbook illustrations by artists. While their accuracy could not have been achieved without the expert dissection of hundreds of cadavers, they were also designed for the training of sculptors and painters. In the eighteenth century anatomy was understood to be a key part of artists’ training, to help them render the human figure as naturalistically as possible. What I couldn’t help wondering was if the merging of the two entities of the Clementina Academy of Fine Arts and the Bologna Institute of Sciences, which Rebecca Messbarger suggests was the expression of “a vision of the inherent attachment and overlap of science with art that was a defining, albeit controversial, attribute of eighteenth-century Bolognese intellectual life and practice...” was one factor that led to the perpetuation of anatomy’s gendered representations of the human body.⁴³⁷ Lelli’s figures include a couple with life-like poses and expressive faces that represent surface anatomy. They became known as Adam and Eve; the human body being seen in a state of innocent perfection before the Fall. At the same time that realism and notions

⁴³⁵ Lucia Dacombe, *Malleable Anatomies: Models, Makers, and Material Culture in Eighteenth Century Italy*, (Oxford: Oxford University Press, 2017), p. 60.

⁴³⁶ Nadir M. Maraldi, Giovanni Mazzotti, Lucio Cocco, Francesco A. Manzoli, ‘Anatomical waxwork modeling: The history of the Bologna Anatomy Museum’, *The Anatomical Record*, 261 (2000) 5–10 (p.6).

⁴³⁷ Rebecca Messbarger, *The Lady Anatomist: The Life and Work of Anna Morandi Manzolini* (Chicago: The University of Chicago Press, 2010), p. 6.

of transparency were being promoted symbolic portrayals of the body were being scientifically endorsed, along with attitudes relating to gendered biological difference.



Fig. 41 Ercole Lelli, *Adam and Eve, Anatomical Models*, 1742-51, wax, wood, bone, Museum of the Department of Human Anatomy, Bologna University.

There were very different anatomical wax models being produced in Bologna at this time, Giovanni Manzolini (previously Lelli's chief assistant) and the artist Anna Morandi having opened their own workshop and rival anatomy school there in the late 1740s. After Manzolini's death in 1755 Morandi continued to produce highly acclaimed systematised models of organs that she dissected herself for use in anatomical and medical education.⁴³⁸ Her expert demonstrations and lectures using wax models portraying discrete organs as well as whole body systems represented a clinically based approach towards anatomical knowledge rather than one located within an artistic tradition. Morandi's models featured parts that were anatomised sometimes to the microscopic level, while her teaching notes

⁴³⁸ Rebecca Messbarger, *The Lady Anatomist: The Life and Work of Anna Morandi Manzolini* (Chicago and London: The University of Chicago Press, 2010) pp. 108 – 118.

reveal an active participation in scientific anatomical research, sometimes disputing received knowledge and suggesting alternatives. That this was not to be the case for the female models intended for the Museum of Natural History and Physics in Florence seems clear. I was beginning to feel that Felice Fontana might have been made ill by the failure of his ambition to make visible the anatomy of the human body. The more he wished to continue to correct his wax models in order to keep up with the latest anatomical discoveries, the more obstacles he encountered. He seems to have lost all confidence in the ability of wax modelling to accurately demonstrate cadaveric dissection. Withdrawing from his duties at *La Specola*, he threw himself into what was to be his final obsession: constructing a “full-scale, decomposable wooden model of a man” out of hundreds of individually carved pieces of wood.⁴³⁹

The gap between what I had been expecting to see and what I actually found at *La Specola* was making me question the accuracy of these figures, my trust in them becoming as tattered as the shroud-like sheets of the Anatomical Venus glimpsed earlier in the dim back-room. When I returned to the galleries to take photographs, the school party had gone and the rooms were gloomily silent and still. I was surprised when I entered the first gallery to find a couple dressed all in black seated on folding chairs. The young woman looked up from time to time while sketching one of the upright models; I could hear the faint scratching of her pencil as she worked, bent almost double as she leaned over a drawing pad that was resting on her knees. He was frowning at his mobile phone and rapidly tapping its keys, his face turned a sickly green by the light emanating from its screen. I wished I could have asked them why they thought anatomy was no longer part of an artists’ training and increasingly, no longer part of the curriculum of medical training.

On going downstairs I again lost my way. Turning a corner in some confusion, I was startled by a case containing a model of a giant-sized misshapen human head and upper torso (looking like a prop from the popular science fiction series ‘Dr Who’). I was relieved to stumble upon a door that opened onto an area at the back of the building. Having glimpsed what I thought were exotic trees and shrubs from an upstairs window during my earlier tour of the galleries, I imagined it would be a well-stocked botanical garden, filled with neatly labelled trees and flowering shrubs brought from afar, planted around a water feature, a fountain perhaps, in which lazy goldfish might show off their shining scales before slowly

⁴³⁹ Anna Maerker, *Wax anatomies and Enlightenment in Florence and Vienna, 1775 -1815* (Manchester: Manchester University Press, 2011), pp. 133- 135 (p.133).

turning again to sink beneath the pads of giant water lilies. If it had once been a working garden for scientific experiments and displays, it now looked sadly neglected, if not completely abandoned. Against a high wall streaked with damp moss and algae, a birch sapling had been allowed to grow like a scrawny weed. That day, being only the second of March, its twigs were completely bare. Its skeletal appearance made me think of the bleached remains of ancient apple trees in decommissioned orchards near Hereford that I had recently seen from a Welsh Marches train, and the relic of what must have been a gnarled giant glimpsed a short while later on that same journey half-buried in the mud of the River Usk in Newport at low tide. On that particular day bright sunlight had given the mud a silvery, almost metallic sheen; here in the garden at *La Specola* the only place where light was reflected was a tiny pool of water strewn with remnants of winter-dead leaves in the relic of what must have once been a fountain. It was encircled by iron railings now covered in rust and moss that gave them a mottled appearance.

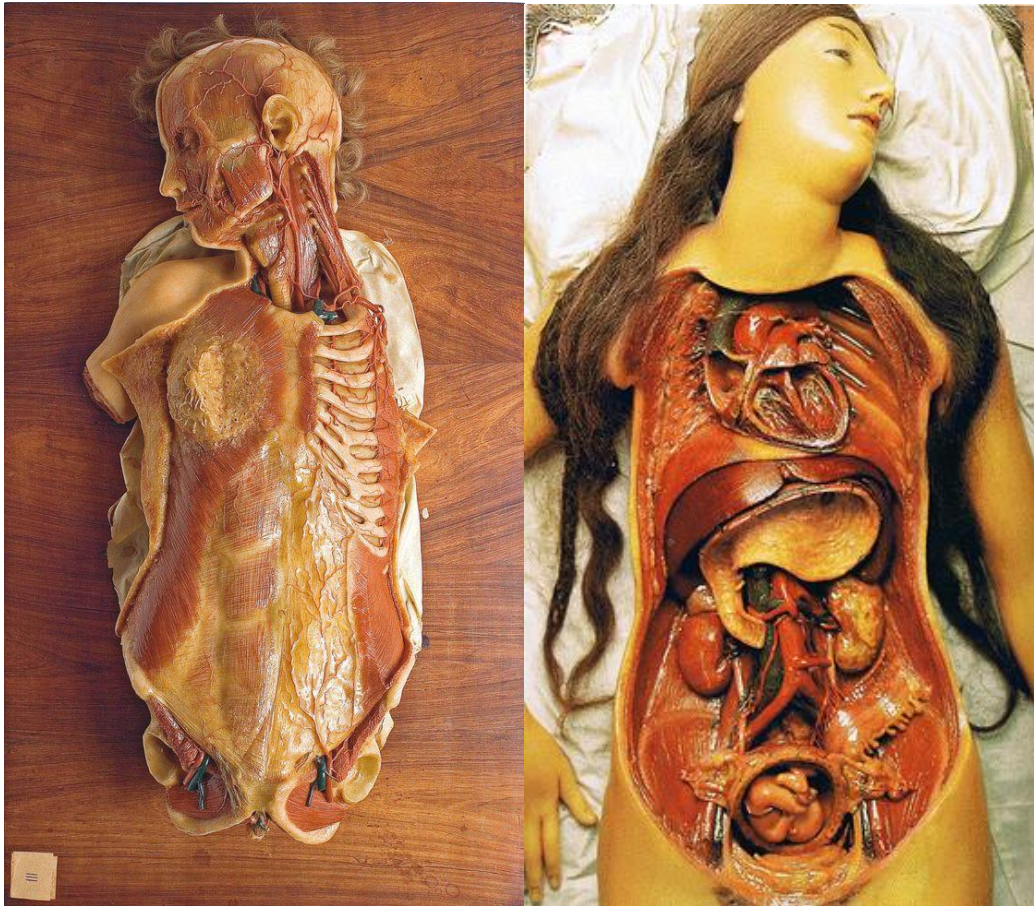


Figs 40 & 41, *The Garden at La Specola*, Florence, Italy, photographs Susan Morgan, 2017

It is usual to think of wax anatomical models as belonging to a relatively short period in the history of anatomy that is not necessarily relevant to medical education today. But surely better understanding of sexual anatomy would help to enrich our sex lives as well as improve

medical practice, particularly as regards nerve-sparing operations? I left *La Specola* that day thinking that if the Anatomical Venus tells a story about imagined female bodies based on symbols, Susini/Boi's models in Cagliari can help us to understand the 'living reality' of our bodies. It is a relief, I wrote in the notebook I kept when I visited the anatomical wax museum at the University of Cagliari, to walk around a collection that offers freedom from artifice born of an obsession with the surface appearances of things. The model in Case III has not been designed to seduce, or play with our emotions. If you have come here to learn, it seems to say, you are welcome to look and see. Sexual anatomy is presented as it would be seen in a dissected cadaver, rather than being shielded from view as if considered shameful. The model provides details of the three-dimensional relationships of parts of female sexual anatomy that were rarely commented upon in scientific textbooks and not made visible until the late twentieth century. Thierry Savatier wrote of Courbet's painting *L'origine du monde* that "It is not a painting like any other, it has a unique place in Western art because it represents without concession, or historical or mythological alibi, not only a woman's sex, but THE sex of Woman (*LA Femme*) and beyond, that of every woman, lovers and mothers..."⁴⁴⁰ Susini/Boi's head and torso of a young female, by contrast, does not seek to reference an 'eternal feminine', lover or mother. Instead it represents layers of one particular young woman's body as seen during a dissection, in order to reveal superficial and deep layers of the abdomen, thorax, neck and head. That the perineum is included permits a clear view of the corpora spongiosa of the clitoris (formerly known as the bulbs of the vestibule), which are absent from the *La Specola* preparations. Like Montaigne's beloved Virgil and Lucretius, who provided him with writing with 'sinews born of straightforward thinking', this wax model reveals an approach to female sexual anatomy that is not only made well but is thought well – that sees clearly and deeply into the subject so that our understanding is expanded and our quality of life enriched, deeply and meaningfully.

⁴⁴⁰ Emma Wilson, 'Catherine Breillat and Courbet's *L'origine du monde*', in *Embodied Encounters: New Approaches to Psychoanalysis and Cinema*, ed. by Agnieszka Piotrowska (London: Routledge, 2014), p. 16.



Figs 42 & 43, Susini/Boi: 'Head and body of a young girl' (1803- 05) Alessandro Riva, *Flesh and Wax* (Cagliari: University of Cagliari Press 2007), p.64-65; Susini/Fontana: 'Anatomical Venus', disassembled wax model with human hair, La Specola, Florence, Italy. *Encyclopaedia Anatomica*, Koln: TASCHEN, (2014), p.78.

Conclusion

I might not be able to remember his face, or ‘hear’ his voice, but something of my Geography teacher still lingers. What triggers thoughts of him after all this time is a series of stories in the press about ‘inappropriate’ relationships between teachers and pupils. Dr. Francis (not his real name) had lived and worked abroad, so he was intrigued to hear that I was born in Uganda and it was there that I spent my first five years. (After that we lived in Australia until I was nearly nine, before moving to south Wales.) Most pupils in that secondary school came from the Swansea area, as did their parents and grandparents, and with most of their relatives living close by, clearly ‘belonged’. I quickly learned to avoid mentioning where I had lived before, but my obvious lack of local knowledge (I tried to pick nettles the first summer we lived in Wales, not knowing they stung) and the fact I could not really say where I was from made it difficult for me to fit in. My teacher showed me that there were good aspects to being an outsider. In his case it gave him the independence of mind to stand up to petty rules and regulations. He enjoyed mocking the pretentiousness of colleagues who tried to insist on stuffy grammar school ways, despite the fact this was a purpose-built comprehensive, supposedly playing its part in creating a fairer society. He helped me do battle with ‘the system’ when I tried to opt for English, Geography and Art at A-level, instead of the far more standard English, History and French. (My ideal combination of subjects would have been English, Art and Biology, but that was thought too ridiculous even to consider.)

What lingers is the flavour, the drift of those times, my teacher’s rebellious spirit and sense of fun. Why shouldn’t we be friends? I was lucky that the kind of affection Dr. Francis had for me prevented anything from ‘happening’ in any prurient, currently newsworthy sense. Only once did I feel out of my depth. After a lesson on Continental Drift (he was attracted to scenarios in which previously unassailable facts took a tumble) he recommended a play that was due to be broadcast on radio that night. Borrowing my older brother’s tinny transistor, I went to bed early to tune in, so I wouldn’t be disturbed by the rest of the family. A radio play features in a short story I wrote many years later that was based on this incident, but it was only recently that I could see the extent to which my memory played tricks on me. Not only did I manage to completely forget the title of the play and the famous playwright’s name, but I somehow contrived to misunderstand a key scene. In my story I describe a school student lying in bed listening to a play on the radio and the effect it has upon her:

As she listened there grew inside her head a scene in midsummer: a man lying back in a small boat, in the flickering light under a weeping willow on a lazy brown river. Water birds croaked, insects buzzed and things were made to sound so hot and sleepy that she felt drowsy herself and let her limbs fall aside in an awful indolence.⁴⁴¹

The main character in the play as I misremembered it looks back at a missed opportunity in his long-lost youth, which was “all to do with a girl he should have kissed. Like saying no to the offer of wild strawberries picked straight from the hedge, warmed by the sun and eaten unwashed, he failed to act on his truest impulses...which was why he was destined to live for evermore in sad dreams and futile regrets.”⁴⁴² In the play itself, things could not have been more different:

– upper lake, with the punt, bathed off the bank, then pushed out into the stream and drifted. She lay stretched out on the floorboards with her hands under her head and her eyes closed. Sun blazing down, bit of a breeze, water nice and lively. I noticed a scratch on her thigh and asked her how she came by it. Picking gooseberries, she said. I said again I thought it was hopeless and no good going on and she agreed, without opening her eyes. [Pause] I asked her to look at me and after a few moments – [Pause] – after a few moments she did, but the eyes just slits, because of the glare. I bent over to get them in the shadow and they opened. [Pause. Low.] Let me in. [Pause.] We drifted in among the flags and stuck. The way they went down, sighing, before the stem! [Pause] I lay down across her with my face in her breasts and my hand on her. We lay there without moving. But under us all moved, and moved us, gently, up and down, and from side to side.⁴⁴³

⁴⁴¹ Sue Morgan, ‘One Little Room’, in *Safe World Gone By* (Dinas Powys: Honno Welsh Women’s Press, 2007), p.184.

⁴⁴² *Ibid.*, p.184.

⁴⁴³ Samuel Beckett, *Krapp’s Last Tape* (London: Faber and Faber, 1959), pp. 16 - 17.

I have no memory of discussing the play with Dr. Francis; I would not have known what words to use or where to begin. Nor can I remember being given any formal sex education lessons at my school. At sixteen, I had not been in a ‘real’ sexual relationship, but I was impatient to learn about sex. I felt it was something you couldn’t learn about in books; you had to ‘do it’, but I held back, lacking the confidence, painfully aware of my inexperience. A late developer physically, way behind my friends, I was intellectually precocious, an avid reader of D.H. Lawrence, a sneaky reader of *A Perfumed Garden* and *The Little Red Schoolbook*, but their contents only added to my already impressive armory of inhibitions and frustrations. Discussing young people’s ignorance of their bodies with the urologist Helen O’Connell, she told me she thought that most students, even those studying medicine, still learn about sex “not through authoritative high quality stuff, but through the same tawdry processes [as they have always done] which is a bit sad really. Maybe it’s just the nature of sex that you don’t learn it through authoritative sources – but then where do you get it from? If we are to educate young people maybe we need to get in the space of where they look and make that work for them.”⁴⁴⁴

Acknowledging that today’s young people have access through the internet to explicit material on porn sites that cater primarily for men, Goedele Liekens, as a UN Goodwill Ambassador for sexual health, gave a two-week course in 2015 to Year 11 pupils at a Technology College in Accrington, north-west England. The TV documentary that covered the story reported that Lieken’s course was designed to encourage teenage boys to see a link between their consumption of pornography and what they expected female genitalia to look like, as well as what they felt entitled to in their sexual encounters.⁴⁴⁵ It was also hoped that the course would empower the girls by providing them with accurate information about their anatomy and their capacity for sexual pleasure, to make it easier for them to stand up to pressure to resemble pornography performers – how to say no to requests to shave their pubic region every day, for example, as well as requests to provide oral sex involving the swallowing of semen and receiving ejaculate on their hair and face. By encouraging teenagers to reflect critically upon pornography, and to consider other ways to experience the sensory delights of being intimate, Lieken’s approach contrasts with standard sex education classes in the UK, where although anatomical diagrams of genitalia are shown, the clitoris is omitted

⁴⁴⁴ Interview transcript of Skype interview with Helen O’Connell, March 26th, 2014.

⁴⁴⁵ Patrick Howse, ‘Pornography addiction worry’ for tenth of 12 to 13-year-olds’, BBC News online, 31 March 2015, <http://www.bbc.co.uk/news/education-32115162> [accessed January 2017]

from representations. This, she feels, mirrors the silence of girls regarding their own sexual pleasures.

Lieken's course reminded me of an interview I conducted with a professor of the sociology of science, who, midway through the conversation, suggested that anatomy needs pornography. We were discussing the problems faced by anatomists seeking to provide dispassionate representations of women's genitalia, because of attitudes towards women that are affected by taboo. I suggested this might be why, at the time of Andreas Vesalius, anatomy turned to artistic representations of the human body, nudes being legitimized in high art by being linked to classical ideals of beauty. The trouble being that while classical sculptures of male nudes represent perfectly proportioned heroic figures unashamedly revealing all, female figures are posed (as in Vesalius's illustration) modestly covering up those parts of their bodies that are considered shameful if exposed. In this regard, I happened to mention that Charles Estienne, a contemporary of Vesalius, used illustrations for female reproductive parts that were based on a series of erotic engravings called *the Loves of the Gods*. It was then that the professor suggested that anatomy needs pornography. Though I replied that I would want to differentiate between erotica and pornography, because pornography objectifies women, he said, "I'm talking about extremely explicit photographs ... if you are going to look for explicit photographic representations of genitalia then it seems to me that pornography is the place to go."⁴⁴⁶ Which surprised me, because it suggests that 'extremely explicit' airbrushed photographic images of hairless often surgically enhanced youthful female genitalia carry with them no subliminal messages about what is desirable in a woman. I also wondered how effective such images might be, when seeking to train the next generation of surgeons, to teach them techniques of nerve-sparing surgery, for example, to protect female sexual function, as recommended by O'Connell *et al.*⁴⁴⁷

Now at the end of my project, I think about the ground it has covered. When I first came across a newspaper article featuring O'Connell's research into female sexual anatomy, what caught my eye was the way in which the instability of data relating to the clitoris (the way that it appears and then gets omitted from textbook illustrations and descriptions at different times in history) was attributed by the authors to cultural or social factors. When they suggested social factors *dominated* the anatomical study of the clitoris, did they think that scientific knowledge was *distorted* by such factors? What if, as in one of the early claims of

⁴⁴⁶ Transcript of anonymised interview with Professor of the Sociology of Science, 17 June 2014.

⁴⁴⁷ Helen E. O'Connell, Kalavampara V. Sanjeevan, John M. Hutson, 'Anatomy of the Clitoris', *The Journal of Urology*, 174 (2005), 1189 – 1195 (p. 1189).

the Edinburgh School of Sociology, ‘natural’ and ‘social’ are not mutually exclusive categories? In a book of essays dedicated to addressing aspects of the relation between science studies and the humanities Massimo Mazzotti writes that:

One of the key points to grasp here is that all kinds of normativity – including scientific normativity – can only be grounded in social interaction, an insight that the Edinburgh sociologists associated with Ludwig Wittgenstein’s argument on the impossibility of a “private language”. In the absence of a texture of patterned and routinized social interaction there would be no criteria for deciding whether a given statement is true or false. The social dimension, therefore, is not a distorting factor in the acquisition, evaluation, and transmission of scientific knowledge, but rather one of the very conditions of possibility of these processes. Cognition, in other words, can only be a collective – and therefore social – phenomenon.⁴⁴⁸

In the same book of essays, Daniella Crocetti argues that “medicine is a social practice that often combines the theoretical platforms of nature and nurture, culture and biology instead of choosing one over the other.”⁴⁴⁹ To prove her point she mentions “Current publications on the treatment of DSD (disorders of sex development) patients [that], perhaps due to the force of the contemporary debate, indicate the willingness of some practitioners to re-evaluate earlier assumptions about role of medicine as an enforcer of the naturalness of gender.”⁴⁵⁰ She adds that “Many contemporary doctors and scientists who work with DSD, also adopt the linguistic separation of sex and gender, along theoretical lines developed by feminists and identity politics theorists, in which sex has a biological/genetic origin and gender has social performative role. This is one of many clear indications of how social debates have affected the development of medical theory and practice.”⁴⁵¹ Such research seems to suggest that the boundaries between ‘natural’ and ‘social’ are porous, that there is a

⁴⁴⁸ Massimo Mazzotti, ‘Impure cultures: interfacing science, technology, and humanities’, in *Impure Cultures: Interfacing science, technology, and humanities* ed. by Massimo Mazzotti and Giuliano Pancaldi (Bologna: Bologna Studies in History of Science, 12 (2010)) pp. 9 – 10.

⁴⁴⁹ Daniela Crocetti, ‘From Hermaphroditism, to Intersex and DSD (disorders of sex development): shifting terminology and shifting meaning’, in *Impure Cultures: Interfacing science, technology, and humanities* ed. by Massimo Mazzotti and Giuliano Pancaldi (Bologna: Bologna Studies in History of Science, 12 (2010)), p. 59.

⁴⁵⁰ *Ibid.*, p. 59.

⁴⁵¹ *Ibid.*, p. 58.

two-way traffic, something I talked about with the same professor of the sociology of science. He had just launched a book on inner and outer cores of scientific knowledge and when I asked him if he thought Helen O'Connell could be seen to be a scientist who was affected by an 'outer core of knowledge', in being influenced by the work of women's health collectives and self-help groups, he replied that:

Clearly there is this kind of porosity... certain attitudes to men and women in wider society reflect back on surgical practice and surgical representations. Therefore that makes it at least possible that campaigning from the outside could change surgery, just as campaigning from the outside changed practices in antiretroviral drug administration. But what you've got to be careful about is whether the people on the outside are 'doing science', and I don't think they are, so you have got to imagine it this way: would this have happened without your scientist leading things from a position where she had all the scientific knowledge and I don't think it would have done, you've got to have somebody on the 'inside'⁴⁵²

Such a notion ignores relations between the medical sciences and their social and cultural conditions; also the impact of the work of women's health collectives and books like *A New View of a Woman's Body* in mainstream science, an example of the kind of the 'two-way traffic' that occurs between science and wider culture, as discussed in Chapter One.⁴⁵³ Based in the English Department at Cardiff University, my thesis evolved into one that combines creative and critical writing, as informed by quantitative and qualitative research into attitudes towards scientific representations of the female body. While I make no claims to have 'done science' (in a laboratory setting), the fact that I have been able to work on a research project, write papers and present findings at science conferences with anatomists made it easier to address a specific problem (that of gender bias in anatomical representations) as part of a genuine interaction with that community of thinkers. My background in the humanities meant that the research study was informed by ideas taken

⁴⁵² Transcript of anonymised interview with Professor of the Sociology of Science, 17 June 2014.

⁴⁵³ Martin Willis, *Vision, Science and Literature 1870 – 1920: Ocular Horizons* (London: Pickering and Chatto, 2011)

from art history, literary criticism, film studies and feminism, which otherwise might not have featured. It was when I started to look more deeply into the historical connections between anatomy and figurative art, for example, that I became aware of the value given within it to (normative) symbolic representations of femininity. To me the classical Venus *pudica* pose, as Christianised by early anatomists, seemed to act like a restraining order on factual observation, preventing sexualised parts of a woman's body from being exposed, because they were considered shameful. Ironically, of course, forbidding access to something helps to draw attention towards it and only increases its allure.

I was already aware that outside of erotica bare facts relating to desirous female bodies rarely appear in the literary canon. Female sexuality is alluded to indirectly, through coy veiling devices, especially in novels aimed at women. Jane Austen's final novel, *Persuasion*, for example (which was first published in 1818), features a thwarted romantic attachment and a painful separation. The back story concerns Anne Elliot, the main protagonist, and the way that she bowed down to family pressures to end a love affair with a young sea captain who was thought to be an unsuitable match. When, after eight years at sea, Captain Frederick Wentworth reappears on the scene, we are told that Anne is quite 'undone' by the continuing strength of her feelings towards him. These are not feelings that are referred to directly, however. Instead we are provided with a domestic scene in which Anne is shown kneeling on the floor by a sofa, caring for one of her nephews who is recovering from a bad fall. Her nursing duties are interrupted when his two year old brother Walter bursts into the room and, marching up to the sofa, begins "to fasten himself upon her, as she knelt, in such a way that, busy as she was about Charles, she could not shake him off."⁴⁵⁴ Even though the little boy is ordered to let go of her, first by Anne herself, and then by a neighbour who is paying a social call, he steadfastly refuses to budge. It is only when Captain Wentworth steps in to bodily remove Walter that Anne is finally liberated. When Anne realises who it was who inadvertently touched her whilst freeing her from the boy's tenacious grip, she is rendered completely speechless – she could not even thank the Captain – only "hang over little Charles, with the most disordered feelings."⁴⁵⁵ We are told that she has to retire from the room in order to 'arrange' these feelings, also that: "She was ashamed of herself, quite ashamed of being so nervous, so overcome by such a trifle; but so it was, and it required a long application of solitude and reflection to recover her."⁴⁵⁶

⁴⁵⁴ Jane Austen, *Persuasion* (London: John Murray, 1818; London: Penguin English Library, 2012), p. 78.

⁴⁵⁵ *Ibid.*, p. 79.

⁴⁵⁶ *Ibid.*, p. 80.

Earlier (male) writers like Laurence Sterne adopted a more direct approach when exploiting the satirical possibilities of the physical body and its involuntary responses, by focussing on the gross materiality of the flesh. Yet it is wayward male bodies that Sterne turns into objects of mirth. When the female form is mentioned, particularly in relation to sexual desire, it noticeably fails to materialise. Announcing that his uncle Toby has fallen in love, and with whom, the narrator declares that the Widow Wadham is the most desirable ‘thing’ a ‘concupiscible’ or lustful man could ever see (and covet). There the description ends. A blank page is provided instead, representing a sheet of paper on which the ‘gentle reader’ (who is assumed to be a married man) can make his own pen and ink drawing of the object of Uncle Toby’s affections, the suggestion being that words are woefully inadequate as compared to visual representations. The instruction to the reader is that his drawing should be “as like (his) mistress as (he) can—as unlike (his) wife as (his) conscience will let (him)”. We are told that the blank page is Sterne’s gift to the reader, so that he may have one page at least “which MALICE will not blacken, and which IGNORANCE cannot misrepresent.”⁴⁵⁷

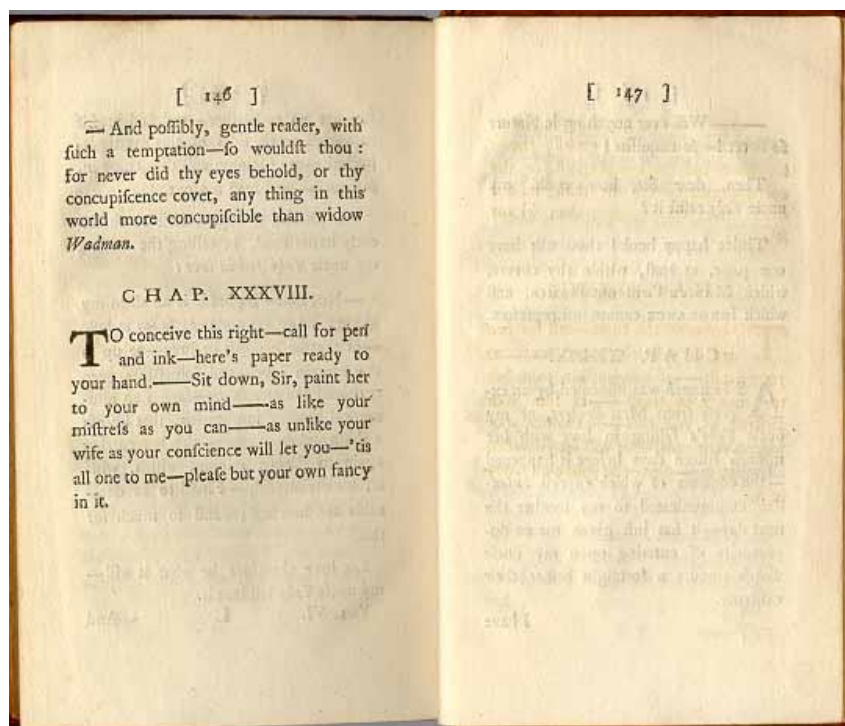


Fig. 44, pages 146 and 147 of Laurence Sterne, *The Life and Opinions of Tristram Shandy, Gentleman*, Vol. 6 (Hepburn 12) printed by T. Becket and P.A. Dehondt in 1769; <http://special.lib.gla.ac.uk/exhibns/month/oct2000.html> [accessed 16 December 2018]

⁴⁵⁷ Laurence Sterne, *The Life and Opinions of Tristram Shandy, Gentleman*, Vol. 6 (London: Hepburn, 1765-1769), pp. 146, 147. <http://special.lib.gla.ac.uk/exhibns/month/oct2000.html> [accessed 7 October 2018]

Craig Dworkin, citing the blank page in *Tristram Shandy*, suggests that “Sterne refrains so that the reader may indulge.”⁴⁵⁸ The blank page also allows him to avoid describing something that tends to be left unsaid in ‘polite’ society, preferring his readers to rely on the power of the imagination. While this might work in comic fiction, I found it hard to believe that key details regarding the human body would be avoided within medical education, where anatomical representations are held to be accurate renditions of current knowledge with regard to ‘the real thing’.

I decided to ask anatomists, clinicians and other health professionals in whose work female anatomy features what they thought the reasons might be for the paucity of reliable factual information about the three-dimensional relationships of the different parts that together make up female genitalia, along with its nerve and blood supplies: the kind of information needed by surgeons and other health professionals who aim to preserve a patient’s sexual function. Did they think that social and cultural factors made it difficult to provide dispassionate representations of female sexual anatomy? Anatomical courses that include cadaveric dissection are valued because hands-on practical experience is seen to provide such a good appreciation for the three-dimensional relationships of different structures, and for human variation. This does beg the question: what different structures – are some given attention and others neglected? And if so, could this explain why female genitalia so rarely features, in detail, in scientific representations and teaching?

Most of my interviewees disagreed. Very few responded in language that even included the words ‘culture’, ‘society’, ‘gender’ and ‘taboo’, as if they were not considered relevant or appropriate. Only one or two felt that anatomists should involve themselves and their students in the ‘cultural and intellectual history’ of their discipline. Medical humanities courses were thought to be a good way to teach ethics and to help medical students deal with their emotional reactions to Dissecting Room experiences. That there might be a need to think critically about gender issues and equality and diversity did not seem to follow; in fact feminist ‘political correctness’ was seen by one of my interviewees as a cause for complaint: “Feminism has definitely had a negative impact on my work... Maybe not so much in the UK but in America there is a feminist lobby that will clamp down in every way on [jokes with sexual words in them, or sexual comments] and take you to the Dean literally and it has a negative impact – even if you say she was beautiful!”⁴⁵⁹ A number of my interviewees denied the existence of

⁴⁵⁸ Craig Dworkin, *No Medium* (London: MIT Press, 2013), p. 22.

⁴⁵⁹ Transcript of anonymised interview with Anatomist H, Zakyntos, Greece, 6 September, 2014.

a male bias within the culture of medicine. “There’s no male or female agenda. So there is never a comparison. It’s more like, okay this is a female organ for which we have specialties (OBGYN). It’s how you treat your patient as a patient, rather than male versus female, or sexual preference.”⁴⁶⁰ Some admitted that there might be insufficient data on female sexual anatomy within textbooks, while making the point that textbooks should always be regarded with suspicion: “The textbook is not a holy bible.”⁴⁶¹ Others raised issues relating to teaching situations (in the Dissecting Room for example): “the problem is you have a pudic region that is sometimes very sensitive and not everyone likes or wants to see it.”⁴⁶² Time pressures were frequently cited as a problem: “As a teacher I am obliged to teach the anatomy as best I can, not as influenced by culture, we do not discuss iconoclastically women or men. That would be quite difficult, it would last too long. Students need to know the facts first... it is not a major objective of anatomy, dealing with cultures.”⁴⁶³ A lecturer in anatomy, still in his thirties, thought there had been a contraction of teaching hours within medical education with regard to anatomy. Whatever the reasons, the outcome was the same. As Helen O’Connell suggested in the interview I conducted with her:

We may be looking at the clitoris but we don’t see it because we don’t know it and didn’t dissect it out as medical students. It isn’t in our conscious realm, partly because it’s forbidden, you know, why are you doing it?⁴⁶⁴

O’Connell went on to write with her co-authors about the possible health implications of shirking a difficult truth within anatomical textbooks. They made the point that:

Because surgery is guided by accurate anatomy, the quality and validity of available anatomical description [relating to the clitoris] are relevant to urologists, gynaecologists and other pelvic surgeons. Accurate anatomical information about female pelvic structures should be found in classics, such as Gray’s Anatomy, the Hinman

⁴⁶⁰ Transcript of anonymised interview with Anatomist J, Istanbul, Turkey, 4 September 2015.

⁴⁶¹ Transcript of anonymised interview with Anatomist B, Cardiff University, 20 December 2011.

⁴⁶² Transcript of anonymised interview with Anatomist A, Cardiff University, 20 December 2011.

⁴⁶³ *Ibid.*, p. 2.

⁴⁶⁴ Transcript of interview conducted with Helen E. O’Connell, Royal Melbourne Hospital, 7 November 2002.

urological atlas, sexuality texts such as the classic Master and Johnson Human Sexual Response or any standard gynaecologic text. These texts should provide the surgeon with information about how to preserve the innervation and vasculature to the clitoris and related structures but detailed information is lacking in each of these sources. The clitoris is a structure about which few diagrams and minimal description are provided, potentially impacting its preservation during surgery.⁴⁶⁵

In a later paper, published in 2008, they stressed how important it was to make correct terminology regarding female sexual anatomy readily available to both women and men, in order “to facilitate sexual knowledge, health and enjoyment.”⁴⁶⁶

A key point raised in O’Connell’s 2005 paper concerns accurate and detailed knowledge of female sexual anatomy that appears to have been lost or hidden. G.L Kobelt in the 1840s, for example, “provided a clear perspective of clitoral anatomy [and stated that]: ‘In this essay I have made it my principal concern to show that the female possesses a structure that in all its separate parts is entirely analogous to the male.’”⁴⁶⁷ My interviews suggest that such a view continues to be unpopular. Support was given instead to notions of gender difference, as expressed in popular articles and books including: *Men Are from Mars, Women Are from Venus*.⁴⁶⁸ I found it especially interesting that O’Connell’s research findings caused concern amongst medical professionals. A specialist in psychosexual medicine working in a sexual health clinic said that she was afraid some people might interpret these findings as ‘proof’ that women should behave more like men and feel entitled to sexual pleasures (knowing “what they want, what they *really really* want”)⁴⁶⁹ including objectifying men. She thought this would lead to “our differences [being] diminished rather than celebrated,”⁴⁷⁰ a reference to public concerns about what was popularly being referred to as ‘ladette culture’.

⁴⁶⁵ Helen E. O’Connell, Kalavampara V. Sanjeevan, John M. Hutson, ‘Anatomy of the Clitoris’, *The Journal of Urology*, 174 (2005), 1189 – 1195 (p. 1189).

⁴⁶⁶ Helen E. O’Connell, Norm Eizenberg, Marzia Rahman, Joan Cleeve, ‘The Anatomy of the Distal Vagina: Towards Unity’, *Journal of Sexual Medicine*, 5 (2008), 1883 – 1891 (p. 1189).

⁴⁶⁷ G. L. Kobelt, *Die mannlichen und weiblichen Wollustorgane des Menschen und einiger Saugethiere*, (Freiburg: 1844), quoted in Helen E. O’Connell, Kalavampara V. Sanjeevan, John M. Hutson, ‘Anatomy of the Clitoris’, *The Journal of Urology*, 174 (2005), 1189 – 1195 (p. 1193).

⁴⁶⁸ John Gray, *Men Are from Mars, Women Are from Venus: A Practical Guide for Improving Communication and Getting What You Want in Your Relationships* (London: Harper Collins, 1992).

⁴⁶⁹ Adapted from lyrics by the Spice Girls, Matt Rowe and Richard Stannard, *Wannabe* (1996).

⁴⁷⁰ Transcript of anonymised interview with a specialist in Psycho-Sexual Medicine, Bristol Royal Infirmary, 2006.

A psychoanalyst I interviewed told me that he was aware of a craving for difference amongst his clients, especially his male clients. When I asked him why he thought this might be, he said that it was because “men, as boys originally, are in a struggle to differentiate themselves from a female body, while having to acknowledge the sameness of these two bodies.”⁴⁷¹ He thought that men “have a tremendous fear of turning into women, whereas women don’t have the same fear of turning into men. A man has this fundamental fear that he could lose something, or be lured back into being the woman that he fears he already is... a man can lose something a woman cannot.”⁴⁷² It struck me that this might help to explain why men feel the need to take control – to present themselves as powerful and masterly, because of societal expectations and the power of gendered stereotypes.

Alan Petersen and Sam Regan de Bere examine the implications of what they call “the masculinist coding of medicine”.⁴⁷³ Pointing out that women were excluded from medical schools and dissecting rooms until the second half of the nineteenth century, they note that women who did manage to break into this male domain found it easier to assume male characteristics. In American medical schools, according to Michael Sappol: “The ‘in-group’ men were imitated by a female ‘out-group’ who wore their hair short like men, were ‘serious’ (eschewed female frivolity and feminine dress), and abandoned the normative female role .”⁴⁷⁴ Even when they started to enter the profession in greater numbers during the twentieth century the presence of women continued to be resisted, Petersen and de Bere arguing that the masculinisation of medicine was integral to its development as a scientific profession, dissection in particular serving as a “male bonding ritual by allowing novice practitioners to demonstrate to one another and to others their shared essential difference from women who, like the dissected cadavers, were constructed as passive objects of men’s instrumental reason.”⁴⁷⁵ Roy Porter writes about objectivity and gender in a similar vein:

In learning how to view and act upon the body rationally and dispassionately, novice physicians developed those qualities judged to be desirable in medical practice, detachment, objectivity, and

⁴⁷¹ Transcript of anonymised interview with Psychoanalyst, London, 2011.

⁴⁷² Ibid.

⁴⁷³ Alan Petersen and Sam Regan de Bere, ‘Dissecting Medicine: Gender Biases in the Discourse and Practices of Medical Anatomy’, in *Medicalised Masculinities*, ed. by Dana Rosenfeld and Christopher A. Faircloth (Philadelphia: Temple University Press, 2006), p. 113.

⁴⁷⁴ Michael Sappol, *A Traffic in Dead Bodies: Anatomy and Embodied Social Identity in Nineteenth-Century America* (Princeton: Princeton University Press, 2002), p. 90.

⁴⁷⁵ Petersen and de Bere, p. 115.

emotional control – those qualities most closely associated in modern Western culture with masculinity. The emotional culture of medicine, like male emotional culture, values ‘level-headedness’ and eschews any displays of vulnerability or expressions of uncertainty, which can undermine claims to authority.⁴⁷⁶

According to Petersen and de Bere, (stereotypical) feminised behaviour was traditionally factored out of medical education, something that remained unchallenged until the rise of feminism in the 1970s. How unsuccessful that challenge turned out to be is suggested in further research conducted by Petersen in the late 1990s, where he argues that “anatomy [has] remained largely impervious to broader public debates about sexual inequalities and gender representations.”⁴⁷⁷ Could this be because such debates, as well as raising the controversial topic of sexual politics, challenge notions of gender difference? Shelley Wall has identified a problem in most medical texts: the fact that they limit themselves to a simplistic binary of idealised female and male forms (and norms). Citing a blog containing an image of intersex genitals, she argues that it represents “a call for ‘humane images’ that reflect the full spectrum of possible human genital forms.”⁴⁷⁸ As a medical illustrator, she is acutely aware of a gap between “what viewers want, or feel they need to see and what the producers of medical imagery (who are viewers too) provide.”⁴⁷⁹

Could it be that medicine continues to perpetuate historical attitudes to gender difference, based on idealised female and male norms? Moore and Clarke suggest that the teaching of gross topographical anatomy “is one of the key sites for the production and maintenance of sex and gender as embodied dualities.”⁴⁸⁰ In the *Epitome* by Vesalius, where male surface anatomy is represented by an engraving of the classical statue known as the Canon and the female by an engraving of a *Venus pudica* hiding her genitals. In the accompanying text Vesalius denies the existence of the clitoris:

⁴⁷⁶ Ibid., p. 117.

⁴⁷⁷ Alan R Petersen, ‘Sexing the Body: Representations of Sex Difference in *Gray’s Anatomy* 1858 to the Present’, *Body and Society*, 4 (1998) pp. 1 – 15.

⁴⁷⁸ Shelley Wall, ‘Humane images: visual rhetoric in depictions of atypical genital anatomy and sex differentiation’, *BMJ Medical Humanities*, 36 (2010) p. 80.

⁴⁷⁹ Ibid. p. 80.

⁴⁸⁰ Lisa J Moore, Adele E Clarke, ‘Clitoral conventions and transgressions: graphic representations in anatomy texts c1900 -1991’, *Feminist Studies*, 21 (1995), p. 255.

It is unreasonable to blame others for incompetence on the basis of some sort of nature you have observed in some women and you can hardly ascribe this new and useless part, as if it were an organ, to healthy women. I think that such a structure appears in hermaphrodites who otherwise have well-formed genitals, as Paul of Aegina describes, but I have never once seen in any woman a penis (which Avicenna called albaratha and the Greeks called an enlarged nympha and classed as an illness or even the rudiments of a tiny phallus⁴⁸¹

Does a focus on idealised notions of gender difference that represents the female body symbolically make it easier for anatomists to avoid drawing attention to variation – and to ascribe it to abnormality, rather than to see it as illustrative of a spectrum that exists in nature? Daniela Crocetti makes the point that it was only in 2006 that DSD was adopted within medical terminology, at a “ground-breaking medical consensus conference in Chicago, in which medical practitioners met with patient advocates for the first time in an official manner. “Intersex” is a medical term that was adopted by patient advocates to counter the negative weight of the terms hermaphrodite and pseudo-hermaphrodite.”⁴⁸² In her view “A discussion of the development of both social and biological theories of gender and sex is necessary. The ways that biological discoveries affect how we think about the body, such as genetic language of sex difference, and the ways that cultural perspectives frame these ‘discoveries’, such as giving meaning to these physical differences as in the case of the medicalization of DSD, overlap to create current medical practice.”⁴⁸³

Issues like these emerged in the quantitative study that I conducted with anatomists at universities in Cardiff and Paris, where we asked students what medical specialities they considered especially appropriate for females and whether they thought female doctors had personality traits that made them more fitted to do medicine. 58% of students at Paris and 40% at Cardiff claimed to think that this was not the case, though occupations like nursing, gynaecology, obstetrics, paediatrics and dermatology were recorded by others as being

⁴⁸¹ Andreas Vesalius, *Observationum anatomicarum Gabrielis Falloppii examen* (Venice: Francesco de’Franceschi da Siena, 1564), p. 143.

⁴⁸² Daniela Crocetti, ‘From Hermaphroditism, to Intersex and DSD (disorders of sex development): shifting terminology and shifting meaning’, in *Impure Cultures: Interfacing science, technology, and humanities*, ed. by Massimo Mazzotti and Giuliano Pancaldi (Bologna: Bologna Studies in History of Science, 12 (2010)), p. 61.

⁴⁸³ *Ibid.*, p.59.

‘female’ branches of medicine. As regards what personality traits might make females more fitted for medicine, those that were recorded included maternal instincts, compassion, multi-tasking abilities, empathy, better listening skills, calmness and patience, as well as a capacity for hard work. In our research paper we argued that such traits stereotype men and women “as having fixed, and opposite, characteristics.”⁴⁸⁴

When we extended the study to include 208 professional anatomists, we found that though 67% of female anatomists and 69% of male anatomists did not want to identify feminine career specialities, 47% of female anatomists and 49% of male anatomists thought that females have personality traits that make them especially suited to medical careers, including sensitivity, good levels of intuition, empathy and patience. We recommended increasing training in equality and diversity issues in order to raise levels of gender awareness, with opportunities for self-reflection, the consideration of approaches towards developing and teaching non-sexist curricula and highlighting the importance of role models and mentoring, particularly in the very male-dominated culture of surgery.⁴⁸⁵ We also stressed the need to extend our study beyond binary issues relating to male and female, to raise awareness of issues relating to intersex, transsexual and transgender, homosexual as well as heterosexual identities, to fully satisfy an equality agenda.

We noted that medical students, whilst being exposed to images that feature the human body in textbooks and teaching situations, were not being encouraged to develop a critical understanding of how images ‘work’ and the ways in which sexual politics might be involved in the practical production of facts. Left-wing and feminist analyses of ‘the male gaze’ do not seem to have been applied to representations of the female anatomical body. Lisa Jean Moore and Adele Clarke highlight the way in which older, problematic forms of representation relating to sex, gender and sexuality continue to be recycled in new arenas of representations of human bodies, such as digital, computer-mediated technologies:

Continuities with previous textual anatomical representations abound in new visual and cyber formations such as the heterosexual requirement, the female body as reproductive and not sexual, and the

⁴⁸⁴ Ibid., p. 359.

⁴⁸⁵ How male dominated the world of surgery can be is suggested in a recent news item. See Justin McCurry, ‘Women robbed of places at Japanese medical school speak out over betrayal’, The Guardian, Saturday 11 August 2018 <https://www.theguardian.com/world/2018/aug/10/betrayed-victims-of-tokyos-medical-school-scandal-react> [accessed 9 October 2018.]

biomedical expert as the proper and dominant mediator between humans and their own bodies.⁴⁸⁶

Images carry with them a multiplicity of meanings and associations – and point-of-view is key. One anatomist I interviewed thought that Helen E. O’Connell was able to look at female sexual anatomy in terms of the three-dimensional relationships of its constituent parts because she was not seeing it in terms of reproductive function: “I think the interesting thing is that she is a urologist and not an obstetrician gynaecologist, so it gave her a different insight... This was something else, and quite focussed. It saw the whole of the relationship of that area with the urethra and the similarities and differences with the male [outside reproductive function].”⁴⁸⁷

Yet when I suggested to other interviewees that, as the first female urologist to practice in Australia, O’Connell proposed a radical re-visioning of the female body, by seeing it in terms of sexual function rather than reproduction, this was not picked up or responded to. It also seemed relevant to me that she was influenced by books written by feminist activists. The feminist self-help health movement in the early 1970s encouraged women to attend awareness raising groups and to participate in vaginal self-examinations. As a health movement it was extensively attacked by the medical establishment in the USA. Clarke and Moore write about police raids, also the arrest of Carol Downer and Colleen Wilson at the Feminist Women's Health Center in Los Angeles in 1972 for practicing medicine without a license.

Their ‘crime’ was remedying vaginal yeast infections by suggesting the insertion of yogurt, and retrieving ‘lost’ tampons. The impact of the women's health movement generally on reinterpretations of the body cannot be underestimated; these women were questioning the received wisdom of biomedicine, the thinking-as-usual, and prevalent definitions of women's bodies. They were fundamentally contesting ways in which biomedicine had been naturalized.⁴⁸⁸

⁴⁸⁶ Moore, Lisa Jean and Adele E. Clarke, ‘The Traffic in Cyberanatomies: Sex/Gender/ Sexualities in Local and Global Formations’, *Body and Society*, 7 (2001), pp. 57-96 (p. 87).

⁴⁸⁷ Transcript of anonymised interview with Anatomist C, Cardiff University, 20 December 2011.

⁴⁸⁸ Moore and Clarke, 1995, p. 276.

It was in the early 1970s that reinterpretations of the clitoris began to appear, as feminists struggled to initiate new attitudes towards women's bodies and health concerns, to counter mainstream medicine, which in their view mystified and alienated their own bodily functions from them.

AIDS activists were inspired by strategies adopted by feminists in their own struggles to gain recognition and support. Olivia Laing writes movingly about the health implications of sexual taboos in her essay on the artist David Wojnarowicz, who took a Christian fundamentalist lobbying group (the American Family Association) to court for reproducing images of his collages as part of their campaign to challenge funding decisions made by the National Endowment of the Art. Laing finds an eloquent defence of explicit sexual imagery in Wojnarowicz's testimony at the trial, which took place in 1989. She quotes him as saying that he believes "sexuality and the human body should not be a taboo subject this late in the 20th century... one of the biggest reasons ... [being] that had the human body not been a taboo subject in this decade, I might have gotten information from the Health Department, from elected representatives, that would have spared me from contracting this virus."⁴⁸⁹ Wojnarowicz died in 1992, "one of the 194,476 people killed by AIDS-related illnesses in America that year."⁴⁹⁰

Cultural studies and film studies in the 1970s and 1980s offered feminist interpretations of visual narratives featuring the female body. Artists, too, produced works in which the female nude was re-visioned and the normativity of gender difference questioned. In 1971, for example, Yoko Ono produced a 25-minute film which begins with a fly exploring the naked body of a young woman (identified in the credits as the actress Virginia Lust). While flies may be indifferent to the cultural meanings that we as humans impose on certain parts of the body, the film seems to suggest that we as viewers cannot help but be affected, for is that not what it means to be human? What Yoko Ono emphasised herself is that we are gendered humans: "It's really obvious that *Fly* is the statement of a woman, what women go through. It's interesting that from a male point of view, it's a totally different film – it's about curvature."⁴⁹¹

⁴⁸⁹ Quoted in Olivia Laing, *The Lonely City* (Edinburgh: Canongate Books, 2017), pp. 206 -7.

⁴⁹⁰ *Ibid.*, p. 210.

⁴⁹¹ Quoted in Caroline Boris-Krimsky, 'Yoko Ono: Art of the Mind', *Art New England*, 22 (2001), pp. 26-8.

Combining howling, whining and buzzing noises, which Ono performs herself, the soundtrack evokes emotional and physical pain as well as rage. While the camera lingers on specific zones, including pubic hair, a lip, a toe, the longest sequence of images involves the fly washing itself on top of a nipple. The closing frame, when the camera focusses on the blue of the sky outside the window, could be an invitation to follow the departing insect and to take flight ourselves.

Ono's use of the fly made me think about their appearance in realist art and medical illustrations, to emphasise the notion that drawing or painting 'from life' was a truthful representation of reality, as in an illustration by Gérard de Lairese for the Dutch anatomist Gottfried Bidloo in 1685. In decorative elements in the margins of medieval illuminated manuscripts and Books of Hours, of course, flies represent sin, corruption and mortality. Carrying with them a multiplicity of meanings, they feature in paintings from the fifteenth century onwards. In *Portrait of a Carthusian* by Petrus Christus (1446), the fly on the bottom of the frame is thought by some to draw attention to the artist's signature, as well as his skill and a reference to a story in Vasari's *Lives of the Painters* where the young Giotto, on finding a portrait in progress left unattended on an easel in his master's studio, paints a fly on the subject's nose, a fly that the Master, thinking it is real, tries in vain to brush away on his return.⁴⁹²

Taking as my starting point the notion that 'workaday' anatomical representations of the female body cannot be plainly factual – free from other meanings – I thought about the way in which representations of those parts of the body that make up female sexual anatomy have gone missing, as if airbrushed out of existence. This seemed to me to be not so much a matter of aesthetics, or style – as one of attitudes towards women, of sexual politics that could be translated into practice. A Clinical Research Fellow in Gynaecology was the first to alert me to the activities of a London gynaecologist called Isaac Baker Brown, who as well as founding St Mary's Hospital, London, helped to set up the forerunner of the Royal College of Obstetricians and Gynaecologists. I was told that he developed the 'art' of clitoral surgery in the 1860s - 90s and that "he proposed, and carried out, many clitorectomies to treat various maladies, such as 'disobedient wives'. Apparently after surgery they would return meekly to their husbands and not cause them any more problems."⁴⁹³

⁴⁹² Giorgio Vasari, 'The Life of Giotto, Florentine Painter, Sculptor and Architect', in *Lives of the Artists*, trans. by Juila Conaway Bondanella (Oxford: Oxford University Press: 1991), p. 35.

⁴⁹³ Private correspondence 16/04/2003.

On page *vi* Brown explains that:

Constantly engaged in the treatment of diseases for the female genitals, I have been often foiled in dealing successfully with hysterical and other nervous affections complicating these lesions, without being able to assign a satisfactory cause for the failure. Dr Brown-Sequard's researches threw a new light on the subject, and by repeated observation I was led to the conclusion that the cases which had puzzled me, and defied my most carefully-conceived efforts at relief, depended on peripheral excitement of the pudic nerve. I at once subjected this deduction to a surgical test, by removing the cause of the excitement.⁴⁹⁴

Emphasising that he repeated the operation 'again and again', he explains that he wrote his book in order to present his results. He also makes the recommendation that "all unprejudiced men must adopt, more or less, the practice which I have carried out."⁴⁹⁵ He is in no doubt that it will prove as successful in their hands as in his own. Baker Brown believed that his surgical interventions could cure a progressive female disease that in its different stages included hysteria, spinal irritation (giving rise to uterine displacements), epileptic fits, cataleptic fits and something called 'idiocy'. If left untreated he suggested it would lead to mania and death.⁴⁹⁶

I found it deeply shocking that genital cutting was legitimised within medical science, the aim being to stop masturbation. Anatomists and clinicians in the interviews I conducted were happy to speak out against gender mutilation, which they understood to be a practice connected with religious beliefs and coming-of-age 'rituals' as conducted by folk 'healers' in non-Western cultures. They did not seem to know that as a surgical procedure it was conducted and promoted within the medical profession in the UK in the 1880s, though a Professor of Anatomy, perhaps alluding to the backlash against Brown that led to the end of

⁴⁹⁴ Isaac Baker Brown, *On The Curability of Certain Forms of Insanity, Epilepsy, Catalepsy and Hysteria in Females* (London: Robert Hardwick, 1866), p. *vi*.

⁴⁹⁵ *Ibid.*, p. *vi*.

⁴⁹⁶ *Ibid.*, p.7.

his medical career, said, “We [in the West] were able to change our minds on this, so other people should too.”⁴⁹⁷

Nor did many consider the possibility that some might look upon genital cosmetic surgery as “beautification, transcendence of shame, and the desire to conform; these clearly matter to [American] women seeking cosmetic surgery on their labia”, a point raised by Ruth E. Zielinski in her doctoral thesis.⁴⁹⁸ Research on this subject has been conducted mainly in the UK, Australia and the USA, though comments made during interviews I conducted suggest that the prevalence of such procedures is not limited to the West.⁴⁹⁹ Given the attendant risks of these procedures, such as scarring, infection, permanent disfigurement, pain on intercourse and loss of sexual function, should such surgery be seen as a culturally acceptable expression of a search for perfection; or an industry-led pressure to conform to an idealised norm, as if variation is a problem to be fixed? A significant increase in demand for genital cosmetic surgery surely raises questions about the effects of images of hairless, prepubescent external genitalia that are so readily available in the media. In their research based on interviews with 27 general practitioners, the authors of a recent paper cite female patients who expressed worries that there was something wrong with the appearance of their external genitalia and requested referrals for labiaplasty, when to the GPs eyes there was nothing abnormal.⁵⁰⁰

In Chapter Six of my thesis I describe two trips I made: one to Cagliari (Sardinia) and the other to Florence, where I was able to compare two very different approaches to the female anatomical body as represented in life-size wax models from the late 18th and early 19th centuries. The model of a young female torso in Case III of the collection in Sardinia, based on dissections by Francesco Boi, Professor of Anatomy at the University of Cagliari, was designed to give medical students information useful for their professional training. Made between 1802 and 1805, it shows the structure of the female perineum including the relationship of the glans of the clitoris, the urethra and the bulbs of the vestibule (now renamed *corpora spongiosa clitoridis*), details that are not present in the collection in Florence. When interviewing the curators at the anatomical museum in Cagliari, I was told that the model should be valued for its scientific value. The full-sized whole body

⁴⁹⁷ Transcript of anonymised interview with Anatomist B, Cardiff University, 20 December 2011.

⁴⁹⁸ Ruth E. Zielinski, *Private Places – Private Shame: Women’s Genital Body Image and Sexual Health* (University of Michigan: 2009, a dissertation submitted in partial fulfilment of the degree of doctor of Philosophy [Nursing]), pp. 23, 24.

⁴⁹⁹ Transcript of anonymised interview with Anatomist D, Cardiff University, 20 December 2011.

⁵⁰⁰ Tristan Harding, Jenny Hayes, Magdalena Simonis, Meredith Temple-Smith, ‘Female genital cosmetic surgery: investigating the role of the general practitioner’, *Australian Family Physician*, 44 (2015), pp. 822 – 825.

Anatomical Venuses that were made by the same modeller: Clemente Susini (when he was employed by the Abbot Felice Fontana) for the Museum of Natural History and Physics in Florence, between 1780 and 1790, are very different. Perhaps because the founder of the museum, the Grand Duke Leopoldo, was repelled by anatomical preparations based on cadaveric dissections.⁵⁰¹ Fontana and Susini were required to adopt an aesthetic approach. Fontana is said to have remarked that “the interest of the Royal museum demands that the defects be removed and the works be perfect.”⁵⁰² When I left *La Specola* it was with the impression that the Anatomical Venus models tell stories about imagined female bodies based on artistic ideals. Susini/Boi’s model in Cagliari, by contrast, as a highly accurate and skilful representation of the three-dimensional relationships of different structures along with their nerve and blood supplies, teaches us what can be seen in the ‘living reality’ of a young female perineum.

In deciding to look at images and texts as integral to the working culture of anatomy, and to conduct a quantitative and qualitative study into the attitudes of anatomists, clinicians and medical students, I was inspired in no small part by Studs Terkel, the American radio broadcaster and jazz aficionado, who specialised in oral history. In the introduction to his book about work, he admits that while it is “by its very nature, about violence – to the spirit as well as to the body... [it is] about a search, too, for daily meaning.”⁵⁰³ Looking at the working culture of medicine and, in particular, anatomical education, my studies uncovered gender inequalities. That the female genitals continue to give rise to controversies can be seen in a special issue on ‘The Female Patient’ in 2013, followed by another in 2015 on ‘The Clinical Anatomy of Sex’, where questions about what constitutes female genital anatomy and what it should be called are seen to be disputed topics.⁵⁰⁴

In interviews with members of FIPAT (the Programme for Anatomical Terminology of the International Federation of Associations of Anatomists [IFAA]), I asked if they thought that it was part of their brief to ensure that anatomy is a fair and equitable profession that promotes equality, inclusivity and gender balance. One of my interviewees thought that while this as an ideal was very ‘commendable’, in reality “it is always very difficult to change.”⁵⁰⁵

⁵⁰¹ A Riva, Gabrielle Conti, Paola Solinas and Francesco Loy, ‘The evolution of anatomical illustration and wax modelling in Italy’, *Journal of Anatomy*, 216 (2010), p. 214.

⁵⁰² Quoted by R. Ballestriero, ‘Anatomical models and wax Venuses’, *Journal of Anatomy*, 216 (2010), p. 227.

⁵⁰³ Studs Terkel, *Working: People talk about what they do all day and how they feel about what they do* (New York: Ballantine Books, 1974), p. xiii.

⁵⁰⁴ See Letters to the Editor, pp. 290 – 292; Review article; pp. 293 – 204; Roy Levin, *Clinical Anatomy*, 28 (2015), pp. 349 – 351.

⁵⁰⁵ Transcript of anonymised interview with Anatomist J, Istanbul, Turkey, 3 September 2015.

He added that in Portugal, the term used for the genital organs (and especially the nerves and arteries that supply them) continues to be ‘*pudendal*’ which comes from the French *pudeur*, which he admitted has a lot of negative connotations and absolutely nothing to do with the structures themselves. While he thought that it was not appropriate in contemporary societies to use this term, another professor of anatomy was not so sure, arguing that although “we still use *pudenda* – as shame – it’s interesting where it comes from, but it’s established terminology now and I’m not sure if we should veto it because of the sins of the past.”⁵⁰⁶

When I mentioned that O’Connell *et al.* in 2008 proposed renaming the distal vagina, the distal urethra and the clitoris (including the bulbs, crura, body and glans) by including them all in the term ‘the clitoral complex’, because they saw the need for an “unambiguous definition of the components of the vulva [as being] important for sexual education and scientific communication about sexuality,”⁵⁰⁷ it was not very well received. This response reminded me of an earlier interview with another Professor of Anatomy who told me that though he was not aware of a problem regarding nomenclature for this region, he thought that pointing out the similarities between male and female sexual anatomy would be useful, “because [female sexual anatomy] is a much more difficult area to dissect, it’s much less obvious because less of it is external.”⁵⁰⁸ Interestingly, in the same article O’Connell *et al.* conclude that “*The clitoral complex*, composed of the distal vagina, urethra and clitoris, is the location of female sexual activity, analogous to the penis in men.”⁵⁰⁹

Since then it has been proposed and agreed by members of FIPAT that they as a body should not only remove eponyms by concentrating on functionality, but also consider changing terms that have historical, moral or political implications that no longer apply. The term that was identified for such change is ‘*pudenda*’ (because of its associations with feelings of ‘shame’ and a need for modesty). As such, it was seen to be an anomalous and pejorative term that was morally unjustified in contemporary societies, symptomatic of times when terms were devised by male anatomists working within a male-centric culture of medicine. It is gratifying to think that such a decision was made in part following discussions and interviews with members of the nomenclature committee, who were also aware of the

⁵⁰⁶ Transcript of anonymised interview with Anatomist J, Istanbul, Turkey, 3 September 2015.

⁵⁰⁷ Helen E. O’Connell, Norm Eizenberg, Marzia Rahman and Joan Cleeve, ‘The Anatomy of the Distal Vagina: Towards Unity’, *Journal of Sexual Medicine*, 5 (2008), p. 1889.

⁵⁰⁸ Transcript of anonymised interview with Anatomist C, Cardiff University, 20 December 2011.

⁵⁰⁹ Helen E. O’Connell, Norm Eizenberg, Marzia Rahman and Joan Cleeve, ‘The Anatomy of the Distal Vagina: Towards Unity’, *Journal of Sexual Medicine*, 5 (2008), p. 1889.

scientific papers we had written on the possibility of sexist attitudes within the culture of medicine and the need for change.

Even as questions of gender bias are being seen as remediable by some, the lasting power and pervasiveness of cultural taboo (and aesthetic ideals of gender difference) means that there are aspects of the human body that continue to affect their representation, with implications for medical education and health and well-being. To confront biased ‘ways of seeing’ takes courage. As feminists in the 1970s and 80s used to say, the personal is political. The attraction of the Venus models endures, despite (or because of) their lack of information. Just as popular museums featuring such models were shut down for ethical reasons, concerns are now being raised regarding the use of human remains preserved through plastination techniques in for-profit exhibitions. Sexual stereotyping or the objectification of female bodies at such exhibitions is an issue, if certain poses are designed to be eye-catching, morbid, or those that reduce “the body to mere material, an object, or a piece of art”, one of the points raised in a ‘Statement on the Public Display of Plastinated Human Bodies’ produced in 2018 by The Federative International Committee on Ethics and the Medical Humanities (FICEM).⁵¹⁰

How creative writers, artists and scientists respond to new material facts relating to the human body and what they make of them remains to be seen. Perhaps we need to look again in order to offer alternative ways of seeing. It might even be enjoyable, saying goodbye to pretty (or not so pretty) lies and instead, to create works that reveal different cultural priorities, particularly in relation to gender relations and gender identity. Olivia Laing, observing the loneliness of artists she describes as being outsiders, questions the notion that “all difficult feelings – depression, anxiety, loneliness, rage – are simply a symptom, a consequence of unsettled chemistry, a problem to be fixed, rather than a response to structural injustice or, on the other hand, to the native texture of embodiment, of doing time, as David Wojnarowicz memorably put it, in a rented body, with all the attendant grief and frustration that entails.”⁵¹¹ In her conclusion, she suggests that the cure for loneliness is in “learning to befriend yourself... there are no rules and nor is there any need to feel shame...”⁵¹² As in a memento mori, a still-life painting in the Vanitas tradition, she reminds us of the passing of time and the need to stay open and alert to the possibilities of life in all in all its various

⁵¹⁰ Professor Andreas Winkelmann et al., Statement on the Public Display of Plastinated Human Bodies, (FICEM, www.ifaa.net, 2018) [accessed 16 October 2018].

⁵¹¹ Olivia Laing, *The Lonely City* (Edinburgh: Canongate Books, 2017), p. 281.

⁵¹² *Ibid.*, p. 281.

forms, while remembering our obligations to each other. Words that remind me of the care and attention shown by scientists, too, who find ways to accept and depict ‘the native texture of embodiment’ that is human sexual anatomy without connotations of shame or any need for false modesty.

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CONFIDENTIAL

Questionnaire:

An assessment of the attitudes of anatomists and clinicians towards gender issues as shown in anatomical education

Bernard Moxham and Susan Morgan

PLEASE NOTE THAT SEXISM IS DEFINED AS – “attitudes and actions which relegate women to a secondary and inferior status in society”

We estimate that the questionnaire will take approximately 25 minutes to complete.

Please note that participation is voluntary and that you can withdraw from the study at any stage.

The data collected are confidential and your participation is therefore anonymous.

WE ARE MOST GRATEFUL FOR YOUR HELP IN THIS STUDY.

1. Please give your age:

2. What is your gender?

3. Before university, were you educated at:

Comprehensive school/Grammar school/Public (private) school/other (please state)

4. Rate your anxiety/embarrassment/misgivings about dissecting various parts of the body (0 little reaction etc) to 5 (very anxious etc):

The face	0	1	2	3	4	5
The arm	0	1	2	3	4	5
The hands	0	1	2	3	4	5
The chest (male)	0	1	2	3	4	5
The chest (female)	0	1	2	3	4	5
The abdomen	0	1	2	3	4	5
The genitals (male)	0	1	2	3	4	5
The genitals (female)	0	1	2	3	4	5
The leg	0	1	2	3	4	5
The feet	0	1	2	3	4	5

5. Please rate your sympathy with gender politics/feminism

0 (no sympathy) 1 2 3 4 5 (very feminist)

6. Provide the degree to which you are in agreement with the following statements:

i. The student's gender is of importance when I am in consultation with the student.

0 (disagree) 1 2 3 4 5 (agree)

Give reasons for your response:

ii. My own gender is of importance in consultation with a student

0 (disagree) 1 2 3 4 5 (agree)

Give reasons for your response:

iii. The gender of the student is of importance in clinical education

0 (disagree) 1 2 3 4 5 (agree)

Give reasons for your response:

iv. My own gender is of importance in my professional relations, for example with colleagues, medical staff or in research

0 (disagree) 1 2 3 4 5 (agree)

Give reasons for your response:

7. How many anatomical mnemonics with sexual connotations do you know?

8. Rate your feelings about sexism in relation to the following mnemonic for the nerves entering the superior orbital fissure of the skull:

Luscious **F**rench **T**arts **S**tand **N**aked **I**n **A**nticipation

0 (no concern) 1 2 3 4 5 (very concerned)

9. Have you encountered any evidence of sexism in the teaching of anatomy, if yes briefly describe:

10. Have you encountered any evidence of sexism in the textbooks of anatomy, if yes briefly describe:

11. Rate each of the following anatomical statements in terms of whether you perceive them as “sexist” (0= not sexist; 5 = very sexist)

The clitoris is a diminutive form of the penis

The clitoris and the penis are erectile sexual organs

The penis is the enlarged form of the clitoris

The clitoris is the analogue to the male penis

The mammary glands are primarily organs of lactation

The mammary glands are secondary sexual organs

The penis is a sexual organ

The penis is a urogenital organ

12. To what extent do you believe that medicine is male dominated:

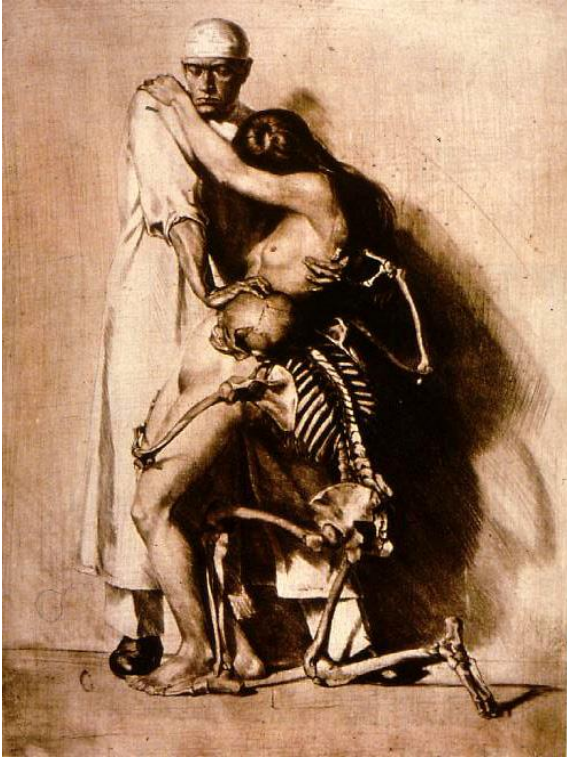
0 (no sexual predominance) 1 2 3 4 5 (male dominated)

13. Which medical specialities to you consider especially appropriate for females:

14. Are there any personality traits that, in your view, female doctors have that make them more fitted to medicine:

15. For each of the below images involving females, rate them according to whether you believe they have a sexist basis (0 = no sexism; 5 = very sexist)

Please note that sexism is defined as – “attitudes and actions which relegate women to a secondary and inferior status in society”



1

Der Arzt (The Doctor) by Ivo Saliger, 1920

(0 = no sexism; 5 = very sexist)

Rating for image 1:



2

A Pregnant Woman, Dissected, Lateral View, with Arms Upraised, Accompanied by Separate Sections of the Body and A Seated Woman, Dissected, Holding a Dissected Baby, Accompanied by Separate Sections of the Body, by Jacques-Fabien Gautier D'Agoty 1764/5

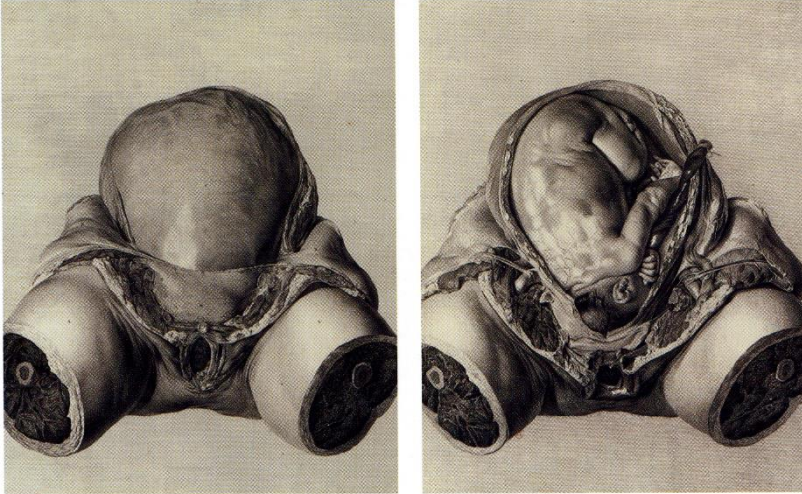
Rating for image 2:

3



Wax Model of a reclining female figure, Clemente Susini, late 18th century

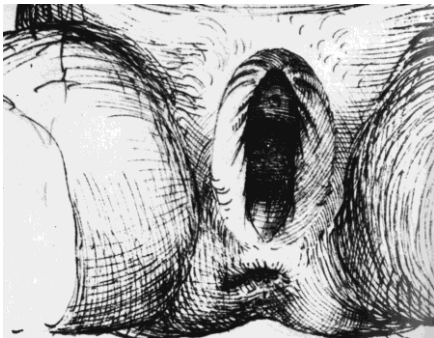
Rating for image 3:



4

Engraving after drawings by Jan van Rymsdyk , from *The Anatomy of the Human Gravid Uterus Exhibited in Figures*, Dr William Hunter, 1774

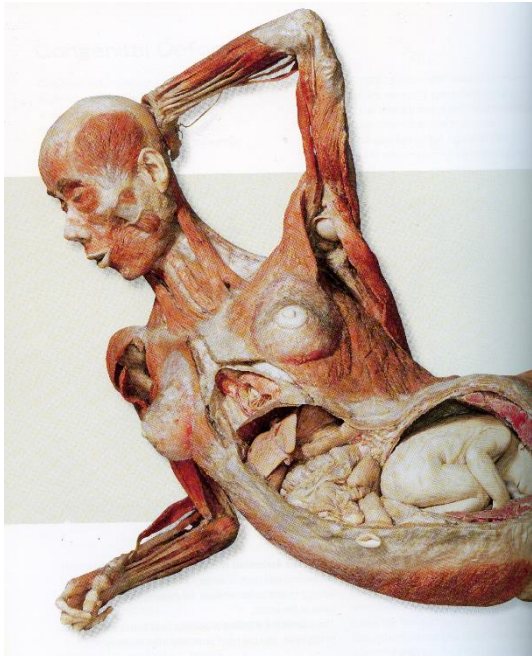
Rating for image 4:



5

The external genitalia and vagina, with anal sphincter, Leonardo da Vinci, 1508 - 9

Rating for image 5:



6

Plastinated preparation of dissected pregnant cadaver, Gunther von Hagen, 2000

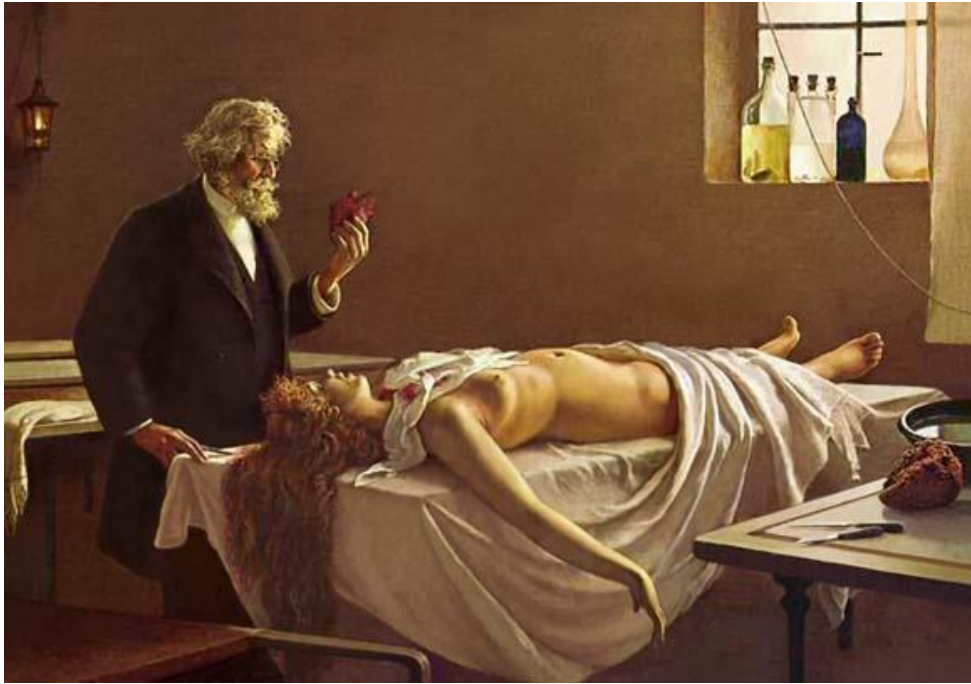
Rating for image 6:



7

The Demonstrators Anatomy Lesson , Karen Ingham, 2003

Rating for image 7:



8

And she had a heart! Enrique Simonet Lombardo, 1898

Rating for image 8:



9

Male and female surface anatomy, from the Epitome of Vesalius, 1543

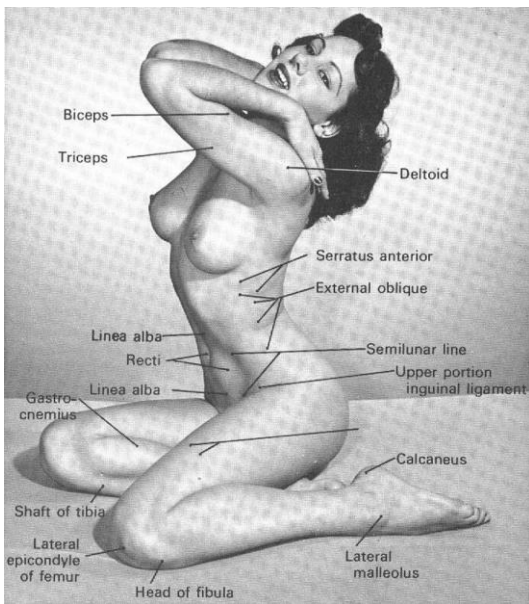
Rating for image 9:



10

Norman and Norma, Robert Latou Dickinson and Abram Belskie, 1943

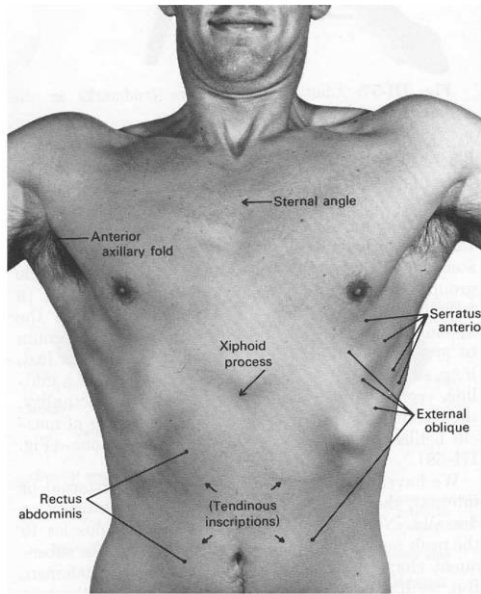
Rating for image 10:



11

From *The Anatomical Basis of Medical Practice*, Becker, Wilson and Gehweiler, 1971

Rating for image 11:



12

From *The Anatomical Basis of Medical Practice*, Becker, Wilson and Gehweiler, 1971

Rating for image 12:

16. The pudendal nerve and pudenda are derived from Latin meaning “to be ashamed”. Do you find this terminology appropriate:

0 (not appropriate) 1 2 3 4 5 (very appropriate)

17. If in textbooks you saw that the female body is presented only to show how it differs from the male, would you regard this as sexist:

0 (not sexist) 1 2 3 4 5 (very sexist)

18. Should the anatomy course address gender issues explicitly:

0 (no) 1 2 3 4 5 (important to address)

19. Should anatomists pay attention to inequity in classroom processes? For example, watch for and challenge student behaviours and relationships that reflect stereotypical roles, such as men assuming the lead in lab activities, women being “note-taker” in small groups.

0 (not important) 1 2 3 4 5 (very important)

