

'The Most Startling Innovation': Ovarian Surgery in Britain, c.1740-1939.

Sally Frampton

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

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Abstract

Ovarian surgery was a topic of considerable interest to European surgeons during the late eighteenth and early nineteenth centuries. In the 1830s extirpation of the diseased ovary became the first major abdominal procedure to come into use in Britain and in 1843 the term ‘ovariotomy’ was coined to describe the procedure. Yet the operation’s ‘establishment’ was fraught with anxieties that went to the heart of surgical morality. Alternatively framed as a triumphant episode of surgical progress and a symbol of Victorian surgeons’ attempts to ‘control’ female patients with brutal and unnecessary surgery, this thesis adopts a different approach by considering what ovarian surgery can tell us about innovation. With the procedure at its centre, this thesis traces the intricacies particular to negotiating novelty in operative surgery, and how the use of ovariotomy raised significant questions regarding risk, responsibility, credit, economics and surgical language.

What emerges is a history that challenges not only previous historicization of ovarian surgery, but also histories of innovation which imagine novel products as stable entities and the innovation process as one that follows a linear pattern. Ovarian surgery, on the contrary, followed no such pattern. At the heart of the debate – and at the heart of this thesis – is the question of definition. The integration of ovariotomy, I argue, was a complex process because the meaning and definition of the innovation was continually contested as the operation was repeatedly re-shaped technically, philosophically and linguistically.

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He wrote succinctly and would not tolerate misuse of the English language – to the patient who asked ‘Do I need surgery, Sir?’ he replied, ‘Everyone needs surgery, Madam, what you need is an operation!’¹

Obituary of Lord Russell Brock, surgeon. (1903-1980).

¹‘Lives of the Fellows: Brock, Russell Claude, Lord Brock of Wimbledon (1903 - 1980)’
(The Royal College of Surgeons of England: created: 1 June 2006, Last modified: 21 March 2007)
<http://livesonline.rcseng.ac.uk/biogs/E000235b.htm> (accessed 27th August 2013).

Introduction

Overview

‘It is...an interesting question to be decided as to why and wherefore a poor little Fallopian tube or withered ovary should possess the power of setting men by the ears’ commented an editorial in the *Medical Press* in 1888.² Looking back to the nineteenth century, historians may be inclined to wonder the same thing. During this time the ovary, as an object of physiological and pathological enquiry, and as a site of surgical intervention, engendered more debate and controversy within the medical profession than any other bodily organ. In the late 1830s the removal of diseased ovaries, usually those afflicted with large non-malignant tumours, became the first surgical procedure involving major peritoneal section to be performed frequently, and in 1842 the Manchester surgeon Charles Clay (1801-1893) began a long and unbroken series of the procedures. During this decade the operation was given an appellation that would come to be etched upon the history of the Victorian era: ‘ovariotomy’, a neologism coined by the Edinburgh obstetrician Sir James Young Simpson (1811-1870) in 1843 to describe Clay’s work.

For the next twenty-five years, the justifiability of opening the abdomen to treat ovarian disease would remain contested, causing deep schisms in the profession, in which reputations could be lost and careers ruined just as often as fortunes were gained. In the late 1860s, mortality rates for the operation began to decline significantly, in part due to the work

² ‘The Militant Spirit in Gynaecology Societies.’ *Medical Press and Circular* 45 (May 9th, 1888) 495.

of two exceptionally prolific and skilful practitioners, the Edinburgh obstetrician Thomas Keith (1827-1895) and London surgeon Thomas Spencer Wells (1818-1897). Keith had begun performing ovariectomy in 1862 and five years later had published the striking results of his first fifty-one cases: forty of his patients had recovered, with all but one of them seemingly completely cured.³ His recovery rate of around eighty per cent was equal if not better than those of other established 'capital' operations – major operations deemed to hold a relatively high risk of death.⁴ By the 1870s, ovariectomy was beginning to be depicted as one of the major surgical innovations of the past decades, gaining a status similar to that of the discovery of anaesthesia or the introduction of antiseptic techniques.

The arguments surrounding the operation did not dissipate, however, as more women survived it. On the contrary, ovarian surgery remained a frequent catalyst for debates. From the priority disputes and accusations of greed that were directed at specialists in the operation during the 1860s, to the controversies of the 1870s and 1880s when a number of surgeons began removing *both* ovaries as a means of curing diseases other than ovarian tumours. Thus, ovarian surgery is one of the most significant and most accessible historical examples of the complexities of innovation in surgery; symbolic of the hopes and fears of the surgical profession, its performance was embedded in a network of ideas and ideals about the role of surgery in society. As increasing experience with the procedure re-shaped viewpoints, as egos clashed and professional territories were defended, those who performed ovarian surgery were never more than a hair's breadth from disrepute throughout the nineteenth century; 'with its lights and its shades, its friends and its foes, its converts and its perverts, the history of ovariectomy reads like a romance,' American gynaecologist William

³ Thomas Keith 'Fifty-One Cases of Ovariectomy' *The Lancet* 90, no.2297 (7 September 1867) 290-291.

⁴ James Paget 'The Address in Surgery' *British Medical Journal* 2, no.155 (16 August 1862)155-162; 161. In which Paget estimated that ten to fifty per cent of amputations remained fatal as did '20 or more per cent' of lithotomies.

Goodell (1829-1894) commented in 1879, capturing something of contemporary sensibilities.⁵

By the end of the 1880s many British surgeons were perpetuating the idea that ovarian surgery was out of control. The previous decades had seen a number of early pioneers in the area have their careers laid to waste by revelations that they had not published the full extent of their experiences with the operation, including cases which had resulted in death. The long-lasting effect of this was a peculiar paranoia among ‘ovariotomists’ - as they were increasingly known - about any hint of secrecy regarding an operator’s experiences. The medical press remained crammed with reports of ovarian surgery well into the 1880s, as cases which saw even a slight deviation from the normal mode of operating or in outcome, continued to be printed. However many surgeons were increasingly unhappy that the prestige of an ovariotomist still seemed to rest upon the number of ovaries that he (and it was usually a ‘he’) had removed. A high volume of cases – even if successful - could no longer be viewed as inherently positive but rather, as one British surgeon, George Granville Bantock (1837-1913) put it, a sign that an ‘indiscriminate removal of the uterine appendages’ was taking place.⁶ To support this assertion, Bantock reported to the British Gynaecological Society a cautionary tale from America, where it seemed surgeons were even more gung-ho than their British counterparts. It was, he claimed, ‘no uncommon thing in New York to see a soup-plateful of uterine appendages presented by some of the younger surgeons to some of the societies there.’⁷

⁵ William Goodell *Lessons in Gynecology*. (Philadelphia: D & G Brinton; 1879) 299.

⁶ ‘The British Gynaecological Society, November 11th 1885’ *British Gynaecological Journal* 1, no.4 (1886) 371-387; 386. ‘Uterine appendages’ was a term used (and still used) to collectively describe the ovaries, fallopian tubes and the surrounding ligaments.

⁷ *Ibid.* 386.

Bantock's disturbing image rivalled anything to be found in contemporary medical allegories such as Bram Stoker's *Dracula* (1897) or Wilkie Collins' *Heart and Science* (1883), both of which, through the medium of gothic horror, addressed issues that were increasingly played out in the ovariectomy debate.⁸ By the 1880s, the operation had become intertwined with growing controversies over animal experimentation as some anti-vivisectionist campaigners began to view 'experimental' abdominal surgery on women as analogous to animal vivisection, a comparison that melded all too easily with Victorian understandings of female vulnerability.⁹ Coupled with controversial cases that were appearing around the same time of women's ovaries being removed under circumstances of dubious consent or for apparently 'trivial' conditions, unpalatable aspects of ovarian surgery were filtering into the non-medical press and the surgeons performing it were acquiring an unfortunate reputation that their practices pushed at the boundaries of medical etiquette. Thus, while desperately proud of their achievements, these latter decades also saw practitioners engaged in a somewhat curious battle with their recent past, as many distanced themselves from the controversies which were engulfing the field. This sentiment was reinforced by growing evidence which seemed to suggest ovaries were responsible for more than just reproduction but also the development of feminine characteristics, making the removal of *both* ovaries for anything less than a serious condition, increasingly questionable

⁸ Wilkie Collins *Heart and Science: A Story of the Present Time* (Peterborough: Broadview Press, 1996); Bram Stoker *Dracula* (Penguin; London, 1994). Wilkie Collins' *Heart and Science* published between August 1882 and June 1883, was Collins' response to the vivisection debate. A vehemently anti-vivisection vehicle, the horror of doctors' animal experimentations are neatly characterised in Dr Nathan Benjulia, a villainous vivisector who wishes to extend his experiments to a vulnerable young woman with brain disease. Bram Stoker's *Dracula* published a little later in 1897 has also frequently been read as a metaphor for male medical control of uncontrolled female behaviour and sexuality, the latter embodied in the vampiric Lucy Westenra. See Tabitha Sparks, *The Doctor in the Victorian Novel: Family Practices*. (Farnham and Burlington: Ashgate, 2009) 118.

⁹ Although this was somewhat complicated by the fact that some prominent ovariectomists, most notably Robert Lawson Tait, were also strongly opposed to vivisection. For more on this see Mary Ann Elston, 'Women and Anti-Vivisection in Victorian England, 1870-1900' in *Vivisection in Historical Perspective* ed. Nicolaas A. Rupke (London & New York: Routledge, 1990), 259-294.

and spurred some surgeons to consider more conservative measures. Yet Bantock's comments exemplify something of the incongruous and confused attitude of 'ovariotomists' by this point; at the same time as he addressed the British Gynaecological Society with his concerns about excessive surgery, he himself was one of Britain's most prolific operators in the field and the following year he published 100 cases of abdominal section that he had performed at the Samaritan Free Hospital in London.¹⁰ With both radical ablation and conservative resection of the ovaries being presented as therapeutic choices for women by the 1890s, it was not only the *place* of ovariectomy in the surgical canon that was being called into question by the turn of the twentieth century, but its very definition.

Approach

With these concerns in mind, this thesis uses the case of ovariectomy to understand how surgeons of the long nineteenth century negotiated novelty. How was this surgical innovation constructed, diffused, owned, profited from, changed and understood? In it I go beyond the polarisation which has been common in historical writing on surgery, with 'social' histories on one side, which often only pay lip service to the technical aspects of operations, and heavily technical accounts on the other, which often marginalise social and cultural considerations.¹¹ In this way it speaks to recent works by historians like Thomas Schlich, Claire Brock and Sally Wilde and Geoffrey Hirst in attempting to recognize that the technical minutiae of operative surgery are worthy of analytical enquiry and that changes in

¹⁰ George Granville Bantock, 'One Hundred Consecutive Cases of Abdominal Section' *The Lancet* 129, no. 3315 (12th March 1887): 518-521.

¹¹ Traditionally such an approach has been associated with heavily technical, whiggish surgical histories; as Christopher Lawrence has observed: 'because it is a practice, surgery has been easily accommodated into empirical and positivist philosophies of medical practice' Christopher Lawrence 'Democratic, Divine and Heroic: The History and Historiography of Surgery' in *Medical Theory, Surgical Practice: Studies in the History of Surgery* ed. Christopher Lawrence (London: Routledge; 1992), 1-47. Arguably surgery, more than other areas of medicine, has been disproportionately subject to 'whiggish' histories.

the professional culture of surgery and in patient-practitioner relationships cannot be regarded as separate from the process of technical innovation.¹²

Nonetheless an approach which makes innovation its guiding framework requires some justification, or at least, clarification. ‘Innovation’ is a rather amorphous word and can be applied to so many different things that it can all too easily come to mean nothing as a reference point. Generally we understand the term to convey novelty or newness. But the broadness of this definition means that ‘innovation’ often implies not only novelty but advancement also. As John Pickstone has noted: “‘innovation’ is a fashionable word, but not without reason; we are all rather weary of ‘progress.’”¹³ As he seems to imply, ‘innovation’ often becomes simply a more circumspect way to describe ‘progress’. Pickstone raised these concerns over twenty years ago; and yet they resonate strongly today. ‘Innovation’ has become the idiom *de jour* for businesses and organisations of all kinds as part of the representation of their ideas, goods and services; not least in medicine, where both private and ostensibly public initiatives have pushed the idea that a focus on innovation – that is the creation and diffusion of new products and processes - is the only logical economic rationale for optimising medical services.¹⁴ Innovation then can be a term of complex meaning, as a

¹² Thomas Schlich *The Origins of Organ Transplantation: Surgery and Laboratory Science, 1880-1930*

(Rochester: University of Rochester Press, 2010), 9–10. Claire Brock, ‘Risk, Responsibility and Surgery in the 1890s and Early 1900s’ *Medical History* 57, no. 3 (2013): 317–337; 325–6. Sally Wilde and Geoffrey Hirst, ‘Learning from Mistakes: Early Twentieth-century Surgical Practice.’ *Journal of the History of Medicine and Allied Sciences* 64, no.1 (2009): 38–77. Wilde and Hirst in particular, stress the practice-based nature of surgical innovation.

¹³ John V. Pickstone, ‘Introduction’ in *Medical Innovations in Historical Perspective*, ed. John V. Pickstone (Basingstoke: Macmillan, 1992), 1–16; 1.

¹⁴ In 2011 Chief Executive of the NHS in England Sir David Nicholson wrote that ‘innovation must become core business for the NHS.’ This was from a policy document which focused on the role of innovation in proving the efficacy of healthcare, tellingly titled ‘Innovation; Health and Wealth’ Department of Health ‘Innovation, Health and Wealth: Accelerating Adoption and Diffusion in the NHS’ (2011).

<http://www.institute.nhs.uk/images//documents/Innovation/Innovation%20Health%20and%20Wealth%20-%20accelerating%20adoption%20and%20diffusion%20in%20the%20NHS.pdf> (accessed 25th August 2013). Additionally numerous companies such as ‘healthcare innovation hub’ Medipex focus

number of medical historians have highlighted. Alongside Pickstone's *Medical Innovations in Historical Perspective*, other edited volumes like Ilana Löwy's *Medicine and Change: Historical and Sociological Studies of Medical Innovation* and more recently Thomas Schlich and Ulrich Tröhler's *The Risks of Medical Innovation* have thrown light on the diverse fates of various novelties and innovations in medicine;¹⁵ and from Pickstone onwards there has been greater emphasis by medical historians upon the 'real, messy, contested and complex debates by which, over time, some procedures were accepted in preference to others.'¹⁶

Most historical work on medical innovation however, is focused upon the twentieth century, reflecting a general understanding that it was during this time significant doubts began to arise as to whether innovation in medicine was an intrinsically 'good' thing; 'there have been mixed feelings about medical innovations since the 1960s, and one can identify an increased interest in risk in recent times' write Schlich and Tröhler,¹⁷ noting that disillusionment with scientific and technological innovation can be seen as a significant component of 'reflexive' modernity.¹⁸ Clearly for these authors this does not *preclude* historical analysis of medical innovations before the twentieth century: all the volumes cited

solely on 'commercialising innovative medical products' conceived of both in the NHS and in the private sphere <http://www.medipex.co.uk/> (accessed 25th August 2013).

¹⁵ John V. Pickstone, ed. *Medical Innovations in Historical Perspective* (Basingstoke: Macmillan, 1992). Ilana Löwy, ed. *Medicine and Change: Historical and Sociological Studies of Medical Innovation* (Montrouge: John Libbey Eurotext, 1993); Thomas Schlich and Ulrich Tröhler, eds., *The Risks of Medical Innovation* (Abingdon & New York: Routledge, 2006).

¹⁶ Pickstone (1992)16.

¹⁷ Schlich and Tröhler (2006), preface.

¹⁸ Thomas Schlich (2006), 'Risk and Medical Innovation: A Historical Perspective' in *The Risks of Medical Innovation* ed. Thomas Schlich and Ulrich Tröhler (Abingdon & New York: Routledge, 2006), 1-19; 2. Certainly strategies of risk analysis and outwardly methodical implementations of innovation were more visible by the twentieth century. Both are perhaps best exemplified in the introduction of the randomized clinical trial into medicine the 1950s in which numerous dimensions of risk were built into the innovation process. See Peter Keating and Alberto Cambrosio, (2006). 'Risk on Trial: The Interaction of Innovation and Risk in Cancer Clinical Trials' in *The Risks of Medical Innovation: Risk Perception and Assessment in Historical Context* ed. Thomas Schlich and Ulrich Tröhler, 225-241 (Abingdon & New York: Routledge, 2006).

above include some essays that deal with innovations from before this time.¹⁹ Nonetheless it has led some historians to assume that before the twentieth century medical novelties were much more readily accepted as positive changes; indeed Pickstone even pinpoints the nineteenth century as exemplifying this, suggesting that ‘we no longer have the high Victorian confidence that change is for the best.’²⁰

Just like the related concept of ‘risk’, because ‘innovation’ is fashionable *now* we assume that projecting it onto the past would be presentist. In fact most historians of medicine have omitted the rich history of innovation - both as a word and concept. As historian of science Benoît Godin has observed ‘for most of its history the concept innovation, a word of Greek origin, carried pejorative connotations. As ‘Introducing change to the established order’, innovation was seen as deviant behaviour, forbidden and punished.’²¹ Often synonymic with notions of revolution - another word which would come to have important connotations for nineteenth-century surgeons - innovation had long been fraught with political and social uncertainty. Only in the nineteenth century, as the impoverished inventor was re-cast as the heroic Briton who fulfilled a productive role in society, did innovation begin to be understood more positively, or at least, less as a signal of radicalism or instability.²² Surgeons were keen to apply this characterisation to themselves, and as more patients survived ovariectomy, medical men increasingly perceived the operation to be deeply

¹⁹Ian Burney (2006) ‘Anaesthesia and the Evaluation Surgical Risk in Mid-Nineteenth Century Risk’ in *The Risks of Medical Innovation: Risk Perception and Assessment in Historical Contexted*. Thomas Schlich and Ulrich Tröhler (Abingdon & New York: Routledge, 2006), 38-52; Ulrich Tröhler *Quantification in British Medicine and Surgery 1750-1830, With Special Reference to its Introduction into Therapeutics* (Ph.D thesis: University College London, 1978).

²⁰Pickstone (1992) 1.

²¹Benoît Godin, ‘Social Innovation : Utopias of Innovation from c.1830 to the Present’: Project on the Intellectual History of Innovation Working Paper No. 11. p.8 2012 (Montreal: INRS, 2012) 8. http://www.csiic.ca/PDF/SocialInnovation_2012.pdf (accessed 25th August 2013).

²² As exemplified by James Watt and George Stephenson. Christine MacLeod, *Heroes of Invention: Technology, Liberalism and British Identity: 1750-1914* (Cambridge University Press, Cambridge, 2007).

symbolic, not just of Victorian progress but also of Victorian *morality*: a procedure that had saved the lives of thousands of suffering women across the social spectrum. Nonetheless as Godin points out, ‘innovation’ continued to have troubling associations throughout the century. Even for those who saw ovariectomy as progress, there were ripples of unease as to the extent to which surgery was being changed by the operation; as one surgeon suggested in 1866, ovariectomy was ‘perhaps the most startling innovation in surgery of late years... our old notion, that it was death to the patient to interfere with the peritoneum, has been somewhat rudely swept away by the wholesale manner in which it is now cut through, and burnt through, and mopped out with sponges.’²³ Even if innovation was not considered an outright mischief and was seen as necessary to progress, it remained shocking and, at times, brutal.

From the viewpoint of today, it seems there has been a striking continuity during the last two centuries in the way that innovation in surgery has been conceived of as particularly complex. Like other areas of modern medicine, standardisation has been a desired goal of surgeons.²⁴ However the move towards standardisation has also been somewhat checked by the aspect of performance that is central to surgery, which can make achieving uniformity in practice difficult. Just as in the nineteenth century, surgery - more than other aspects of medicine - is the product of individual idiosyncrasies, continuing to rely predominantly on an operating surgeon’s manual skills.²⁵ Today this is most visible in the difficulties of

²³William P. Swain ‘Transactions of Branches: On Recent Improvements in Surgery’ *British Medical Journal* 2, no.298 (Sept 15th 1866) 303-305; 304.

²⁴ As attested to in historical studies such as Thomas Schlich’s on the introduction of osteosynthesis by Swiss surgeons in the 1950s. Schlich shows how the organisation responsible for innovating the technique, the AO Foundation, attempted to diffuse osteosynthesis as a standardised technique through both educational manuals and practical instruction. But Schlich also highlights the resistance of some surgeons to the AO’s brand of scientific, standardised surgery. Thomas Schlich, *Surgery, Science and Industry: A Revolution in Fracture Care, 1950s-1980s*. (Basingstoke: Palgrave Macmillan, 2002); 252-3.

²⁵Although with the growing use of robotic surgery for routine operations this might not always be the case. Robotic surgery still relies on surgeon’s manual manipulation but crucially, this manipulation is

reconciling randomised control trials with operative surgery; ‘choices about the exact size and location of the incision are individual to the surgeon and to each patient, as are the exact ‘steps of each operation’ the surgeon Peter Angelos has written; ‘thus, it is often difficult to standardise procedures, which make large multicentre clinical trials of surgical procedures difficult to undertake.’²⁶ Nineteenth-century surgeons likewise struggled to reach a secure conclusion as to what innovation meant to them and what was the best way to achieve it; and similarly standardisation in surgery was both desired and yet problematic to the flourishing of innovation, which was seen to rely on a certain amount of creativity.²⁷ This was most obviously revealed in the well-documented tensions between ‘art’ and ‘science’ in nineteenth-century medicine. Steve Sturdy has argued that such divisions between the two have been somewhat overstated by historians. Certainly, as he suggests, such a dichotomy indicates a questionable reliance on rather essentialist concepts of ‘science’ and ‘art’ in medicine, when the two were never entirely separate entities anyway²⁸ - it was perhaps more the case that an imbalance in favour of science was suspected, rather than an outward hostility to scientific surgery itself. Nonetheless doctors *did* worry about the loss of artistic flair in the face of scientific medicine,²⁹ and surgeons did imagine art and science to be two ideal constituents of surgery.

mediated through technology, thus arguably undermining the centrality of the surgeon’s manual skills.

²⁶ Peter Angelos, ‘The Art of Medicine: The Ethical Challenges of Surgical Innovation for Patient Care.’ *The Lancet* 376, no. 9746 (2010): 1046–1047; 1046.

²⁷ Stefan Timmerman and Marc Berg suggest that ‘the notion that predictability, accountability and objectivity will follow uniformity belongs to the Enlightenment master narratives promising progress through increased rationality and control’ Stefan Timmermans and Marc Berg, *The Gold Standard: The Challenge of Evidence-Based Medicine and Standardization in Health Care*. (Philadelphia: Temple University Press, 2003); 8.

²⁸ Steve Sturdy, ‘Looking for Trouble: Medical Science and Clinical Practice in the Historiography of Modern Medicine.’ *Social History of Medicine* 24, no. 3 (2011): 739–757.

²⁹ ‘Our present system of medical education is to my mind erring greatly on the side of devoting too much time to the science of our profession and too little to its art’ complained the psychiatrist Lionel Weatherly in 1898. Lionel Weatherly, ‘Remarks on Medical Progress.’ *The Lancet* 152, no. 3918 (1st October 1898): 851-854; 852.

These continuities are balanced out – if not outweighed – by historical contingencies. Today clinical medicine is predicated upon levels of collective, experiential information, guidelines and managerial regulation that were non-existent in the nineteenth century. Thus, by reflecting on how surgical innovation was understood before the significant changes that would occur in the organisation of medicine in the twentieth century, this thesis looks to the very specific culture of the long nineteenth century and understandings of professional etiquette, patient-practitioner relationships and medical philosophies at this time. In this context how was surgical innovation dealt with? And to what extent was surgical innovation perceived of as *distinct* from other types of medical innovation? These questions are central to this thesis. The timespan of this study is relatively lengthy, looking primarily at a period from around the middle of the eighteenth century, when ovarian surgery first began to be discussed, up until the first decades of the twentieth. But it focuses tightly on a specific technique – surgical interference with the ovaries - in what might be described as an operation-centred history, something which differentiates it considerably from previous historical work on ovariectomy and – with the notable exception of Thomas Schlich’s work on osteosynthesis – most work on the history of surgery.³⁰

The British experience of ovarian surgery is my main focus, although where in some parts I look to France and America. This is especially so in my first chapter because the important role of French practitioners in early discussions about ovarian surgery has rarely been discussed and yet warrants much more than a cursory glance. Certainly the international context of ovariectomy is significant, for the spread of operative novelties across national borders came with its own peculiar set of problems. Nonetheless surgery in Britain, France

³⁰ Schlich (2002). Osteosynthesis involves the implantation of metal implants to fix bone fractures. As a technique used to treat bones in various parts of the body, it is considerably different from ovariectomy, an organ specific procedure.

and America functioned in highly different contexts during the nineteenth century, driven by variations in economics, medical philosophies and geographies which impinged directly on notions of innovation in surgery. Here I concentrate on the specifics of British medical culture, in which during the nineteenth century, a deep divide existed between London surgeons and those residing in other parts of the country, something which would play an important part in the shaping of the operation. This thesis then takes as its starting point what was ostensibly a single innovation in a single country, tracing its antecedents, diffusions and controversies. If this initial trajectory may seem linear, the outcome is anything but. This is not a story of how an innovation was developed and then accepted. On the contrary this thesis shows how the integration of ovariectomy was a complex process because the *meaning* and *definition* of the innovation were continually contested.

Historiography

Despite the wide range of issues ovarian surgery raised, its historiography has been dominated by discourses of gender, with the operation frequently presented as a key example of the female experience of Victorian medicine. This is perhaps unsurprising, given that the trajectory of ovarian surgery seems to suggest that experimental and risky abdominal surgery was being premised on the removal of female sexual organs. Furthermore one does not have to look too hard to find affirmation that the operation was at times used irresponsibly, that vulnerable women were sometimes operated on without consent, and that the use of ovariectomy on occasion to ‘cure’ maladies like hysteria, presents some troubling questions about the way invasive medical procedures were being used to control female behaviour. With the advent of social history and the subsequent work of feminist and gender historians to uncover women’s experiences of medicine in the past, it is this aspect of the history of ovariectomy which has left the deepest historical footprint; the intense interest of

nineteenth-century surgeons in the ovaries has become a by-word for the unhappy excesses of Victorian medicine.

Jane Eliot Sewell's doctoral thesis, *Bountiful Bodies: Spencer Wells, Lawson Tait and the Birth of British Gynaecology* remains one of the most detailed pieces of literature to explore ovariectomy from this angle. A dual biographical study of two of Britain's most well-known Victorian surgeons and prolific performers of ovariectomy, Spencer Wells and Birmingham surgeon Robert Lawson Tait (1845-1899),³¹ Sewell highlights the growing potential of gynaecological surgery to be both a prestigious and lucrative pathway for ambitious young medical men. Her understanding of ovariectomy as an operation of three stages: efficaciousness, confidence and transgression (as ovariectomy became an 'elective' procedure towards the end of the century) also sees her framing ovariectomy in terms of innovation and her work speaks to the burgeoning field of innovation studies in the late twentieth century in which innovations were often understood in terms of a staged 'career'.³² While broadly construed, there is validity in such staging, it does however imply a certain inevitability to the acceptance of ovariectomy which, I would argue, does little justice to the multiplicity of morals and meanings at stake.

But for Sewell it is gender which has played the most significant role in the construction of the operation. Three other major pieces of work in which ovariectomy features, Ornella Moscucci's *The Science of Woman*,³³ Ann Dally's *Women Under the Knife*³⁴ and Thomas

³¹ Jane Eliot Sewell 'Bountiful Bodies: Spencer Wells, Lawson Tait and the Birth of British Gynaecology' (Ph.D thesis: Johns Hopkins University, 1990).

³² *Ibid* 267. The key example of this type of literature, where medicine is imagined as a stage career is J. B McKinlay, 'From 'Promising Report' to "Standard Procedure": Seven Stages in the Career of a Medical Innovation.' *The Milbank Memorial Fund Quarterly: Health and society* 59, no. 3 (1981): 374-411.

³³ Ornella Moscucci *The Science of Woman: Gynaecology and Gender in England 1800-1929* (Cambridge: Cambridge University Press, 1990).

³⁴ Ann Dally, *Women Under the Knife: A History of Surgery*. (London: Hutchinson Radius, 1991).

Laqueur's *Making Sex*,³⁵ also contextualise the operation in this vein, and which I will discuss in more detail in chapter one. Suffice to say here, that all three further develop Sewell's argument, Moscucci for instance suggesting that the performance of ovariectomy was an 'integral part of the social construction of femininity'.³⁶ A fourth study, Regina Morantz-Sanchez's *Conduct Unbecoming a Woman*, which charts the tumultuous career of Mary Dixon Jones, a prominent gynaecological surgeon and enthusiastic ovariectomist in New York, stands slightly apart from the rest of this literature, and not just because of the different national context. Her analysis is more complex with less reliance on a dichotomy between the female patient and male practitioner, which is complicated by her primary medical actor being a woman. While her work *is* women's history in that it seeks to recover the experiences of primarily female actors, it is a move away from grander narratives that emphasise subordination of women towards one more inclusive of female agency.³⁷

This thesis does not seek to offer a wholesale revision of these accounts, but there is revisionism here, particularly in the first chapter, which perhaps most starkly reveals the limitations to understanding ovarian surgery solely as an aspect of the construction of femininity. As both Christopher Lawrence and Thomas Schlich have noted, the history of surgery remains chronically under researched, as it continues to be assumed to be unproblematic and self-evident,³⁸ (somewhat ironically, one might add, given the strivings surgeons have made to represent their work as multi-dimensional rather than practical) and historians of medicine continue to focus on 'concepts and practices that are obviously

³⁵ Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, Massachusetts and London, England: Harvard University Press, 1990).

³⁶ Moscucci, (1990) 135.

³⁷ See also Regina Morantz-Sanchez, 'Negotiating Power at the Bedside : Historical Perspectives on Nineteenth Century Patients and Their Gynecologists' *Feminist Studies* 26, no. 2 (2000): 287-309. For a more recent discussion of these trends in gender history see Joanne Bailey, 'Is the Rise of Gender History 'Hiding' Women from History Once Again?' *History in Focus* (2008) <http://www.history.ac.uk/ihr/Focus/Gender/articles2.html> (accessed 25th August 2013).

³⁸ Schlich (2010) 9; Lawrence (1992) 14.

influenced by culture and society', such as psychiatry.³⁹ Gender history, Schlich notes, is one of the few areas where a concerted attempt to construct a history of surgery has been realised.⁴⁰ Thus it would be churlish to dismiss the important contributions made to the history of surgery by such an approach, particularly in its exposure of the networks of relationships between patients and practitioners:

More broadly one might describe the historiography of surgery as small but rich. From Owsei Temkin onwards, historians of medicine have recognized that any notion of a clear demarcation between surgery before and after the introduction of antiseptics - the former period often characterised as nothing short of barbaric - does not hold up to historical examination.⁴¹ But it was Christopher Lawrence's 1992 edited volume *Medical Theory, Surgical Practice*, in particular his introductory essay, which provided one of the first notable challenges to the stereotype of surgery as a tale of simple progression from manual craft to eminent profession.⁴² Early modern historians such as Linda McCray Beier have also problematized such conceptualisations of surgery, emphasising that professionalization was already present in seventeenth century surgical culture.⁴³ Meanwhile Roger Cooter and Gert Brieger have both challenged the traditional idea that there was a smooth shift from conservative to radical surgery in the nineteenth century, or even that either 'type' can be easily defined. Rather by the end of the century there were still competing ideas about which was the ideal philosophy on which to base surgical practice.⁴⁴ More recently Thomas

³⁹ Schlich (2010) 8.

⁴⁰ *Ibid.* 8.

⁴¹ Owsei Temki *The Double Face of Janus and Other Essays in the History of Medicine* (Baltimore and London: Johns Hopkins University Press, 1977).

⁴² Lawrence (1992).

⁴³ Linda McCray Beier, *Sufferers and Healers: The Experience of Illness in Seventeenth-century England* (London & New York: Routledge and Kegan Paul, 1987).

⁴⁴ Roger Cooter, *Surgery and Society in Peace and War* (Basingstoke: Macmillan Press, 1993); 21. Gert Brieger, 'From Conservative to Radical Surgery in Late Nineteenth-Century America' in *Medical Theory, Surgical Practice: Studies in the History of Surgery* ed. Christopher Lawrence, (London & New York: Routledge, 1992), 216-231.

Schlich, Ilana Löwy and Sally Wilde have expanded the history of surgery considerably. Schlich has produced significant work on the Weberian notion of tacit knowledge within the operating theatre,⁴⁵ Ilana Löwy has written evocatively on the history of prophylactic surgery and its mutually constitutive relationship with conceptualisations of disease, particularly cancer,⁴⁶ while Sally Wilde has addressed the issues of trust and consent and how they were gained from potential surgical patients in the late nineteenth and early twentieth centuries.⁴⁷ Both Löwy and Wilde have briefly discussed ovariectomy, indeed Löwy's *Preventive Strikes* might even be considered as a 'sequel' to the ovariectomy controversy, looking as it does at the use of preventive surgery for breast and ovarian cancer in the twentieth and twenty-first centuries. Nonetheless consideration of ovariectomy is generally lacking from most of these accounts. This thesis then addresses a notable lacuna by returning a hugely important operation to the history of surgery.

Sources

Archive materials utilised in this thesis include a range of both personal and institutional records. In the former category, collections containing the correspondence and papers of James Young Simpson, Robert Lee, Charles Clay and Robert Liston have been invaluable. It also includes lectures (both published and unpublished) given by integral actors in surgery and obstetrics such as James Blundell, William Hunter and John Hunter. At times these lectures have been among the most illuminating sources as to how senior members of the surgical profession were policing and diffusing ideas of novel surgery to students.

⁴⁵ Schlich (2002).

⁴⁶ Ilana Löwy, *Preventive Strikes: Women, Precancer and Prophylactic Surgery* (Baltimore, John Hopkins University Press, 2010).

⁴⁷ Sally Wilde, 'Truth, Trust, and Confidence in Surgery, 1890-1910: Patient Autonomy, Communication, and Consent' *Bulletin of the History of Medicine* 83, no. 2 (2009): 302-330; 303.

As with many other areas of medicine, particularly those involving women's experiences as patients, first-hand accounts of ovarian surgery are unfortunately lacking. On the whole where patient experiences are cited, whether from archival or printed sources, they are almost exclusively derived from literature where the patient experience has been mediated through the voice of (the almost invariably male) practitioner. This should not be assumed to necessarily invalidate such accounts; in fact many of them speak to the complexity of the relationship between patients and the networks of practitioners they encountered. Nonetheless it is undeniable that more first-hand accounts of patient experiences would have added a further dimension to this work.

Institutional records such as those for the Samaritan Hospital in London, the Royal Infirmary in Edinburgh and the l'Académie Royale de Chirurgie in Paris have also provided significant insights. Of particular importance, especially in chapter five, have been the operation registers and patient records of the Chelsea Hospital for Women and the London Hospital.⁴⁸ These two hospitals – one specialist, one general – have been selected due to the relative comprehensiveness of the archives pertaining to these institutions as they were in the late nineteenth and early twentieth centuries. This enabled me to make an in-depth examination of the use of the word 'ovariotomy' in their records, as well as to assess the extent to which ovarian operations were continuing to be performed in hospitals at this time. It should be noted however, that this means my findings in this respect are based on information from hospitals situated in London only, giving them a geographical bias which may or may not have been challenged by examination of records for provincial hospitals. Furthermore, these records were not always straightforward to analyse. At the London in particular, cases are occasionally indexed in one type of record but not in another (for example in the Surgical

⁴⁸ The London was re-named the Royal London Hospital in 1990.

Beadle's Register but not in the Surgical Index) or indexed under different names in different records, particularly as surgeons increasingly removed multiple organs during one procedure (for example removing both the uterus and an ovary/ovaries could see an operation described as both 'ovariotomy' and 'hysterectomy'). Nonetheless, it is believed these records are sufficiently expansive and accurate to make the data from them exceptionally useful.

It might be tempting to see published sources as of secondary significance to personal correspondence and papers, which are generally considered to provide a more 'real' voice to historical actors because they were not intended for a public audience. In the case of ovarian surgery however, what *was* said publicly was just as significant as what was not and none the less 'real' for that. The permanence of print made the pages of medical journals more desirable than private correspondence as the location for thrashing out issues of surgical morality and etiquette. Indeed private communications were often referenced and sometimes even re-published in the press anyway, blurring the boundaries between public and private. There is no question that much of the debate about ovarian surgery was very intentionally played out publicly and that this was facilitated by the emergence of medical weeklies during the first half of the nineteenth century. While medical societies were already well established,⁴⁹ the introduction of titles such as *The Lancet*, *The Medical Times*, *The Provincial Medical and Surgical Journal* and many more, meant that a culture of print centred around medical practice was flourishing, where previously reports of medical cases had tended to form just one constituent of journals with a more general scientific and philosophical scope (such as *The Philosophical Transactions of the Royal Society*). The impact this had on the diffusion of controversial medical novelties is significant. Journals

⁴⁹ For instance the Medical Society of London founded in 1773 and the Medical-Chirurgical Society formed in 1805.

like the rabble-rousing *Lancet* seemed to encourage heated exchanges of correspondence between ovariologists and other interested parties, while editorial pieces gave voice to strongly worded opinions about the operation that were then quickly spread among practitioners all over the country and beyond. Yet there were significant boundaries in place which hint at the complexity to the meanings of ‘public’ and ‘private’ debate; the leaking of medical discussions into the non-medical press was considered to be dangerous ground by most ‘orthodox’ medical practitioners and when reports about controversies in ovarian surgery spilled into the non-medical press, it was much to the chagrin of the profession. Thus, non-medical publications played their role in the debate too and are included where appropriate. Popular surgical monographs are also worth noting as a key source in conveying what kind of pedagogical information was being disseminated on a wide scale. Surgical textbooks of the nineteenth century were by no means disinterested manuals objectively listing technical information. On the contrary, they often cited the issues of medico-morality that controversial surgical innovations brought to the fore. Many of those which included something on ovariectomy referenced the history and ethics of the operation before they went on to discuss its technical aspects.

Chapter Outlines

Chapter One argues that the ‘beginning’ of ovarian surgery cannot be explained solely in terms of gender or through the ‘rise’ of local surgical pathology. Instead this chapter takes the historicization of ovarian surgery back to the eighteenth century, offering a temporally expansive approach which considers how we might trace the diverse roots of this major surgical innovation. That there is even a history of ovarian surgery to speak of before the mid-nineteenth century challenges previous historiography of the operation which generally says very little about this period. This is not to say that before this time there were many

incidences of ovarian surgery actually occurring; there were not; but the *possibility* of performing such an operation in the *future* was much discussed and this in itself constitutes a significant part of its history. Why were the ovaries marked out as having greater surgical potential than other organs? And what does the development of ovarian surgery during this time tell us about the circular relationship between pathologies, surgical ideas and surgical actions?

Chapter two considers how representations of ovarian surgery were constructed in medical professional culture. The mid-decades of the nineteenth century were a tense time for surgeons who performed ovariectomy. As the debate over its justifiability became steadily polarised, the operation's novelty and risk had to be carefully handled by proponents of the procedure in light of the aggressive opposition of prominent surgeons such as Robert Liston and Robert Lee. By taking an approach centred on the question of practice, this chapter seeks to examine how far the inextricably practical nature of operative surgery was problematic to constructing representations of risk and propriety. In what medium were experiences of ovarian surgery best represented and disseminated to surgical peers? Were statistics alone satisfactory? What counted as a death from ovariectomy? How much responsibility should patients take for the operation's 'risk'? This chapter argues that two forms of representation were at the heart of the ovariectomy debate: an 'objective' one and a more obviously 'subjective' one in which patient accounts and the emotive discourse of both proponents and opponents was used to construct a morally-tinged debate, punctured with emotional language, and which highlighted the idiosyncrasies of individual surgeons. This chapter therefore challenges the assumption that there was an inherent tension between the ideas of surgery as 'science' and 'art', instead arguing that each form of representation was considered unsatisfactory without the other.

In **chapter three** I question how knowledge and practices regarding new ovarian operations came to be credited to particular surgeons and the implications this had for professional status, something I draw together loosely under the term ‘intellectual ownership’. In recent years intellectual property in medicine has generated much debate, linking in with wider discussions about the commercialisation of medicine and the commodification of the human body.⁵⁰ This only serves to underscore how little historians of medicine have engaged with the topic; nowhere more so than in operative surgery, where traditional legal methods of intellectual ownership, such as patenting, were inapplicable and yet where claims for – and disputes over – credit and priority formed a large part of the correspondence about ovariectomy in medical journals. This was especially so between the 1860s and 1880s as surgeons sought to stake their claim in an increasingly successful and lucrative procedure. Ultimately this chapter presses the fundamental (and fundamentally overlooked) importance of priority and credit in surgical *practice* and the need for these disputes to be subject to critical analysis, rather than regarded as a distasteful or even humorous aside in the operation’s history.

Following on from some of the issues raised in the preceding chapter, **chapter four** will explore the contentious relationship between ovariectomy and money. While the economic aspects to medicine have long been considered by historians in relation to the nineteenth century, the recent focus has been on explicitly commercial pursuits such as the selling of ‘patent’ medicines. Relatively few historians continue to expand upon the work of Anne

⁵⁰ Recent high-profile cases in the USA have centred on gene patenting, that having been enthusiastically practised by universities and biotechnology companies, is now having its legality questioned. The unexpected March 2010 ruling of a federal court against Myriad Genetics, which invalidated the company’s patents on the BRCA1 and BRCA2 genes, has highlighted the complexities that now govern the ethical and legal tenure of asserting property rights over biological material. For an overview of the case and March 2010 ruling see: Bob Carlson ‘Surprise District Court Ruling Invalidates Myriad Genetics’ BRCA Patents, But Appeal is Pending” *Biotechnology Healthcare* 7, no.2 (2010), 8–9.

Digby, whose exploration of the market for medicine between 1750 and 1911, *Making a Medical Living* (1994), put money squarely at the centre of the nineteenth-century medical encounter. As Digby contends, while doctors embraced a rhetoric of professionalisation, ‘medicine, even for the regular member of the medical profession or Faculty, was an occupation which still retained strong elements of trade.’⁵¹ This relationship between medicine and money also needs to be considered in relation to the dramatic rise of medical specialism at this time, something which, as the work of Lindsay Granshaw shows, cannot be disassociated from its financial implications.⁵² This chapter then, considers the ways in which ovariectomy was a business. How was money earned, exchanged and utilised around ovariectomy? How did a surgeon’s self-identification as an ‘ovariectomist’ relate to their potential for profit – making? Was ovariectomy really more lucrative than other operations? And if so why? This chapter seeks to present a detailed account of the operation’s financial impact in a profession where making money was problematic to the rhetoric of altruism and professional fraternity and where there was an increasing move towards standardising medical fees. It also frames the rapidly expanding use of the operation at the end of the 1870s - often read only through changing notions of female pathology - within a discourse of trade.

Chapter five takes as its starting point ovariectomy’s apparent ‘decline’ as a significant operation, but as well as focusing on that period it also considers what might best be described as the operation’s ‘afterlife’. Accounts of ovariectomy’s history tend to conclude with the outcries that came from many in the profession in the 1890s that it was being performed excessively, captured most famously in Thomas Spencer Wells’ declaration that

⁵¹ Anne Digby *Making A Medical Living: Doctors and Patients in the English Market for Medicine, 1720-1911* (Cambridge: Cambridge University Press, 1994); 6.

⁵² Lindsay Granshaw ‘Fame and Fortune by Means of Bricks and Mortar’: The Medical Profession and Specialist Hospitals in Britain 1800-1948’ in *The Hospital in History*, ed. Lindsay Granshaw and Roy Porter, 199–220. (London & New York: Routledge, 1989).

ovariotomists had become tantamount to ‘spayers’.⁵³ But at the same time ovarian surgery was beginning to develop in new ways as understandings of the organ’s physiology began to change. With the introduction of new terms to describe ovarian surgery, such as ‘oophorectomy’ in the 1880s, the meaning of ‘ovariotomy’ was becoming ever more confusing. What then had the word come to symbolise by this time and who continued to use it? How did a once pioneering operation pass into the history of surgery? Making ovariotomy historical was an important aspect of the way surgeons understood themselves as innovative; yet far from constructing only simplistic, progressive accounts, the historicization of ovariotomy often laid bare surgeons’ anxieties about the direction surgery was going in.

By constructing an operation-centred history, this thesis offers an inventive approach both to the history of surgery and the history of innovation. Through the example of ovarian surgery I show that no aspect to the ‘process’ of surgical innovation can be considered self-evident. Rather, the picture that emerges is of an operation that, despite its notoriety, lacked clear definition and which was continually re-shaped technically, philosophically and linguistically, throughout the century.

⁵³ Thomas Spencer Wells, *Modern Abdominal Surgery: The Bradshaw Lecture Delivered at the Royal College of Surgeons of England. With an Appendix on the Castration of Women* (London: J. A. Churchill, 1891); 51.

Chapter One

Pathologies, Actions, Ideas

‘We know what a masquerade all development is, and what effective shapes may be disguised in helpless embryos. – In fact, the world is full of hopeful analogies and handsome dubious eggs called possibilities.’

George Eliot, *Middlemarch*, 1874.⁵⁴

1.1 Ideas, Actions and Locating a Beginning to Ovarian Surgery

Offering a ‘beginning’ to any major historical episode can be a difficult task for historians. Doing so usually involves a degree of reductionism, as abridgements creep in for the sake of narrative and generalisations are made in the name of clarity. In the history of surgery, it can be relatively easy to pinpoint the first performance or performances of a novel procedure. But *why* a particular person or persons begins to operate in a new way at a certain time is, of course, more difficult to assess. Re-visiting the early history of ovarian surgery provides an interesting challenge in this respect. While broad cultural shifts have been suggested by a number of historians as precipitating interest in removing ovaries in the nineteenth century, such assertions are not sufficiently explanatory as to why this type of surgery developed in advance of other types, nor have these arguments been well evidenced. Specific

⁵⁴ George Eliot, *Middlemarch: A Study of Provincial Life* (London: Vintage, 2007); 8.

consideration as to how ovarian disease and its treatment were understood in the eighteenth and early nineteenth centuries remains wanting.

Instead the pre-Victorian history of ‘ovariotomy’, as extirpation of the ovaries would come to be known, has long been captured in a linear trajectory which has developed little since the end of the nineteenth century.⁵⁵ Indeed while the interest of the Hunter brothers in the operation is sometimes referenced – the roles of surgeon and anatomist John (1728-1793) and his brother, physician and *accoucheur* William (1718-1783) will be discussed below - histories of ovariotomy almost invariably begin with the performance of what was believed to have been the first successful extirpation of a diseased ovary in 1809 by the Kentucky surgeon Ephraim McDowell (1771-1830), usually followed by a brief ‘who’s who’ of the sporadic performers of the operation in the ensuing thirty years.⁵⁶ This is perhaps unsurprising; it is this first *procedure* after all, this first *action*, which holds sway as the material ‘reality’ of a surgical innovation.⁵⁷

But one must also be wary of gliding over the diffuse roots to a novel procedure. This has often occurred in relation to ovariotomy, which is so often interpreted by historians to be just one (often minor) element of a much broader narrative, rather than the focus of interest. It has also occurred because the operation is so often conceptualised as innately *Victorian* (an idea Victorian surgeons themselves perpetuated as they forged historical accounts of the operation) and reflective of specifically *Victorian* ideals regarding both surgical morality and

⁵⁵ This includes comparatively recent work such as Regina Morantz-Sanchez, *Conduct Unbecoming A Woman* (Oxford: Oxford University Press, 1999).

⁵⁶ Such an approach is also common in most secondary literature on ovariotomy. See Ornella Moscucci (1990) esp. 135-137 and Ann Dally *Women Under the Knife: A History of Surgery* (London: Hutchinson Radius, 1991) both of which only briefly touch on the earlier history of ovarian surgery, and in Dally’s case inaccurately.

⁵⁷ Indeed emphasis on the materiality of surgery is by no means a bad thing; as I shall come back to in this chapter and elsewhere in the thesis. As noted in the introduction and as recently highlighted by Claire Brock, there can be a tendency for the everyday practical work of surgeons to be lost in historical accounts. Brock (2013) 325-6.

gender. Indeed, so embedded is this idea, that in historical literature on Victorian medicine, ovariectomy is now something that can be comfortably discussed in tangentially related articles, with little need to explain in-depth its significance to historians of Victorian medicine; it is a known quantity, symbolic of that period.⁵⁸ This conceptualisation has been both the cause and effect of the scant attention paid to its eighteenth- and early nineteenth-century roots.

With that in mind, this chapter has two intertwined objectives. It first sets the scene by offering a brief critical assessment of the historiography of ovariectomy so far, and in particular, historians' interest in the gendered nature of the operation. This framework of gender, while offering some significant points, has resulted in a rather narrow account of the early history of the operation and its pervasiveness within the historiography warrants its review at the beginning of this chapter. I follow this with my own account which more assiduously explores ideas and practices of ovarian pathology and surgery in the eighteenth and early nineteenth centuries. By doing so I present a more nuanced account of its development which has a number of questions at its heart; namely why did the ovary, in advance of other abdominal organs, come to be seen as one on which it was possible to operate? What made the diseased ovary a distinctly surgical object and who decided this? Was such an idea even *new*? And if so, did a new idea necessarily give surgeons' licence to initiate novel practices? I bring forward the confluence of ideas surrounding its pathology, gendered and non-gendered (if such a crude distinction can be made), that caused ovarian disease and its surgical treatment to be a subject of interest among British medical practitioners. More broadly, I also consider how we can conceive of a major surgical innovation to have a beginning. It might be assumed that physiological and pathological

⁵⁸ See for example Claire Brock 'Surgical Controversy at the New Hospital for Women, 1872-1892.' *Social History of Medicine* 24, no. 3; 608-623.

theory spur operative action and that during this timeframe particularly, improved anatomy equated to ‘better’ surgery. This relationship is however, rarely elaborated on, particularly in relation to how developments in pathological anatomy were surgically expressed in everyday medical practice. Furthermore, unplanned, accidental and even unsuccessful surgery can also be important in the construction of new surgical knowledge, and as I show here, this was certainly the case in ovarian surgery.⁵⁹ As will be seen, a complex melding of idea and action formed the basis of ovarian surgery and the relationship between the two was far from simplistic. While today we often associate innovation with cutting-edge, radical change, surgical innovation of the ovary was a long drawn-out and lumbering process, although one, crucially, that was initiated comparatively early, compared to other types of abdominal surgery.

1.2 Ovarian Surgery in Twentieth-Century Historiography: Nineteenth Century Heroes and Victorian Villains

The most comprehensive accounts we have of eighteenth-century ideas regarding ovarian surgery, as well as its occasional practice, are found in two biographies of Ephraim McDowell, authored respectively by Mary Young Ridenbaugh, McDowell’s granddaughter in 1890, and that published by fellow Kentucky surgeon August Schachner in 1921. Both monographs are valuable resources, providing exhaustive detail about a wide range of eighteenth- and early nineteenth-century practitioners, in Europe and America, who were interested in the subject, and thereby act as considerable aides in determining the diverse genealogy of the operation. Yet, as explorations of McDowell’s life, both are clearly written with the objective of highlighting his heroic role in the operation’s development (against

⁵⁹Sally Wilde and Geoffrey Hirst, ‘Learning from Mistakes: Early Twentieth-century Surgical Practice.’ *Journal of the History of Medicine and Allied Sciences* 64, no.1 (2009); 38–77.

alleged British reluctance to acknowledge the significance of his contribution) and err on the side of celebratory rather than analytical.⁶⁰

Strikingly, more recent scholarship has failed to build on these accounts of the early history of ovarian surgery. Emerging from social and women's history perspectives, historical work on ovariectomy in the late twentieth century instead focuses almost entirely on the operation in the last two decades of the nineteenth century. As I shall discuss in following chapters, it was during these later decades that the procedure became embroiled in controversy, as serious concerns were raised as to whether the operation was being performed excessively and unnecessarily, as some surgeons began to remove women's ovaries for conditions such as menstrual pain, epilepsy and even hysteria. The heightened gender dynamics that resulted, as ovariectomists were accused of being little more than vivisectionists of women, have been the primary concern of most late twentieth-century historians. Indeed, one might wonder how it is possible for gender *not to* be the central focus of any history of the operation. Ovariectomy after all, was performed only on women and almost entirely (although not exclusively) by men; on occasion to treat a number of highly gendered mental illnesses.⁶¹ Thus, it is perhaps not surprising that some historians have tapped into the hermeneutical richness of this shift in the operation's meaning and shaped the alleged 'fashion' for removing ovaries into a motif of Victorian understandings of female pathology and sexuality. In this respect the operation became an important resource for women's historians in the latter half of the twentieth century, intent on exposing patriarchy in all its guises. For feminist activists Barbara Ehrenreich and Deirdre English for example, writing in America in 1978 in the

⁶⁰August Schachner, *Ephraim McDowell: 'Father of Ovariectomy' and Founder of Abdominal Surgery*. (Philadelphia and London: J.B Lippincott Company, 1921); esp. xvi-ii; Mary Young Ridenbaugh, *The Biography of Ephraim McDowell: The 'Father' of Ovariectomy*. (New York: Charles L Webster, 1890); esp. 90.

⁶¹ Its occasional but significant use in the treatment of hysteria has been of particular interest; Elaine Showalter, *The Female Malady: Women, Madness and English Culture, 1830-1980* (London: Virago, 1987); 131-2.

midst of second wave feminism and an expanding women's health movement, the operation was a clear indication of the repressive sexual politics of the Victorian era and the removal of the ovaries – which is described by Ehrenreich and English as an invention of the second half of the nineteenth century – part of the 'gynecologist's exotic catalog of tortures'.⁶²

By the 1990s perspectives on the operation were becoming more nuanced than Ehrenreich and English's somewhat ahistorical approach. But, as discussed in the introduction, that perspective remained highly gendered. Thomas Laqueur's *Making Sex* (1990) perhaps most deeply embedded the operation in a broader cultural context. Laqueur pinpoints changing conceptions of human anatomy as the reason behind nineteenth-century interest in removing ovaries, as male and female bodies became increasingly distinguished from one another during the late eighteenth and nineteenth centuries.⁶³ The increasing differentiation medical practitioners made between ovaries and testicles, he argues, strengthened the connection instead between ovaries and the production of feminine characteristics - from menstruation to appropriate 'female' behaviour - and which thus provided sound reasoning for their surgical manipulation. For Laqueur, this two-sex model shaped the surgical approach to women in the nineteenth century, and he argues that ovariectomy was "the clearest case in which cultural assumptions fuelled a research tradition whose results in turn confirmed those

⁶² Barbara Ehrenreich and Deirdre English, *For Her Own Good: 150 Years of the Expert's Advice to Women* (London: Pluto Press, 1979)111-2.

⁶³ Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, Mass. and London: Harvard University Press; 1990); Londa Schiebinger makes a similar argument noting the emergence of a 'female' skeleton in anatomy in the early eighteenth century: Londa Schiebinger, *The Mind Has No Sex? Women in the Origins of Modern Science* (Cambridge, Massachusetts & London: Harvard University Press, 1989); 191-206. Certainly eighteenth-century anatomists were interested in this subject, although by no means considered the gendering of human anatomy unequivocal. In a 1775 lecture, William Hunter for example notes that while it was possible to 'generally distinguish a male from a female skeleton by the size and general strength of the bones', variations in men and women means that anatomists were 'liable sometimes to be deceived'. 'William Hunter: Notes from his Anatomical and Chiurgical Lectures' 183 (1775) Western Manuscripts MS5593 (Wellcome Library).

views”.⁶⁴ Like other historians, it is the sporadic use of ovarian surgery to treat mental conditions in the latter part of the century which seems to guide his analysis.

From this point of view it might have seemed that any questions about the roots of ovariectomy were all but answered by the 1990s; as Jane Eliot Sewell argues in her account of gynaecological surgery in nineteenth-century Britain, published around the same time as Laqueur’s *Making Sex*:

It is no historical accident that ovariectomy was the first major procedure in abdominal surgery to be developed and accepted. Unlike appendectomy or liver and kidney operations, which might objectively have been equally valid candidates for innovation, ovariectomy involved women’s reproductive organs and these organs were bequeathed a larger-than-life status in society.⁶⁵

I do not wish to suggest that the ovary’s status as a reproductive organ did not play a part in the development of ovarian surgery. In some respects it did and it is abundantly clear that gender courses through the narrative of ovarian surgery and increasingly so by the late nineteenth century. But there is an important difference between recognizing the *nuances* of gender residing in surgery of the female genital organs, and letting it become an essentialist part of the operation. Other factors have to be considered as more than mere asides. Laqueur, Sewell and others avoid placing the increasing emphasis on the biological specificity of women directly with the medical profession or situating it within an overtly misogynistic agenda like Ehrenreich and English.⁶⁶ And yet there is, regardless, something overly

⁶⁴ Laqueur (1990); 175.

⁶⁵ Jane Eliot Sewell (1990) 315.

⁶⁶ Laqueur for example, depicts ovariectomy as part of a general societal response to cultural change, in which it was seen as increasingly necessary to keep in check female social and political progress; Laqueur (1990) 194. Sewell also specifically challenges the more radical approach of Ehrenreich and English; Sewell (1990) 14.

deterministic in the way in which ovariectomy has been consistently gendered by late twentieth-century historians; not least because the medical and cultural identity of the diseased ovary *specifically* has not been adequately explored by these historians, making assertions such as Sewell's little more than assumptions. Many historians would recognize that they inhabit a political space, or at least that the work they produce is dictated to some degree by the context it has been written in. This has certainly been the case with works on ovariectomy, as no doubt is my own reading of the operation, centred as it is upon innovation, a word that today has much political currency. But as Erin O'Connor has persuasively shown, feminist studies of how female pathologies have been constructed have often teetered dangerously close towards emptying such historical accounts of anything new or meaningful. Using Victorian understandings of breast cancer as a case study, O'Connor argues that by accepting that there were essentialist categories of femininity in the treatment of women by Victorian medical men, this in itself becomes an essentialist approach to Victorian women. As she writes: 'what, crucially, is the difference between a Victorian ideologue taking the breast as a synecdochal sign of femininity and a postmodern feminist critic taking breast disease as the synecdochal sign of a wider cultural pathology, a pathology that has everything to do with the way Victorian femininity was framed? In ontological terms, I would suggest, not a lot.'⁶⁷ O'Connor's critique leads her to conclude that 'the nineteenth century becomes a voyage into feminist methodology, a place to stage and work out certain problems in twentieth century thinking about gender and sexuality.'⁶⁸ The work of feminist scholars in the history of medicine between the 1970s and 1990s brought a much needed focus to the female experience of health and illness. But in relation

⁶⁷ Erin O'Connor, *Raw Material: Producing Pathology in Victorian Culture* (Durham: Duke University Press, 2000) 78.

⁶⁸ *Ibid.* 79

to understanding the history of ovarian surgery, this intellectual framework has very obviously come with a price.

1.3 Locating the Ovary in Early Modern Medicine

How then *was* the ovary understood in the eighteenth century?

First and foremost, it was a novelty. Around the middle of the previous century, William Harvey (1578-1657) had asserted his doctrine of *ex ovo omnia* – everything from an egg - and in the 1660s and 1670s Regnier de Graaf (1641 – 1673), Niels Stensen (1638-1686) and Jan Swammerdam (1637-1680) among others, had begun to affirm experimentally that the female testes were egg producing organs. As a consequence, the more congruous term ‘ovary’ was increasingly seen fit to describe them.⁶⁹ This shift from testicle to ovary formed a more secure ground for theories of ovist preformation, which characterised the egg as the container of all future pre-formed life, and which put the ovary at the centre of procreation.⁷⁰ It did not, however, quell the rise of spermist preformation which shone briefly but powerfully at the end of the seventeenth century (the proponents of which suggested that it was in fact sperm that was the container of all pre-formed life).⁷¹ Nor did it prevent the concept of epigenesis – the gradual development of a new organism from the male and female seed - begin to dominate understandings of generation once more by the end of the 1700s. In other words, while the ovary had become a locus of research into generation, and was generally understood by most

⁶⁹ Regnier De Graaf, *Regnier de Graaf on the Human Reproductive Organs: an Annotated Translation of ‘Tractatus de Virorum Organis Generationi Inservientibus’ (1668) and ‘De Mulierum Organis Generationi Inservientibus Tractatus Novus’ (1672)*, trans. H. D Jocelyn. and B.P Setchell (Oxford: Blackwell Scientific Productions, 1972) 135. They were known both as ‘ovary’ and ‘ovarium’ (as well as the plurals ‘ovaries’ and ‘ovarian’). But – unless quoting sources - I use only ‘ovary’ and ‘ovaries’ here, for the sake of consistency.

⁷⁰ Clara Pinto-Correia *The Ovary of Eve: Egg and Sperm and Preformation*. (Chicago: University of Chicago Press. 1997) 42-44.

⁷¹ An overview of the spermist debates has been provided by the Embryo Project at Arizona State University. See Cera R. Lawrence “Spermism” *The Embryo Project Encyclopedia* (<http://embryo.asu.edu/pages/spermism>) accessed 11th July, 2013. See also Pinto-Correia (1997) esp. 65-104.

practitioners to play *some* kind of role in reproduction,⁷² understandings of what exactly that role was remained decidedly vague.⁷³ Throughout the eighteenth century much about the ovary remained shrouded in mystery; Matthew Baillie (1761-1823), Britain's foremost morbid anatomist and nephew of John and William Hunter, described the organ in 1789 as 'a part of the animal oeconomy which seems to have been hitherto involved in a considerable degree of obscurity'.⁷⁴ Indeed, notably, the term 'ovary' continued to be used interchangeably with 'female testicle' well into the late eighteenth century, suggesting that not all practitioners and students were cognisant of the reasoning behind the newer more specialised term.⁷⁵

But there were other ways too in which the ovary was perceived of as a subject of inquiry, especially if like Baillie, one was not only an anatomist of some reputation but a practising physician too. The 'obscurity' he referred to reflected not only a regard of the organ's physiology but also, significantly, its diseases. Andrew Cunningham has characterised the long eighteenth century as a time when 'the generation of humans – or certain aspects of it – became more important for the medical or surgical practitioner than ever before'.⁷⁶ Certainly, as he suggests, the encroachment of male medical practitioners upon the realm of childbirth gave added impetus to anatomical investigations into the female reproductive system. Most famously this was borne out in the works of William Smellie (1697-1763) and William Hunter both of whom made their names and fortunes as man-midwives. Hunter's *Anatomia Uteri*

⁷² By the later decades the Edinburgh anatomist John Aitken (1747–1822) was advising that the ovaries be considered 'the only organs, on the part of the female, which are truly seminal and genital' Aitken (1784) 27.

⁷³ 'How the Ovum is impregnated, how it breaks through the Integuments of the Ovaria, and how it gets into the Womb, is not yet sufficiently demonstrated' wrote the man-midwife John Burton in 1751. See John Burton, *An Essay Towards a Complete New System of Midwifery, Theoretical and Practical*. (London: James Hodges, 1751); 35.

⁷⁴ Matthew Baillie, *An Account of a Particular Change of Structure in the Human Ovarium from the Philosophical Transactions*. (London: s.n., 1789); 2.

⁷⁵ John Astruc, *A Treatise on the Diseases of Women*, vol. 3 (London: J. Nourse, 1767). John Aitken, *Principles of Midwifery, or Puerperal Medicine*. (Edinburgh, Sold at the Edinburgh Lying-In Hospital, 1784)

⁷⁶ Andrew Cunningham *The Anatomist Anatomis'd: An Experimental Discipline in Enlightenment Europe*. (Farnham: Ashgate, 2010); 170.

Humani Gravidæ Tabulis Illustrata (1774) in particular, provided novel knowledge about the process of embryonic development. However obstetrical texts were not usually written with an eye to explicitly supporting one theory of generation or another and most obstetricians were primarily concerned with producing pedagogical texts for fellow man-midwives. As such it was childbirth and its associated complications that tended to be at their heart.

At first glance the ovary, with its less direct and seemingly more ambiguous role in relation to childbirth, is harder to locate in this discourse. It is clear that at this time, medical men considered the womb to be the organ of greatest significance in regards to women's physical, mental and reproductive health; as such it occupied a central place in vernacular as well as medical understandings of women's bodies.⁷⁷ But did the apparent 'obscurity' of the ovary, in comparison, preclude its presence in medical ideas and practice? Ready access to databases such as *Eighteenth Century Collections Online* enables the perusal of a large portion of the medical monographs and pamphlets that were available in Britain during the the century, while the digitisation of the *Philosophical Transactions of the Royal Society* allows us to bear witness to key discussions of English physicians and surgeons on the subject. What is clear from both is that the ovary and its diseases *were* of interest to medical men despite the continued uncertainties regarding its function. For some anatomists, it was the ovary's generative function which remained of primary concern. This was certainly the driving force for John Hunter's interest in the ovary. In 1787 Hunter reported to the Royal Society an experiment he had undertaken looking at the effect of removing one ovary upon the generative potential of pigs. Hunter was fascinated as to the physiological reasoning behind there being

⁷⁷ Wendy D. Churchill, *Female Patients in Early Modern Britain: Gender Diagnosis and Treatment*. (Farnham: Ashgate, 2012); 201; Darren Wagner 'Visualisations of the Womb through Tropes, Dissection and Illustration (circa 1660-1774)' in *Book Illustration in the Long Eighteenth Century: Reconfiguring the Visual Periphery of the Text*, ed. Christina Ionescu (Newcastle: Cambridge Scholars Publishing, 2011), 541-572; 542.

two ovaries, and his experiment led him to conclude that while generation was still possible, the loss of one ovary would roughly halve the number of young produced.⁷⁸

Experiences with ovarian disease also provided significant information for those investigating generation. The physician Henry Sampson (c.1629-1700) presented a case to the Royal Society in 1677 which involved a woman ‘who died hydropical in her left testicle’. Sampson argued that the large and numerous fluid-filled cysts on the ovary, which he had found upon dissection, were in fact pathologically enlarged eggs. This he believed, would ‘further satisfy those who have hitherto doubted of the female testicle its being an ovary’.⁷⁹ Undoubtedly one of the most perplexing conditions of the ovary, where physiological and pathological concerns merged, was when, upon dissection, the organ was found to contain tissues such as hair, teeth and bone.⁸⁰ Thomas Denman (1733-1815), England’s leading man-midwife in the last decades of the eighteenth century, reported in the 1794 edition of his popular *Introduction to the Practice of Midwifery*, that this kind of matter was found in dropsical ovaries ‘so frequently, that there is scarce a collection of anatomical curiosities in which there are not various examples’.⁸¹ The condition fascinated and revolted. It was clearly evidence of pathological behaviour in the ovary, but how closely aligned the disease was with embryonic development was a source of confusion and generated a variety of theories. The French physician Jean Astruc (1684 – 1766) believed the entities to be putrefying embryos which had erroneously embedded themselves and then died in the ovary. Astruc’s theory allowed for the spark of animal life to have once existed before death occurred, after which there took place a reversal

⁷⁸ John Hunter, ‘An Experiment to Determine the Effect of Extirpating One Ovary Upon the Number of Young Produced’ *Philosophical Transactions of the Royal Society* 77 (1787); 233-239.

⁷⁹ Henry Sampson, ‘Anatomical Observations in the Body of a Woman, About 50 years old, Who Died Hydropical in the Left Testicle.’ *Philosophical Transactions of the Royal Society* 12 (1677): 1001.

⁸⁰ This condition is known today as a dermoid cyst or teratoma.

⁸¹ Thomas Denman, *An Introduction to the Practice of Midwifery, Volume 1* (London: J. Johnson, 1794); 133.

of the natural generation process, whereby the embryo degenerated into a tumour.⁸² Others however were cautious of ascribing the ovary such powers of alteration and one surgeon even conjectured that a tooth he had discovered in the ovary of a deceased patient could not possibly have been formed within the organ. Instead he concluded that it must have been ‘swallowed while the Tumour was forming, when by perforating the Intestines and Ovarium it gained admittance’.⁸³ In 1789 there appeared in the *Philosophical Transactions* a paper by Matthew Baillie which provided a sophisticated challenge to the idea that such tumours were formed from a conception at all. The body of a girl aged around twelve or thirteen had been brought to Baillie for dissection. Upon opening the girl’s right ovary he had been startled to find a mass of hair and bones. Having always accepted the dominant view that conception was the cause of this condition, Baillie nonetheless asserted that the girl’s age, intact hymen and underdeveloped womb all seemed to suggest otherwise.⁸⁴ His rather fortunate position as the nephew of John and William Hunter not only gave his account good standing but also the opportunity to connect it with one of John Hunter’s cases, where a tumour filled with similar matter had been extracted from underneath an eyebrow.⁸⁵ Baillie thus provided what seemed to be clear evidence that tissue growth *could* occur in the ovary without sexual activity, and a lecture given by the surgeon John Abernethy (1764-1831) in 1827 indicates that by this time Baillie’s theory was generally accepted.⁸⁶

In fact, in general, the ovaries were considered to be organs that were frequently diseased. So often were they found to contain pathological changes upon dissection, that it was difficult to

⁸²Astruc (1767) 60-62.

⁸³ Richard Browne Cheston, *Pathological Inquiries and Observations in Surgery, from the Dissections of Morbid Bodies. With an Appendix Containing Twelve Cases on Different Subjects*. (Glocester: R. Raikes, 1766); 47.

⁸⁴Baillie (1789) 6-7.

⁸⁵Baillie (1789) 8.

⁸⁶ John Abernethy, ‘Mr. Abernethy’s Physiological, Pathological and Surgical Investigations’ *The Lancet* 7, no. 187 (31st March, 1827): 817-827; 826.

establish what exactly *should* be considered a normal ovary: ‘the change of condition, which these disorders produce in the *ovaria*, has often deceived anatomists; and made them mistake the true structure of these parts’ noted Jean Astruc, whose numerous textbooks were frequently translated into English.⁸⁷ Indeed Thomas Denman speculated that the organ’s vesicular structure might explain the prevalence of its disease and suggested that the cyclical formation of small liquid-filled capsules within the organ perhaps gave it an innate disposition to conditions like dropsy;⁸⁸ in other words, the frequency with which ovaries changed suggested that the *preternatural* was in some sense *natural* to the organ. As we will see in the next section, it would be this rather curious condition, dropsy of the ovary, which would receive the greatest attention from practitioners, keen to comprehend the organ’s diseases.

1.4 The Dropsical Ovary

Growing interest in the ovary’s generative function helped form a professional atmosphere in which discussion of its diseases developed. But this did not by any means equate with improved treatment. Buried deep within the peritoneum, the ovary was quite literally inaccessible; and the slow and painless progression that seemed to characterise ovarian disease in its early stages, made it difficult to determine its existence until it was advanced. These difficulties, along with the continued ambiguities regarding the ovary’s function, meant that the inclusion of ovarian disease in medical texts, even those which purported to cover the diseases of women, was deemed inappropriate by some authors. In particular, texts aimed towards young and inexperienced students and practitioners appeared to steer clear of mentioning diseases of that organ. In 1784 for example, John Aitken (1747–1822), lecturer in anatomy at the University of Edinburgh, produced *Principles of Midwifery and Puerperal*

⁸⁷ Astruc (1767) 14.

⁸⁸ Denman (1794) 125.

Medicine to guide his students.⁸⁹ Under the heading ‘puerperal pathology’, he purported to cover both those diseases connected to childbirth and those within the female generative system that were not.⁹⁰ And yet while referring to the ovaries in his anatomical description of the generative organs, Aitken did not address any diseases of the ovary, focusing only on those confined to the womb and the vagina.⁹¹ Similarly, John Ball’s (1704? - 1779) 1770 text *The Female Physician: Or, Every Woman Her Own Doctress*, aimed, Ball said, towards young practitioners, those stationed abroad as well as interested female readers, gave no mention to the diseases of the ovary.⁹² Others briefly discussed the subject but failed to elaborate on any of the specifics of treatment. In Henry Manning’s 440 page *A Treatise of the Female Diseases*, published in 1771, little more than a page was given over to the ovaries and fallopian tubes, because, not only were there few diseases specific to these organs, Manning argued, but they were so obscure and difficult to identify that, such diseases were ‘seldom or never perceptible, even to the patient herself’.⁹³ If a patient was suspected of having a disease such as cancer or encysted dropsy of the ovary, Manning suggested that they simply be treated in the same manner as cancers and dropsies in other parts of the body.⁹⁴

Despite this, most practitioners were cognisant that ovarian disease *did* occur frequently among women and some elected to address the matter in more detail. Jean Astruc’s expansive *Treatise on the Diseases of Women*, for example, provided a much more nuanced account. Comprised of numerous volumes produced throughout the 1760s, Astruc gave a detailed classification of ovarian pathology, making it by far the most exhaustive account on

⁸⁹ The preface is addressed to Aitken’s pupils; Aitken (1784).

⁹⁰ *Ibid.* 54.

⁹¹ *Ibid.* 27.

⁹² John Ball, *The Female Physician, or Every Woman her Own Doctress* (London: L Davis, 1770).

⁹³ Henry Manning, *A Treatise on Female diseases* (London; R. Baldwin, 1771) 307. Manning’s dates are unknown.

⁹⁴ *Ibid.* 308.

the subject to be published in the eighteenth century.⁹⁵ The anatomist Charles Bell (1774-1842), writing at the end of the century, appeared, like Henry Manning and others, relatively unconcerned with promulgating novel knowledge about the ovary. But there was one condition that he believed practitioners were likely to encounter often and therefore needed to be alert to: ‘Of all the parts of the female pelvis,’ he wrote ‘the ovaries are most frequently diseased; though, in reference to practice, the knowledge of them is unimportant, if we except that of dropsy, so frequently occurring.’⁹⁶

Perhaps because by the early nineteenth century the term had largely been replaced by ‘ovarian cyst’, the ‘dropsy’ in ovarian dropsy has often been ignored in accounts of ovarian surgery. Yet it was the nature of the *dropsical* ovary that was fundamental in making the organ surgical. Dropsy was a rather generic and expansive disease category, used to refer to swellings containing water, serum or air found throughout the body, usually (but not always) presenting alongside other symptoms such as retention of urine and thirst. It was generally considered a common medical problem and for the most part, viewed as a disease caused by some kind of constitutional imbalance.⁹⁷ The frequency of the condition meant that a fairly detailed nosology of the disease had been in use since ancient times,⁹⁸ when the disease was usually grouped into three categories: ascites (watery swelling of the belly), tympanites (windy swelling of the belly) and anasarca (swelling throughout the body).⁹⁹ During the

⁹⁵ John Astruc, *A Treatise on the Diseases of Women, Vol.2* (London: J. Nourse, 1762) 248-56.

⁹⁶ Charles Bell, *A System of Dissection, Explaining the Anatomy of the Human Body, the Manner of Displaying the Parts, and their Varieties in Disease*. (Edinburgh: Mundell and Son, 1798); 89.

⁹⁷ Although what exactly this underlying problem was would remain a subject for debate until the early nineteenth century, when it began to be understood better as a symptom of many different kinds of cardiac, renal and other abnormalities.

⁹⁸ For earlier discussions of dropsy see: Thomas Adams, *Diseases of the soule a discourse divine, morall, and physycall*. (London: George Purslowe for John Budge, 1616) 23. Physician and antiquary Richard Wilkes discusses the treatment and etymology of dropsy in ancient Greece. Richard Wilkes *An Historical Essay on the Dropsy* (London: Law & Ray, 1781); 1-7.

⁹⁹ Anonymous, *An Account of the Causes of Some Particular Rebellious Distempers* (London?: s.n., 1670); 76-8.

early modern period, classification became increasingly sophisticated. Conditions such as hydrocephalus (fluid in the cranium), hydrothorax (fluid in the chest) and dropsies of the womb, testicle and ovary were increasingly cited as different forms of the condition.

Dropsy was a medical narrative in its own right, cutting across areas of the body, age, gender, and cause and effect. Because humoral imbalances were seen as the root of most forms, of the disease, therapeutically it was often approached holistically. Recipes for cures were frequently offered simply for ‘the dropsy’ without any specification of body part.¹⁰⁰

The disease warranted attention; it was not only common, but also considered exceedingly dangerous if left untreated. Bills of mortality attest to this; the 1764 Bill for London, for example, reported 956 deaths from the disease in that year,¹⁰¹ making it the sixth most fatal of the fifty-seven diseases listed. For the year 1798 dropsy again proved the sixth most fatal of fifty-four diseases listed, the cause of 784 deaths in the city.¹⁰²

Misinterpretation of the disease in both men and women was common. In particular dropsy was often mistaken for corpulency,¹⁰³ something complicated by the fact that fatness was occasionally implicated as a *cause* of the disease too.¹⁰⁴ In cases of dropsical women there was often confusion as to whether a swelling was the result of pregnancy or dropsy, for as historian Lisa W. Smith has highlighted, for eighteenth-century practitioners signs of pregnancy, particularly in the first few months, were ambiguous.¹⁰⁵ This was particularly the case in dropsies that were ovarian in nature, because of the size such swellings could attain,

¹⁰⁰ See for example: ‘A Cure for Dropsy’ *Gentleman’s Magazine* 9 (June, 1739) 299; ‘A Receipt for Dropsy’ *Gentleman’s Magazine*, 30 (Sept, 1760) 416.

¹⁰¹ ‘General Bills of Mortality for the year 1764’ *Scots Magazine* 26 (1764) 72.

¹⁰² ‘Account of Diseases in London’ *Monthly Magazine* 7, no. 41 (1799) 68-9.

¹⁰³ Wilkes (1781) 94-5.

¹⁰⁴ John Leake, *Medical Instructions towards the Prevention, and Cure of Chronic or Slow Diseases Peculiar to Women* (London: R. Baldwin, 1777) 336-7. Thomas Short, *A Discourse Concerning the Causes and Effects of Corpulency* (London; J. Roberts, 1728).

¹⁰⁵ Lisa W. Smith, ‘Imagining Women’s Fertility before Technology’ *Journal of Medical Humanities* 31 no.1 (2010): 69-79; 72.

and was a relatively common problem encountered by practitioners.¹⁰⁶ This ambiguity between conditions sometimes led younger, unmarried women to a place of considerable vulnerability, in which the spectre of illegitimacy was raised by their swollen bellies. Often it was only as the woman's abdomen continued to grow beyond the usual nine months that dropsy was accepted as a more likely scenario than pregnancy.¹⁰⁷

Dropsy was a major and serious disease of the eighteenth century and the dropsical patient has received some attention from historians, particularly in relation to gender. Wendy Churchill and Richard Gooding have both highlighted the belief of many medical practitioners that dropsy disproportionately affected women.¹⁰⁸ Physician Donald Monro (1728-1802) certainly thought this the case, writing in 1756 that 'women being more subject than men to stoppage of the natural excretions, and being also of a weaker frame, are more frequently attacked by dropsies.'¹⁰⁹ Many others agreed that women's wateriness seemed to make them more prone. Yet the gendering of dropsy was more complex and varied than Churchill and Gooding suggest. Even when dropsy is described as being more liable to attack women, practitioners were often quick to add that it was frequent in men too; many believed it a disease from which no one was safe, one that could strike at men, women and children, apparently indiscriminately.¹¹⁰ In 1810 it was a male victim of the swollen

¹⁰⁶ Practitioners often published cases where initially a patient was believed to be pregnant, only for her belly to continue to grow beyond the usual nine months, when dropsy would then become accepted as a more likely scenario. For a notable example see Benjamin Gooch *Medical and Chirurgical Observations, as an Appendix to a Former Publication*. (London and Norwich: G. Robinson and R. Beatniffe, 1773) 110-117; also William Smellie. Thomas Denman also discussed the frequency with which such dropsies were mistaken for pregnancy. See Denman (1794) 125.

¹⁰⁷ Cathy McClive, 'The Hidden Truths of the Belly: The Uncertainties of Pregnancy in Early Modern Europe.' *Social History of Medicine* 15, no. 2 (August 2002): 209-27; 227.

¹⁰⁸ Wendy D Churchill, 'The Medical Practice of the Sexed Body: Women, Men, and Disease in Britain, Circa 1600 – 1740,' *Social History of Medicine* 18, no. 1 (2005): 3-22; 20. Richard Gooding, 'A Complication of Disorders': Bodily Health, Masculinity, and the Discourse of Gout and Dropsy in Henry Fielding's *The Journal of a Voyage to Lisbon*, *Literature and Medicine* 26, no. 2 (2008): 386-407; 394.

¹⁰⁹ Donald Monro, *An Essay on the Dropsy and its Different Species*. (London; D. Wilson & T. Durham, 1756) 14.

¹¹⁰ Richard Wilkes, *An Historical Essay on the Dropsy* (Law & Ray; Stafford, 1777) 3.

abdomen chosen by cartoonist Thomas Rowlandson (1756-1827) to represent the disease dropsy in his caricature ‘Dropsy Courting Consumption’ (see **figure 1**). The dropsical gentleman, ‘courting’ his polar opposite, a rake-thin, consumptive woman, looks more overfed than ill (a possible reference to the oft-made assumption that dropsy was the result of overindulgence or excessive alcohol consumption).¹¹¹ Dropsy could be gendered but it was not necessarily *feminised* and the disease is better understood when taking into consideration the wide discursive space in which understandings of it were constructed. Gender was just one component in a condition that was far reaching in society: age, class and lifestyle were also believed to play their roles in the causation of dropsy and its frequency and variability made room for many competing theories as to its causes and cures.

¹¹¹ John Ball, *The Modern Practice of Physic*, vol. 1 (London: A. Millar, 1762) 218. The possible connection between alcohol and dropsy was highlighted by Quaker physician John Coakley Lettsom who warned against the effects of alcohol in his *Hints Designed to Promote Beneficence, Temperance and Medical Science. Vol. I.* (London: H. Fry, 1797) 20.

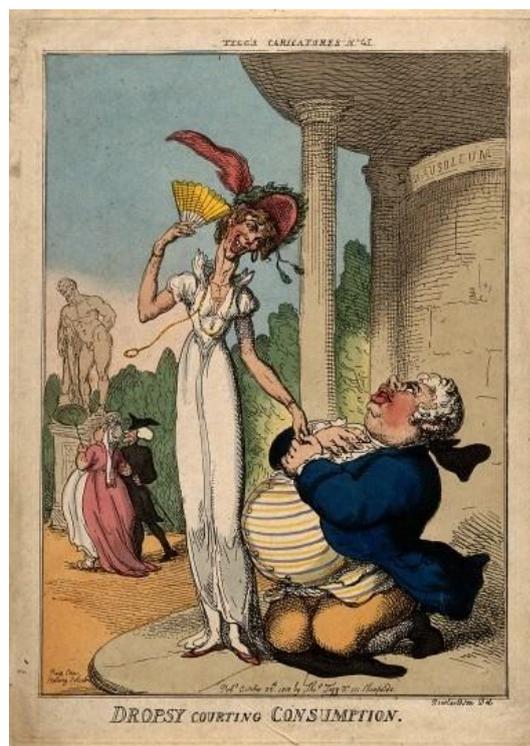


Fig. 1. *Dropsy Courting Consumption* (1810)

Etching in which Thomas Rowlandson starkly contrasted the grossly swollen dropsical patient against the emaciated consumptive who is the object of his affection. Rowlandson's caricature suggested that dropsy could quite easily be conceptualised as male as much as it could female. (Wellcome Collection); coloured etching; 35.3 x 25 cm.

What primarily set apart dropsy of the ovary from other types of the disease was its pathological presentation; this differed in three significant ways. First, it was the most frequent type of dropsical swelling to occur in an encysted form – when multiple sacs of fluid formed within a larger general swelling - which added complexity to the disease site, as fluid was effectively ‘trapped’ in the smaller cysts. Second, in contrast to most other dropsies, which were usually viewed as symptoms of underlying disease elsewhere in the body, it was understood to be a localised disease *in and of itself*, a sign of the organ's structure gone awry rather than a constitutional disorder that could be rectified by restoring balance. Finally, ovarian dropsy, like other ovarian diseases, was often symptomless until the disease reached an advanced state when it would often begin to cause a great deal of

pain. Its slow, insidious growth meant that suspected sufferers of the condition often did not seek medical attention until their abdomen was noticeably swollen.¹¹² In fact the gigantic sizes suspected ovarian dropsies could attain – usually it was only upon the death and dissection of the patient that the condition was confirmed - were significant in capturing the attention of medical men. The abnormal size of anything, not least the human body, was not just something around which ideas of monstrosity could be constructed, it was a fundamental way in which the monstrous was *defined* and the unrestrained size that dropsical ovaries could attain intrigued the higher echelons of the scientific community. Frequently reaching the size of a human head or even larger, dropsical ovaries could be extraordinary and monstrous, and were often described as such.¹¹³

This combination of factors gave ovarian dropsy a significant place in discussions of treatment, and the prospects of a cure perplexed eighteenth century physicians and surgeons. ‘The ovarium dropsy being *encysted*, will be found to require a considerable deviation from the general mode, though on similar principles, to restore the tone of the exhalants and lymphatics, and at the same time evacuate the extravasated fluids’ stated one practitioner in 1796.¹¹⁴ His words suggested a continued adherence to the humoral model - that a cure for the disease lay in restoring balance – but also acknowledgement that the ‘extravasated fluids’ – the fluid trapped in the small cysts - meant that this task was far from simple. Indeed for many other practitioners the conclusion was much grimmer: encysted dropsy of

¹¹² Long standing assumptions about the vague symptoms of ovarian disease, especially ovarian cancer, have only been challenged comparatively recently as groups such as Ovarian Cancer Action seek to highlight that there are in fact, many symptoms for women to be alert to. On this see Patricia Jasen, ‘From the ‘Silent Killer’ to the ‘Whispering Disease’: Ovarian Cancer and the Uses of Metaphor’ *Medical History* 53, no. 4 (2009): 489-512.

¹¹³ Benjamin Gooch (1773) 110-117; John Aitken *Elements of the Theory and Practice of Physic and Surgery*, vol.2 (London: s.n, 1782) 270; Jean-Guillame Chifoliau, ‘Observation: Dilation Monstrueuse d’un Ovaire Complicqué d’Anasargue’ (1781). Mémoires, Observations et Correspondance Médicale Adressés à la SRM. SRM 190, d.1 n. 4(Académie Nationale de Médecine, Paris).

¹¹⁴ William Luxmoore *An Address to Hydropic Patients* (London: W. Wilson, 1796) 18-19.

the abdomen was simply incurable by medical means, compounds proving ineffective as a treatment for the disease.¹¹⁵ This seemed to be confirmed with the 1785 publication of *An Account of the Foxglove and some of its Medical Uses* by Birmingham based physician William Withering (1741-1799). In it Withering recorded his successful experimentation with *digitalis* to treat dropsies of many kinds. Notably however, he excluded ovarian dropsy from the possibility of cure with this method. Instead he concluded that while types of dropsy like hydrothorax and anasarca were generally curable either by *digitalis* or by other medicines, ‘the ovarian dropsy defies the power of medicine’.¹¹⁶ Complex in its structure, difficult to diagnose and unfitting to treatment plans used for other dropsies, ovarian dropsy puzzled and troubled practitioners from across the professional spectrum.

1.5 Extirpating Ovaries: The Disembodied Technique

The powerlessness of medicine meant that it was surgery that appeared to offer the most hope for those with the disease. The operation of paracentesis, commonly known as ‘tapping’, was one of the most common treatments for abdominal dropsies that could not be helped by medicine and was cited by the majority of practitioners as the only treatment which was even slightly effective in ovarian disease. Paracentesis was a procedure that had been in use since ancient times and was relatively simple in its execution: after pressure had been applied to the affected area of swelling with bandages or a belt, a trocar was inserted into the affected area through which the fluid was then drained off. It was a common technique, but it was also one where the limitations were clearly perceived by practitioners.

¹¹⁵William Cullen *First Lines of the Practice of Physic, Vol.4* (Edinburgh: C. Elliot, T. Kay, & Co, 1788) 327; Benjamin Bell *A System of Surgery, Vol.1* (Edinburgh: Charles Elliot and G.Robinson, 1783) 415.

¹¹⁶William Withering *An Account of the Foxglove and Some of its Medical Uses* (Birmingham: Swinney, 1785) 203.

It was generally acknowledged, particularly with encysted dropsy, that the procedure was almost always a palliative measure – dropsical swellings would usually begin to re-fill once they had been drained and the more complex and multi-cysted the swelling was, the more likely it was that a tapping would fail – a single puncture unlikely to cause effective draining in the smaller sacs of fluid. Aside from that, the procedure was fraught with danger, carrying a high risk of death from disease or exhaustion. Most advocated performing the procedure only once the pain had become unbearable or the vital organs were thought to be impaired in their function.¹¹⁷ Yet with a limited choice in treatment options, tapping was both sought out and performed despite the risks and the fear it clearly induced in many patients. Numerous women with ovarian disease sought repeated ‘tappings’ to palliate their symptoms. Philip Meadows Martineau (1753-1829), a young surgeon residing in Norwich reported such a case to John Hunter in 1784, who went on to communicate it to the Royal Society. A pauper woman known by Martineau, Sarah Kippus, was believed to have been tapped eighty times during a period of twenty-three years, an extraordinary 6631 pints of fluid altogether drawn from what was later discovered to be a swollen, dropsical ovary. When Martineau had encountered her three years before her death, her appearance was ‘truly deplorable, not to say shocking’,¹¹⁸ her belly by that point so huge that her face was now almost wholly obscured by it. Yet remarkably, Kippus was generally in good spirits, reported by Martineau to be a cheerful and friendly woman who ‘seldom regarded the operation’.¹¹⁹ Indeed, the

¹¹⁷Although a small number of eighteenth century medics such as the eminent physician John Fothergill (1712-1780) and a friend of William Hunter, spoke openly about the need for tapping to be performed early if there was any hope of affecting a cure in any form of abdominal dropsy. See John Fothergill, ‘On the Use of Tapping Early in Dropsies’ *Medical Observations and Inquiries*, 4 (1772) 115.

¹¹⁸ Philip Martineau and John Hunter, ‘An Extraordinary Case of a Dropsy of the Ovarium’ *Philosophical Transactions of the Royal Society* Vol. 74 (1784) 471-6; 471.

¹¹⁹ *Ibid.* 472

operation evidently became a routine part of her life, Martineau noting that paracentesis would generally occur on a Sunday so that her neighbours could assist her.¹²⁰

In a number of respects the disease seemed to suggest itself to surgery. Visibility, one could argue, is at the crux of surgical encounters,¹²¹ and the huge sizes that dropsical ovaries could accrue made it a visceral and visible disease that straddled the line between the internal and external and, consequently, the traditional – if not always observed – boundaries between surgery and physic. It was a disease through which anatomists could contemplate how internal disease *mapped* to external appearance, as well as being an interesting and productive example of morbid anatomy.¹²² But perhaps most significantly, the disease was localised, suggesting that surgical intervention, if it was possible, could potentially remove the disease in its entirety.

Despite this, the possibility of a new, radical operation being introduced to treat ovarian dropsy was by no means inevitable. The ovary was an internal organ of which knowledge remained imperfect, and its location underneath the peritoneum made surgical interference a fearful prospect. Throughout the late eighteenth and early nineteenth centuries the quest to find a non-surgical solution to the disease persisted, with everything from douches and electricity to diuretics, mercury and iodine injections continuing to be advocated for its treatment, none of which, however, would earn the confidence of the profession. For most

¹²⁰ *Ibid.* 472

¹²¹ As Stefan Hirschauer has identified, looking and cutting are arguably the two key elements to operative surgery. Stefan Hirschauer 'Performing Sexes and Genders in Medical Practices' in *Differences in Medicine: Unraveling Practices, Techniques and Bodies*, ed. Marc Berg and Annmarie Mol, 13-27 (Durham, Duke University Press, 1998).

¹²² Matthew Baillie was particularly vocal about the need for anatomists to identify those diseases where 'alterations in the structure take place' Matthew Baillie *The Morbid Anatomy of Some of the Most Important Parts of the Human Body*. (London: J. Johnson, 1793) i. Baillie was central to the growing interest in pathological anatomy in Britain in the late eighteenth century. See Cunningham (2010) 217-222.

practitioners, the ineffectiveness of medicine did not mean surgeons should be accorded freedom to innovate how they pleased, for recourse to surgery remained undesirable regardless. Operations were, as John Hunter liked to tell his students, ‘the defect of surgery’,¹²³ an occasional necessary evil which surgeons were expected to perform only when all else had failed. Given the popular opinion that surgeons were little more than blood thirsty, untrustworthy knife-wielders, Hunter’s words of caution are unsurprising.¹²⁴ Entering the abdomen was fraught with dangers both to patients’ lives but also professional reputations. Even paracentesis was considered a serious and risky operation, only to be performed when absolutely necessary.¹²⁵ To go beyond this, to open the abdomen completely, was a shocking prospect.

Nonetheless, for a small but highly influential group of physicians, surgeons and anatomists, the lack of treatment options for ovarian dropsy was frustrating and perplexing enough that by the middle of the eighteenth century consideration was being given to the radical possibility of opening the abdomen to extirpate dropsical ovaries in their entirety. These ideas were fostered by a culture of experimental anatomy among French and British practitioners – some were physicians, although most were surgeons - a number of whom were deeply interested more generally in the possibility of extirpating internal organs. Their concerns focused not only upon the technical feasibility of doing so, although this was of course significant, but also function, namely, what organs was it possible for humans to live without and to still be able to function normally? Two organs were initially of particular

¹²³ ‘John Hunter: A Copy of Notes Taken at his Lectures on Surgery’ 2 (1787) Western Manuscripts MS5598 (Wellcome Library).

¹²⁴ Lynda Payne *With Words and Knives: Learning Medical Dispassion in Early Modern England* (Aldershot & Burlington: Ashgate; 2007) 87.

¹²⁵ Many notable surgical texts at the beginning of the nineteenth century, such as Charles Bell’s *A System of Operative Surgery* (1807) and William Hey’s *Practical Observations on Surgery* (1803) omitted the discussion of paracentesis altogether and treatises on female diseases seldom went further than advocating tapping in extreme cases.

interest: the spleen and the womb. The exact function of the former had long been a mystery to medical men. Indeed the possibility that it was in fact entirely useless within the bodily economy was sometimes raised, most notably by the British physician Richard Blackmore in the early decades of the century. Reviewing past medical literature as a means of supporting his argument, Blackmore claimed that that the Ancients, like him, had viewed the spleen to lack function and to possibly even be ‘noxious’, due to its production of black bile.¹²⁶ Ancients such as Eristratus, he argued, also firmly believed that humans could survive without the spleen. Blackmore cited also the work of the seventeenth-century anatomist Marcello Malpighi (1628-1694) who had successfully extirpated the spleen from a number of dogs, all of whom had survived the procedure.¹²⁷ As Blackmore himself acknowledged, such a view, while hardly novel (as he was at pains to show), *was* potentially controversial, implying as it did that the organ was ‘made in vain; which is to affirm, that an Intelligent and infinite wise Cause, may act without Design, and for no End.’¹²⁸ This challenged not just ingrained medical ideas of constitution and humoral balance but the Galenic idea of teleological anatomy: that every part of the body had a specific purpose.

The thriving correspondence culture of the Royal Academy of Surgery (l’Académie Royale de Chirurgie), formed in Paris in 1731 under *l’Ancien Régime* and dissolved in 1793, reveals that not dissimilar questions were being asked there in respect to another organ. In the early 1780s an intriguing discussion had begun at the society when a surgeon named Lassort appealed to his peers for responses to a question that he felt had not yet been satisfactorily answered: namely, could a woman, once she had had children, live without her womb? The question generated numerous replies from surgeons and *accoucheurs*, many of whom

¹²⁶ Richard Blackmore *A Treatise of the Spleen and Vapours* (London: J. Pemberton, 1725) 5.

¹²⁷ Richard Blackmore *A Critical Dissertation upon the Spleen* (London: J. Pemberton, 1725) 51-2.

¹²⁸ *Ibid.* 5.

enthusiastically brought forward cases where extirpation of the womb had been attempted or where in hindsight, it was thought extirpation might have saved a life, indicating that while the possibility of removing the womb was radical, discussion of it was not considered exceedingly controversial. Like with the spleen, the possibility of removing the womb was not a new idea: as one correspondent noted, the operation had already been performed by sixteenth-century surgeon Ambroise Paré (1510-1590) who had once extirpated a diseased mass from a woman that had later been identified as being formed from the ovary and womb. Even though Paré's removal of the womb had been accidental rather than intentional, this gave the operation some historical foundation.¹²⁹ Strikingly, most practitioners who did respond believed that extirpation of the womb was possible and a woman could go on to live a healthy life.

Thus, contrary to Jane Eliot Sewell's assertion as to the 'larger than life' status of the female generative organs, it seems in fact it was their relative *expendability* within the bodily economy which was being emphasised, especially after child-bearing had been completed. That this latter element was added to the question circulating round the Society was significant. It prevented more serious moral questions being raised that might have been if removing the wombs of women of child-bearing years was being suggested; although in practice not all responding practitioners appeared concerned about distinguishing between younger and older women in this way.¹³⁰ This phrasing of the question also highlighted that the womb's function, while important, was also temporary, and that at a certain time the organ became useless. The womb was, of course, vital to propagation, but it was not vital to the maintenance of life, it seemed, unlike the brain, heart or liver. At least one surgeon made

¹²⁹ Beaudont 'A Monsieur le doyen de la Société de l'Ausun...' ARC 17, d.3, no.45, Archives de l'Académie royale de Chirurgie (Académie Nationale de Médecine).c.1781-2. 5.

¹³⁰ Beaudont (c.1781-2) 4.

the comparison between the removal of the womb and that of the testicles in men,¹³¹ the crucial difference being not so much their gendered nature but that removing the female generative organs meant entering the peritoneum. *Theoretically*, if a man could survive without his generative organs, as it was believed they could, so too could a woman without hers.

Thus, in pre-revolutionary France in particular, the possibility of radical abdominal surgery played an important part in surgical debate. Although London was steadily growing into the hub of medical education and innovation that it would be known for in the nineteenth century, Paris still led in surgery and obstetrics during the mid-decades of the eighteenth century and French texts translated into English continued to function as key tools of learning for British surgical practitioners.¹³² As Toby Gelfand has commented: ‘from a technical standpoint, French surgery assumed a position of European leadership in the late seventeenth century and the first half of the eighteenth; French or, to be more precise, Paris surgeons built this reputation on major operations, new instruments, and anatomical work for which cadavers were in plentiful supply.’¹³³ Gelfand does not specifically contest Michel Foucault’s assertion of the ‘birth’ of the so-called anatomo-clinical school in Paris at the turn of the nineteenth century and its attendant ‘clinical gaze’.¹³⁴ But like other historians he has sought to draw attention to eighteenth-century Parisian surgery and the antecedent structures

¹³¹ Lassort ‘Réponce’; ARC 17, d.3, no.45 Archives de l’Académie royale de Chirurgie (Académie Nationale de Médecine).c.1781-2.1.

¹³² Toby Gelfand ‘Invite the Philosopher, as well as the Charitable,’ Hospital Teaching as Private Enterprise in Hunterian London’ in *William Hunter and the Eighteenth Century Medical World*, ed. William F.Bynum and Roy Porter (Cambridge: Cambridge University Press, 1985), 129-152; 138.

¹³³ Toby Gelfand, *Professionalizing Modern Medicine*. (Westport and London: Greenwood, 1980) 9.

¹³⁴ Foucault argues that hospital teaching emphasised the correlation of outward signs and symptoms with bodily lesions found upon dissection Michel Foucault, transl. by A. M. Sheridan *The Birth of the Clinic: An Archaeology of Medical Perception* (Taylor & Francis e-library, 2003) esp.124-148.

and traditions which precipitated the changes Foucault writes about.¹³⁵ Similarly Laurence Brockliss and Colin Jones have warned against taking at face value Foucault's assertion that before the Paris school medical study was 'didactic rather than creative'.¹³⁶

It was in this context that discussion regarding the radical surgical treatment of the ovary, including its extirpation, began in France in the mid-decades. It was a discussion that was guided by some of the most prominent names in French surgery; among them Henri Le Dran (1685-1770), a surgeon to Hôpital de la Charité in Paris who was highly respected in England, having been elected a Fellow of the Royal Society in London in 1745.¹³⁷ Le Dran was an innovative surgeon with an array of interests. He advocated radical mastectomies involving excision of involved lymph nodes and was a highly successful lithotomist.¹³⁸ Less celebrated but nonetheless significant, was his experimentation with more radical methods of treating encysted dropsies of the abdomen. Le Dran, a general surgeon, was interested in encysted dropsies of all types, not just of the female reproductive organs, and ovarian dropsy was conceptualised by him as an abdominal rather than a 'female' disease. Indeed dissections of fatal cases of ovarian dropsy – of which a great deal were undertaken on both sides of the channel – only seemed to re-iterate this. Dissections for suspected ovarian dropsy frequently revealed a disease site which, while rooted in the ovary, had diffused haphazardly

¹³⁵ Gelfand (1980) xiii. This historiographical shift has perhaps been most succinctly characterised by W.F Bynum as demonstrating that 'what Foucault calls the 'clinic' had a gestation as well as a birth'. William F. Bynum, 'Physicians, Hospital and Career Structures in Eighteenth-Century London,' in *William Hunter and the Eighteenth-Century Medical World*, ed. William F. Bynum and Roy Porter (Cambridge: Cambridge University Press, 1985), 105–128; 108.

¹³⁶ Laurence Brockliss and Colin Jones *The Medical World of Early Modern France* (Oxford: Clarendon Press, 1997) 827.

¹³⁷ Election of Henri le Dran to the Royal Society (1745) Ref no: [EC/1744/09](http://tinyurl.com/nuyp2bk), Repository: GB117 (The Royal Society) <http://tinyurl.com/nuyp2bk> (accessed 8th July 2013). His surgical treatises also went through a number of English editions.

¹³⁸ On Le Dran's lithotomies see: Brockliss and Jones (1997) 556. On his proposition to extirpate of the breast and surrounding glands in cases of suspected cancer see: Henri Le Dran *Consultation on Most of the Disorders that Require the Assistance of Surgery* (London: Robert Horsfield, 1766) 64-67.

throughout the abdomen, sometimes filling the entire cavity, as can be seen in **figure 2**. The enlarged ovary often adhered itself to muscles, the peritoneal wall, the intestines or other organs. These multifarious ways in which the disease could spread and the lack of knowledge about whether such adhesions were present when a patient was alive, not only made operations difficult but meant that even upon dissection the disease often defied anatomical standardisation.¹³⁹

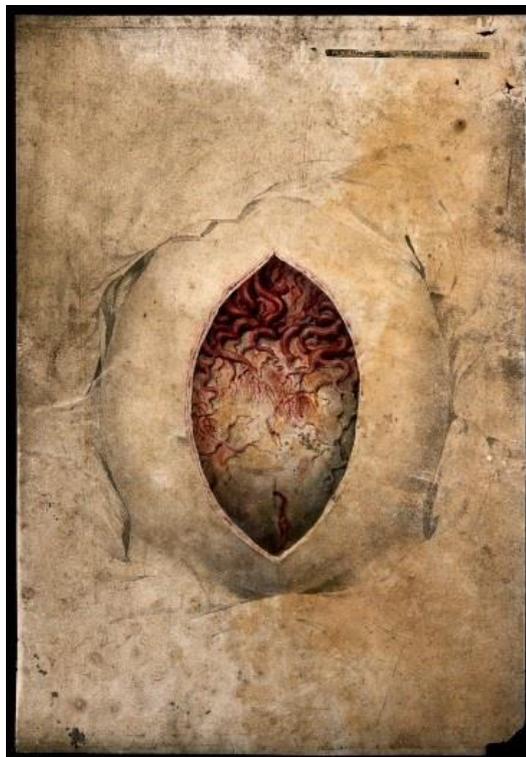


Fig. 2. A diseased ovary cut for dissection. (1824)

Despite its title, this anonymous image is probably of an abdomen that has been sectioned, the hint of limbs at the bottom and the shrouding, suggesting that this is a torso. The inside reveals the ovary as a huge diseased mass, invading the peritoneal cavity and with complex vascular involvement. Such imagery implied the abdominal rather than gynaecological nature of the disease (Wellcome Collection); watercolour; 25.2 x 23.5 cm.

¹³⁹ Stefan Hirschauer has written on discrepancies between anatomical standardisation and the realities of surgery. See Hirschauer (1998) 13-27.

Despite the difficulties in treating the disease, Le Dran was relatively optimistic about future possibilities, believing that ‘surgery, advancing every day toward its perfection has found other resources than the puncture’.¹⁴⁰ That this was the feeling of the majority of British and French surgeons in the mid-decades seems unlikely, but Le Dran had spent a number of years experimenting and researching encysted dropsy and by the 1740s was quite convinced that surgeons had to find new procedures rather than rely on the wholly inadequate practice of paracentesis. In *Traité des Opérations de Chirurgie*, published in 1742 and translated into English in 1749, Le Dran revealed how with encysted dropsies, rather than simply drawing off the liquid, his practice was to create a permanent incision within the diseased organ, the idea being that the ensuing suppuration would prevent a re-filling of the cysts.¹⁴¹ Le Dran’s idea was novel, but, much like paracentesis, he recognized that, in addition to the disabling side-effect of a permanent fistula, the method could not provide an absolute cure to the patient.¹⁴² It was yet another palliative technique, albeit a more sophisticated one perhaps, than tapping.

In 1753 Le Dran was the author of one of a number of reports on encysted dropsies of the abdomen to be published jointly in an issue of *Mémoires de l’Académie Royale de Chirurgie*. A comparatively sparse five volumes of the *Mémoires* were published during the

¹⁴⁰ Henri Le Dran ‘Hydropsie Enkistée Attaquée par une Opération dont il resta Fistule’ in ‘Plusieurs Mémoires et Observations sur l’Enkistée et le Skirre des Ovaires’ *Memoires de l’Academie Royale de Chirurgie* 2, (1753); 431-442 ; 433 : ‘la Chiurgie qui avance tous les jours vers sa perfection a trouvé d’autres ressources que la ponction.’

¹⁴¹ Le Dran’s described his treatment of the cyst: ‘its sides draw near each other by their elastic disposition, and are assisted herein by the pressure of the neighbouring parts of the cystic suppurate, as they approach near each other, and the pain ceases. In short, by this means the small cysts, which are very thin, and are inclosed in the great one, empty themselves daily; and the membranes which form them, come away in pieces, by the suppuration of the internal coats of the large cystis.’ Henri Le Dran transl. by Thomas Gataker *The Operations in Surgery of Monsieur Le Dran*. (London: C. Hitch & R. Dodsley, 1749) 128.

¹⁴² *Ibid.* 128.

eighteenth century and those cases included from the discussions of the Royal Academy of Surgery tended to be only those ‘felt worthy of becoming part of surgical lore’.¹⁴³ Thus the collection of essays, entitled ‘Several Accounts and Observations of the Encysted Dropsy and Schirrhous Ovary’ can be seen as reflecting a concerted effort on the part of the Academy to focus attention upon the subject. The accounts, which were brought together with concluding remarks from the eminent Paris surgeon and lithotomist Sauveur François Morand (1697-1773), further pushed the question of major intervention for the disease that Le Dran had instigated. The most radical suggestions came from Parisian surgeon Jean Delaporte (dates unknown).¹⁴⁴ Recounting a case of death from ovarian dropsy, Delaporte was probably the first surgeon to publicly express his desire to see the establishment of a more radical operation which involved removing the whole ovary, *le foyer de maladie* (‘the seat of the disease’) as he described it, to cure the disease.¹⁴⁵ With a small organ like the ovary, Delaporte argued, the huge mass of disease frequently took over the entire organ, which essentially became converted into a tumour. The ovary was not just the *source* of the disease, it *was* the disease, and could only be cured, Delaporte believed, by removal of the entire organ. In this way encysted dropsy of the ovary differed from those encysted dropsies of the abdomen which were situated in the abdominal cavity but not localized to a specific organ. With the ovary, disease and organ became interchangeable and unlike dropsies such as hydrocephalus where it was not feasible to extirpate the affected organ, ovarian dropsy was a condition where attacking and removing the organ - important but ultimately expendable - was potentially viable. In his concluding comments Morand praised Delaporte, imploring his colleagues to celebrate the surgeon’s bravery in being the first modern

¹⁴³ Brockliss and Jones (1997) 581.

¹⁴⁴ Jean Delaporte ‘Hydropsie Enkistée de l’Ovaire attaquée par incision’ 452 – 455 in ‘Plusieurs Mémoires et Observations sur l’Enkistée et le Skirre des Ovaires’ *Memoires de l’Academie Royale de Chirurgie* 2 (1753).

¹⁴⁵ Delaporte (1753) 455.

practitioner to have dared to raise the possibility of removing the diseased ovary in its entirety.¹⁴⁶ But like those interested in the possibility of removing the spleen and womb, Morand also looked back to the ancient world for examples of surgery involving the ovary. He cited numerous examples of female castration, noting its successful practice in female birds and quadrupeds. He also alluded to a manuscript by the Greek author Hesychius (c.5th Century CE) in which it was suggested that women of the ancient Lydian community were castrated (although of course the ‘modern’ operation did not necessarily mean castration as it was only proposed that diseased ovaries be removed). Finally Morand referred to examples where ‘accidental’ removal of the ovaries were alleged to have occurred following wounds to the stomach.¹⁴⁷ Contributing historical evidence like this provided gravitas to the operation and was probably in part an attempt by Morand to prevent the operation being labelled a dangerous and unnecessary novelty.

Dozens of reports on ovarian dropsy continued to be sent to the Academy of Surgery during the second half of the century. Like Philip Meadows Martineau in Britain, many surgeons were simply keen to share their experiences of patients who had suffered from enormous ovarian tumours. However a small but influential number were, like Delaporte, primarily concerned with cure, and wished also to demonstrate that extirpation of the ovary should be considered viable in advanced cases of ovarian dropsy where other means had failed. Some framed this as a matter of moral obligation and professional pride: ‘surgery of our century has yet to fully triumph over this common and cruel disease’ wrote a Chartres based surgeon named Philippe to the Academy in 1763.¹⁴⁸ Philippe, who was a regular correspondent to

¹⁴⁶ Sauveur-François Morand ‘Remarques sur le Observations précédentes, avec un précis de quelques autres, sur le meme sujet.’ in ‘Plusieurs Mémoires et Observations sur l’Enkistée et le Skirre des Ovaires’ *Memoires de l’Academie Royale de Chirurgie* 2 (1753) 455-460; 459.

¹⁴⁷ *Ibid.* 460

¹⁴⁸ Philippe ‘D’un Mémoire sur l’hydropsie de l’ovaire’, as reported to the Society by Destremau (1765) *Archives de l’Académie Royale de Chirurgie* ARC 39, d.’maladies de l’ovaire’, no.74 –

the Society was cautiously optimistic about the use of the operation, believing it was possible, although only under special circumstances. He emphasised that a very particular type of patient would be necessary for initial forays with the operation. The ideal ovarian surgery patient, Philippe hypothesised, was among other things, between twenty and forty years old, of a medium weight, robust constitution and who had had a life of simple, modest work.¹⁴⁹ Thus while the operation was being styled by surgeons as one of that would only be used as a last resort, the ideal patient, according to Philippe, needed to be relatively young and healthy if she was to survive. A strong patient was essential, Philippe believed, if this new operation was to succeed, at least at this point in its development.

It was almost certainly the arguments of Delaporte and Le Dran which were on William Hunter's mind when he gave consideration to the topic in 1753. Hunter had made his name as a man-midwife, as we have seen, but it was as part of an article on asthma and dropsy published in *Medical Observations and Inquiries*, a publication of the London Society of Physicians, that he gave his most detailed opinions on the disease and its treatment. This is demonstrative of how the curative prospects of ovarian dropsy were being discussed as much in the context of dropsy as in debates centred on the diseases of women, if not more. In the first part of the article Hunter seemed to suggest the impracticality of the operation:

It has been proposed by modern surgeons, deservedly of the first reputation, to attempt a radical cure by incision and suppuration, or by excision of the cyst, I am of opinion, that excision can hardly be attempted; and that incision and suppuration will be found by

document 1 (Académie Nationale de Médecine) 9 : 'la chirurgie de notre siècle n'a pas encore pleinement triomphée de cette commune et cruelle maladie'.

¹⁴⁹ Philippe 'D'un Mémoire sur l'hydropsie de l'ovaire' (1764) Archives de l'Académie royale de Chirurgie ARC 39, d. 'maladies de l'ovaire', no.74 – document 2 (Académie Nationale de Médecine) 35. Philippe's dates and first name are unknown.

experience to be an operation that cannot be recommended, but under very particular circumstances.¹⁵⁰

Thus, Hunter appeared to be distancing himself from the likes of Delaporte and Le Dran.¹⁵¹ However his succeeding comments, in fact seemed to leave open the possibility that a radical operation might just work, if the circumstances were right. His important remarks warrant reproduction in some detail here:

Now if the disease be nearly what I stated, must not the wound made in the belly, for the excision of the cyst or cysts always be large enough to admit the surgeon's whole hand? Must it not often be a good deal larger: as when the tumor is large and composed of a number of bags filled with gelly? Would not such a wound be attended with a good deal of danger from itself? Would it not be very difficult to cut the pedicle, or root of the tumor with one hand only introduced? Would it not be impossible to do this, where the adhesions proved to be considerable?...If it be proposed indeed to make such a wound in the belly, as will admit only two fingers or so, and then to tap the bag, and draw it out, so as to bring the root or the pedicle close to the wound of the belly, that the surgeon may cut it without introducing his hand; surely; in a case otherwise so desperate, it might be advisable to do it, could we beforehand know that the circumstances would admit such a treatment.¹⁵²

Hunter thus envisioned in some detail the possibility of radical excision. Yet like Delaporte, he never attempted the operation. Nor did his younger brother John. John certainly encountered the disease many times – his casebooks recorded numerous patients suspected

¹⁵⁰ William Hunter, 'The History of Emphysema' *Medical Observations and Inquiries* 2 (1758) 17-70; 41.

¹⁵¹ Hunter was possibly a student of Le Dran's Paris in the early 1740s. Gelfand (1985) 131.

¹⁵² Hunter (1758) 44-5.

of having the condition - and in 1785 he openly discussed the possibility of a more radical operation since ‘there was no reason why, when the disease can be ascertained in an early stage, we should not make an opening into the abdomen and extract the cyst itself.’ He went on to echo Morand by asking ‘why should not a woman suffer spaying, without danger as well as other animals do?’¹⁵³ But Hunter’s hypothesis transferred only to a theoretical *possibility* of surgery and not to any radical alterations in his own practice. He treated all his recorded ovarian cases with tappings, mercury and electricity and never attempted exirpation himself.¹⁵⁴ In this respect he perhaps adhered closely to his philosophy that operations should remain strictly *dernier resort*. Hunter’s interests primarily lay in anatomy, and natural history rather than surgery, which despite his expansive practice, was often a burden to him.¹⁵⁵ It may well have been that the impetus to innovate around the operation was simply not there for him.

Indeed by the end of the eighteenth century, despite the growing discussion around the subject, there had only been two cases made public in Britain involving the removal of an ovary. The first was that of Scottish practitioner Robert Houstoun (1678-1734), whose case in fact preceded the commentaries of Delaporte, William Hunter and others on the subject. In 1724 Houstoun reported in the *Philosophical Transactions* that in 1701 he had made an incision of about four inches into the abdomen of fifty-eight-year-old Margaret Millar, who was labouring under a ‘monstrous’ tumour.¹⁵⁶ Urged by the desperate woman to do

¹⁵³ As quoted in Schachner (1921) 141.

¹⁵⁴ For examples see: Elizabeth Allen, J.L. Turk, Sir Reginald Murley, ed., *The case books of John Hunter FRS* (London: Royal Society of Medicine Services Limited, c1993) 63-4; 485-6.

¹⁵⁵ Wendy Moore *The Knife Man: Blood, Bodysnatching and the Birth of Modern Surgery* (London: Bantam Press, 2005) 233; William F. Bynum, ‘Hunter, John’ *Encyclopaedia of Life Sciences* (2001) www.els.net DOI: 10.1038/npg.els.0002437. Published online: 25th July, 2001. Accessed online: 14th July 2013.

¹⁵⁶ Robert Houstoun, ‘An Account of a Dropsy in the Left Ovary of a Woman, Aged 58. Cured by a Large Incision Made in the Side of the Abdomen’ *Philosophical Transactions of the Royal Society* 33 (1724) 8-15; 9.

something for her pain, Houstoun had made an incision in her belly and managed to remove large parts of a distended ovary and some gelatinous substance through the incision. The woman recovered, apparently relieved of her pain. Retrospectively, a number of Victorian surgeons, most notably Robert Lawson Tait, would argue that Houstoun was the original pioneer of ovariectomy, claiming his direct influence on the Hunter brothers' suggestions.¹⁵⁷ However, this was more likely to do with Tait's own predilection for championing the contributions of practitioners outside of London; there is no evidence of either Hunter or the French surgeons referencing the Houstoun case, which appeared to have surprisingly little contemporary impact. Nonetheless it is important to note that this case was 'out there' so to speak, communicated through the influential *Transactions*.

The second case was reported in 1775 by St. Bartholomew's Hospital surgeon Percivall Pott (1714-1788). Pott had removed both ovaries from a twenty-three-year-old woman, although he only realised them to *be* ovaries on removing the first, the diseased organs having herniated and passed through the abdominal wall. Pott himself did not use the opportunity to express the significance of this incident in relation to surgery; the case was unusual and the location of the ovaries odd. The operation had not required Pott to open the peritoneal cavity, and therefore provided no guidance for treatment of the more typical ovarian diseases a surgeon was likely to encounter.¹⁵⁸ Both Houstoun and Pott's cases however, would later be used to support various contentions about the justifiability of ovarian surgery. This demonstrates the influence of such operations that were precipitated not by any theory of potential innovation or even a sophisticated understanding of pathology but by medical

¹⁵⁷ Lawson Tait, 'Address on the Principle of Exploratory and Confirmatory incisions' *The Lancet* 137, no. 35197 (February 1891) 292-296.

¹⁵⁸ Pott did however consider the implications removing the ovaries would have on the woman's physiology, reporting that after the operation her breasts had disappeared and her body had become more muscular and thus challenging the general view that removing the ovaries, if the operation could be performed, would not impair the general physiology of the body. Percival Pott *Chirurgical Observations* (London: T. J. Carnegy, 1775) 184-186.

emergencies like in Houstoun's case; or in Potts' case where the removal of the ovaries was in fact accidental.¹⁵⁹

Thus, by the end of the eighteenth century, the operation – the *intentional* removal of a diseased ovary – remained almost entirely hypothetical in Britain; a disembodied technique, without a surgeon willing to perform it or patient to submit to it. In France the situation was slightly different; in 1782 the Rouen surgeon Jean-Baptiste L'Aumonier (1749-1818), claimed to have successfully and with relative ease, diagnosed and then removed a diseased ovary from the abdomen of twenty-one-year-old Louise Lagrange, a significant development.¹⁶⁰ Strikingly however, the case did not appear to make an impact in Britain, nor did any other French surgeons admit to following in his footsteps, although some were evidently trying: at least one French surgeon, writing in 1763, claimed he offered to attempt radical extirpation on a patient with advanced ovarian disease but that, unsurprisingly, she 'absolutely refused' his proposition.¹⁶¹

Brockliss and Jones have characterised Delaporte's suggestion as one innovative technique that simply 'never got off the drawing board'.¹⁶² In particular they compare it to the rapid development of Caesarean Section on live women at this time, which was performed with relative frequency in eighteenth-century France. Brockliss and Jones argue that Enlightenment sensibility towards the child gave cultural impetus for an operation, which, although exceedingly dangerous, gave the child at least a chance of life rather than the grim

¹⁵⁹ Although not necessarily to justify extirpation -The Houstoun case for example was sometimes used in conjunction with Le Dran's suggestions to suggest that a partial excision like Houstoun's was preferable to full extirpation. 'Ovarian Dropsy' *Medico-Chirurgical Transactions* 3 (1826) 588.

¹⁶⁰ Jean-Baptiste L'Aumonier 'Observations sur un dépôt de la trompe et sur l'extirpation des ovaries' *Histoire de la Société Royale de Médecine*, 5 (1787) 296-300. L'Aumonier's account was later discredited, as he was case was deemed to be one partial excision of the ovary and thus not a 'real' ovariectomy.

¹⁶¹ Philippe (1762) 5.

¹⁶² Brockliss and Jones (1997) 560.

ending of craniotomy.¹⁶³ Why then was there not a similar take up of ovarian surgery when the frequency and seriousness of ovarian disease seemed also to imbue the operation with a moral justifiability? Early historians of ovariectomy, such as August Schachner, have pointed to the pessimistic overtones of William Hunter's words as to why no one took up the task at hand and dared to perform the operation in Britain at least. 'We are surprised to have discovered upon several occasions references expressing astonishment that no action followed the publication of William Hunter's views' wrote Schachner in 1921, but, he continued, 'how could anyone find anything in William Hunter's views to inspire action, and what more could be said than that which was said, to intimidate action?'¹⁶⁴ There is, of course, the possibility that extirpations were taking place away from prying eyes. But what, perhaps, mattered more was the cultural resonance of this *proposed* innovation in surgical technique. By admitting its possibility did it therefore exist? If it was spoken of, then what were the implications for the profession? While the relative lack of medical periodicals, especially outside France, meant the diffusion of ideas and experiences was slow among medical men in Europe, it seems that initially the lack of active response to the challenge of the operation was due to a sense of responsibility on the part of elite surgeons. As Anton De Haen (1704-1776), the Dutch-Austrian physician and leading light of Viennese medicine allegedly described the operation: 'it would not do to talk about, lest some reckless surgeon should attempt to perform it'.¹⁶⁵ The caution which both Hunter and de Haen advised in their discussion of the topic implied that even *articulating* the possibility of the operation was itself powerful and potentially dangerous.

¹⁶³ *Ibid.* 561-2.

¹⁶⁴ Schachner (1921) 185.

¹⁶⁵ As quoted in Randolph E. Peaslee *Ovarian Tumors: Their Pathology, Diagnosis and Treatment, Especially by Ovariectomy* (D. Appelton, New York, 1872) 234.

A simplistic conceptualisation of surgical innovation might suggest that a group of authoritative practitioners decide there is a problem to be solved, and this then lends itself to action.¹⁶⁶ However such a linear model of innovation is complicated by episodes like ovarian surgery where a large chasm existed between the *idea* of performing the procedure and the *action* of doing so. Certainly, in the case of ovarian surgery, there existed motivation in finding a new way to treat diseased ovaries: frequent, invariably fatal, and so far with little success by means of non-surgical therapeutics, it was opportune for surgeons to find a way of solving this problem. Yet delicate negotiation was required for a procedure that was highly symbolic of fundamental change, not just in technique – Caesarean Section after all similarly required the opening of the abdomen – but in surgical *objective*. Ovarian dropsy, as distressing a disease as it was, was at least one that the patient had the potential to live with for a lengthy period of time, particularly if palliative techniques were employed. Agreement that a radical operation be used in its treatment required a significant shift in surgical conventions and made its performance by any well-known surgeon a controversial step. For some in the profession it was a new and exciting prospect; for others, a potential attack on the defined limits of surgery. As a result, by end of the century the operation was more often than not conceptualised as something suited for a *future* time in medicine. This was certainly the view of Philippe, the Chartres surgeon who had written such a detailed treatise of ovarian extirpation for the Academy. For Philippe, innovation in ovarian surgery should be neither inevitable nor random; rather it was essential that the profession waited for the *right* case to come along – however long that may be – so that the practical reality of the operation began with success rather than failure. Philippe appeared acutely aware of the possibility that *his* generation of surgeons would be judged on their practices with ovarian surgery and was convinced it was better to exercise caution and wait, so as to ensure surgeons ‘honoured

¹⁶⁶ As is implied by Wilde and Hirst (2009) 74.

our century with a new discovery' rather than introducing something disreputable.¹⁶⁷ By the end of the century – and despite the L'Aumonier case – this sentiment remained intact; 'I am persuaded that a time will come when this operation will be extended to more numerous cases than I have proposed, and that it will not be difficult to execute,' the French surgeon Nicolas Chambon (1748-1826) is alleged to have written in 1798.¹⁶⁸ The long gap between idea and action reflected the complex and circular relationship between theory and practice in the construction of a 'new' operation. The metropolitan, professional cultures of London and Paris had planted the seed of its possibility and philosophised in great detail about it; sporadic attempts at the operation in emergency cases had also occurred, as had a partial excision. But radical extirpation of the ovary was yet to be part of regular surgical practice.

1.6 From Kentucky to Edinburgh to the pages of *The Lancet*: Multiple Cases of Ovarian Surgery in the Early Nineteenth Century

In Britain in the early nineteenth century, interest surrounding the potential of the operation rapidly gained ground. Along with rising admiration for French interventionist surgery, there came in 1817 the revelation that an American surgeon, Ephraim McDowell, had successfully removed diseased ovaries in three women, all of whom had survived, and the cases of which he had published in the *Eclectic Repertory and Analytical Review*.¹⁶⁹ What was novel about

¹⁶⁷ Philippe (1764) 36. 'Une opération dont les commencements entrepris avec plus des prudence, auraient honoré notre siècle d'une nouvelle découverte.'

¹⁶⁸ I have not been able to trace the original source of this. Shachner supposed Chambon to have said this at a meeting of the Royal Academy of Surgery, however the Academy had dissolved by 1898. Chambon took a deep interest in the subject however and discussed the possibility of extirpation elsewhere, thus it seems likely he did make a statement to this effect. Peaslee (1872) 234-5.

¹⁶⁹ Ephraim McDowell 'Three Cases of Extirpation of Diseased Ovaria' *Eclectic Repertory and Analytical Review* 7 (1817) 242-245.

McDowell was that he was reporting *multiple* cases, in which diseased ovaries had been *intentionally* removed, demonstrating both a clear objective and consistency. McDowell appears to have been motivated by practical reasons rather than by a more grandiose objective of proving empirically the theories of French surgeons. Indeed he claimed to have been ignorant of any other attempt to perform such an operation, freely admitting that his first case was of an experimental nature, albeit one to which his first patient at least, had fully ‘consented’.¹⁷⁰ What is more, with a small practice in rural Kentucky, McDowell was in some respects remote enough to have been able to perform the operations with relative anonymity.¹⁷¹ Nonetheless in a follow-up paper in 1819 detailing further cases (one successful, one resulting in death) McDowell echoed the fears of De Haen, by openly declaring his wish that the operation should *not* become part of regular surgical practice, implying instead that the operation needed to be carefully controlled, as its danger would be greatly increased if it fell into the hands of ‘the mechanical surgeon’. McDowell was presumably referring to those not sufficiently educated, to whom he believed the operation

¹⁷⁰ *Ibid.* 242 McDowell’s first patient Jane Todd Crawford (1763-1842) was suffering from a huge tumour, at first assumed to be an advanced pregnancy. McDowell agreed to operate on Crawford on the condition she travelled to his hometown of Danville where he could perform the operation with his own assistants and in his favoured surroundings. Crawford famously travelled sixty miles on horseback in great pain so as to have the operation. The Editors, ‘McDowell, Ephraim’; <http://www.anb.org/articles/12/12-00598.html>; *American National Biography Online* Feb. 2000. Access Date: Sun Jul 14 2013. While Crawford’s consent is suggested, McDowell’s following three patients were all black women and references to consent in their cases is only spoken of in relation to McDowell obtaining the consent of their ‘master’. See *ibid.* 243 and Ephraim McDowell ‘Observations on Diseased Ovaria’ *Eclectic Repertory and Analytical Review* 9 (1819) 546-552; 551. In an article about the medical ethics of nineteenth-century gynaecological surgeon James Marion Sims, L. Lewis Wall correctly asserts that ‘it is difficult to make fair assessments of the medical ethics of past practitioners from a distant vantage point in a society that has moved in a different direction, developed different values, and has wrestled—often unsuccessfully—with ethical issues of sex, race, gender, and class that were not perceived as problematic by those who lived during an earlier period of history.’ Nonetheless as he also seeks to highlight, it is patently unclear whether McDowell’s black patients gave consent to these operations, something which should not be forgotten. L. Lewis Wall ‘The Medical Ethics of Dr J Marion Sims: a Fresh Look at the Historical Record’ *Journal of Medical Ethics*, 32, no.6 (2006) 346-350; 349.

¹⁷¹ For more in this see Jean Bowra, ‘Making A Man A Great Man: Ephraim McDowell, Ovariectomy and History’ presented at *Social Change in the 21st Century*, (University of Queensland, October 2005, Accessed November 13, 2010, from <http://eprints.qut.edu.au/3454/1/3454.pdf>) 1-9; 5-6.

should remain ‘forever incomprehensible’.¹⁷² While this may have in part sprung from a wish on McDowell’s part to remain respectable, he clearly also saw the operation as one which required considerable expertise and should be avoided as much as possible.

The role McDowell came to play in the development of ovarian surgery, has been the subject of much speculation. Many accounts have sourced his inspiration to perform such surgery from his time as a medical student at the University of Edinburgh, where it has been claimed that he studied under the anatomist John Bell (1763-1820). Bell has been said to have had a particular interest in diseases of the ovaries and their surgical potential.¹⁷³ The proof for the intellectual relationship between the two men mainly rests on the fact that McDowell first sent the reports of his operation to Bell. However there is no substantial documentary evidence to suggest Bell’s particular interest in the operation. Nor is there evidence that McDowell actually attended Bell’s lectures.¹⁷⁴ While it seems certain that the rich intellectual atmosphere of Edinburgh would have left an impression on the young American surgeon, and Bell as a prominent anatomist and surgeon would probably have had a degree of interest in the topic, it seems likely that the link between the two was played up later in the century as the operation’s priority came to be debated. The role of Bell became important in asserting that while an American surgeon may have had success in performing it; it was, in spirit, a *British* operation.

Why then was it in rural Kentucky that the operation became a material reality? Latterly, McDowell’s successes have been seen as the defining moment in the history of ‘ovariotomy’

¹⁷²McDowell (1819) 548.

¹⁷³ Dally (1991) 11-13p; Moscucci (1990) 135-6.

¹⁷⁴ Schachner wrote that while McDowell may have been influenced more generally by the powerful teaching of Bell ‘we are thoroughly convinced that the idea of ovariectomy originated in the fertile brain of Dr. McDowell.’ The concrete connection between McDowell and Bell seems to have first originated with a Kentucky surgeon named John D. Jackson sometime in the nineteenth century. Schachner (1921) 11-12.

but this operation was yet to be described as ovariectomy and the contemporary impact of McDowell was hardly one of triumphant success. McDowell waited eight years until writing up his reports of the cases, upon which he duly sent copies to Bell and to the American surgeon Philip Syng Physick (1768-1837). Physick, despite his reputation as a bold and innovative surgeon who had trained under John Hunter,¹⁷⁵ took no interest in the paper, which only received publication after then falling into the hands of Thomas Chalkley James (1766-1835), a Philadelphian obstetrician, who although not himself particularly influential,¹⁷⁶ did see fit to publish McDowell's cases in his journal the *Eclectic Repertory*, one of the few medical publications in America at that time. A later report sent by McDowell to the *Repertory*, indicated that mild controversy had been caused by this original report, McDowell alluding to remarks made by a Dr. Michener, who criticised parts of McDowell's account, in particular the lengthy nine-inch incision made by the Kentucky surgeon.¹⁷⁷

But it was the copy that McDowell sent to Bell which would have the most impact in Britain. Bell himself never saw it – he left for the continent in May 1817 and died in Italy in 1820.¹⁷⁸ It then fell into the hands of John Lizars (c.1787-1860), who had been partner in surgical practice with Bell. Lizars, a successful practitioner and respected instructor of anatomy and surgery at the Edinburgh school,¹⁷⁹ had his curiosity aroused by McDowell's reports and the challenge of extirpating ovaries became a pet project for him over the next

¹⁷⁵ Thomas A. Horrocks. 'Physick, Philip Syng'; <http://www.anb.org/articles/12/12-00722.html>; *American National Biography Online* Feb. 2000 (accessed Mar 22 2011).

¹⁷⁶ Thomas A. Horrocks. 'James, Thomas C.'; <http://www.anb.org/articles/12/12-00450.html>; *American National Biography Online* Feb. 2000 (accessed Mar 22 2011).

¹⁷⁷ McDowell (1819) 546-7.

¹⁷⁸ K. Grudzien Baston, 'Bell, John (1763–1820)' *Oxford Dictionary of National Biography* (Oxford University Press, 2004) <http://www.oxforddnb.com/view/article/2013> (accessed 22 March 2011).

¹⁷⁹ See: 'The Late Professor John Lizars' *Edinburgh Medical Journal* 6 (1860) 1019-3 and Malcolm Nicolson, 'Lizars, John (1791/2–1860)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004) <http://www.oxforddnb.com/view/article/16814> (accessed 14 April 2011).

several years. Rooting his work in that of Le Dran and citing McDowell's examples, Lizars published first in 1824 a lengthy article on the subject in the *Edinburgh Medical and Surgical Journal* and then in 1825 his monograph *Observations on Extraction of Diseased Ovaria*, in which he detailed four cases where he had attempted the radical procedure, his work illustrated with exquisite coloured plates engraved by his brother William. Lizars' results were not good; of his four cases, one died from peritoneal inflammation, another was discovered to have been misdiagnosed, with no tumour to be found at all upon opening the abdomen, and in a third the operation had to be abandoned because of extensive adhesions. Only one case brought success – a large diseased ovary was removed from a patient who – after a tense three month period of severe post-operative illness – had survived. This achievement was tempered somewhat by Lizars' revelation that the patient's other ovary had also been diseased, but which he had been unable to remove.¹⁸⁰

Working in Edinburgh, one of the intellectual centres of medicine, where his practices would be known, Lizars used his practical experience of the operation to pose wider questions about justifiability, not just of ovarian surgery, but abdominal surgery as a whole - something McDowell had chosen not to do. Even though Lizars' results had been poor, they nonetheless showed, he argued, that opening the feared peritoneum was *not* necessarily fatal; in a bold claim at the end of the monograph, Lizars wrote that 'from these cases, it appears, that there is little danger to apprehend in laying open the abdominal cavity'. In Lizars' opinion, other diseases aside from those of the ovary which gave recourse to 'gastrotomy' (the non-organ-specific term he used to describe opening the abdomen) included 'extra-uterine conceptions, *foetus in utero*, with deformity of the pelvis presenting embryulcia, aneurism of the common or internal iliac arteries, or of the aorta, volvulus, internal hernia,

¹⁸⁰John Lizars *Observations on Extraction of Diseased Ovaria* (Edinburgh: Daniel Lizars, 1825) 11.

cancer of the uterus and foreign bodies in the stomach threatening death.¹⁸¹ It has been claimed that Lizars' publication received widespread criticism and that it badly damaged his career.¹⁸² Certainly, some colleagues openly condemned Lizars for his foray into abdominal surgery, which had on a practical level, achieved little. James Johnson's *Medico-Chirurgical Review* in particular, did not consider Lizars' experiments favourably. In the same article Johnson (1777-1845) had expressed doubts about the credibility of McDowell's cases, suggesting that the American surgeon's claims of success seemed dubious to the point of suspicion. He did not doubt Lizars' cases to be true, but neither did he believe his experiences would make surgeons any more confident in attempting to remove diseased ovaries.¹⁸³ Fellow Edinburgh surgeons James Syme (1799-1870) and Robert Liston (1794-1847) also reacted negatively. This was probably in part related to the open disdain in which the two surgeons held Lizars, the professional rivalries between the men frequently spilling into public debate;¹⁸⁴ nonetheless Lizars' ostensible failure with ovarian extirpation provided useful fodder to fling at their rival. Liston would go on to sarcastically describe Lizars in his personal correspondence as 'Ovary John'.¹⁸⁵ To observers and rivals, Lizars was treading what was just a fine line between progressive and eccentric surgical behaviour.

But other publications welcomed his report, albeit cautiously. The *London Medical Repository and Review* commended Lizars for his 'splendid and very able work' which demanded the attention of the profession; although this was not before the reviewer also warned surgeons to exercise discretion when cutting for ovarian dropsy, taking to task the

¹⁸¹ *Ibid.*, p.24

¹⁸² Nicolson (2004)

¹⁸³ 'Extirpation of the Ovaria' *The Medico-Chirurgical Review* 6 – Analytical Series (1826) 215-7.

¹⁸⁴ For more about the plethora of professional and personal spats between surgeons in early nineteenth-century Edinburgh, see: Peter Stanley, *For Fear of Pain: British Surgery, 1790 – 1850* (Rodopi, Amsterdam & New York, 2003) esp.38-9; for Syme's comments on the operation see J. Syme, *The Principles of Surgery* (Edinburgh : MacLachlan and Stewart; London, 1832).

¹⁸⁵ Robert Liston, letter to James Miller (February 4th, 1837) MS 6087/3 (Wellcome Collection).

claim of some that it was a purely surgical disease.¹⁸⁶ The review in *The Lancet* provided perhaps the most enthusiastic reception to Lizars' work. Still only two years old and with a radical agenda, the journal called for the operation to be judged relative to other operations, rather than being regarded as novel or different, opining that:

If it be rendered probable that such an operation as that required for the extraction of the ovaries can be performed with success equal (ie in comparison with its magnitude) to that which follows other operations, its difficulty should not be regarded, and there will be no reason why it should not be done.¹⁸⁷

For those, like *The Lancet*, who were convinced of the operation's benefits in the early decades of the nineteenth century, proving its justifiability lay in constructing a sound experimental basis for the operation rather than relying on a slow accumulation of cases, and as referenced in their review of Lizars' work, at the heart of early nineteenth-century research into the possibility of ovarian surgery was James Blundell (1791-1878). Blundell was an obstetrician by trade, but his experimentation into the feasibility of removing organs was, like Lizars', demonstrative of objectives that extended well beyond the treatment of reproductive organs. The significance for Blundell was not with any particular organ, but in establishing that the peritoneum could be opened without resulting in certain death. In 1828 Blundell, in a Hunterian fashion, used animal experiments to define principles on which abdominal operations could be based, and commenced a large series of experiments using twenty-nine rabbits, variously removing their ovaries, uteruses, spleens, kidneys and portions of the bladder, as a means of establishing how far the peritoneum could suffer interference. Eight out of twenty-nine of Blundell's experimental rabbits survived and

¹⁸⁶ 'Review: On the Extirpation of Diseased Ovaries' *The London Medical Repository and Review* 3 (1826) 135-145; 136.

¹⁸⁷ 'Review: On the Extirpation of Diseased Ovaries' *The Lancet* 4, no. 103(17 September 1825) 327.

Blundell argued that the details of the results proved that in *principle* all the organs experimented with, bar the kidney, could be feasibly removed. This, he concluded established that ‘moderate openings into the human peritoneum will not necessarily, or even generally, prove fatal from inflammation.’ As Blundell pointed out, both hernia operations and tappings with the trocar for dropsy involved making small wounds to the peritoneum and these procedures were frequently performed by surgeons. The fear surrounding the peritoneum, therefore, was unnecessarily excessive, a conclusion, he believed, that was based on impulsive distrust of the surgically unknown territory of the internal body, rather than any experimental proof. Establishing the operation lay in proving that surgeons could make the inside of the body theirs too.

Throughout the 1820s other accounts regarding the removal of diseased ovaries had begun to spill onto the pages of British medical journals. In 1822 the *Edinburgh Medical and Surgical Journal* reported a successful case performed in Vermont by Dr. Nathan Smith (1762-1829), who claimed that he had already begun teaching the methods of practising the operation in his surgical lectures at Yale University;¹⁸⁸ Smith, like MacDowell had visited Scotland as part of his medical education.¹⁸⁹ McDowell’s colleague in Danville, Alban Smith (1795-1861), also had a successful case in 1826.¹⁹⁰ The most notable cases in Europe aside from Lizars’ were that reported by the London based Italian physician Augustus Granville (1783-1872) in 1826 – Granville’s patient survived but the tumour could not be removed – and

¹⁸⁸ Nathan Smith, ‘Case of Ovarian Dropsy Successfully Removed by a Surgical Operation’ *Edinburgh Medical and Surgical Journal* 18 (1822) 532-4; 534.

¹⁸⁹ Constance E. Putnam. ‘Smith, Nathan’ *American National Biography Online* <http://www.anb.org/articles/12/12-00858.html> (Accessed Jul 14 2013).

¹⁹⁰ Alban Smith ‘Account of a Case in which an Ovarium was Successfully Extirpated’ *North American Medical and Surgical Journal* 1 (1826) 30-38.

those of a German surgeon by the name of Chrysmar in 1829, who had had two successes and a fatal case.¹⁹¹

By this stage interest in the ovary had definitively eclipsed interest in other organs as possible sites of abdominal surgery. In relation to the womb, surgeons were focusing instead on the possibilities of a potentially safer vaginal extirpation method, of which there were a number of successful cases reported in the British medical press in the 1820s and 1830s. Why surgery of the spleen did not become established at this time however, is less clear. Perhaps no other abdominal organ was so subject to rigorous animal experimentation during the early nineteenth century than the spleen, most of which had only clarified that the organ was secondary to other major abdominal organs.¹⁹² Like ovarian surgery, in the late eighteenth and early nineteenth centuries, occasional attempts to extirpate the human spleen were made. In this way, understandings of the surgical possibilities of the spleen closely mirrored those of the ovary up until the early decades of the nineteenth century. At that point, however, interest in removing the spleen appears to have diminished. In 1842, a British surgeon Francis Eagle, basing his proposals on Blundell's experiments, had written a lengthy article in *The Lancet* arguing for the justifiability of extirpating diseased spleens, but his ideas fell on deaf ears, and little more was written on the subject in the following decades.¹⁹³ It would not be until the 1880s that the subject was revived, when surgeons, including those who had made their name as specialists in ovarian surgery, established splenectomy. Surgical *possibility* alone did not inevitably precipitate surgical innovation. And without the similar justifications that were being put in place to permit the extirpation

¹⁹¹ Hopper, 'On Extirpation of Diseased Ovaria' *London Medical Gazette* 3(1829) 401-405. Chrysmar's dates are unknown.

¹⁹² The Bell brothers, Charles and John, conceived of it in 1816 as an 'organ subservient to the stomach.' helping to aid digestion. John and Charles Bell *The Anatomy and Physiology of the Human Body, Vol.3* (London: Longman, 1816) 354.

¹⁹³ 'Review of Mr. Eagle's Proposition to Excise the Spleen' *The Lancet* 39, no. 999 (22 October 1842)130-131. Eagle's dates are unknown.

of dropsical ovaries – that disease was definitively local and invariably fatal - development of splenic surgery seems to have lost ground.

1.7 Conclusion

Beyond the general implication of Foucault and others that a greater focus upon anatomy and dissection led to an increasingly ‘surgical’ way of thinking among doctors in the late eighteenth and early nineteenth centuries, little has been done to show in what *manner* this might have been expressed surgically, or why some forms of ‘new’ surgery were prioritised over others, especially in Britain. This I hope to have rectified somewhat in this chapter in relation to ovarian surgery.

With an increasingly robust foundation of experimental proof and backed up by real successes, by the 1830s the removal of diseased ovaries *was* a surgical reality if not a common practice. The entry of the ovary into the surgical remit, in advance of the kidney, the liver or the spleen or any other abdominal organ, was dependent on a confluence of factors. Pathological anatomy was one important aspect. As this chapter has drawn out, the pathological complexity of the dropsical ovary brought the disease to the attention of medical practitioners. In particular, the *presentation* of the disease made it the ideal location for forays into the abdomen. A visually striking, tactile disorder it was common enough for cases to be plentiful and distressing enough for practitioners to consider it to be justifiable. It also appeared to be local in origin, thus differentiating considerably from other forms of dropsy, and suggesting the disease was potentially curable. We see then, that the early history of ovarian surgery, particularly before McDowell, is one of complex beginnings to an innovation that quickly became high-status; a mixture of discussion among surgical leaders, none of whom, notably, attempted the operation itself, surgical accidents and emergencies, patient refusals and unsubstantiated historical anecdotes, and thus, a mutually constitutive relationship between surgical ideas and surgical actions.

Jane Eliot Sewell has claimed that it is ‘no historical accident’ that ovarian surgery was the first form of abdominal surgery to become attempted and accepted; that other organs were equally likely candidates and that it was the ovaries that became the focus because these were women’s reproductive organs which had a ‘larger than life status’ in society. Certainly the ovaries were increasingly medicalised throughout the late seventeenth and early eighteenth centuries. Moreover the unique egg-producing function attributed to them in the seventeenth century helped define their gendered identity within the body and make them an object of novel, physiological interest. Looking at the way ovaries have been medically treated, however, requires a step back from pre-conceptions about the gendering of the body and a questioning attitude to what surgeons *saw* when they operated. Certainly in some respects dropsy of the ovary *was* gendered – the many mistaken diagnoses of pregnancy for example, that some women endured, factored deeply into understandings of the disease. But when surgeons made paracentesis, experimented with incision and attempted extirpation, was it necessarily a gendered body they saw before them? Did they consider specifically the implications of operating on female organs or was it more generally, *disease* they were interested in curing? Ultimately it seems that it was the relative *expendability* of the ovaries – the possibility a woman could live without one or even both if necessary - which contributed towards its framing as a surgical object; to surgeons of this period, I would argue, the gendered nature of the organ was not always of primary concern.¹⁹⁴ Rather, the ovary might be best described as having a polymorphous identity during this time, ascribed roles both as a physiological research object, primarily in the context of exploring the female role in generation, but also an overlapping yet distinct identity as a site of surgical

¹⁹⁴ As Erin O’Connor suggests in her work in relation to breast cancer, what wasn’t there is as significant as what was, or as she puts it: “the question, then, is not, how does the discourse of breast cancer construct gender? But rather, how does the discourse of breast cancer elide gender?” O’Connor (2000) 93.

intervention. In this latter discourse the distinctly feminine nature of the ovary was not necessarily the focus of either anatomists or surgeons and ovarian disease was understood as much as an abdominal complaint as it was one of the generative organs. The ovary could be viewed as both gendered and non-gendered.

Innovation in ovarian surgery had already shown itself to be a long and complex process by the mid-1830s, by which point its possibility had been discussed for over eighty years; however its justifiability was far from established. If the technique of opening the peritoneum and cutting out the ovary was no longer completely novel, what it represented was. Far from the successes of L'Aumonier, McDowell and others providing a comfortable shift into a new era, ovarian surgery was soon to be catapulted onto the front pages of the medical press, where it was to become one of the most controversial topics in British medicine.

Chapter Two

Representations of Practice

2.1 Introduction

The previous chapter questioned the historiography so far produced on the origins of ovarian surgery. It also offered a new exploration of how and why the ovary came to be construed as a surgical object. By the 1820s, I argued, the possibility of surgically extirpating the dropsical ovary was accepted by many British medical practitioners to be at least technically possible. Some also openly expressed their belief that a patient *could* survive the operation and be cured of their disease. As I suggested, this did not mean the operation quickly or easily transitioned into common or acceptable practice. The operation still carried considerable hazards to the patient - most practitioners were agreed on that. The question coming into focus was whether this threat to patients' lives negated any further use of the operation, or whether in serious cases, where it seemed the patient was likely to die from the disease anyway, the operation was justified. This question loomed large, carried and amplified by the emergence of numerous weekly and monthly medical periodicals in the early decades of the nineteenth century. Medical periodicals had existed in Britain before this of course, the influential *Medical Observations and Inquiries*, where Hunter had published on encysted dropsy, being one example. But it was at the beginning of the nineteenth century that periodicals began to take shape in a way that made them 'an effective

talking-shop for the clinical research of the day'.¹⁹⁵ Weekly or monthly issues (rather than annual, as many eighteenth-century periodicals were) enabled greater debate and quicker conveyance of newsworthy events, as did the introduction of spaces like correspondence columns.¹⁹⁶ A number of periodicals were established at this time that would go on to become well-known and well-established. These included *Medico-Chirurgical Review* (est.1816), *The Lancet* (est.1823), *London Medical Gazette* (est.1827) and *Medical Times* (est.1839).¹⁹⁷ This expansion of print culture facilitated discussion regarding the practice of ovarian surgery, as the growing number of journals allowed for greater visibility of new cases. But ovarian surgery was also present in other parts of the medical press: in the publication of lectures, in the correspondence pages and even in book reviews. This intertwining was symbiotic: periodicals provided coverage of the issue for those who were interested in it, but ovarian surgery also provided newsworthy material for the press to sink their teeth into. Ovarian surgery was not unique in being made the subject of editorials, but editors like James Johnson at the *Medico-Chirurgical Review* were noticeably passionate in their opposition to the operation; it is clear that periodicals did not neutrally reflect opinions on ovarian surgery, rather they played a part in shaping them.

It is during this time that we can speak of a *debate* emerging, as through the press medical men began to polarise into two camps: those who advocated ovarian surgery - some of whom performed it also - and those who were against its use. Some practitioners shifted between the two camps; some remained in the middle, but it was common for practitioners

¹⁹⁵ Roy Porter 'The Rise of Medical Journalism in Britain to 1800' in *Medical Journals and Medical Knowledge: Historical Essays*, ed. William F. Bynum, Stephen Lock and Roy Porter, 6-28 (London and New York: Routledge, 1992); 19.

¹⁹⁶ *Ibid.*

¹⁹⁷ William F. Bynum and Janice C. Wilson 'Periodical Knowledge: Medical Journals and their Editors in Nineteenth-century Britain' in *Medical Journals and Medical Knowledge: Historical Essays*, ed. William F. Bynum, Stephen Lock and Roy Porter, 29-48 (London and New York: Routledge, 1992); 37. Bynum and Wilson note that more than a dozen medical weeklies emerged between 1823 and 1843.

to have *some* kind of position on the operation and to relate it to the broader context of the debate which saw a number of prominent members of the medical community place themselves on the far ends of the spectrum and enthusiastically posit their *representation* of the operation for other medical men to form their judgement upon.

Indeed it is representations of the operation that I make my focus in this chapter, with an eye particularly on these mid-decades, as British practitioners tried to make sense of the moral, technical and professional concerns that came with the growing use of a ‘novel’ operation in practice. Thinking about the way representations are historically constituted is integral to the history of modern science and medicine. Or so we might assume. Both science and medicine are, after all, ostensibly premised upon ‘objective’ representations of truth and yet, as Lorraine Daston and Peter Galison have most recently shown, objectivity itself is an historical construct.¹⁹⁸ Thus, the task of the historian of medicine, one might assert, is to show how the self-evident and the ‘scientific’ is in fact a construction. Yet as cultural historian Sander Gilman has recently argued, the value of representation as a mode *and* as a subject of historical analysis is no a longer a given in the history of science and medicine. With the ‘neuro-turn’ in humanities, where we see historical episodes ‘explained’ by neuroscience,¹⁹⁹ and where, as Gilman argues, ‘the new social history of medicine seems to have become a means of speaking about the reality that is ‘merely’ mirrored in representations’.²⁰⁰ How historians understand representation as both historical phenomenon and its use as an historiographical method are under close scrutiny.

¹⁹⁸ Lorraine Daston and Peter Galison *Objectivity* (New York: Zone Books, 2007). They write that ‘to be objective is to aspire to knowledge that bears no trace of the knower – knowledge unmarked by prejudice or skill, fantasy or judgment, wishing or striving.’ They mark it as a product of the mid-nineteenth century.17.

¹⁹⁹ See for example Melissa M. Littlefield and Jenell M. Johnson, eds., *The Neuroscientific Turn: Transdisciplinarity in the Age of the Brain* (Ann Arbor: University of Michigan Press, 2012).

²⁰⁰ Sander Gilman, ‘Representing Health and Illness: Thoughts for the Twenty-First Century,’ *Medical History* 55, no. 3 (2011): 295–300; 296.

In light of these recent critiques, it seems pertinent to think more closely about the *ways* representations of ovarian surgery were constructed and why this might be a useful tool for understanding historical episodes in surgery. The methods of representation surgeons employed should not be treated as either self-evident or merely a mirror upon surgeons' or patients' reality. Rather, representations were carefully cultivated and carefully negotiated. Of course, in a sense, this entire thesis is about how ovarian surgery was represented by historical actors; but during these mid-decades, considerations of how the operation was best represented to the medical community came under particular scrutiny. There was a thirst for knowledge about experiences of the operation; but what type of representation best conveyed what was an irreducibly *practice* based innovation? The burgeoning British medical press made possible a plethora of different representations of the operation. This complicated searches for the truth and reality of the operation which many in the medical community actively sought.

In this chapter I consider three different aspects to the representation of ovarian surgery between the early 1830s and the early 1860s when the justifiability of extirpating ovaries was a subject of intense debate. In the first section, by way of setting the scene, I start by giving a brief overview of the place of ovarian surgery in British medicine in the 1830s, before going on to consider how, during this time, it could be represented as both progressive and regressive. How was it that the operation could be construed in these diametrically opposite ways? And how were these differing representations situated in a medical culture where changes in anatomy, pathology and professional politics were shaping ideas of 'progress' in surgery? In the second part of the chapter, I go on to consider the place of what I term 'emotive accounts' of ovarian operations that emerged in the medical press, particularly during the 1840s, as the operation began to be performed by numerous practitioners in London. Reports of ovarian surgery were distinctive in their verbosity, in their strong conveyance of the patient's narrative and in their eliciting of emotional response

from readers. This played heavily into debates surrounding the operation's justifiability but also attendant discussions regarding responsibility in surgery and even blame. Women who underwent the procedure were by no means considered passive material to be operated upon. Their active role in agreeing and participating in the operation, as well as their behaviour before and especially after the operation were an important part of the way operative experience was presented to the rest of medical community, both by practitioners who advocated or performed the operation, and by those who made it their business to prevent the operation becoming established practice. I follow this by a third interlinked part which looks to the role of statistics in accounts of the operation, considering how statistical and 'emotive' representations of the operation complemented, challenged and complicated one another. Quantifying data, it has been often argued, was of increasing interest to medical men in the mid-decades and the use of statistics in settling the question of ovarian surgery's justifiability might be assumed to be simply another reflection of the shift towards 'scientific' medicine at this time. But how useful were numbers deemed to be in representing the operation? Could they provide a definitive answer to the justifiability question? And how could they represent the *moral* uncertainties that hung over the operation?

2.2 Progress or Culpable Homicide? Polarising Representations in the 1830s

In the first half of the nineteenth century numerous developments occurred in understandings of ovarian physiology and pathology, among them, in 1827, the experimental identification of the mammalian ovum by Russian anatomist Karl Ernst Von Baer (1792-1876). Increasingly it was accepted by practitioners that ova existed in the ovary before conception, rather than being generated by it, and in the 1840s and 1850s, ovulation also

began to be connected with menstruation.²⁰¹ As Chandak Sengoopta has argued, this led physiologically minded practitioners to link the actions of the ovary with female nervous disorders; it was the ovaries rather than the womb that were coming to be regarded as central to the generation of women's 'feminine' characteristics.²⁰²

In Britain in 1830, the first dedicated monograph on the subject of ovarian disease had also appeared: *Illustrations of Some of the Principal Diseases of the Ovaria*, was authored by Edward Seymour (1796-1866), a physician to St. George's Hospital. Seymour's work blended pathology with comparative anatomy and physiology to give a nuanced nosology of ovarian diseases and tumours, and his work served to reiterate the idea that ovaries were especially subject to morbid change.²⁰³ Seymour's monograph was influential, but in regards to treating ovarian dropsies and other ovarian tumours, it seemed to offer little new.²⁰⁴ In fact new understandings of ovarian pathology seemed only to heighten the sense of futility which lingered around treatment such as tapping. It was quite obvious to most practitioners by this point, Seymour included, that 'dropsy' of the ovary was an entirely different disease to a condition like ascites. Indeed, some were beginning to question whether cysts and tumours in the ovary were a form of dropsy at all.²⁰⁵ If they were not, this suggested standard treatments for dropsical conditions like tapping were not only ineffectual but, possibly entirely incorrect for a condition that was increasingly seen as distinctive in its pathology. It

²⁰¹ Although up until the late nineteenth century this theory - known as the 'ovular' theory - remained disputed. See for example Lawson Tait 'Menstruation and the Ovaries' *The Lancet* 132, no. 3404 (24 November 1888) 1044-1045. Tait did not believe that menstruation was related to the ovaries, claiming that his oöphorectomy patients (who had had both ovaries removed) usually continued to menstruate after the operation.

²⁰² Chandak Sengoopta 'The Modern Ovary: Constructions, Meanings, Uses' *History of Science* 38, no. 122 pt 4 (2000) 425-88; 428. The physician Thomas Laycock was key in promoting this idea in Britain, see Thomas Laycock *A Treatise on the Nervous Diseases of Women* (London: Longman, Orme, Brown, Green, and Longmans, 1840).

²⁰³ Edward Seymour *Illustrations of Some of the Principle Diseases of the Ovaria* (London: Longman, Rees, Orme, Brown and Green, 1830).

²⁰⁴ See for example comments made in 'Review: 'Illustrations of Some of the Principle Diseases of the Ovaria'' *Edinburgh Medical and Surgical Journal* 34 (1830)123-140; esp.136-8.

²⁰⁵ *Ibid.* 137. The review describes the term dropsy as 'erroneous.'

was a view James Blundell promoted in his lectures on midwifery at Guy's at the tail end of the 1820s. Speaking of tapping, he declared to his class, 'the more I have seen of this operation, the more I have felt inclined to whisper to myself, when the surgeon has taken up his instrument-'I wish he could do something better'.²⁰⁶ Nonetheless most practitioners in the 1830s carried on using diuretics, opiates and tapping to palliate the condition. John Lizars' cases of ovarian extirpation were, as we have seen in chapter one, generally well received. But rather than marking acceptance of the procedure, his cases only seemed to clarify that any use of the operation would now be subject to intense scrutiny.

At the turn of the decade occasional new cases of ovarian extirpation that had occurred in Europe and America were being reported in the British press.²⁰⁷ But it was only in the second half of the 1830s that further British cases began to filter in. It was from the provinces rather than the medical metropolises that these emerged. This provincial influence was important; rural practitioners were often the sole provider or one of only a few providers of medical care in their village or town. It meant practitioners were often required to provide a range of medical and surgical services, making them well experienced in a multitude of treatments. Peter Stanley has argued that in the early nineteenth century, surgical innovation was driven by competition – competition for patients and competition for hospital positions. But these new cases of ovarian extirpation are suggestive of innovation being dictated also by the necessity of thinking and acting creatively when one was the only practitioner in the area. Not only that but it seems likely that isolation from the large metropolises could spur on the use novel and risky procedures, whereas in London, the more tightly bound medical community – geographically and socially – meant practices were more closely scrutinised. It

²⁰⁶ James Blundell 'Lectures on the Diseases of Women and Children' *The Lancet* 11, no. 290 (21 March 1829) 769-772; 772.

²⁰⁷ 'German Medicine: Extirpation of a Diseased Ovary' *London Medical and Surgical Journal* 4(3rd August, 1833) 32; David Rogers 'Extirpation of an Enlarged Ovary' *London Medical Gazette* 5 (28th November 1829) 271-272.

has been suggested by historian Jean Bowra, albeit in relation to a different national context, that this was probably an important factor in Ephraim McDowell's decision to operate in 1809.²⁰⁸

In 1837 a paper by William Jeaffreson (1790-1865), a surgeon practising in the small market town of Framlingham in Suffolk was published in *Transactions of the Provincial Medical and Surgical Association*. It was entitled *A Case of Ovarian Tumour Successfully Removed*. In it Jeaffreson described the case of Mrs. B, a long-time patient of his who had laboured under suspected ovarian dropsy for some years, the condition causing complications in two pregnancies. This was not the first time Jeaffreson had encountered the disease. In fact he described having had over twenty cases of ovarian dropsy come under his care, all of which, he stated, had been 'invariably fatal in their termination'.²⁰⁹ As was typical, Mrs. B's tumour had been slow growing at first, before beginning to rapidly enlarge, leaving the patient in considerable pain and leading Jeaffreson to offer his distressed patient 'the one chance which I thought remained, by operation, candidly stating its probable hazard.'²¹⁰ With the final decision left to Mrs. B – the significance of which will be explored in more detail later in this chapter - a date for the operation was set. A small incision of about an inch and a half in length – much smaller than the type made by McDowell and Lizars - was made between the navel and pubes. The diseased sac, once located, was punctured and drained of twelve pints of fluid before being seized and cut away with ease, the only adhesions being to the ovarian ligament (as would be in the case of a healthy ovary) and to the fallopian tube. The remaining pedicle was knotted with a ligature before being returned

²⁰⁸ Jean Bowra 'Making a Man A Great Man: Ephraim McDowell, Ovariectomy and History' (<http://eprints.qut.edu.au/3454/1/3454.pdf>) (Paper presented to the Social Change in the 21st Century Conference, Centre for Social Change Research, Queensland University of Technology, 28 October 2005) 1-9;

²⁰⁹ William Jeaffreson 'A Case of Ovarian Tumour Successfully Removed' *Transactions of the Provincial Medical and Surgical Association* 5(1837) 239-245; 239.

²¹⁰ *Ibid.* 242

to the cavity and the operation was complete. A rigorous program of opiates, tincture of foxglove and enemas were administered and Mrs. B was, after a week, considered cured and out of danger. Jeaffreson went on to perform four more successful extirpations, while colleagues of Jeaffreson from the East Anglian medical community reported successful cases too.²¹¹ This was followed by a number of operations by a Tonbridge practitioner named William West (1794-1848), some published on his behalf by a medical student called John Gorham (1814-1899) who West had sent one of his extirpated tumours to. West had had four cases, two of whom had been cured, one who had recovered and one who had died.²¹² Collating West's cases with those from East Anglia, Gorham enthusiastically advocated the operation in a letter to *The Lancet* in 1839, suggesting that in light of these provincial cases there was enough evidence to suggest the operation was of real 'utility and benefit'.²¹³

As Gorham was no doubt aware, emphasising the utility of the operation was of great importance. In surgery, utility was closely connected to justifiability: innovative procedures were not to be performed just because they *could* be performed; there had to be a firm reason for doing so. In the 1830s, the pertinence of Benthamite utilitarianism was not lost on medical men. Social reformer Jeremy Bentham of course, took an interest himself in surgery and advocated surgeons' increased access to dead bodies for the sake of improving of medical education. Famously this even extended to Bentham bequeathing his own body to medicine, which was publicly dissected by the physician Thomas Southwood Smith (1788-

²¹¹ Robert King 'New Operations for the Removal of Abdominal Tumours' *The Lancet* 27, no.699 (21st January 1837) 586-90; King had assisted Jeaffreson in his operation. In 1839 Jeaffreson also reported to *The Lancet* another successful case by a practitioner in Harleston named Benjamin Crisp. See William Jeaffreson 'Ovarian Cysts' *The Lancet* 33, no. 846 (16 November 1839) 287.

²¹² William West 'Successful Operation for the Removal of an Ovarian Tumour' *The Lancet* 29, no.743 (25th November 1837) 307-308; John Gorham 'Observations on the Propriety of Extirpating the Cyst in Some Cases of Ovarian Dropsy' *The Lancet* 33, no.843 (26th October 1839) 155-61.

²¹³ John Gorham 'Excision in Ovarian Dropsy' *The Lancet* 33, no.852 (28th December 1839) 506-7.

1861) upon Bentham's death in 1832. In a speech given by Smith over Bentham's body, the physician implored medical men to connect moral philosophy with their own work and Smith depicted the role of the medical practitioner in strictly utilitarian terms, arguing that it was 'the mitigation of human suffering and the increase of human happiness' that should be at its heart.²¹⁴ For advocates of the ovarian operation, representing the procedure as useful, was of upmost importance. Not least because, in the opposing camp, one objection prevailed over all others: that until an absolutely sure judgement could be made that a case *was* ovarian - something that so far had eluded practitioners - any attempt at the operation was surely unjustifiable. The possibility of performing a dangerous operation when there was a high chance of death was problematic in itself; that the pursuit might be entirely in vain, was flagrantly immoral. Previous cases such as John Lizars' erroneous operation upon a woman who as it turned out, had no ovarian tumour at all, was in this respect, exceptionally useful material for those seeking to highlight the operation's ineffectuality.

For no-one more so than the most outspoken opponent of the operation in the 1830s, the surgeon Robert Liston (1794-1847). Liston, who was probably the most famous operator of his generation, had come from Edinburgh to London in 1834 when he was appointed Professor of Surgery at University College London. He was an excellent anatomist and a skillful surgeon of external diseases and tumours. Much of his considerable fame – aside from his pioneering role as the first performer of an anaesthetic operation in Britain - was cultivated from his dazzling displays of operative skill, in particular the speediness with which he performed his operations, and he excelled in daring procedures such as excision of the large jaw, removal of scrotal tumours and amputations of the thigh. Liston's surgical innovations tended to spring from an audacious self-confidence in his own operating skills, a

²¹⁴ Thomas Southwood Smith *A Lecture Delivered Over the Remains of Jeremy Bentham* (London: Effingham Wilson, 1832) 6.

characteristic that at times led to him perpetrating grim errors in his practice.²¹⁵ Liston also espoused simplicity above all else as the key to successful surgery.²¹⁶ He used his 1837 manual, *Practical Surgery*, to communicate his ‘plain, common-sense view of the most important injuries and diseases which are met with in practice’ which he claimed were ‘unencumbered by speculations or theories’.²¹⁷

Liston was not unusual at this time in troubling himself over abdominal surgery but he was notable for using his considerable professional clout to convey the ferocity of his opposition to it. In *Elements of Surgery* first published in 1831, Liston condemned those who attempted extirpation of the ovary as ‘indictable for culpable homicide, and qualify him for such punishment as his rash and reckless conduct richly deserved.’ The unfortunate women who had undergone the procedure he described as ‘sacrificed to a desire for false reputation’.²¹⁸ This was not the only time the operation was linked to the possibility of homicide by those who opposed its use. If a woman was opened up only for no ovarian disease to be found, what was there to differentiate between an operation and a brutal mutilation? If she died could it not conceivably be murder? For Liston, there was nothing to suggest that opening the abdomen was a sign of progress in surgery. Rather he used evocative language to depict it as a *regression*, a throwback to baseness and butchery, an operation that splayed women open like sacrificial lambs for no profit to either the patient or medical science. This idea of

²¹⁵ The most famous episode of this involved a small boy admitted under his care at University College Hospital who had a swelling in his the neck over the carotid. Liston’s House-Surgeon Mr. Bucknill had informed Liston that the tumour was pulsating but Liston denied that so young a boy could have aneurism and ‘putting his hand into his right waist- coat pocket, he took out a knife, and made a deep incision into the tumour. Out leaped the arterial blood, and the boy fell upon the floor. The wound was stitched up, and the patient put to bed, the artery being subsequently tied, but without any good result. On examination, it was found that an abscess had existed, and had ulcerated into the carotid.’ J.F Clarke *Autobiographical Recollections of the Medical Profession* (London: J & A Churchill, 1874) 391.

²¹⁶ For more on Liston’s surgical style see: Reginald Magee ‘Surgery in the Pre -Anaesthetic Era: The Life and Work of Robert Liston.’ *Health and History* 2, no.1 (2000) 121-133.

²¹⁷ Robert Liston *Practical Surgery* (London: John Churchill, 1837) v.

²¹⁸ Robert Liston *Elements of Surgery* (London: Longman, 1835) 54.

‘sacrifice’, particularly of women, was powerful, conjuring up images of slavishness to unthinking ritual and of unnecessary death, quite contrary to any notion of progress. Indeed so powerful was this trope that early proponents of the operation used it in their representations too, but instead described the sacrifice of women to the untamed ravages of disease, left to die rather than being offered a chance of life through the operation.²¹⁹

The operation was also opposed by William Lawrence (1783-1867), surgeon to St. Bartholomew’s Hospital, who like Liston sat comfortably in the surgical elite of London. The manner in which Lawrence conveyed his opposition to the operation requires us to first consider in more detail how ‘progress’ elicited complex meanings in surgery at this time and thus, complex representations. The historian Peter Stanley has depicted the 1830s as a period when ‘the only way to make a name as a surgeon...was by performing operations, and young men hoped that by performing an operation first, more daringly or more spectacularly, it would enhance their reputation.’²²⁰ But this was not quite the case. Any radical innovation in surgery was tempered by the continued deference of surgeons to an ideal of *reducing* the number of operations performed, which it was believed would be increasingly possible as pathological understandings improved. It was after all, the science of surgery rather than its manual aspects that many surgeons, concerned about their professional standing, wished to promote.²²¹ As Adrian Desmond has shown, during the

²¹⁹ Robert King, Jeaffreson’s colleague who himself performed one (successful) extirpation, described ovarian disease as ‘a morbid state which has almost invariably been left to exercise its ravages in freedom, the patient falling sacrifice to it after a series of years of suffering, and incapacity for useful or pleasurable exertion.’ King, thus evoked both sacrifice and utility, albeit in a different context to opponents of the operation. King (1837) 586.

²²⁰ Peter Stanley *For Fear of Pain: British Surgery, 1790 - 1850*. (Amsterdam & New York: Rodopi, 2003) 28.

²²¹ Lawrence stated that it was ‘the boast of modern surgery to have greatly diminished the number of operations’. See: William Lawrence “Lectures on Surgery, Medical and Operative. Lecture 1: Introduction” *The Lancet* 13, no. 318 (3 October 1829)33-42; 38. See also Stephen Jacyna *Philosophic Whigs: Medicine, Science and Citizenship in Edinburgh, 1789-1848* (London: Routledge, 1994) 115-124.

1820s and 1830s British physicians and surgeons were also reflecting intensely upon broader notions of progress, reform and radicalism in the organization and philosophical underpinnings of medicine. The explosion of medical professional politics during this time, as reformers like Thomas Wakley castigated the bloated medical corporations and hospitals for their elitism and nepotism, was closely intertwined with the transmission of radical new medical theories into British education. This included Lamarckian ideas of ‘philosophical anatomy’, which stressed commonality between organisms, rather than hierarchy, allowing radical medical men to emphasise a common thread of progressive egalitarianism in both anatomical theory and the organisation of medicine.²²²

‘Conservative’ members of the profession worried about this unwelcome importation of French philosophies of medical practice. Some even believed it explained the perceived increase in bold and daring operations occurring in Britain, particularly gynaecological and obstetrical ones which, it was argued, were borne of the influence of a continental culture that prided itself on risky and daring operations. In 1828 the conservative periodical the *London Medical and Physical Journal* pounced upon a number of both suggested and practiced operations of the female genitalia, including John Lizars’ operations of ovarian extirpation, as examples of how ‘some of the operators of this island have shown an anxiety to import such operations from the continent or to invent others which vie with them in boldness.’²²³ While this resistance to French medical ideologies could be partly read as a general rivalry British medical men felt towards their French counterparts; it allowed opponents of the operation to represent it as a French idea, and thus hint towards its being as potentially dangerous and uprooting as French medical politics or morphological anatomy.

²²² Adrian Desmond *The Politics of Evolution: Morphology, Medicine and Reform in Radical London* (Chicago: University of Chicago Press, 1989)

²²³ ‘Extirpation of Ovarian Tumors’ *London Medical and Physical Journal* 59 (February 1828)175-176; 175. The journal was Roderick MacLeod, a renowned conservative and rival of Thomas Wakley.

But aside from this aversion to the continental influence, the technical ‘radicalism’ of ovarian extirpation was not generally viewed as representative of progressive views upon medical philosophy or politics. This was clear in the opposition of William Lawrence to the operation. Although by the 1830s Lawrence had virtually renounced his political radicalism after being elected to the Council of the Royal College of Surgeons of England, in the decade preceding that, no other London surgeon had such a profound impact on medical philosophy. Lawrence had been an outspoken critic of the lack of democratic representation for general practitioners, who made up the bulk of the profession, as well as a close ally of Wakley. Furthermore his deep attachment to controversial French anatomical theories saw him denounce vitalism during a series of lectures between 1816 and 1819 and adopt a materialist viewpoint that was quickly condemned as blasphemous.²²⁴ Throughout and beyond these controversies Lawrence exercised an enormous influence as a surgical educator. A gifted orator, his lectures were warmly received by his students at St. Bartholomew’s.²²⁵ Lawrence also promoted increased unison between physic and surgery, and in his first lecture of the winter season of 1829, Lawrence emphasised the fluidity of the boundaries erected between the internal and external body, deriding the capriciousness of such a division when all diseases were so closely connected by a general physiology and pathology. ‘How deep would the domain of surgery extend, according to this view?’ Lawrence pondered with more than a hint of sarcasm, ‘half an inch or an inch?’²²⁶ Lawrence emphasised the need for internal causes to externally recognizable ailments to be part and parcel of surgical education.

²²⁴ Stephen Jacyna, ‘Lawrence, Sir William, first baronet (1783–1867)’, *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, May 2009. [<http://www.oxforddnb.com/view/article/16191>, accessed 13 Dec 2011]

²²⁵ Keir Waddington *Medical Education at St. Bartholomew’s Hospital, 1123-1995* (Woodbridge: Boydell Press, 2003) 60.

²²⁶ Lawrence (3 October 1829) 36.

Strikingly however, these aspirations did not extend to any desire on Lawrence's part for *operative* surgery to foray further inside the body and Lawrence continued to equate surgical disease with external disease.²²⁷ Like Liston, Lawrence viewed ovarian surgery as bloody, brutal and backward, not progressive at all. Indeed, in his lecture focusing on the female genitalia, Lawrence reacted incredulously to the possibility of extirpating dropsical ovaries. He cited the usual oppositions to it: the difficulty in making a judgement of what disease lay beneath, and the possibility that inoperable adhesions would be discovered upon opening the belly. But Lawrence's repulsion to ovarian surgery clearly centred on the major abdominal section surgeons like John Lizars had used. In a lecture in 1830 Lawrence subtly married the idea of the large abdominal incision with the act of dissecting the dead, commenting with a causticness that the *London Medical Gazette* but not *The Lancet* picked up on when reporting the lecture, that 'the operation *merely* requires an incision to be made through the integuments of the abdomen, extending from the pubes to the ensiform cartilage; exactly the same kind of cut that you would make in examining a subject after death.'²²⁸ The same idea was later echoed by Liston, who in a lecture published in *The Lancet*, paraphrased the macabre poetry of seventeenth-century satirist Samuel Butler to describe the ovarian operation: 'as if a man should be dissected/to see what part is disaffected,' Liston quoted to his students.²²⁹ Liston and Lawrence's comments intimated repugnance at the opening of the sealed cavities of the body and the violent interference which both dissection of cadavers

²²⁷ William Lawrence 'Lectures on Surgery, Medical and Operative. Lecture 2: On the Nature and Seat of Diseases' *The Lancet* 13, no.319 (10th October 1829) 65-71; 65.

²²⁸ William Lawrence 'Lectures on Surgery: Lecture LXXV' *London Medical Gazette* 6 (August 21st 1830) 822-8; 827.

²²⁹ Robert Liston 'Practical Surgery: A Course of Lectures on the Operations of Surgery and Diseases and Accidents Requiring Operations.' *The Lancet* 45, no.1119 (8 February 1845) 145-8; 147. The couplet was taken from part two of Butler's English Civil War parody *Hudibras* (1664). Liston has also been credited with coining the famous pejorative 'belly-rippers' to describe those who performed ovariectomy. As of yet no source has been found which verifies when and indeed if Liston coined this phrase. This appears to have been first attributed to Liston by the obstetrician Robert Lee (who as we shall see was virulently against the operation) in his 1853 publication *Clinical Reports of Ovarian and Uterine Diseases* (London: John Churchill, 1853) 83.

and extirpation of abdominal organs required. Represented this way, the operation evoked all the horrors of human vivisection at a time when tension surrounding the medical use of cadavers was growing. Just a year before Lawrence's lecture, William Burke had hanged in Edinburgh for his part in a series of gruesome murders he committed with his accomplice William Hare, the bodies of those they killed sold as dissection material to the surgeon Robert Knox (1791-1862). Knox himself was officially cleared of any wrongdoing in the scandal, but his reputation never quite recovered (as is depicted in the caricature of Knox in **figure 3**).²³⁰ In an effort to prevent further episodes like this, the Anatomy Act passed in 1832, had increased surgeons' access to bodies by allowing them the unclaimed dead of the workhouses. The Act however, wrought with caveats, seemed only to stigmatise the bodies of the poor instead of criminals and throughout the decade tensions remained high regarding surgeons' practices with dead bodies.²³¹

²³⁰ Helen Macdonald *Possessing the Dead: The Artful Science of Anatomy* (Carlton: Melbourne University Press, 2010) 15.

²³¹ Ruth Richardson *Death, Dissection and the Destitute: the Politics of the Corpse in pre-Victorian Britain* (London: Routledge, 1987).

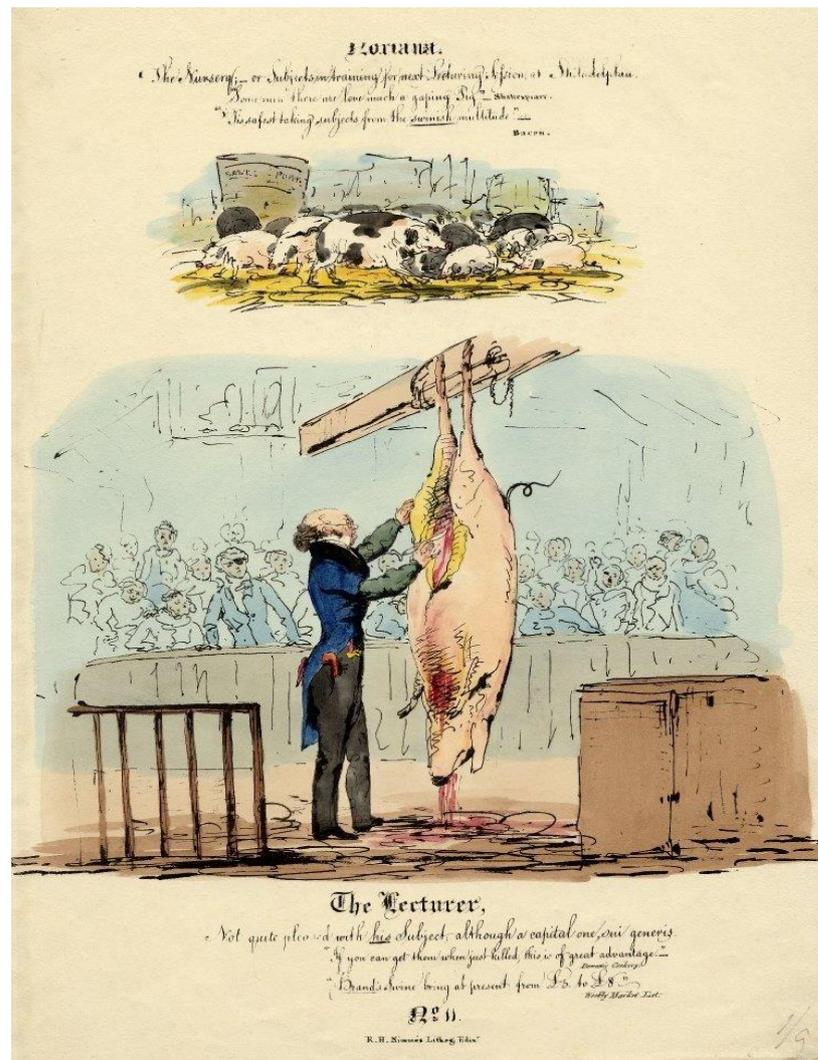


Fig. 3. *The Lecturer* (1829)

In this the second image from the Edinburgh engraver R.H Nimmo's *Noxiana* series, Robert Knox's involvement with the Burke and Hare scandal is satirised. Horrified medical students look on as Knox slits open the belly of a pig. The series provocatively highlighted the macabre connections between dissection, surgeons and the spectre of homicide. (British Museum); hand-coloured lithograph; 32.3 x 24 cm.

Certainly some of the descriptions given by those performing abdominal surgery in the late 1830s would suggest anatomical exploration of the living, conscious patient. Robert King (1781-1842), who had assisted William Jeaffreson in his first operation, reported to *The*

Lancet on his numerous attempts at abdominal surgery in 1837. In 1834, King had operated upon forty-year-old Sophia Puttock who had a suspected tumour. It is worth quoting a substantial portion of his account to give a sense of the language being used as King and his colleagues searched for the tumour:

To give greater facility for examination, the wound was enlarged in the direction of the lumbar vertebrae, for about four inches. The search was repeated most carefully, not only in the perpendicular direction, but upwards, towards the liver and small extremity of the stomach. Several of the gentlemen present repeated the attempt to find the tumour, but unsuccessfully. The kidney of the same side was handled, and appeared to be more moveable than natural, as it could be raised from its position nearly two inches. After the cavity of the abdomen had been exposed for two minutes, it was determined to reclose it, which was done without difficulty, by the common interrupted sutures.²³²

Thus, Puttock's abdomen was slit open but as the tumour was not immediately visible, this led King to handle her abdominal organs, before inviting his colleagues to insert their hands into her body to do the same. The operation could well have been a useful anatomy lesson to King and his colleagues - and indeed King himself presented it as an important part of the operative experience. But accounts like this allowed individuals like Lawrence and Liston to use the imagery of dissection to represent the operation as a violation of the living body at a time when surgeons' reputation for cruel butchery persisted.²³³

In terms of how representations were constructed, there is a crucial point to be made here: that there was discordance between notions of progress in anatomy and those in surgery.

²³² King (1837) 587.

²³³ This characterisation of surgeons was most famously embodied in Charles Dickens' depiction of the bloodthirsty surgical students Bob Sawyer and Benjamin Allen in his 1837 novel *The Pickwick Papers*, in which we find the young men enthusiastically relating to Mr Pickwick the bloody operations they are witness to. Charles Dickens *The Pickwick Papers* (London: Penguin 1994) 483.

While a surgeon like Lawrence could enthusiastically promote French methods of observation and practice over textbooks and lectures, as well as embrace radical ideas of anatomy, in his case this did *not* extend to countenancing the radically new that was abdominal surgery, which in fact, like Liston, he considered regressive. Undoubtedly this was in part a response to the very real risks of performing ovarian surgery, as well the delicate public reputation of surgeons in light of the body-snatching scandals. But by considering this opposition to the operation through the framing of representation, we are led to more complex questions about connections in medicine that we often take for granted. For many surgeons the new in fact did not always represent the progressive, nor was improvement in anatomy necessarily best represented by an expansion in the remit of surgery. Lawrence's opposition to ovarian surgery suggests a desire for *separation* between anatomy and surgery, not similarity.

At the end of the 1820s Lizars' advocacy of ovarian extirpation was described by the *London Medical and Physical Journal* as 'exactly the opposite to ninety-nine men out of a hundred'.²³⁴ By the end of 1830s, little seemed to have changed. Further operations had occurred but they remained few and far between and generally performed outside the medical metropolises of London and Edinburgh. During this time powerful opposition to the operation was arising, which saw ovarian surgery carefully represented by its detractors as contrary to surgical morality. Beyond the ever present concerns regarding the hazards of the operation, competing representations of progress were at play, which nonetheless spoke to a common moral landscape, where the *usefulness* of a surgical operation was prized above all and where the operation had to be carefully situated within a medical world fraught with professional politics.

²³⁴ 'Extirpation of Ovarian Tumors' (1828) 175.

2.3 Who's Responsible? Patients, Risk and Emotive Accounts

Despite the powerful opposition of Liston and Lawrence, the early 1840s saw a rapid uptake in the practice of the operation – or at least an increased reporting of cases - as it began to be performed by a number of London practitioners. Some of these operations, such as those performed by Aston Key, Caesar Hawkins, Bransby Cooper and Benjamin Phillips were one-offs. All but Hawkins' case had resulted in the death of the patient and one can speculate that this may have prevented these practitioners from making further attempts. But there were also a small group of surgeons who had performed the operation multiple times and with greater success such as Samuel Lane (1802-1892), Daniel Walne (1796-1866) and Frederic Bird (1810-1874). Most cases were performed in private although occasionally the operation would be performed at a hospital. The most prolific operator of all was Manchester obstetrician and surgeon Charles Clay (1801-1893), who commenced a long and unbroken series of ovarian extirpations from 1842, claiming in 1848 to have performed the operation forty times, twenty-six of which had been successful.²³⁵ These practitioners came from a range of professional backgrounds; Bird was a young, recent graduate from Guy's, Lane, a senior surgeon at St. Mary's, Walne was less well-known but also an established London surgeon, while Clay was part of an elite of Manchester obstetricians, closely associated with the prominent Manchester practitioner Thomas Radford (1793-1881). Indeed it was Charles Clay who in 1843 introduced one of his cases with a new word to describe ovarian extirpation – 'ovariotomy', a term, he claimed which had been coined for his operations by his most well-known advocate, James Young Simpson.²³⁶ The term was a misnomer - technically 'ovariectomy' (or even 'ovarian cystectomy') would have been more accurate, as the ovary was completely cut out; 'ovariotomy', as Clay used it, implied only an

²³⁵ Charles Clay *The Results of all Operations for the Extirpation of Diseased Ovaria* (Manchester: W.M Irwin, 1848) 56.

²³⁶ Charles Clay 'Ovariectomy' *Medical Times* 9, no.211 (7th October 1843) 4-5.

incision. But nonetheless the word stuck, assured by the combined clout of Simpson and Clay.

At this point the *London Medical Gazette* and the *Medical Times* rather than *The Lancet* were the periodicals in which most cases of ovarian surgery were published. This was possibly a bid on the part of operators to avoid the acidic tongue of Wakley, for by 1844 *The Lancet*, which earlier in the century had been a cautious advocate of the operation, had come out against the procedure, publishing a strongly worded editorial condemning the use of the operation.²³⁷ But the manner in which these surgeons chose to represent their operations in print goes beyond consideration of which journal they were published in; it is also about the style in which they were conveyed. These accounts often belie the rather broad assertions historians have previously made about the way medical and surgical accounts were constructed in the nineteenth century. It has been argued on a number of occasions, for instance, that it was in the nineteenth century that the patient's 'voice' began to disappear from practitioners' accounts of medical encounters. The conversational, emotive tone that characterised eighteenth-century accounts was replaced by an altogether more dispassionate one dominated by the practitioner's (rather than the patient's) voice, something often closely aligned with the 'rise' of hospital medicine in the early part of the century.²³⁸ Clinician and historian Brian Hurwitz has described the style of the nineteenth-century report as involving a 'ruthless curtailment of patients' accounts and the denial of their agency within case

²³⁷ 'Extirpation of Ovaria' *The Lancet* 43, no.1074 (30th March 1844) 45-47. Although alternatively it is possible that *The Lancet* was not particularly keen to publish cases of the operation.

²³⁸ Mary Fissell, 'The Disappearance of the Patient's Narrative and the Invention of Hospital Medicine' in *British Medicine in an Age of Reform*, ed. Roger French and Andrew Wear, 92-109 (Abingdon: Routledge, 1991).

reports...accompanied by a clinical attentiveness that focuses now on the normality of body systems.’²³⁹

My argument here is somewhat different. It is rather that those practising ovariectomy – a practice one might add, predominantly occurring in private rather than in hospitals - both desired and were expected to provide richly subjective accounts of their experiences *as well as* ostensibly objective, statistical-based ones. In this sense my approach aligns more closely with that put forward by literary theorist Meegan Kennedy. As she argues, the case history, which had so long been a significant aspect of medical culture, was not merely ironed out or replaced by ‘objectivity’ in the nineteenth century. Rather the nineteenth-century case history faced ‘a uniquely heterogeneous set of demands: it must produce both a fact and a story, represent both a disease and a person, display both the disinterested stance of the man of science and the physician’s subjective insight.’²⁴⁰ As we shall see in the next section, ‘objective’ statistical accounts of ovarian surgery *were* important. Furthermore, most surgeons acknowledged the need for pathological explanation of their cases, usually including post-mortems in accounts of fatal operations, as well as clinical details. On occasion they also included sketched images of pathological specimens, although such images – and indeed images in general - were not a common aspect to their representations. But surgeons were predominantly concerned with constructing - and journals with publishing - full, qualitative accounts that had the patient at the centre. These were

²³⁹ Brian Hurwitz “Form and Representation in Clinical Reports” *Literature and Medicine* 25, no.2 (2006) 216-40; 229.

²⁴⁰ Meegan Kennedy *Revising the Clinic: Vision and Representation in Victorian Medical Narrative and the Novel* (Columbus: Ohio State University Press, 2010) 23. It also speaks to recent work by Sarah Chaney on the history of madness. Chaney argues that, contrary to the general picture of Victorian approaches to madness as authoritarian, late nineteenth-century alienists put high value upon individual case histories and patient experience. It seems that, in general, the significance Victorian doctors put upon patient narratives has been underplayed by historians. See Sarah Chaney ‘A Hideous Torture on Himself’: Madness and Self-Mutilation in Victorian Literature’ *Journal of Medical Humanities* 32, no.4 (2011) 279-289; 281.

conceived of as crucial to formulating an idea of how justifiable ovarian surgery was. They were used to convey subjective, emotive experiences that more objective accounts could not quite express, as well as to elicit similar responses. Given the moral questions the operation raised, this style of representation, I argue, was more prominent in cases of ovarian surgery than in other forms of surgery,²⁴¹ and in particular, the negotiation of responsibility between surgeons and patients was at the crux of many of these accounts.

The construction of surgical responsibility has been a subject of interest to historians of late. Claire Brock's recent work on abdominal surgery in late nineteenth-century Britain for example, elaborates upon the divisions of responsibility between surgeons and their assistants, as operations began to be performed by surgical 'teams' rather than individuals.²⁴² Like historians before her such as Regina Morantz-Sanchez, Brock also raises the issue of patient demand for ovarian operations in the latter part of the century, opening up the question of how far women could be deemed responsible for these operations (especially when they failed) and in encouraging unnecessary procedures.²⁴³ This can be connected also to previous work by Morantz-Sanchez on gynaecological surgery, in which she unpacks and

²⁴¹ Given the variety of cases flooding into the press, it is difficult to give direct comparisons. However the following two cases might serve as comparative examples. The amputation case is markedly more 'clinical' than the abdominal cases and may be considered typical of case style for what was a comparatively routine operation. The Caesarean case is noticeably more lengthy and detailed, taking in the long period of aftercare for the patient involved. However the author does not embark on any noticeable moral justification of the operation, as was common in ovarian cases, nor is the patient's narrative as striking, possibly because Caesareans tended to be performed as absolute emergencies where the negotiation of 'consent' and responsibility could not be as lengthy. See B.W Holt 'Case of Extensive Scrofulous Disease of the Knee-Joint. Amputation-Recovery' *The Lancet* 37, no.944 (2nd October 1841); James Whitehead 'Case of Caesarean Section' *London Medical Gazette* 28 (10th September & 17th September 1842) 939 – 947; 971-977).

²⁴² Claire Brock 'Risk, Responsibility and Surgery in the 1890s and Early 1900s.' *Medical History*, 57, no.3 (2013) 317–337.

²⁴³ Regina Morantz-Sanchez, (1999). *Conduct Unbecoming of a Woman: Medicine on Trial in Turn-of-the-Century Brooklyn* (Oxford: Oxford University Press, 1999); 106-7.

contests the notion of the patient's disappearing voice in the nineteenth century, revealing instead the pivotal role of the patients in her study in the decision-making process.²⁴⁴

As I will elaborate on in chapter four, these issues were certainly of increasing concern during the latter part of the century. But as a result, far less has been written on the topic of patient responsibility and demand for ovariectomy during these mid-decades. In part this may be because, from our contemporary viewpoint, it is hard to conceive of demand and even what we might now term 'consent' for such operations in the pre-anaesthetic era, especially for an operation like ovariectomy, which required the patient's belly to be cut open. Surgery at this time could be bloody, brutal, fearful and unimaginably painful. But there *was* patient demand for major operations.²⁴⁵ Indeed for performers of ovariectomy, this factored heavily into the way they presented their experiences. The operations which Bird, Walne, Clay, Phillips and others performed were, by their own admission hazardous. Yet, as they represented it, many women suffering from ovarian dropsy had heard of the operation and were absolutely determined to have it performed upon them. There is some evidence for this. A letter written to Charles Clay in 1844 by the Birmingham obstetrician John Tomlinson Ingelby (1794-1845) mentions how one of his patients had 'referred to an operation you had recently undertaken – I conclude an ovarian case, but she referred to it in general terms only.'²⁴⁶ If such an innovation was known to exist by those who could potentially benefit from it - as it seems possible it was - then we should not assume that sufferers would have necessarily reacted in the same way as surgeons to the emergence of new technologies of a

²⁴⁴ Regina Morantz-Sanchez 'Negotiating Power at the Bedside : Historical Perspectives on Nineteenth Century Patients and Their Gynecologists' *Feminist Studies* 26, no.2 (2000) 287-309.

²⁴⁵ Stanley (2003) 198-99.

²⁴⁶ Letter to Charles Clay from John Tomlinson Ingelby (June 19th 1844) MS5747 no.12 (Wellcome Collection).

potentially curable nature. Knowledge, hopes and expectations of the operation were also being formed by patients away from doctor-constructed ideas of risk.²⁴⁷

My concern here however, is less about the material extent to which this was occurring, which it would be exceptionally hard to get a fix on, but rather how the patient's role was used and possibly amplified in surgeons' narratives. Benjamin Phillips' case, involving an operation in 1840 on a twenty-one-year-old patient identified only as 'A.D', typified this emerging style. Publishing in the *London Medical Gazette*, Phillips (1805-1861) began not with the case itself but with a long preamble which saw him preparing his audience for the bad result he was about to reveal; 'unquestionably it is more agreeable to detail the results of the successful than the unsuccessful practice of our profession' he stated 'yet it is equally incumbent on the practitioner to detail the one and the other'.²⁴⁸ Depicting cases retrospectively like this was not unusual. But Phillips also used it to reflect deeply upon the question of culpability in surgery, and in particular the relationship between art and nature. Finding a balance between the powers of nature, that is the progression or regression of disease without surgical interference, with the role of surgical 'art', which implied actions initiated by the surgeon, had long been a fundamental tenet of surgery. It was often central to practitioners' individual philosophies of practice, with surgeons often styling themselves as mere assistants to nature.²⁴⁹ Yet as Phillips saw it, there was a growing prevalence among

²⁴⁷ The 'Sociology of Expectations' which takes the construction of future hopes for science, technology and medicine as a subject of analysis has, in recent times, been utilised by medical historians. See Ornella Moscucci 'The British Fight Against Cancer: Publicity and Education, 1900-1948' *Social History of Medicine* 23, no.2 (2010) 356-373

²⁴⁸ Benjamin Phillips 'Extraction of an Ovarian Cyst' *London Medical Gazette* 27 (9th October 1840) 83-88; 83.

²⁴⁹ For more on this see Stephen Jacyna 'Physiological Principles in the Surgical Writings of John Hunter' in *Medical theory, Surgical Practice: Studies in the History of Surgery*, ed. Christopher Lawrence, 135-52 (London and New York: Routledge, 1992). Jacyna discusses Hunter's emphasis on the surgical art necessarily *harmonising* with nature; the curative powers of nature were not to be ignored. Taking a slightly different approach, Jürgen Schlumbohm has fleshed out this nature/art dichotomy by relating it to the practices of early nineteenth-century man-midwives. Schlumbohm

surgeons for asserting that, even when an operation was performed, something other than their own operative skills was responsible for a bad outcome. This was the consequence of:

A desire men feel to find a cause of death over which they could not have control: and that is rarely difficult: the consequence of this is, that when they estimate the results of treatment, they exclude all cases where they can find reason for death independent of the operation or the treatment.²⁵⁰

By stating this, Phillips was clearly framing his publication of the fatal case of A.D that was to follow as an act of his courage on his part; that he at least, was taking responsibility for the death that had occurred in his hands. By doing so, Phillips also conveyed the deep anxiety produced by failed cases, which could indicate not only professional failure but a degree of personal failure too. Here then, Phillips was treading cautiously into the muddy waters of the surgeons' psyche, using the emotive depiction of the guilt-ridden surgeon, attempting to find any other reason than his own failure as the cause of death. By doing so Phillips addressed head on the emotional stakes of hazardous surgery.

Yet as he moved on to describe the case of A.D, a striking contradiction began to emerge in his account, as Phillips quite clearly shifted responsibility for the case's failure to the patient and her family. Phillips proceeded by conveying A.D's long journey towards the operation.

Some months before, we learn, A.D had perceived an enlargement on one side of her

argues how, in, obstetrics, the opposition between nature and art, could be read also in gendered terms, with female midwives expected to merely assist nature, while male obstetricians actively employed 'culture' in the form of surgical practices. As Schlumbohm goes on to argue: "it was precisely Enlightenment science which sought to give such dichotomies a biological-medical foundation: culture and nature were understood as opposites, bound up with the polarities of man-woman, activity-passivity and reason-emotions." Jürgen Schlumbohm 'The History of Childbirth: Women and Doctors in the Lying-in Hospital of Göttingen University, Eighteenth-Nineteenth Century' *Theatrum Historiae* 3 (2008) 149-159; 155.

http://dspace.upce.cz/bitstream/10195/35069/1/SchlumbohmJ_The%20history%20of%20childbirth_2008.pdf (accessed 23 August 2013).

²⁵⁰ Phillips (1840) 83.

abdomen which after a period of slow growth had rapidly begun to enlarge. With a prescribed cupping treatment proving ineffective, her case had been passed via Robert Liston on to obstetrician Charles Locock (1799-1875). Whether Liston was aware of Locock's opinion of the operation is not known, but the views of the man he was sending her on to were quite the opposite of his own (suggesting that it was possible for there to be a significant discordance of opinion within referral networks). Locock advised A. D that both tapping and medicine would be useless and that there was only one hope. Phillips paraphrased Locock telling the girl that: 'within the last four years an operation had been invented by which the cyst could be extracted; that if it succeeded her disease would be cured, and he strongly advised her to undergo that operation.'²⁵¹

Swiftly exercising her 'consumer' power, A.D once more switched doctors, determined to find someone who would not just recommend the procedure but also perform it. Her next doctor was of a similar opinion to Locock and at once referred her onto Phillips, who believing that there were probably no adhesions present, at last gave her the news she wanted: that he would undertake the operation. A month later with A.D in 'good spirits',²⁵² Phillips performed the operation at St.Marylebone Infirmary (one of the few extirpations at this time to be undertaken at a hospital) with over ten other medical men in attendance. The operation went well, with the ovarian sac easily removed and as Phillips had estimated, no adhesions were present. The pedicle, which in this case was formed of the Fallopian tube, was cut and ligatured and the patients' pulse did not rise past 68, Phillips putting this forward as evidence 'that the suffering was not great'.²⁵³ However the situation quickly began to change once the stitches had been sewn. A. D began to experience agonising pain in the right side of her abdomen which morphia and opium could not assail, blood oozed

²⁵¹ *Ibid.* 84.

²⁵² *Ibid.* 85.

²⁵³ *Ibid.* 85.

from the wound and frequent vomiting set in. A brief upturn in her health ('countenance very good') was followed by the ominous reporting of 'cholera-like symptoms'. A. D died soon after, her body exhausted, but her 'mind intact'.²⁵⁴ A post-mortem uncovered two potentially significant pathologies: first that the ligature which was supposed to have secured the end of the severed pedicle had failed to secure all the vessels; second that the intestines were grossly ulcerated indicating, Phillips argued, a pre-existing disease. It was here that Phillips' call for surgeons' to take responsibility for their mistakes seemed to dissolve under his own desire to represent the case as one of patient culpability; it was also here that the verbosity of the account, and the strong presence of the patient's voice, were most useful to him. For Phillips then went on to suggest that it was A.D's apparent intestinal condition that was actually the cause of death rather than the operation; the issue of the ligature he proceeded to completely ignore. Phillips argued that he was further proven in this conclusion by conversations with A.D's mother in which he had learnt that the mother had not informed him of her daughter's serious bowel problems. When the mother had mentioned to her daughter just before the operation that she had forgotten to inform Phillips of this, Phillips quoted the daughter's response to her mother as the following:

It is lucky, mother, that you did forget it, for I have been twenty times to-day, but do not say anything to Mr. Phillips about it, or he will put off the operation.²⁵⁵

Using the patient's 'own' voice then, Phillips implicated not only A.D's diseased body but also her (and her mother's) actions, leading him to conclude that an underlying condition rather than the operation was the cause of her death. If responsibility, even blame, lay with

²⁵⁴ *Ibid.* 86.

²⁵⁵ *Ibid.* 87.

anyone it was with the patient and her mother for not revealing the significant health problems that A.D was experiencing while she was being treated.

It was not unusual for blame to be parcelled out to patients in this manner through detailed reports of their actions. In his third published case, Charles Clay made a similar assertion of blame in the case of forty-seven year old Mrs. Dillon, this time in regards to the behaviour of her and her family after the operation. On opening Mrs. Dillon's abdomen, Clay and his colleagues had found a malignant tumour with significant vascularisation. Deemed inoperable, the abdomen had been closed without any active treatment. On the morning of the fifth day of her recovery, Mrs. Dillon's husband had requested giving his wife a mixture of gin and garlic 'as she had been accustomed to take it for the wind', a request Clay denied. When later that day he visited the patient she had become seriously ill and Clay found it 'impossible to reflect on the progress of the case...without suspecting some interference of the most unwarrantable description in the nursing, particularly when coupled with the wish to exhibit stimulants in the morning of that day.'²⁵⁶ Mrs. Dillon died six days after the operation and Clay placed the blame squarely with the family members who had been attending the patient when he himself had been unable to be there and who he believed had given her gin against his wishes.²⁵⁷

Such accounts encouraged readers to think deeply about divisions of responsibility in surgery. Where did fault lie when an operation went wrong? Was it always the surgeon's responsibility? Or could blame lie with the patient, with those who attended them, or even with nature? Given their place at the more materialist end of the medical spectrum, surgical operations are often assumed to be discrete events in which the role of different actors is

²⁵⁶ Charles Clay 'Cases of Peritoneal Section' *Medical Times* 7 (26th November 1842) 139-142; 141

²⁵⁷ *Ibid.* 141

self-evident. Phillips and Clay's reports instead pointed to the malleable nature of responsibility and blame in operating and the transmutable boundaries between the operation itself and events that occurred before and after it that might influence its outcome.

As we see in the case of A.D, it was not only a patient's agreement to an operation that was highlighted but their pursuit of it as well. In many of these cases, the patient was depicted as the driving force and the surgeon as the reluctant possessor of potential healing powers; an impartial adviser to the suffering woman. This was exemplified by Clay's first case, a middle aged woman named Mrs. Wheeler in 1842:

My patient began to express herself earnestly desirous of an operation – respecting which I neither persuaded her to, nor dissuaded her from, but faithfully detailed to her the magnitude of the means she sought, pointed out the particulars of every case on record, with the results, and rather if anything depreciated than added to the chance of recovery. Still she was determined I should operate.²⁵⁸

And indeed in Mrs. Dillon's case, which ultimately had ended fatally, Clay somewhat retrospectively characterised himself as having had his own sense of judgement overpowered by the patient's determination:

In vain I argued that her case had not the same prospects of success as the others preceding hers and that if it was performed the chances were greatly against her; her importunities at length prevailed, and I somewhat reluctantly consented to operate.²⁵⁹

²⁵⁸ Charles Clay 'Cases of Peritoneal Section' *Medical Times* 7 (15th October 1842) 42-45; 44.

²⁵⁹ Clay (26th November 1842) 140.

Husbands and male relatives were conspicuous by their absence in these narratives of patient demand. Rather it was stressed that if female patients were above age and had been furnished with the facts of the operation by their doctors, they were not only more than competent in making the final decision, but that their subjective understanding of their own lived body potentially even outweighed the surgeon's own personal feelings on the matter. Phillips' and Walne's reports were especially striking in that they emphasised not only the bodily pain that might compel women with the condition to seek help but also the greater impact of the disease upon their self-image and emotional experiences. While A.D, for example had experienced pain, the main reason for her seeking medical help was not this, Phillips suggested, but rather the stir her changing shape was causing among her peers, the surgeon commenting that 'the tumefaction was so far increased as to have become apparent externally, and subjected her to remarks which distressed her a great deal.'²⁶⁰ Daniel Walne's third and youngest patient, 'A.K' was reported to have echoed similar concerns, the nineteen-year-old-girl and her family increasingly distressed by remarks from A.K's teacher and later her employer about her unusual and 'matronly' appearance; indeed 'her size excited so much observation, and caused so many unpleasant remarks...that she was obliged to return home.'²⁶¹ As was explored in the previous chapter, this interplay between illegitimate pregnancy and ovarian dropsy and its attendant consequences - social stigma and even detrimental effects on marriageability - were often of great concern for younger patients with the condition and this was most probably at play in A.D and A.K's narratives. Yet even if pregnancy was not suspected, the oddity of appearance which the condition could cause - a grossly swollen belly, often coupled with oedema in the legs or emaciation

²⁶⁰ Phillips (1840) 84.

²⁶¹ Daniel H. Walne, (1843). *Cases of Dropsical Ovaria Removed by the Large Abdominal Section* (London: Longman, Brown, Green, and Longmans, 1843) 42. This pamphlet brought together three cases he had published in the *London Medical Gazettes* between 1842 and 1843.

of the rest of the body - could be distressing enough, that it was emphasised by operators.²⁶² Walne's first case for example, fifty-eight-year-old Mrs. F__ was moved to seek treatment because she had become 'unpleasantly remarkable'.²⁶³ At an advanced age, it was unlikely to be the possibility of pregnancy making her remarkable but simply the strangeness of her appearance. Thus, both surgeons were keen to convey aspects away from illness which might justify the operation and constructed empathetic, holistic accounts of these women's experiences.²⁶⁴

As in the 1830s where we saw advocates and opponents of the operation essentially mirroring one another in their language of representation, it is perhaps no surprise that the alleged enthusiasm of these women to being operated upon was also useful material for those against the use of ovariectomy. One such person was Samuel Ashwell (1798-1857), then lecturer of Midwifery at Guy's. In spite of acting as James Blundell's assistant during the pivotal years between 1825 and 1834 when Blundell had publicly advocated abdominal surgery, Ashwell spoke out vehemently against the operation in the 1840s. In 1845, following the publication of his monograph, *A Practical Treatise on the Diseases Peculiar to Women*, Ashwell's views on extirpation began to filter into both the British and American press. Picked up on in particular was his description of an encounter with a sixty-two-year-

²⁶² Bodily fatness in the nineteenth century was not as rigorously policed in society as it is today but cultural theorists such as Joyce L Huff have highlighted, within mid-nineteenth century culture, noticeable fatness did represent a destabilising 'otherness' to the ordered body, defying an exacting Victorian aesthetic which keenly sought 'the 'properly' shaped body. Joyce L. Huff, 'A 'Horror of Corpulence': Interrogating Bantingism and Mid-Nineteenth-Century Fat-Phobia" in *Bodies out of Bounds: Fatness and Transgression*, ed. Jana Evans Braziel and Kathleen LeBesco, 39-59 (Berkeley: University of California Press, 2001) 44.

²⁶³ Walne (1843) 8.

²⁶⁴ Numerous cases recorded women's anxieties over their potential to work due to their condition. See King (1837) 589 and Walne (1843) 42. Marjorie Levine-Clarke has emphasised, albeit in a broader context than surgery, that in lower socio-economic classes at least, women conceptualised their own health and negotiated their healthcare in the context of their employability. Marjorie Levine-Clarke *Beyond the Reproductive Body: The Politics of Women's Health in Early Victorian England* (Columbus: Ohio State University Press, 2004).

old woman who had travelled far to visit him in London ‘anxious to have extirpation’. The woman ‘had never been tapped, although ovarian dropsy had existed for more than half her life.’ Dismissively, Ashwell claimed that ‘there was scarcely any suffering beyond weight and pressure, although the tumor was of immense size and partly solid’ and that ‘in such a case it would have been highly culpable to have operated; and yet a surgeon over-zealous about the removal of ovaries had induced the firm belief that it ought to have been done.’²⁶⁵ In this case Ashwell claimed to have made the woman sensible to the dangers of the operation and that she had changed her mind. But in another, that of a twenty-two-year-old woman who had approached him, the patient had gone on to find another surgeon to perform the operation, only for it to prove fatal. ‘Many years might have been added to her existence’, noted Ashwell regretfully.²⁶⁶ For Ashwell, patient demand was to be quelled and not acquiesced to.

In a further mirroring technique, the small band of men who were willing to extirpate ovaries could also shift around ideas of responsibility when the operation was *not* performed. An article in the *Medical Times* in 1851 by Frederic Bird barely concealed the anger he felt about a young patient on who he had wished to perform extirpation. ‘Miss F__’ was just twelve-years-old when she first perceived an abdominal swelling. After numerous encounters with a variety of physicians and surgeons, Bird encountered Miss F__ three years later. Describing her as ‘possessed of remarkable vivacity and intelligence’ who complained little about her illness,²⁶⁷ Bird was openly moved by the plight of the young woman who had by this point developed increasingly painful side effects from the tumour, including serious

²⁶⁵ Samuel Ashwell ‘Extirpation in Ovarian Dropsy’ *Boston and Medical and Surgical Journal* 45 (4th June 1845) 357-359; 357.

²⁶⁶ Ashwell (1845) 358.

²⁶⁷ Frederic Bird ‘Diagnosis, Pathology and Treatment of Ovarian Tumours’ *Medical Times* 24, no.57 (2nd August 1851) 120-123; 123.

curvature of the spine from where the pressure of the growth was bearing down. Much to Bird's chagrin Miss F__'s original physician, Robert Lee (1794-1877) was of an opinion that stood in stark contrast to Bird's, something which will be elaborated on further in the next section. Lee believed an operation inadvisable and, as Bird reported it, 'with a natural desire to spare their child useless suffering, the parents were influenced by the apparent doubt based on Dr. Lee's opinion.'²⁶⁸ Thus, the operation was not agreed to. A year later Miss F__'s parents changed their mind as the state of their daughter's health became increasingly desperate and Bird was asked to perform the operation. By now, Bird felt Miss F__ was too weak to be operated upon and she died a few months later of the disease. While Bird never directly implicated Lee in the death, it was clear that he believed it was Lee's opposition to the operation that was at fault. 'If no other lesson be taught by this case' he warned 'it must at least be conceded, that, as extirpation could have been performed, so might life have been preserved.'²⁶⁹ The dangers of the operation meant that its performance could be represented as a liability, morally and professionally, but so too could the absence of its performance potentially imply a lack of moral responsibility on the part of the doctor or doctors employed to alleviate a patient's suffering, and who refused to take a chance with the only operation that might stand a chance of saving their life.

As Flurin Condrau has succinctly put it, taking a patient's medical history most often 'results in a medical construct based on information coming from the patient, while being clearly governed by perceptions, categories and the language of medicine.'²⁷⁰ This was even more so, one could argue, when further mediated through print media aimed at a professional medical audience. The use of the patient's narrative to reinforce the justifiability of the

²⁶⁸ *Ibid.* 123.

²⁶⁹ *Ibid.* 123.

²⁷⁰ Flurin Condrau 'The Patient's View Meets the Clinical Gaze' *Social History of Medicine* 20, no.3 (2007) 525-540; 529.

procedure is translucently apparent in these accounts. The voices of A.D, A.K and other patients were undoubtedly deployed by surgeons as part of a damage-limitation exercise. Evocative and dramatic narratives of the surgeon-patient relationship reinforced surgeons' characterisations of themselves as following their moral conscience; the end product was reports in which the moral aspects of the operation weighed heavily upon the reader. There were considerable advantages to this. Assuming that because the expected audience would have been a medically educated one they would have responded only to objective facts is a beguiling approach which continues to feed into sweeping assumptions about objectivity and even dispassion being inherent to nineteenth-century medicine. The general opinion of historians has been that while surgeons did *feel*, personal feelings towards patients had to be deeply buried in an effort to maintain a level-headed and above all objective approach to their cases; emotion was to be exorcised from surgeons' outward representations of themselves. For some practitioners this would certainly have been the case.²⁷¹ But for those who supported and performed ovarian extirpation there was frequent recourse to writing emotion into representations of their practice and eliciting emotional responses to support their cause; furthermore they were often mirrored in this approach by the operation's critics. The moral qualities of this 'new' operation were so intertwined with its performance, that to sever the connection between the two was neither possible nor desired. Indeed it is telling that when James Young Simpson set an examination question on the operation in the late 1840s, the question did not require simply an answer of technical facts, but instead asked the student to answer whether the operation was 'justifiable or not justifiable', provoking an

²⁷¹ Stanley (2003). Stanley describes this tension between emotions and the need to repress them in early nineteenth-century surgery, remarking that: 'there is evidence that surgeons observed and remarked upon the tensions which confronted those obliged to inflict suffering in surgery. That they lived in an age and society that countenanced the open expression of emotion among men sharpened rather than eased the tension. Science opposed a duty to objectivity: to surrender to the emotions would be to betray scientific surgery.' 233. See also Payne (2007). Payne's work looks at the construction of dispassion among surgeons in early modern England.

implicit moral judgement to be made by the examinees.²⁷² Ovariectomy was no mere technical innovation, it was moral one too, and both advocates and opponents sought to recognize this in their representations.

2.4 ‘An Eminently Uncertain Operation’: Ovariectomy and the Trouble with Statistics

While the operation was by no means occurring frequently, by the early 1840s a number of British practitioners were willing to perform the operation and had done so multiple times. And yet the position of the operation had not significantly improved from that which it held in the decade before. *The Medical Times* which had been founded in 1839 saw the operation as justified, describing it in 1844 as ‘far too important an innovation in surgery...to be lightly given up because it has not received the favour of a journal or two.’²⁷³ The *London Medical Gazette*, which some years before had been vocal as to the unsavoury ‘French’ roots to the operation, stated that they now held a neutral position on the matter.²⁷⁴ But most other medical journals, as the *Times* indicated, remained resolutely opposed. *The Lancet*, as we have seen, publicly stated their position against it in 1844 and in the same year *The Medico-Chirurgical Review* also condemned it, disparagingly describing ovariectomy as, ‘the surgical subject of the day. It is the *fashion* just now to open the abdomen and cut out the ovary. It was the fashion last year to lay violent hands on every squinting man, woman and child, and cut his, her or its eyes out.’²⁷⁵ ‘Fashion’ implied limited temporality, even faddishness. Just

²⁷² James Young Simpson ‘Lecture Notes or Model Answers for Exams in Obstetrics and Gynaecology with a Section Discussing Ovariectomy’ (c.1848-1850?) JYS/326 (Royal College of Surgeons of Edinburgh).

²⁷³ ‘Ovarian Dropsy’ *Medical Times* 10 (1st April 1844) 11.

²⁷⁴ ‘Results of the Operation for the Extirpation of Diseased Ovaria: Review’ *London Medical Gazette* 44 (23rd November 1849) 899-900; 899.

²⁷⁵ ‘Extirpation of Ovarian Tumors’ *Medico-Chirurgical Review* 79 (1st April 1844) 557-562; 557.

as reckless surgeons had been unnecessarily preoccupied with eye surgery the year before,²⁷⁶ so now they focused on an equally useless procedure upon the ovary. Others insinuated that it teetered dangerously near the realm of quackery, vying with mesmerism and hydropathy for controversy.²⁷⁷ But for many critics it was not just the operation itself that was the issue, it was about how to make sense of the plethora of representations now streaming into the public arena. How could a decision about the operation be made, the profession fretted, if data on it was untrustworthy, incomplete or confused? In the 1840s some began to formulate statistics from the cases published in a bid to bring closure to the ovariectomy debate; ‘statistics will settle the question’ the Irish obstetrician Fleetwood Churchill (1808-1878) wrote in 1844.²⁷⁸

The role of statistics in medicine is a path much-trodden, historiographically. In terms of surgery, Ulrich Tröhler has shown that the use of statistics stretches back farther than we often assume and that they were commonly used in the eighteenth century.²⁷⁹ But Ian Hacking’s contention that it was during the nineteenth century that statistics began to permeate most elements of Western society through a powerful intertwining with print culture – what he describes as an ‘avalanche of printed numbers’ - remains convincing.²⁸⁰ This is not to say that the medical profession quickly and unquestioningly accepted statistical methods, for it is clear that throughout the eighteenth and nineteenth centuries

²⁷⁶ The influential Berlin surgeon Johan Dieffenbach (1792-1847) introduced a new operation for squinting at which involved sectioning of the media rectus muscle at the beginning of the decade. The operation became widely and rapidly diffused across Europe.

²⁷⁷ Fleetwood Churchill, ‘Ovariectomy’ *Medico-Chirurgical Review* 82 (1st October 1844) 528-532.

²⁷⁸ *Ibid.* 528.

²⁷⁹ Statistics played an integral part in eighteenth century medical culture, theoretically as well as in the clinical realm. Tröhler cites the use of statistics in the eighteenth century to measure mortality in lithotomy and amputations. Ulrich Tröhler *Quantification in British Medicine and Surgery 1750-1830, With Special Reference to its Introduction into Therapeutics* (Ph.D thesis: University College London, 1978); Ulrich Tröhler ‘Quantifying Experience and Beating Biases: A New Culture in Eighteenth Century British Clinical Medicine’ in *Body Counts: Medical Quantification in Historical and Sociological Perspective*, ed. Gérard Jorland, Annick Opinel and George Weisz, 19-50 (Montreal: McGill-Queens University Press, 2005).

²⁸⁰ Ian Hacking *The Taming of Chance* (Cambridge: Cambridge University Press, 1990) 2.

many in the medical profession were not convinced by the usefulness of statistics, nor did they like what it represented about medicine - that it was, perhaps, more science than art and that it reduced their patients to mere numbers.²⁸¹ But in the mid-nineteenth century, statistics figured more prominently in medical culture than before; in part because the expansion of hospitals enabled the collation of greater numbers of cases.

This apparent 'rise' of statistics has sometimes been conceptualised as part of a wider history of risk, although that there might even be a history of risk to be found in the nineteenth century is a slightly thorny issue. 'Risk' after all is often considered to be a twentieth-century phenomenon, associated with the increasing use of epidemiology to investigate the probabilistic aspects of illness on a mass scale, as well as with the expansion of the life insurance industry.²⁸² Etymologically too, while the word 'risk' was first cited by the Oxford English Dictionary in the seventeenth century, its use increased exponentially in the mid-twentieth century. For these reasons discussing notions of risk in the nineteenth century has been considered presentist.²⁸³ Yet, while one must avoid conflating nineteenth-century concepts of risk with modern ones, risk – as in the chance of death being caused – was very real, both as concept and a term in nineteenth-century surgery.²⁸⁴ As Patricia Jasen

²⁸¹ For a useful overview on both the history and historiography of medical statistics see Gérard Jorland and George Weisz 'Introduction: Who Counts?' in *Body Counts: Medical Quantification in Historical and Sociological Perspectives* ed. Gérard Jorland, Annick Opinel and George Weisz, 3-15 (Montreal: McGill-Queens University Press, 2005).

²⁸² This argument is put forward convincingly by Schlich and Tröhler in the introduction to their volume. Thomas Schlich & Ulrich Tröhler 'Risk and Medical Innovation: A Historical Perspective' in *The Risks of Medical Innovation*, ed. Thomas Schlich & Ulrich Tröhler, 1-19, (Abingdon: Routledge, 2006).

²⁸³ For a background to this argument see Patricia Jasen 'Breast Cancer and the Language of Risk, 1750-1950.' *Social History of Medicine* 15, no.1 (2002) 17-43.

²⁸⁴ The Google N-Gram viewer (<http://books.google.com/ngrams>) allows one to track the use of a particular word in the 5.2 million books digitized by Google. The N-gram for 'risk' shows infrequent but growing use of the word in the nineteenth century. But a quick search of *The Lancet* during the early nineteenth century brings up a plethora of articles where operative 'risk is described by influential surgeons. See for example: William Lawrence 'A Lecture Introductory to a Course of Surgery' *The Lancet* 11, no.285 (14th February 1829) 612-618. Lawrence warned his students: 'in any operation you have to perform, unless the knife is guided by anatomical knowledge, consider the risk of the patient, and that of yourself, as the operator.' 617.

has argued, historians' fears of presentism may stem from understanding 'risk' only by what it means today, when a more useful approach would be to understand the 'different languages of risk' that there have been, including the way risk was understood by the patient.²⁸⁵

How risk was represented statistically in regards to ovariectomy has been somewhat subsumed by historians' interest in the quantification of another surgical innovation of the 1840s: anaesthesia. This reflects a more general historiographical trend which often sees anaesthesia depicted as transforming and even initiating the use of ovarian surgery. While Martin Pernick for instance cautions against assumptions that anaesthesia was the main reason for an increase in operations in general, he nonetheless argues that in the case of gynaecology, and particularly ovariectomies, it *was* the case that anaesthesia 'did indeed lead to new and more untested operations' and that before 1846 'ovariectomy had been done only as an heroic last resort.' He cites the case of American surgeon Washington Atlee, who had begun performing ovariectomy in Philadelphia in 1844 and who, Pernick writes, performed 385 ovariectomies between 1849 and 1878, publicly stating his conviction that anaesthesia would make ovariectomy safe.²⁸⁶ Aside from Pernick's anachronistic depiction of ovariectomy,²⁸⁷ his argument that there was an important division between ovariectomy pre and post 1846 – at least when applied to Britain - is weak. While the introduction of chloroform was welcomed by most performers of ovariectomy as an important aide to their operations,²⁸⁸ there is little evidence from the 1840s to attest to ether and chloroform either

²⁸⁵ Jasen (2002) 18.

²⁸⁶ Martin Pernick *The Calculus of Suffering: Pain, Professionalism, and Anesthesia in Nineteenth Century America* (New York: Columbia University Press, 1985) 213.

²⁸⁷ Pernick characterises the operation in the 1840s as one where ovaries were removed to rectify emotional problems, which as we shall see, came much later. *Ibid.* 213.

²⁸⁸ Most described using chloroform in their cases soon after it was introduced. Charles Clay also wrote in private to James Young Simpson to declare himself 'converted' to chloroform. However by 1863 Clay had begun to cast doubt on the helpfulness of chloroform in abdominal surgery, stating that if an ovariectomy patient could face the operation without it then it would be in her favour not to have

improving confidence in the operation amongst its sceptics or substantially increasing the number of operations being performed. In Britain at least, as the enthusiasm for anaesthesia began to cool soon after its introduction into practice, fears quickly set in over its role in encouraging dangerous and unnecessary operations.²⁸⁹ Thus its use in ovariectomy only added fuel to the fire as critics speculated that operations would now be performed even more recklessly.²⁹⁰

Pernick as well as Ian Burney have focused upon the introduction of anaesthesia as a prime example of the emergence of surgical ‘risk’ in the nineteenth century and the use of statistics in calculating the risk of anaesthetic-related death as a prime example of the ‘medical utilitarianism’ that pervaded at the time.²⁹¹ But the use of statistics to represent ovariectomy should not be read in the shadow of anaesthesia. Not only did ovariectomy statistics precede the introduction of anaesthesia in 1846 but the innovation under scrutiny was different: a surgical procedure, rather than a process ancillary to the actual surgical incision, as anaesthesia was. This impacted on the process of statistical representation, as too did the unique status many ascribed to ovariectomy both in terms of technique and objective.

It was Charles Clay’s publication of his first five operations as a stand-alone pamphlet, *Cases of Peritoneal Section*, in 1842, which seemed to first draw the medical community’s

it. Letter to James Young Simpson from Charles Clay (n.d) JYS/200 (Royal College of Surgeons of Edinburgh); “Obstetrical Society of London” *Medical Times and Gazette* 1 (March 4th 1863) 407-8.

²⁸⁹ Ian Burney ‘Anaesthetic and the Evaluation of Surgical Risk in Mid-Nineteenth-Century Britain.’ in *The Risks of Medical Innovation*, ed. Thomas Schlich & Ulrich Tröhler, 38-52 (Abingdon: Routledge, 2006) 38.

²⁹⁰ These concerns were evidently well-known beyond the medical community. In 1847 the satirical magazine *Punch* published a poem entitled ‘The Blessings of Chloroform’ with the couplet ‘Chloroform will render quite agreeable the parting with/any useless member that a patient has been smarting with.’ Fears about chloroform’s power to extend the realm of surgery meant that surgeons’ performance of new and risky operations were more closely scrutinised than ever before. ‘The Blessings of Chloroform’ *Punch* 13 (December 18, 1847) 232.

²⁹¹ Burney (2006); Pernick (1985).

attention to the issue of ovariectomy statistics.²⁹² At the end of the pamphlet Clay had collated a list of all known large incision ovarian operations including his own (thus differentiating it from small incision procedures like Jeaffreson's). As Clay calculated it, there had so far been ten successful cases and one failed case of the operation.²⁹³ His statistics however, were met with derision. In a rather vicious review, *The British and Foreign Medical Review* tore apart his methodology, the reviewer pouring scorn upon the way Clay had chosen to group his own fatalities. Clay it seemed, had chosen *not* to count his two fatal cases, Mrs. Dillon and Mrs. Hardy, because he had operated upon them only to find tumours that were not ovarian but were either uterine or of an 'anomalous' nature; thus Clay had seen fit not to count them at all in the statistics of his operations. Clay's approach outraged the *Review*, the writers of which took it upon themselves to re-jig Clay's table of statistics into two tables that provided a more 'accurate' picture of his experiences: one table of completed operations and another of operations where no ovarian tumour had been discovered, or where the operation had had to be abandoned because of complications; a further representation of Clay's representation, in other words. The reviewer also attacked the validity of Clay's other data regarding successful cases. In particular his inclusion of Jean-Baptiste L'Aumonier's 1783 case was discounted by the *Review* as a case of abscess rather than an encysted ovary (somewhat contradicting their outrage at Clay's own exclusion of cases with a different pathology). Ephraim McDowell's successes were also, it seems, still being met with incredulity, the *Review* suggesting his operations 'stagger[red] belief'.²⁹⁴ Doubt was also cast on the validity of including John Lizars' apparently successful case, due to the fact that the second ovary in the surviving patient was believed to

²⁹² Charles Clay *Cases of Peritoneal Section* (London: Munro and Congreve, 1842). The pamphlet brought together the five cases he had published in the *Medical Times*.

²⁹³ *Ibid.* 18.

²⁹⁴ 'Review: 'Cases of Peritoneal Section Peritoneal Section'' *British and Foreign Medical Review* 16 (October 1843), 387-402; 394.

have been diseased but not removed. The *Review* was clear in its dislike for the operation; but that these three operators came under so close a scrutiny spoke also to changing notions of what could be counted as valid evidence in surgery. In the eighteenth century the boundaries between historical and contemporary ‘data’ had been fairly blurred; as we have seen in chapter one, anecdotal evidence from the ancient world played a post-facto role in validating the removal of ovaries. By the 1840s with Clay’s statistics under close scrutiny, older examples, unpoliced by contemporary British observers, were especially prone to being invalidated by critics.

Just a year later two further statistical tables were published, one by surgeon Benjamin Phillips in *Medico-Chirurgical Transactions*, and a second by the aforementioned Fleetwood Churchill, first published in the *Dublin Journal* before being reprinted in the *Medico-Chirurgical Review*.²⁹⁵ Phillips, who over the preceding few years had begun to turn his back on the operation, was particularly vocal in his belief that the results of unsuccessful operations were being held back and that this was erroneously giving the impression that the operation was safer than it was.²⁹⁶ Possibly Clay’s confusing statistics were being hinted at, but Phillips was also suggesting that multiple practitioners were choosing not to reveal cases where there had been a fatal outcome. Phillips supported this contention by including in his table four cases (the surgeons described by the anonymous initials ‘A.B’, ‘C.D’ and so forth) that had never before been publicly recorded in Britain but with which he was ‘acquainted’. Three had resulted in death. Phillips insinuated that he knew also of a number of other failed cases performed by certain surgeons who had already published on their successful ones; he did not include these in his own statistics, implying instead that if these surgeons

²⁹⁵ Benjamin Phillips ‘Observations on the Recorded Cases of Operations for the Extraction of Ovarian Tumours’ *Medical-Chirurgical Transactions* 27 (1844) 468-492; Fleetwood Churchill (October 1st 1844).

²⁹⁶ Phillips, (1844) 469.

were honourable they would reveal their failed cases in due course.²⁹⁷ By stating that he had omitted such cases, Phillips was drawing attention to the limitations of his *own* statistics in accurately conveying both the extent of operating and its relative risk. If, as Phillips asserted, a multitude of dangerous operations were going unrecorded, this was a worrying thought indeed, for it suggested the widespread and unchecked use of what might be a dangerous innovation.

The contemporaneous table constructed by Churchill further suggested that confusion was already present in the project to construct a ‘true’ statistical representation of ovariectomy’s risk. Churchill’s table differed considerably; it excluded a number of cases that Phillips had added to his, as well as including one – the contentious L'Aumonier case – that Phillips had not. The two men had also calculated their mortality rates differently. Phillips had determined his by looking at how many times the diseased organ had been successfully removed from the patient and how many had then gone on to recover - only with both these elements in place did he believe the operation could be regarded as a success. Using this he calculated that there had been thirty-five successes out of eighty-one attempts, giving a success rate of forty-three per cent. Churchill had collated sixty-six cases and stated that there had been forty-two recoveries and twenty-four deaths, giving an overall success rate of sixty-four per cent. Where the ovary had been successfully extirpated (he counted forty nine cases) a success rate of sixty-seven per cent was given.²⁹⁸

There were other problems too. How ovariectomy statistics might be related – or whether they could even be related - to other major operations raised further divisions. For proponents of the operation, making such a comparison was vital to their cause. If

²⁹⁷ Phillips, (1844) 475.

²⁹⁸ Churchill (1844) 530.

ovariotomy's mortality could be shown to be similar to that of other 'capital' operations,²⁹⁹ as many believed it was, then why should it be held in more disregard and fear than other operations?³⁰⁰ Opposition to the operation, Clay argued, often stemmed from an illiberal and conservative streak in the medical profession, happy to cut off legs at the thigh and tie major arteries because these were 'established' practices, but unable to countenance the new. Just as Blundell had predicted, Clay believed, excessive and unproven fears about entering the peritoneum, were preventing progress.³⁰¹ This tactic failed to convince most opponents and sceptics. From early in the 1840s doubt was cast on the validity of comparing ovariotomy with these other operations; ovariotomy remained for many a procedure of choice, quite different from amputation or aneurysm which were seen as indispensable, emergency treatments. Some surgeons even took offence at the attempt to associate ovariotomy with these other operations, believing it to detract from the safety and the value of established procedures, when ovariotomy was far from being so.³⁰² Advocates of ovariotomy defended themselves by pointing out that if the meaning of a capital operation was going to be scrutinised in this way, then other operations – lithotomy, aneurism – could equally be described as operations of *choice* for conditions that could be lived with for years.³⁰³ But for many, the difference went even beyond risk or whether the operation was one of choice.

²⁹⁹ Broadly speaking, 'capital' operations usually referred to lithotomy and lithotrity, major amputations such as at the shoulder or the thigh, operations upon strangulated hernia and the ligaturing of major arteries – any operation where there was believed to be a relatively high risk of death. However what exactly constituted a 'high' risk was never well defined.

³⁰⁰ This was the subject of a lecture on ovariotomy by St. Thomas' Hospital surgeon Samuel Solly (1805-1871) in 1846. Solly, an advocate of the operation, collated numerous statistics to suggest that the mortality rate for ovariotomy was about four in ten. He compared this to numerous statistics for other capital operations such as amputation of the thigh, where there was a mortality rate of about three and a half out of ten, amputation of the arm (four out of ten) and Sir Astley Cooper's hernia operations where nearly five in every ten patients had died. Samuel Solly 'Clinical Lecture on Ovariotomy' *London Medical Gazette* 38 (3rd July 1846) 51-58; 54.

³⁰¹ Clay (1842) 16.

³⁰² John P. Halton, John 'On the Average Number of Deaths in Capital Operations' *London Medical Gazette* 33 (December 23rd, 1844) 390 – 400.

³⁰³ James Young Simpson often used this tactic of argument and made it part of his long discussion on the operation at the Medico-Chirurgical Society of Edinburgh, 17th December 1845: 'Medico-Chirurgical Society of Edinburgh' *The Monthly Journal of Medical Science* 6, pt. 4 (1846) 53 – 67.

Ovariectomy was inherently different because, as one critic put it in a letter to *The Lancet* in 1857, it was against ‘surgical instinct’.³⁰⁴ Opening the belly was quite a different thing from a lithotomy, amputation or other ‘classic’ surgical operation and this rendered it incomparable.

While both advocates and opponents took an interest in the quantification of ovariectomy, statistical tables – or at least published ones – were being more commonly constructed by opponents. Through one man in particular, the aforementioned obstetrician Robert Lee, statistics came to be a powerful tool for those sceptical about the operation in the 1850s. Lee in fact was a fine example of how statistics were constructed when one already had a firm opinion of the operation in mind. A Scottish born but London based practitioner, Lee had by the late 1840s built up both a considerable private practice as well as a powerful reputation as an author, lecturer, anatomist and physiologist.³⁰⁵ He worked relentlessly in his numerous fields of interest and was well-respected, although during his career he was involved in a number of well publicised spats including a lengthy dispute with Thomas Snow Beck during the 1840s, over which one of them had ascertained correctly the anatomy and physiology of the uterine nervous system. Lee was a known traditionalist in his approach to surgery and especially in his distaste for major operations in obstetrics and gynaecology. From the late 1840s Lee castigated the use of Caesarean Section in his speciality. Equally, the increasing use of ovariectomy deeply perturbed him and he spoke out publicly against what he saw as a ‘rage for cruel and bloody operations’.³⁰⁶ For both operations Lee believed the statistics to be

³⁰⁴ James Matthews Duncan ‘Is Ovariectomy Justifiable?’ *The Lancet* 69, no. 1748 (28th February 1857) 212-214. Duncan described ovariectomy as having a ‘distinct, individual character’ and thus was incomparable to other operations.

³⁰⁵ See for instance ‘Biographical Sketch of Robert Lee; M.D, F.R.S’ *The Lancet* 57, no. 1438 (22 March 1851): 332-337. Biographical sketches of this magnitude appeared only occasionally in *The Lancet* during the 1850s, attesting to the authority Lee wielded in the London medical world.

³⁰⁶ ‘Royal Medical and Chirurgical Society’ *The Lancet* 57, no.1432 (8 February 1851) 147-172; 155.

unsatisfactory and like Phillips believed that many unsuccessful cases were not being disclosed. The contested nature of Caesarean Section provides an interesting comparison to ovariectomy in this respect, for surgeons and obstetricians were similarly concerned about ascertaining the true mortality of the Caesarean Section. Like ovariectomy the operation was viewed by many to unnecessarily resort to the unpalatable practice of opening up the abdomen. In 1841 Fleetwood Churchill had produced statistical tables comparing the mortality of various obstetrical operations. Reflecting on his statistics of all Caesarean Sections known to him to have been performed since 1750, Churchill declared that there had been ‘316 operations, from which 149 mothers recovered and 129 children were saved and 53 lost, in 182 cases where the result was recorded.’³⁰⁷ This suggested to Churchill that while the operation was dangerous and should still be considered *dernier resort*, it was less dangerous than previously believed and he thought the risk not dissimilar to other more established obstetric procedures like symphyseotomy.³⁰⁸ Churchill’s statistics were swiftly questioned by *The Medico-Chirurgical Review*, who argued that his collected numbers barely scratched the surface as to the true number of Caesarean sections that had been performed in Europe so far, the estimated extent of which led the *Review* to conclude that ‘the real proportionate mortality can... never be accurately ascertained.’³⁰⁹ Statistics were being sought as a means of attaining a definitive idea of operative risk, but like Phillips’ ovariectomy statistics, those for Caesarean section seemed highly uncertain. In this way operative statistics where data was being retrospectively collected, differed considerably

³⁰⁷ Fleetwood Churchill, *Researches on Operative Midwifery* (Dublin: Martin Kenne and Son, 1841) 222.

³⁰⁸ Symphyseotomy was an operation which saw the division of the symphysis pubis joint in order to facilitate labour. Churchill estimated that half of babies were lost when symphyseotomy was performed compared to over two thirds when Caesarean section was undertaken. He used both statistics and contextual information to somewhat curiously suggest that although more mothers survived symphyseotomy than the Caesarean Section, many were badly injured by the former procedure, leading Churchill to declare that their mortality rates were roughly the same. 254.

³⁰⁹ “Review: ‘A Practical Treatise on Midwifery’ by M. Chailly’ *Medico-Chirurgical Review* 41 (1st October 1844) 403-410; 407.

from those for anaesthesia, where statistical methods had been quickly employed soon after it was introduced into practice.

Nonetheless there were important differences between ovariectomy and Caesarean Section. The former still smacked of unnecessary surgery in a way Caesarean Section didn't. In cases of the latter after all, it was about comparing the risks of the operation to other serious operations for obstructed labour. With ovariectomy, the choice was between major surgery and one of the considerably less invasive treatments for ovarian tumours which were still being utilised, such as tapping, diuretics, application of pressure to the tumour and iodine injections, making the risks of the major operation much more magnified. It was perhaps for this reason that Lee more hotly pursued definitive statistics on ovariectomy. He first made his own statistics on the operation public at a meeting of the Royal Medical and Chirurgical Society at the end of the 1850, where he announced that he had collected 108 cases, by which he had calculated a thirty-five per cent mortality rate for all attempted ovariectomies.³¹⁰ The tables, like Phillips', included further cases which had never before been published, mostly constituting single cases which Lee alleged had been communicated directly to him. Two names were noticeably absent though: Daniel Walne and Frederic Bird, for Lee claimed that both men had failed to furnish him with the full facts of their experience and had not published all their unsuccessful cases. Lee's colleague Caesar Hawkins, who since his own failed operation had, like Phillips, become increasingly disenchanted with ovariectomy, deplored Bird for holding back details of unsuccessful cases while at the same time having 'actually put on record...his opinion of the impropriety of withholding any information from the public with regard to this very operation.'³¹¹ Bird, who was present at the meeting, expressed shock at this humiliating public announcement, claiming that he had

³¹⁰ 'Royal Medical and Chirurgical Society, November 13th 1850' *The Lancet* 56, no. 1421 (23 November 1850) 583-587.

³¹¹ *Ibid.* 584.

already sent Lee the statistics for his operations thus far: twelve cases, of which eight had had been successes. But herein lay the slipperiness in defining what exactly the most desirable method of data collection was. Lee's definition of statistics was quite different from Bird's who clearly believed his notice of twelve cases without giving any further details was enough to satisfy Lee in his collection of *statistical* data. But it was not. For Lee, statistics were not a matter of mere quantification and calculation when it came to operations; statistics, Lee believed, needed to be contextualised with further information about the cases, otherwise they were useless. Thus the value of numerical data was not a given, even by those who were constructing apparently objective accounts. Rather, they were entirely contingent on further additional information.

Things went from bad to worse for Bird during the meeting. Being pushed into confirming how many attempts he had made to remove an ovarian tumour, whether successful or not, Bird admitted that on numerous other occasions, not reported, he had opened up the abdomen to make an exploratory incision. Apparently weary of attempting to diagnose blindly, Bird had begun to open the belly to ensure that ovarian disease was present before he went ahead with an operation. The report of the meeting gives a palpable sense of tension in the crowded room as Bird was asked how many times he had made such an exploratory incision. Bird responded that 'probably he might startle some gentleman by stating as many as forty, or fifty; but of this number he was speaking quite at random.'³¹² Bird denied that any of these exploratory incisions had been fatal, although this was contested by Lee who believed that at least one had been. Regardless, major damage had been done both to Bird's reputation and the cause of ovariectomy. Bird's public humiliation put a well-known face to the vague and nameless fear that dozens, perhaps even hundreds of abdominal procedures

³¹² *Ibid.* 585-586.

were being performed secretly and thus, as of yet, the true scale of the operation's risk had not been adequately conveyed.

Lee was evidently delighted with the stir his paper had caused and his role in encouraging the profession to think deeply and critically about both ovariectomy and Caesarean Section. 'In all of which I was victorious, or rather the truth triumphed' he wrote in his diary at the end of the year regarding his public battles.³¹³ Lee's use of statistics was ostensibly to attain an objective representation of the operation. But what they had really done was provide Lee with an opportune way through which to rather dramatically reveal what had gone unrepresented. Indeed perhaps even more important than the statistical calculations he had made – that over a third of those being operated on died – was the way in which he had made the withholding of information on ovariectomy now seem completely unacceptable. The operation of ovarian extirpation had been a private endeavour, negotiated between patients, practitioners and eventually, a surgeon willing to take the risk of doing the operation. 'Ovariectomy' was something different; it shifted the operation from a single act to a collective identity, in which all occurrences were expected to be made public. Risky surgery could no longer be private and radical surgical innovations were to be both understood and judged collectively and publicly. Truth could only exist if it existed publicly. Surgeons who were thought to resist this were vulnerable to accusations of misconduct and this shift in surgical practice was felt profoundly by some of those personally and unfortunately involved. Daniel Walne had escaped the full extent of Lee's wrath by sending him more complete information on his cases but it is telling that by the beginning of the 1850s he had given up performing ovariectomy, as had Samuel Lane. Frederic Bird, who up to now had done more in London than any other practitioner to promote the cause of

³¹³ Diary of Robert Lee Vol.6 (1838 – 1872) MS3218 (Wellcome Collection).

ovariotomy at first appeared to escape relatively unscathed from the debacle, responding first with a letter to *The Lancet* again stating his cases, and then launching a lengthy series of articles on the pathology and treatment of ovarian disease in *The Medical Times* (one of them the aforementioned case of Miss F__). But in 1852, aged just thirty-four, Bird published his last ovarian case. He retained a respectable post lecturing at Westminster Hospital but was rarely seen in medical society in later life. A telling glance into his world was furnished in an obituary written upon his death in 1874. It noted with a hint of ambiguity that Bird gave up ovariotomy as he felt he was ‘averse to the anxieties which are naturally associated with such operations’.³¹⁴ Ironically in a later publication Lee included Bird’s original statistics.

Despite Lee’s personal victory, the controversies surrounding Bird seemed only to clarify the unsatisfactory nature of surgical statistics. At the same meeting where Bird was accused of concealment, a number of medical men began to question what method was best employed to gather and represent knowledge of the operation. Despite the fact that Lee had published as much detail as he could on each case and, where possible, on the length of life afterwards, William Lawrence, still firmly against the operation, expressed concern as to whether Lee’s statistics really got to the bottom of ascertaining the operation’s propriety. Lawrence pondered how much statistics could tell the profession not only about the length to which a successful operation *prolonged* life but also to what extent that involved a decent *quality* of life afterwards. As Lawrence’s words implied the days, weeks, even months after ovariotomy had been performed could be a time of considerable anxiety. During these mid-decades deaths on the operating table or very soon after the operation accounted for around only half of fatal cases and it was, as one Irish surgeon described it, ‘the great danger that

³¹⁴ ‘Obituary: Frederic Bird’ *The Medical Times and Gazette* 1 (May 9th 1874) 520.

looms in the distance'³¹⁵ - that is the expected onslaught of peritoneal inflammation – that was to be feared as much as the operation itself and which was not easily factored into statistics. Different situations, outcomes and sick bodies made it hard to imagine a typical ovariectomy and without a sense of what was typical, this made it hard to say which operations should be included in statistics and which shouldn't. Ostensibly an operation is intrinsically connected to the operator; the two are indivisible: the operation a product of the surgeon's physical actions. And yet, as Thomas Schlich has shown in his study of twentieth-century surgery, surgeons have often been troubled by how statistics blur the boundaries between the two, especially when outcomes are poor.³¹⁶ Is a fatal outcome caused by the type of operation employed or by an operator's technique? If it is the former, does this exonerate an operator from responsibility? This issue had earlier been highlighted by a Dr. Murphy, who in defending Frederic Bird's practice of the operation at a society meeting published in *The Lancet*, described failed ovariectomies as often 'the fault of the operation, not the operator'.³¹⁷ Thus, for Dr. Murphy, the operation had to be *disembodied* and made separate from the inherent subjectivities of the surgeon as a means of ascertaining its essential 'truth'.

³¹⁵ Richard G. Butcher 'On Ovariectomy, and the After-treatment of the Patient.' *Dublin Quarterly Journal of Medical Science*, 40, no.2 (1865) 257-284.

³¹⁶ Thomas Schlich *Surgery, Science and Industry: A Revolution in Fracture Care, 1950s-1990s* (Basingstoke: Palgrave Macmillan, 2002) 122-123. Schlich draws this out in relation to the diffusion of the osteosynthesis technique, albeit in the different context of late-twentieth century fracture care, and where the technique was diffused 'officially' by Arbeitsgemeinschaft für Osteosynthesefragen (AO), the Swiss medical organisation who produced textbooks and ran courses to teach the method. Nonetheless Schlich notes that AO also keenly highlighted that poor results were often the result of the operator rather than the method.

³¹⁷ 'Westminster Medical Society' *The Lancet* 50, no.1261 (30 October 1847) 451-478: 467. Four years before, the surgeon John Halton similarly highlighted the distinction between surgeon and operation, suggesting that statistics for capital operations should eschew altogether those failed cases where the mode of the operation (i.e. the performance of the operator) rather than the operation was deemed at fault. John Halton 'On the Average Number of Deaths in Capital Operations' *London Medical Gazette* 33 (29th December 1843) 390-400.

The ovariectomy debate became a less visible presence in the medical press for several years after Lee's confrontation with Bird; certainly fewer cases were published. Nonetheless, occasional articles regarding its justifiability cropped up and ovariectomies were certainly still performed by Clay in Manchester. A new group of London based practitioners also began to take up the operation in the late 1850s most notably the obstetric physician William Tyler Smith (1810-1873) and the surgeons Thomas Spencer Wells (1818-1897) and Isaac Baker Brown (1811-1873). Brown, who had a long-standing interest in diseases of the ovary, had spent years cautioning against the operation, continuing to use only palliative and medical therapeutics to treat dropsical ovaries.³¹⁸ By the end of the 1850s however, he had had a change of heart. Now convinced that these means could not affect a permanent cure, he began to advocate the operation in the late 1840s and started performing it in the 1850s.³¹⁹ Indeed more generally there was a noticeable change of heart among the profession regarding the operation in the late 1850s and early 1860s. Many, like Brown, were not necessarily entirely confident in the operation but by now, sufficiently unconfident in the power of medicine to do anything to treat the condition. When in 1862 Lee once more publicly derided the lack of truthful representation of ovariectomy,³²⁰ his remarks were met much more coolly and in 1865 a further turning point came with Wells' publication of his monograph *Diseases of the Ovaries: Their Diagnosis and Treatment*, which, despite the title, was in fact Wells' record of cases rather than a textbook. In it Wells provided verbose, richly informative accounts of every single ovarian operation he had performed - successes and failures, carefully dividing the operations into completed and uncompleted and providing

³¹⁸ Brown was a particular enthusiast of a method involving wrapping the abdomen in tight bandages so as to put pressure upon the abdomen and thus reduce swelling. Isaac Baker Brown 'Practical Remarks on the Cure of Ovarian Dropsy without Abdominal Section' *The Lancet* 43, no.1083 (1st June 1844) 306-307.

³¹⁹ Isaac Baker Brown *On Some Diseases of Women Admitting Surgical Treatment* (London: John Churchill, 1854), Brown details all his cases of ovariectomy so far.

³²⁰ 'Royal Medical and Chirurgical Society, Tuesday November 11th 1862' *The Lancet* 80, no.2047 (22nd November 1862) 565-569.

noticeably detailed information on the patient's state of health, months and sometimes years after the operation. He also claimed a success rate of seventy-six recoveries for the 114 operations he had performed, results which two years later would be improved upon further by those of Thomas Keith, who in 1867 announced that four-fifths of his ovariectomy patients so far had survived the operation.³²¹ Wells' monograph, as shall be discussed more thoroughly in the next chapter, was quickly regarded as influential, not least because Wells carefully seeded the idea among his surgical brethren that he was the surgeon responsible for 'reviving' the fortunes of ovariectomy. But it is important to note here that his success was perhaps less to do with his mortality rate - which at around one-third might still have been considered high by those who depicted ovariectomy as an 'elective' procedure - but rather the way Wells *represented* his cases. Honest statistics recounting a high number of cases were of the utmost importance. But it was *context* too that was essential in representing operative surgery, and this could only be provided by full and frank case reports which expressed both the surgeon's narrative as well as the patient's.

2.4 Conclusion

During the mid-decades of the nineteenth century, the justifiability of performing ovarian extirpation or as it was known by the 1840s, 'ovariectomy', was hotly debated in Britain, including by some of the most powerful surgeons in the country. Polarisation of opinion on the operation was mediated, and to an extent constructed, through public representations of it. In the first part of this chapter I considered how in the 1830s competing framings of the operation were formed. On one hand the operation was depicted as a sign of advancement by a small but increasingly vocal group of advocates, on the other, as a base, useless and

³²¹ Thomas Spencer Wells *Diseases of the Ovaries: Their Diagnosis and Treatment: Vol.1* (London: John Churchill & Sons, 1865) xiii; Keith (1867).

possibly criminal procedure. Writing an historical account on an ostensibly ‘successful’ innovation – from a modern viewpoint anyway - always runs the risk of characterising detractors along the way as conservative or even backwards looking. As I have sought to show here, characterisations of the progressive (and conversely, the regressive) in surgery were far from self-evident but rather constructions facilitated by the medical press. Existing as they did in the same professional landscape, the language used by both advocates and opponents of the operation often mirrored one another; sacrifice, utility: evocative terms and concepts such as these were used by both sides as they sought to convey representations of the operation to other medical men. For both sides, what was crucial was that their representation of the operation slotted into rather than contradicted surgical morality. As we have seen, conceptualisations of progress in operative surgery were greatly tempered by surgeons’ aspirations at this time to operate less.

This mirroring was evident also in the ensuing three decades as the operation began to be practised with a degree of regularity in London and Manchester and which led to more scrutiny than ever as to how and why it was being performed. Both sides attempted to construct what they saw as a *true* representation of the operation, but this was easier said than done. Constructing a collective understanding of its risk and propriety revealed itself to be complex and possibly even unattainable. Establishing the justifiability of the operation proved complicated in the face of the acknowledged messiness of individual cases - inexperienced operators, patient’s bodies afflicted with pre-existing illnesses, incompetent family members interfering in the aftercare process – these all needed to be taken into consideration; thus only through full and frank qualitative accounts of each operation could ‘real’ experience be represented. These accounts, punctured with emotional language and centred on an evocative narrative, allowed operators to express their moral reasoning for

performing the operation, often through the voice of the patient. This was mirrored in the similarly emotive accounts of opponents like Samuel Ashwell and Robert Lee.

This did not negate the desire, however, for clear numerical data. In the 1840s, statistics were increasingly utilised by medical men to make sense of new and potentially hazardous innovations. They provided control and order, ostensibly permitting a definitive answer to how risky an operation was. The controversies surrounding operators like Frederic Bird seemed to make it more important than ever that honest, accurate numbers were provided by all operating in the field. While doctors' criticisms of statistics at this time are well-recognized by historians, particularly their concern that the individuality of cases would be stripped away, I have sought to show how surgeons negotiated these problems when faced with the urgent need to find an answer to the question of ovariectomy's justifiability. Moreover I have argued that conceptualisations of the operation as entirely novel also had an impact on the way statistics on it were understood. Only by conveying experiences of ovariectomy through emotive, qualitative accounts *and* through statistical data, was anything near the truth thought to be represented.

The question of representation did not go away. Throughout the century the operation would continue to be painted in strikingly different ways: life-saving or life destroying, progressive or regressive, savage or sophisticated. But in these mid-decades representations of the operation were scrutinised and deconstructed with particular voracity. The medical community was intent on settling a debate which had serious implications for the practice of surgery and where opponents often feared that the 'truth' of the operation was being obfuscated by secrecy and deception. Even as opinion began to swing in favour of the operation, the ferocity of this past opposition was not forgotten. Indeed its impact would be felt for some decades.

Chapter Three

Intellectual Ownership

3.1 Introduction

In the introduction to his book *Surgical Diseases of the Ovaries and Fallopian Tubes* (1891), John Bland-Sutton (1855-1936), gynaecological surgeon at the Chelsea Hospital for Women, made a strikingly barbed comment regarding publications in the field; ‘the literature relating to surgical diseases of the ovaries displays a notorious amount of egoism’ he began, ‘...nearly every treatise devoted to this subject is mainly a record of personal experience.’³²² His remarks would not have been lost on his readers. Ovariectomy, over the previous fifty years, had been one of the most popular and persistent topics of discussion among the medical profession. The contentious moral issues surrounding the operation had long added a highly personal dimension to these discussions, as we have seen in the previous chapter. But by the 1860s individual rivalries and disputes were threatening to become the defining feature of the debate.

A direct accusation of egoism, such as Bland-Sutton’s, was a damning one to be cast at any sector of the medical profession. The drive for reform by practitioners in the mid-decades of the nineteenth century, had led to the establishment of the Medical Act in 1858. Yet for many practitioners the Act was a disappointment, doing little to actively prevent or regulate the practice of ‘quacks’, and the lack of desired reform led to a heightened insecurity among

³²² John Bland-Sutton, *Surgical Diseases of the Ovaries and Fallopian Tubes* (Philadelphia: Leas Bros. 1891) v.

doctors over their profession's status.³²³ For those practitioners ostensibly operating within the parameters of orthodoxy, immersing oneself in rhetoric that stressed altruism and the selfless acquisition of knowledge was a fundamental tool in accentuating differences between professional doctors and 'quacks'. Crucially however, these ideals provided a basis upon which the morals and practices of 'orthodox' rivals could be questioned too.

Throughout the Victorian era, any hint that practitioners might be excessively interested in personal success was something that was potentially subject to intense scrutiny. Doctors inhabited a professional world where accusations of quackery and self-interest could quickly be rolled out.

Over the mid part of the century, those who performed ovariectomy gained an unfortunate reputation for this kind of controversy. 'Specialists' of all kinds had begun to attract negative attention in the 1860s, a subject that will be discussed in more detail in the next chapter.³²⁴

Suffice to say here that those identifying as specialists in gynaecological diseases were often singled out for their predilection for bickering. An article in the *Boston Surgical and Medical Journal* in 1881, reporting the news from the London medical world, commented on a meeting of the Medico-Chirurgical Society in which Samaritan Hospital surgeon John Knowsley Thornton (1845-1904) had argued for the use of antiseptic methods in gynaecological surgery: 'the subject, as usual, afforded the ladies' doctors a grand opportunity for controversy', the anonymous author commented, 'of which, as is their wont, full advantage was taken, and in a manner too, which happily is not usual here amongst the

³²³ M. W Weatherall. 'Making Medicine Scientific: Empiricism, Rationality, and Quackery in mid-Victorian Britain' *Social History of Medicine* 9, no.2 (1996) 175-94. More recent scholarship has emphasised that the 1858 Act was a process of negotiation between MPs and medical men, in which the former limited the powers of the act for the sake of patient choice. See M J D Roberts 'The Politics of Professionalization: MPs, Medical Men, and the 1858 Medical Act,' *Medical History* 52, no.1 (2009)37-56.

³²⁴ George Weisz 'The Emergence of Medical Specialization in the Nineteenth Century,' *Bulletin of the History of Medicine* 77, no.3 (2003) 536-75; 569; Granshaw (1989).

practitioners in other special departments.³²⁵ Within the speciality of diseases of women, the unique distinction that performers of ovariectomy were accorded, as practitioners willing to go into the abdomen,³²⁶ meant that they formed their own professional subset and as a consequence acquired their own peculiar reputation. As Bland-Sutton's comments implied, by the end of the century, it was evident that a significant portion of debate regarding ovariectomy had come to be centred upon rivalries and disagreements. Much of this was focused on one very particular and vexed issue: the distribution of credit – that is recognition of one's work - among those who believed themselves responsible for the operation's innovation. It is this that I make the focus of this chapter.

Historians and sociologists have long been interested in the role of credit and priority in scientific practice. Robert K. Merton in his influential *The Sociology of Science* (1973) saw awarding credit as central to the construction of norms within professional, scientific culture. For Merton, it was only through credit that *originality* - that most prized aspect of science - could be validated; thus, 'recognition for originality becomes socially validated testimony that one has successfully lived up to the most exacting requirements of one's role as a scientist.'³²⁷ In recent years historians of science and technology have shown revitalised interest in the subject, reflecting the growing and high-profile presence of intellectual property in the techno-sciences today.³²⁸ With this has come a considerable nuancing of

³²⁵ Anonymous, 'Letter from London,' *Boston Medical and Surgical Journal* 104, no.6 (Feb 10th 1881) 142 -143.

³²⁶ Many high profile surgeons such as Jonathan Hutchinson in London and James Syme in Edinburgh refused to perform the operation even after its justifiability was felt to be established. See: Speech by Thomas Horrocks recounting surgical memories of his time at the London Hospital (n.d c.1885) PP/OPE/5/1 (Royal London Hospital Archives) and Letter from Robert Christison to Mr. Dewar concerning Mrs. Dewar's illness with ovarian disease (15th February 1863) GB237 Dc7.101-3 (University of Edinburgh Special Collections).

³²⁷ Robert K. Merton *The Sociology of Science* (Chicago: Chicago University press, 1973) 293.

³²⁸ To take one example, the increasing pervasiveness of 'technology transfer' in the UK, that is the securing of intellectual property – and subsequent commercial exploitation - of scientific research at educational institutes.

ideas about what ‘intellectual property’ might mean in an historical sense.³²⁹ Historians of techno-science, Christine MacLeod and Gregory Radick, have argued that intellectual property needs to be understood in a narrow sense – for example as it is embodied in legal processes such as patenting – but also broadly as it is embodied in priority and – perhaps more interestingly – ‘productivity claims, made when a body of theoretical principles is asserted to underpin useful technologies.’³³⁰ Such work shows historians are finding more fruitful ways of analysing what ‘intellectual ownership’ - as we might broadly define the concept, ‘intellectual property’ being rather presentist - has meant at different times, and of which patenting is only one aspect.

As of yet this historiographical shift has not extended to the history of medicine. In particular medical *practice*, understood in the *clinical* sense, requires much greater disentangling from the broader scope of ‘science’, not least because, as I show here, medical practitioners’ experiences of intellectual ownership can be so vastly different from that of other fields. As medical sociologists Judith P. Swazey and Renée C. Fox have pointed out, a multiplicity of different types of credit potentially hover around medical – and especially – surgical practice which historians and sociologists from Merton onwards have almost entirely failed to address, other than in relation to patenting.³³¹ And yet histories of patenting tell us little about how intellectual ownership functioned in a field like operative surgery,

³²⁹ The term ‘intellectual property’ is relatively novel, not emerging as part of regular legal vernacular until the end of the nineteenth century. However, it is used here to broadly encompass a range of issues surrounding the ownership of intellectual labours, from patenting to trade marking, to non-legal methods of managing and recognising credit such as publication, peer recognition and pecuniary reward.

³³⁰ Christine Macleod and Gregory Radick ‘Claiming Ownership in the Technosciences: Patents, Priority and Productivity,’ *Studies in the History and Philosophy of Science* 44, no.2 (2013) 188-201; 181 (abstract).

³³¹ Judith P. Swazey and Renée C. Fox ‘The Clinical Moratorium,’ in *Essays in Medical Sociology: Journeys into the Fields* ed. Renée C. Fox (New York: Transaction Publishers, 1988), 325-365; 337 inc. n. 32. A recent example from medical history where the focus has been once more on patent medicines is Takahiro Ueyama’s monograph on patent medicines in Victorian London: Takahiro Ueyama *Health in the Marketplace: Professionalism, Therapeutic Desires, and Medical Commodification in Late-Victorian London* (Seattle: University of Washington Press, 2010).

where patenting did not occur. What is more, unlike other areas of what we might now describe as the ‘life’ sciences, where innovation is centred around, for example, an anatomical finding, or a new physiological theory, operative surgery manifests itself in a physical act. This, I argue, has long impacted on how priority, credit, truth and individual reward are negotiated in surgery and yet we know very little about the ways in which this occurred.

In this chapter then I consider an overlooked part of ovariectomy’s history; that is, how intellectual ownership was constructed around what was perceived to be new surgical knowledge and practice. Ovariectomy was increasingly symbolic of a bold and novel way of operating. But how was this new knowledge to be owned and credited – if indeed it could be? How was it rewarded or otherwise acknowledged and why was it important that it was? How if at all, was operative surgery understood as a form of intellectual labour? I will argue here that the many attempts by those involved with ovarian surgery to establish intellectual ownership in their work is demonstrative of the complexities involved in crediting practitioners for their surgical innovation. I place this also within the wider context of intellectual ownership in which it was played out, most particularly the contemporaneous debates on patenting, invention and free trade which were occurring. The medical profession’s reluctance to involve itself in these debates could easily be interpreted as a lack of concern on the profession’s part on the matter of priority and credit, a sign perhaps of their commitment to humanism. Closer inspection however, reveals that doctors *were* concerning themselves with similar issues, as the case of ovariectomy will demonstrate. Unlike technological innovations, such as those occurring in engineering, operations were not patentable. It was exactly this that made debates about who deserved credit for innovating ovariectomy so heated, as alternative methods had to be constructed by surgeons, in an attempt to provide credit for their originators and innovators.

3.2 Patent Concerns, Unpatentable Processes

The credit disputes which contributed so fundamentally to the way ovariotomy and ovariotomists were characterised played out in a very specific economic and cultural context. In the mid-decades of the nineteenth century there was increasing recognition in Britain of the contributions made to society by inventors and this had resulted in growing calls for inventions to be better recognized, legally and financially.³³² Works like *Self-Help* (1859), Samuel Smiles' (1812-1904) hugely popular paean to self-improvement and endeavour, championed bold pioneers who had innovated in the face of adversity, including those in the field of medicine.³³³ But these changes were the manifestation of a growing cult of heroism which centred predominantly on individuals from manufacturing and engineering, people like Isambard Kingdom Brunel, George Stephenson and James Watt, and the highly visible and influential products of their intellectual labours, which had so greatly transformed society. The inventor was no longer the shady eccentric or dishonest swindler but the heroic Briton, contributing to the nation's industrial might and playing a positive role in society.³³⁴

This changing conception of inventors was most visibly embodied in public support for patenting reform; *The Times* was an early supporter and readily invoked the glories of inventors past to argue in 1850 that 'the *rights of the inventors* can scarcely be spoken of as having a definite existence. It is strange that a Watt, a Hargreave, an Arkwright, should be left to present a humble petition to the crown, imploring that he may for a period of short duration be guaranteed a beneficial interest in his own discovery.'³³⁵ With the Great

³³² Christine MacLeod *Heroes of Invention: Technology, Liberalism and British Identity: 1750-1914* (Cambridge: Cambridge University Press, 2007) 2-3.

³³³ Samuel Smiles *Self-Help: With Illustrations of Conduct and Perseverance* (Rockville: Serenity, 2008). Smiles cites Edward Jenner (1747-1823) as an example. See 102-3.

³³⁴ MacLeod (2007) This reputation came in part from the fact that in the early modern period, patentees had often been favourites of the Royal court who were issued monopolising patents that ruined other 'honest' tradesmen, and who charged the public extortionate prices. See 33-4.

³³⁵ Anonymous, 'Editorial,' *The Times* 20665, December 6, 1850, 4.

Exhibition of 1851, an unprecedented platform for new industrial products and processes emerged, enabling for the first time Britons from across the social spectrum to view *en masse* the fruits of industry from across the world. But with this platform came concerns over the ease in which inventions on display could be pirated. A hasty intermediate legal measure - the Protection of Inventions Act 1851 - gave protection to all unpatented British inventions at the exhibition.³³⁶ More importantly however, it reinvigorated and strengthened a lengthy campaign by manufacturers, inventors and other interested parties for wide scale amendment to patent law, principally to increase the short tenure of a year that patents then held and also reduce the initial price of patents. The Patent Amendment Act, which fulfilled both these criteria, was passed in 1852.³³⁷

Medical practitioners were for the most part absent from these debates. When patenting *was* discussed within the pages of the medical journals, it was often with suspicion and disdain, and for many, there was discordance between property rights and medicine, an inherent contradiction in permitting excessive individual reward within the framework of altruism which increasingly bound orthodox medical culture together. As Scottish physician William Gairdner put it in 1868, in a way which neatly summarised the moral viewpoint of the profession:

A principle now firmly established in the medical profession... that the status of its members is considered lowered by any attempt to establish property in any remedy, or

³³⁶ Clare Pettitt, *Patent Invention: Intellectual Property and the Victorian Novel* (Oxford and New York: Oxford University Press, 2004)123-124.

³³⁷There were numerous attempts earlier in the century to reform the patenting system and some minor changes were made with the Patent Act of 1835, which allowed the extension of some patents, but overall the Act made little change to the patenting system. For an overview see H. I. Dutton *The Patent System and Inventive Activity during the Industrial Revolution, 1750-1852* (Manchester: Manchester University Press, 1984) esp.34-56.

other invention for the relief of disease; whether by concealment, or by patenting, or otherwise advertising the invention for the benefit of its presumed owner.³³⁸

Patents certainly had particular and unseemly connotations for medical men that did not reflect the changing place of patents and patentees in other fields of industry. Outwardly patent medicines were increasingly treated with disdain by a profession trying hard to rid itself of old stereotypes and the term was increasingly used to infer useless nostrums, peddled by quacks with their ingredients kept secret by their proprietors.³³⁹ Moreover, not only did patent medicines contravene an expected openness of practice by medical men but their potential dangers were repeatedly highlighted in the medical press, and this culminated in a parliamentary Bill in 1884 – the Patents Medicine Bill - which proposed that the legal requirement of all patented and trademarked medicines be analysed and their contents made known to the Pharmaceutical Society.³⁴⁰

Closer inspection suggests however that the medical profession had, in fact, a rather contradictory attitude towards proprietary medicines; for while patents and trademarks were lambasted, invention and innovation in medicine and surgery were also openly celebrated, including those of a proprietary nature. *The Lancet's* introduction in 1850 of its monthly column 'New Inventions in Aid of the Practice of Medicine and Surgery' for example, responded to doctors' clear interest in new innovations and brought regular advertisement to

³³⁸ Anonymous, 'The Theory of Professional Remuneration,' *British Medical Journal* 1, no. 371 (8th February 1868): 122–3; 122.

³³⁹ Despite the name most 'patent medicines' were actually trademarked rather than patented because unlike patents, the application for a trademark did not require any disclosure of the ingredients of the medicine.

³⁴⁰ House of Commons Debate, *Hansard* 286 ser.3 (26 March 1884), 801-11 (<http://hansard.millbanksystems.com/sittings/1884/mar/26>; (accessed 8th August 2013). The Bill never made it to its second reading, most likely because the profession's revulsion to the patent medicine industry did not reflect in the opinion of the public, who had an increasing appetite for patent medicines throughout the second half of the century; additionally its continued revenue was probably enough to dissuade Parliament from regulating it. See T.A.B Corley 'Interactions Between the British and American Patent Medicine Industries, 1708-1914,' (pamphlet reprint from *Business and Economic History*, Series 2, 16, 1987) 112.

a range of new medical and surgical aides such as siphons, trusses and respirators, both patented and non-patented.³⁴¹ Practitioners' endorsement of patent medicines was usually more covert but it *was* present; as Lori Loeb has illustrated in her exploration of patent medicines in late nineteenth and early twentieth century Britain, in private practice, a sizeable number of practitioners prescribed patent medicines or were involved with patent medicine companies as shareholders; thus we cannot consider patent medicines to have been merely in the realm of unorthodox practitioners.³⁴²

This rather confused attitude was present more generally in their attitude towards intellectual ownership and credit, which reflected troubling contradictions in medicine between the practitioners' desire for personal success and altruistic rhetoric the profession as a whole so desperately wished to convey. The desire to appear respectable did not quell practitioners' need for recognition of their work and the lack of 'official' recognition available in medicine was felt acutely, especially in the context of both patent reform in other fields and the quite different management of credit (including in medicine) in other countries. Patenting was not necessarily seen as the answer: even after reform, patent laws had not been structured with medicine and surgery in mind, especially surgery which would be particularly difficult to subject to patent, given both its idiosyncratic and often emergency nature.³⁴³ And yet it was *in* surgery that some of the most important innovations were taking place. It was generally left to non-medical commentators to raise the issue of how this problem should be addressed. Using the successes of anaesthesia and ovariectomy as key examples, the

³⁴¹ For more on 'orthodox' practitioner's financial and professional interests in patented *devices* see Ueyama (2010).

³⁴² Lori Loeb 'Doctors and Patent Medicine in Modern Britain : Professionalism and Consumerism,' *Albion: A Quarterly Journal of British Studies* 33, no.3 (2001) 404-425; 416-8.

³⁴³ Even today the surgical procedure continues to retain a unique position in patent law. In Britain no patent can be issued for any type of surgical process. Intellectual Property Office 'Examination Guidelines for Patent Applications relating to Medical Inventions,' (Intellectual Property Office, May 2013) 13-16 (<http://www.ipo.gov.uk/medicalguidelines.pdf>; accessed 8th August 2013).

influential Whig periodical *The Edinburgh Review*, in 1872, made the case for pecuniary reward for medical and surgical innovators, arguing that ‘some tangible evidence should be given that the nation appreciates the sacrifices daily and hourly made by those who devote their and energies and their talents to the promotion of its physical well-being.’³⁴⁴ The *Review* thus underscored the notion that medical and surgical innovations were, in spirit, the same as any other type of scientific or technological innovation and yet, when it came to awarding credit – both in terms of recognition and financially, they were treated completely differently. The *Review* also gloomily compared the situation in Britain to other countries in Europe where ‘honours and rewards from the nation await the men who are useful to the country.’³⁴⁵ In Britain medical men were hardly ever officially recognised for their work, Edward Jenner being a rare exception.³⁴⁶ In France, on the other hand, there was long tradition of promoting and rewarding innovative contributions to medicine and surgery with prizes, often in pecuniary form, and by the nineteenth century both the French Academy of Science and French Academy of Medicine offered prizes.³⁴⁷ In 1863 Eugene Koeberlé (1828-1915), at that point one of very few surgeons who performed ovariectomy in that country - the operation was still far from established there - was awarded 2,000 francs and the prestigious ‘prix Barbier’ by the French Academy of Medicine for having performed two successful ovariectomies.³⁴⁸

This lack of official recognition meant that in medicine and *particularly* surgery parallel cultures of ownership had to be constructed. The naming of procedures, instruments,

³⁴⁴ ‘Review Essay’ *Edinburgh Review, or critical journal* 136, no.278 (October 1872)488-515; 515.

³⁴⁵ *Ibid.* 514.

³⁴⁶ Edward Jenner received £30,000 from Parliament for his pioneering work in vaccination.

Anonymous, ‘The Theory of Professional Remuneration’ (8th February 1868). 122.

³⁴⁷ George Weisz, *The Medical Mandarins: the French Academy of Medicine in the Nineteenth and Early Twentieth Centuries* (Oxford: Oxford University Press, 1995) 98-103.

³⁴⁸ L.F Hollender, ‘Eugene Koeberlé (1828-1915): Père de la Chirurgie Moderne,’ *Annales de Chirurgie* 126, no. 6 (2001) 572-81: 574.

anatomical areas and diseases after innovators and discoverers was a practice that speedily gained ground in the mid-nineteenth century - although it was not unheard of in surgery before then³⁴⁹ - and operations were with relative frequency named after their claimed inventors. Gynaecological surgeons were some of the most common users of this tool of ownership. As most were fully aware, the field was flourishing rapidly as ovariectomy was improved and innovated upon and this made it difficult to keep track of credit claims. If an operation was named for a surgeon, either by himself or by his supporters, and that name was accepted by peers, at least some kind of legacy was secured; for while operations might be subject to technical changes, the surgeon's name was now indelibly fixed to its development. In gynaecological surgery Simpson's operation, Sims' operation, Peaslee's operation, Tait's flap-splitting operation and Battey's operation, the latter of which will be discussed in more detail below, all became part of regular surgical taxonomy. But with the variety of techniques abounding, eponyms could also be useful indicators of what exactly an operation entailed. In 1876 for example, the Italian obstetrician Edoardo Porro (1842-1902) had introduced to the world his new operation, which was something of a hybrid: a Caesarean Section which also involved removing the ovaries, fallopian tubes and uterus, something that quickly became known as Porro's Operation. In this case Porro himself had not named it, rather the name was thrust upon the operation to describe what had variously been called by British and American surgeons "Utero-ovarian amputation as a mode of completing the Casarean section'... 'Cesareanovaro-hysterectomy', 'Caesarean hysterovariotomy,' and 'Caesarean hysterovariotomy.'" ³⁵⁰ Surgical instruments were also often named for the surgeon who had designed them and then commissioned an instrument

³⁴⁹ In 1720 for example John Douglas (? – 1743) claimed to have introduced the supra-pubic lithotomy (or 'high' operation) into British surgical practice in a pamphlet that was rather proprietarily entitled *Lithotomia Douglassiana* (London: Thomas Woodward, 1720).

³⁵⁰ Clement Godson, 'Porro's Operation' *British Medical Journal* 1, no.1204 (January 26th, 1884) 142-159; 142.

maker to create them. Indeed this was a far more common method of intellectual ownership than patenting, which well-known surgeons at least, tended to avoid. This often led to a rather symbiotic relationship between surgeons and ‘their’ instruments: the most popular instruments tended to be those made by high status surgeons, whose names suggested the trustworthiness of the tool. The popularity of their instruments then went on to further secure the surgeon’s name and reputation. Various instruments devised by Thomas Spencer Wells and Isaac Baker Brown (of which more below) proved to be some of the most fashionable in use for ovariectomy and Wells in particular found another way to maintain visibility with his numerous instruments. In fact Wells’ artery forceps, used to prevent bleeding in ovariectomy cases, remains a staple of the operating theatre even today.

These methods were important but for surgeons they were not the most important. With the rise of the medical weekly in the early nineteenth century a new, highly public and easily accessible forum had emerged through which credit claims could be aired with ease; it was this that by the mid-decades would prove to be the most common way to assert credit and priority. In fact the weekly medical press seemed to open the floodgates for every type of dispute across the social spectrum of the medical community; in 1837, nine years after its inception, *The Lancet* even complained of this in an editorial. In dry tones that were typical of its style during the early decades, and particularly the admonishment by its editor Thomas Wakley of anything which hinted at the fripperies of quackery, the journal complained about doctors’ excessive interest in credit and priority; the journal noted that ‘the extent to which this evil has grown can only be fully appreciated by the conductors of the periodical press, or by those who follow with attention the debates of our medical and philosophical societies. Editor’s tables are continually laden with letters from gentlemen, who would enforce their

claim to ‘priority’ in some discovery.³⁵¹ While evidently this meant editors were most likely selective of which disputes they published, it certainly did not preclude them doing so and nor did possible associations with unsavoury self-interest stop practitioners airing their grievances publicly. Journals like *The Lancet* and *London Medical Gazette* and later the *British Medical Journal* were filled with reports and correspondences claiming and contesting priority and credit, including numerous high-profile physicians and surgeons. This was now the predominant way a dispute was publicly settled. In the next two sections I look at two highly public disputes regarding ovariectomy, which, in different ways, attest to the difficulties surgeons could face in receiving recognition for their innovations.

3.3 Clay’s Adhesion Clam and the Pedicle Dispute.

Ovariectomy was not just a part of a changing landscape of knowledge management; rather the way the operation was defined *depended* on questions of credit and priority. As we have seen in the previous chapter, between the 1830s and early 1860s, while controversy over ovariectomy’s justifiability raged, there were still only a relatively small number of surgeons performing it, or at least admitting to performing it. As a consequence, discussion often centred around the *personal* experiences of those few men such as Frederic Bird, Caesar Hawkins and Isaac Baker Brown who spoke out publicly and often emotively about their experiences with it. Thus the intensely personal accounts that Bland-Sutton would go on to admonish, had in fact been actively encouraged earlier in the century, when claiming personal attachment to an operation was less to do with credit - of which it would have been clearly churlish to claim given the continued high mortality of the operation - and more to do with assuming responsibility. Indeed during this time, such was the polarisation of views

³⁵¹ ‘Editorial,’ *The Lancet* 28, no. 726 (July 29th 1837) 669-70; 670.

about ovariectomy that a surgeon was just as likely to seek credit for *disowning* the operation than he would to 'owning' it – this was evidently a concern for Robert Liston who in a letter to James Miller in 1835 shortly after his move to London, expressed hopes that it would not be taken 'amiss that I have disclaimed abdominal surgery. I was first to do so.'³⁵²

Such was the gravity of performing the operation that the personal was already deeply embedded in every performance of ovariectomy. But it was only as mortality rates for the operation began to drop noticeably that surgeons began to use their personal experience of the operation to make public claims about individual innovations relating to the operation that they believed they had originated. It is no coincidence then that these began to occur in earnest in the 1860s at the very time in which the standing of the operation was improving considerably, making association with it by means of priority and credit, highly appealing rather than a potential risk. At first these emerged as outwardly minor, more technical claims. Nonetheless, the seriousness with which they were taken was testament to the status of the operation. They also revealed the relative ease with which ovariectomy could be deconstructed into the components that formed it – the surgical instruments used, the method of aftercare, the type of incision and so forth - all of which had the potential to be claimed as innovative in their own right. One part of the operation in particular, around which credit claims emerged, was the method of dividing the diseased ovary from the remaining pedicle and the subsequent treatment of the pedicle afterwards. This was a topic of great interest in the 1860s as a number of methods were experimented with including ligatures, clamps and cauteries. In 1862, the surgical community had had its attention drawn to a new instrument that was being used for ovariectomy by practitioners in the Midlands. The instrument, known as 'Clay's adhesion clam', had been devised by the Birmingham obstetrician John Clay

³⁵² Letter from Robert Liston to James Miller (May 26 1835) MS6085 (Wellcome Collection).

(1821-1894, John Clay was no relation to Charles Clay),³⁵³ who had attracted some attention two years previously having translated an extensive work by Austrian obstetrician Franz Kiwisch von Rotterau (1821-1894) on diseases of the ovaries. The 'clam' consisted of two blades which carefully secured the tissue for dividing, at the same time forming a small groove through which either a hot or cold cauterising iron could pass, rubbing or burning remaining adhesions. Clay had originally invented the instrument for cases where the ovarian tumour was connected by various adhesions to other parts of the body rather than being connected by the pedicle alone.³⁵⁴ However, as in principle the latter required a similar process of tissue division, Clay envisioned that the instrument would in due course be used to treat pedicles too.³⁵⁵

Clay's claim to this innovation initially seemed secure, he having made both the details and design of the instrument accessible by publishing both of them in the *Medical Times* in 1862. So too, did the success of the instrument seem assured, as it was quickly taken up and then modified by Isaac Baker Brown as a part of his routine method for dividing the pedicle, Brown carefully acknowledging that Clay had *originated* the instrument. But in 1866 credit claims surrounding the instrument once more emerged when Thomas Spencer Wells referred to Clay's priority in employing the two part method of compressing and cauterising the pedicle that the instrument enabled.³⁵⁶ Published in the *British Medical Journal*, his assertion

³⁵³ Even though John Clay, Professor of Midwifery at Queen's College, Cambridge was no relation to Charles Clay their similar names could be a cause for confusion. In fact John Clay first publicly addressed the issue of the clam's priority because of a lecture Brown had given describing the instrument as originated by a 'Dr. Clay,' leading John Clay to raise concerns that this would suggest the instrument had been created by Charles Clay. John Clay 'Ovariectomy: Clay's Adhesion Clam,' *British Medical Journal* 1, no.225 (April 22nd, 1865) 418-9.

³⁵⁴ Diseased ovaries were commonly found to be adhering to other organs and tissues such as the liver, stomach and omentum.

³⁵⁵ John Clay 'Adhesion Clam; a New Instrument For Aiding the Removal of Ovarian Tumours etc,' *Medical Times and Gazette* 1 (June 21st, 1862) 640-1.

³⁵⁶ Thomas Spencer Wells 'Clinical Remarks on Different Modes of Dealing with the Pedicle in Ovariectomy,' *British Medical Journal* 2, no.301 (October 6 1866) 377-9.

provoked a speedy and terse response from Brown, who in the intervening time had claimed credit for this particular development, arguing Clay had only suggested the *possible* use of the instrument for treating the pedicle. Brown appealed to the editor of the journal, dispensing of any pretence that this was about anything other than personal credit: ‘Sir, it is of little moment to me whether Mr. Spencer Wells chooses to ignore or to adopt a method of securing the pedicle which has been followed by most satisfactory results’, he wrote, ‘but I cannot allow him so to place the matter before my medical brethren as to lead them to infer that I had nothing whatever to do with it except as a successful operator.’³⁵⁷ It was an interesting choice of words from Brown, suggesting that successful deployment of the instrument was of little compensation compared to the grander prize of originality; success itself could not guarantee credit. John Clay reluctantly involved himself in the dispute the following week, stating that he had ‘a great objection to discuss personal matters in the public papers’ or ‘saying anything about ‘*due credit*’ but that in fact he *had* used the two part method to treat the pedicle.³⁵⁸ As was often the case, the dispute quietly died down somewhat unresolved; but such was the importance of the method of treating the pedicle in the operation that it remained a frequent focal point for innovation and high profile priority claims.³⁵⁹

³⁵⁷ Isaac Baker Brown ‘Management of the Pedicle in Ovariectomy,’ *British Medical Journal* 2, no.302 (October 13th 1866) 421.

³⁵⁸ John Clay ‘On Management of the Pedicle in Ovariectomy,’ *British Medical Journal* 2, no.303 (October 20th 1866) 449-50; 449.

³⁵⁹ This included James Marion Sims and Lawson Tait. Sims pioneered the use of silver wire ligatures for those ovariectomists who preferred to secure the pedicle stump within the peritoneal cavity, while Lawson Tait in the 1890s further innovated on Brown and Clay’s innovations by introducing an electric cautery-clamp which ran an electric current through the cautery, sufficiently ensuring the pedicle was ‘cooked’ and thus reducing the chance of haemorrhage. See James Marion Sims ‘Ovariectomy: Pedicle Secured by Silver-Wire Ligatures: Cure’ *British Medical Journal* 1, no.432 (April 10th 1869) 326; Robert Lawson Tait ‘The Evolution of the Surgical Treatment of the Broad Ligament Pedicle,’ *The Lancet* 147, no.3794 (May 16th 1896) 1338-1841).

Disputes like the one between Brown, Wells and Clay, may seem at first to be little more than jealous medical men splitting hairs over the minor details of innovation – exactly the kind of dispute on which present day conceptions of arrogant, Victorian medical men might easily lie. But they should also be read as testament to the *significance* even relatively minor credit claims could attain in an atmosphere where understandings both of the value of major surgical innovation like ovariectomy *and* innovation in general were being radically re-conceptualised. Disputes over the technical minutiae of the operation show also how intellectual ownership was multi-faceted, potentially awarded to many different components of the operation, in which suggestions, material inventions, their modifications, as well as operative performance, could all be owned.

3.4 ‘My Operations Were My Own’: The Dispute between Thomas Spencer Wells and Charles Clay

By far the most controversial credit dispute involving ovariectomy was that which occurred between Thomas Spencer Wells and the more well-known Clay, Charles Clay, in 1865. Charles Clay had, up until then, generally been considered Britain’s most successful ovariectomist. Nor had any significant challenge ever been made to his claim to have performed the first successful ovariectomy in England by major incision in 1842.³⁶⁰ Since then he had performed the operation consistently and by 1863 had had 104 cases, seventy-two of which had survived.³⁶¹ He was well-known both in Britain and abroad and attracted patients from all over the country although he performed his operations with little fanfare.

³⁶⁰ Some ascribed the first successful ovariectomy in *Britain* to John Lizars who, as we have seen, had successfully removed a diseased ovary in 1825 but probably not cured the patient whose other ovary was also diseased. Clay acknowledged Lizars and credited himself only as the first to have performed ovariectomy in *England*. See Charles Clay, ‘Dr. Clay’s Reply to Dr. Granville on Ovarian Extirpation,’ *Medical Times* 8, no. 204 (1843) 326–7.

³⁶¹ ‘Obstetrical Society of London: Wednesday March 4th,’ *The Lancet* 81, no.2067 (11th April 1863) 417; 417-9. This appears to have been a rare visit made by Clay to the Obstetrical Society of London.

The son of a corn merchant and Edinburgh educated, Charles Clay barely ever involved himself in the public debates over the justifiability of the operation, rarely appearing at society meetings and only occasionally publishing on his cases. His only professional teaching appointment had been brief spell as lecturer of diseases of women and in midwifery at St. Mary's Hospital in Manchester from which he resigned after a year.³⁶² Indeed he made no bones about his distaste for London medical society, remarking in private correspondence to James Young Simpson that 'the cockneys are a jealous set'.³⁶³

Thomas Spencer Wells, on the other hand, had chosen a very different path. Although he was not at pains to reveal it, he was from a relatively humble background. It was probably for this reason his early career consisted of a long spell in a poorly paid (but nonetheless financially secure) position as an assistant surgeon in the Royal Navy.³⁶⁴ Successful private practice after all, depended on connections which - if one was from a modest background - could take time to secure. Specialism eventually enabled Wells to make a name for himself in London medical society – first in ophthalmology, before in the late 1850s he secured the role as surgeon at the Samaritan Hospital for Women where his interest in ovariectomy developed. In short, Wells' interest in ovariectomy might be ascribed to calculated professional risks on his part: specialism brought with it the possibility of notoriety. But if practised successfully – especially in London – it could be a ticket to both eminence and financial riches. Buttressed by his other roles as an editor of the *Medical Times and Gazette*

³⁶² Peter D. Mohr, 'Clay, Charles (1801–1893)' *Oxford Dictionary of National Biography* (Oxford University Press, Sept 2004); online edn, Oct 2006 (<http://www.oxforddnb.com/view/article/5558>, accessed 4 May 2010). Mohr suggests this was due to 'the pressure from his private practice'.

³⁶³ Letter from Charles Clay to James Young Simpson (March 25th c.1848) GB 779 RCSEd JYS/37 (Royal College of Surgeons of Edinburgh). As was briefly explored in the last chapter, Clay's publications generally seemed to receive poor reviews in the London press which may have contributed to his dislike of the London medical world.

³⁶⁴ Jane Eliot Sewell, 'Wells, Sir Thomas Spencer, first baronet (1818–1897)' *Oxford Dictionary of National Biography* (Oxford University Press, 2004); online edn, Oct 2008. (<http://www.oxforddnb.com/view/article/29018>, accessed 9 Aug 2013).

and an active and visible member of London surgical society, Wells was by the early 1860s comfortably established and by the 1880s one of the most well-respected and well-paid surgeons in London.

As we have seen in the preceding chapter, it was his publication of *Diseases of the Ovaries: Their Diagnosis and Treatment*, in 1865, that sealed both the permanence of his reputation and for many, presented clear justification of ovariectomy. Published in response to the suspicions of opponents that failed cases were being concealed by surgeons, it was not long before the voluminous book was being depicted as a seminal publication that had definitively established ovariectomy as a 'legitimate' operation. In a rather gushing review in the *British Medical Journal*, Wells' book was readily accorded the accolade of 'the most important addition to the history of ovariectomy, which has yet been published' and was even an 'epoch in the History of Surgery, and is especially creditable to the Surgery of this Metropolis.'³⁶⁵ As this suggests, there were subtle geographical politics playing out here too; a later review appearing in the *Edinburgh Medical Journal*, while expressing admiration for Wells' work as a 'plain and truth-like record of achievement', was somewhat more cautious and careful to recognize the contributions of the non-London based Lizars and Clay as well as the Edinburgh based Thomas Keith, who was achieving even better results than Clay.³⁶⁶

The book was no doubt influential but Wells played an active role in encouraging the idea that his monograph was epoch-making. In his introductory words, he neatly compartmentalised his work into a new category of literature on ovariectomy that differentiated considerably from that which had come before. While careful to bestow due praise on successful colleagues past and present, it was to himself that he credited the unique

³⁶⁵ 'Review: Diseases of the Ovaries, Their Diagnosis and Treatment,' *British Medical Journal* 1, no. 214 (February 4th 1865): 117.

³⁶⁶ 'Review: Diseases of the Ovaries – Their Diagnosis and Treatment,' *Edinburgh Medical Journal* 13, no. 1 (1867): 565-568.

position of creator of what he would later term the ‘revival’ of ovariectomy and by doing so formed a divide both in chronology and technique between his work and what came before. Although not claiming to have originated the operation, he argued that it was *he* who had rescued it from sliding unpopularity in the 1850s, made it trustworthy and established its re-emergence. This narrative he would continually re-affirm in later speeches, re-creating what came before him as a dark phase in the operation’s existence, and making the new phase of the operation his own. Evidently this was a strong enough part of his personal and professional identity that he or his family wished it to be his epitaph – in Brompton cemetery lies Wells’ grave, upon which a one line epitaph is still just about visible: ‘he Revived the Operation of Ovariectomy’ [sic] (see **figure 4**).

Wells’ description of the world ovariectomists inhabited in the 1850s, if exaggerated, contained elements of truth of course: the disgrace of Frederic Bird seemed to lie in stark contrast to Wells’ very visible success and meticulous recording of cases. But in one respect his re-ordering of ovariectomy drew marked attention: his clear attempt to consign Charles Clay within this rather negative early history of ovariectomy. Consistent and successful, Charles Clay had clearly had far more success than any other ovariectomist; he had, in theory, much to his credit. Yet to Wells’ mind he was no more than another practitioner who had been unable to bring ovariectomy into respectability.

Wells never directly denied Clay’s claim to being the first successful performer of ovariectomy in Britain but instead sought to demonstrate how flimsy Clay’s reputation as an innovator was in the absence of any firm proof of his history with the operation. For Wells, full credit was denied to Clay because ‘his operations not being performed in an hospital before numerous professional witnesses and no connected series of cases being published,

his example had but little influence.³⁶⁷ Both contentions - that Clay's credit claims were negated by a lack of witnesses and also by a lack of published material - shot straight to the heart of contemporary notions of surgical knowledge-making. Surgical operations had long been public affairs and surgeons frequently witnessed the operations of peers as part of the pedagogical transmission of surgical knowledge, something to which Thomas Schlich has applied the Weberian idea of 'tacit knowledge' (of which surgery is arguably a prime example).³⁶⁸ But witnessing was also important in terms of verifying claims about operations and could be used either to support or repudiate a surgeon's account of a performance. This is of course, a well-documented aspect of the construction of accepted scientific knowledge. As Steven Shapin and Simon Schaffer argue in their now seminal work, the establishment of the experimental method in seventeenth-century science was in part based on the witnessing of experimental observations by multiple, credible individuals.³⁶⁹ Despite the often impromptu nature of surgery, the necessity of having multiple witnesses was at the very least highly desirable if not rigorously policed, especially for serious or novel operations. This was not lost on Clay who in a speedy and outraged response to the publication of Wells' book, published in *The Lancet*, wrote:

Every operation has been witnessed generally by *three* or *four* professional men; in many instances *seven* or eight; and in some instances as many as *ten* or eleven; I believe not less than from six to seven hundred in the whole, and nearly always very different persons from every part of Europe.³⁷⁰

³⁶⁷ Wells (1865) x.

³⁶⁸ Thomas Schlich *Surgery, Science and Industry: A Revolution in Fracture Care, 1950s-1990s* (Basingstoke; Palgrave Macmillan, 2002) 65.

³⁶⁹ Steven Shapin and Simon Schaffer *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 2011) 56-60.

³⁷⁰ Charles Clay, 'On Ovariectomy and Ovariectomists,' *The Lancet* 85, no. 2165 (25 February 1865): 200-2; 201.

Certainly Clay's personal notes and correspondence, although filled in rather sporadically, do note down numerous medical men who came to witness his operations, including foreign visitors.³⁷¹ But by the mid-decades, the literal act of witnessing was not always sufficient in asserting a credit claim. Increasingly the *type* of witness and *location* of the witnessing were coming under scrutiny. This reflected a changing geography of surgery, with the hospital increasingly regarded as the ideal location for surgical spectacle, in which many witnesses could conveniently gather, mutually reinforcing the truth of what was being observed. In 1847 one such spectacular had taken place at University College Hospital when Robert Liston had performed the first operation in Britain under ether. Liston 'posted a notice that the operation would take place and the theatre was filled with spectators.'³⁷² Highly public and bold performances like this projected an image of the surgical community as truthful and open, attributes which were greatly valued.

This ideal permitted Wells to be dismissive of Clay's witnesses despite the fact that Clay had worked hard to ensure as many people as possible saw his operations. Witnesses to his early operations were predominantly drawn from the local community of Manchester practitioners but that included well-known figures like the obstetrician Thomas Radford (1793-1881).³⁷³ Thus, as Clay himself acknowledged, Wells' allegations could only be an allusion to Clay's lack of hospital appointment. Without this role Clay was easily depicted as out of touch from

³⁷¹ Charles Clay's case book M/C Medical Collection – cat.9.11.54 MNB (Manchester Medical Collection, University of Manchester). Furthermore, Clay's notebooks suggest that at least one prominent foreign medical man – the American physician and later inventor William Francis Channing (1820-1901) visited Clay to observe his work; letter from William Channing to Charles Clay (August 14th 1855) no class mark (Manchester Medical Collection, University of Manchester).

³⁷² D'Arcy Power, 'Liston, Robert (1794–1847)', rev. Jean Loudon, *Oxford Dictionary of National Biography*, (Oxford University Press, 2004); (<http://www.oxforddnb.com/view/article/16772>, accessed 29 July 2013).

³⁷³ As is evidenced in Charles Clay, *Cases of Peritoneal Section for the Extirpation of Diseased Ovaria by the Large Incision from Sternum to Pubes* (London: Munro & Congreve, 1842). In the 1840s Radford became well-known as a leading champion of caesarean section in place of craniotomy.

modern conventions and out of sight from his peers. This was despite the fact that a sizeable percentage of ovariectomies continued to be performed in private dwellings – as Wells himself often did and indeed *general* hospitals were considered by many to be unsuitable for ovariectomy, as shall be discussed in the next chapter. Nonetheless, with Wells' possession of the wards of the Samaritan, and Clay residing in Manchester without any similar situation, Wells was in the stronger position in a surgical culture that was increasingly London-centric. The second aspect to Wells' criticism of Clay was the lack of recognized published material recounting Clay's cases. In a response to Clay's letter, Wells had defended this assertion, writing:

Half a page of tabulated matter is really all the information published of 50 of Dr. Clay's alleged cases, except some equally useless lists in one of Dr. R Lee's tables. Such meagre unauthenticated reports are absolutely worthless to the scientific inquirer; and, for all purposes of comparison with the results of other operators, Dr. Clay can only be admitted as having operated on 27 patients.³⁷⁴

For Wells then, despite Clay's assertion that he had performed the operation 111 times, only twenty-seven of these actually counted because these were the ones he had published. Insufficient detail regarding ovariectomists' experiences and the best way to present cases had of course, long been a concern. Surgeons needed to publish to ensure the rest of the surgical community could also, in a sense 'witness', their operations. But Wells' refusal to adequately credit Clay was indicative of notions once more changing as to the best way of representing surgical experience. Wells seemed to indicate that cases had to be connected together in a monograph form to ascertain credit. This idea dismayed Clay; 'surely Mr. Wells cannot mean to infer that to...*ensure credit* one must publish a book (too often only a

³⁷⁴ Spencer Wells 'Results of Ovariectomy,' *The Lancet* 85, no. 2167 (11 March 1865), 272.

polite advertisement of the author's whereabouts?)³⁷⁵ queried Clay, who argued instead that the larger circulation and readership of journals, brought it to a wider audience and thus was undoubtedly a better source of credit. Despite this seemingly logical argument, which factored in the enormous expansion of the medical press in the previous three decades, Clay had failed to acknowledge the growing importance of the monograph as a way of stabilising credit, and its part in fashioning surgeons into gentlemen and scientists who could compete with physicians in their eloquence. Text was being made equal to operating as an expression of surgical authorship.

Clay fought back against the insinuations in Wells' book in a series of letters to *The Lancet*, between February and April 1865, in which he set out to regain intellectual possession of the operation. For Wells priority was intimately tied up with publication and witnessing, but for Clay, credit was constructed differently and much more closely bound to originality and priority. For him, the fact he performed the *first* successful ovariectomy in the way *he* defined it (i.e. by major incision) and then performed it consistently was enough to define him as the first credible ovariectomist in England. 'If I had not been the pioneer for this operation in 1842, and for years after that, alone and unsupported,' Clay claimed, 'neither ovariectomy as an operation, nor Mr. Wells as an ovariectomist, would most probably be heard of at this time.'³⁷⁶ His words evoked the more romantic image of the isolated inventor in direct opposition to Wells' eminent society man.

Clay was thus attempting to use his professional isolation to his advantage, to show how he was the true innovator of the operation because he had practised it for years even while the profession had largely turned its back on him. In a rather contradictory fashion Clay encouraged readers to see both sameness and difference in his and Wells' operations. In his

³⁷⁵ Clay (25 February 1865) 201.

³⁷⁶ *Ibid.*

letters to *The Lancet* Clay at times represented Wells as a poor quality imitator, speaking almost nostalgically about the days gone by when ‘I had the operation to myself, when I had rather to originate than imitate plans of operation and after treatment’, the insinuation being that Wells has done the latter.³⁷⁷ Imitation, as the saying goes, could be the highest form of flattery, and if acknowledged correctly, was thoroughly acceptable behaviour for Victorian surgeons. Imitation was after all an integral part of learning through ‘tacit knowledge’, of literally learning and copying the manual techniques of more experienced surgeons, but it also had to be carefully negotiated. Historians have traditionally depicted Victorian culture as comfortable with the heavy use of replica and imitation in art and technology, often arguing that it was not until the twentieth century that Western society began to intensify the value of that which was ‘original’. But the Victorian take on imitation and authenticity was in fact more confused.³⁷⁸ Reproduction complicated conceptualisations of truth and reality. Indeed if the Great Exhibition marked a genuine Victorian ‘moment’ in its celebration of novelty and invention, it was also, as Clare Pettitt describes it, a ‘moment of crisis in the history of representation’, making visible as it did, the potential of new technology to generate mass reproduction.³⁷⁹ As wide-scale manufacturing, publishing and commercialism began their ascent, the effect was to destabilize notions of uniqueness in invention and innovation. Imitation of successful novelties was deemed essential but plagiarism and unacknowledged copying were an increasing concern.

This troubled surgeons too, and the nature of surgery often made it difficult to separate imitation from originality. Indeed at other times Clay emphasised the polarity in he and Wells’ methods, arguing that their operations were ‘two distinctly different modes of

³⁷⁷ Charles Clay, ‘The Ovariectomy Controversy,’ *The Lancet* 85, no.2171 (8 April 1865) 380.

³⁷⁸ See for example, David Wayne Thomas, ‘Replicas and Originality: Picturing Agency and Dante Gabriel Rossetti and Victorian Manchester,’ *Victorian Studies* 43, no.1 (2000) 67-102.

³⁷⁹ Clare Pettitt (2004) 85.

proceeding, if faithfully carried out', going on to detail the various differences between both forms of operation.³⁸⁰ Wells for example championed an incision of about four inches as the ideal way to open the abdomen, Clay made a larger one, sometimes up to twelve inches; Wells completed the operation by securing a clamp to the remaining pedicle, Clay used ligatures; Wells treated the pedicle external to the peritoneum, Clay kept it within, and so forth.³⁸¹ Clay's objective in doing this could not have been exclusively to prove one method was better than another in terms of mortality, or if he did, the point was weak, for Clay's and Wells' results were markedly similar by this point - both claimed around two thirds of their patients survived.³⁸² Rather, deconstructing their operating methods helped Clay differentiate between his work and Wells', and strengthened his claim that he had innovated his *own* operation by himself. This fluidity of definition was significant in establishing credit in a way that was unique to surgery. 'Ovariectomy' could only ever act as an umbrella term for numerous methods, modes and types of operative procedure, sometimes united only by the organ which was the surgical objective. What *made* an operation? Was it defined by its objective? Its method? Its outcome? To some degree every performance of ovariectomy was unique, dependent on the way the surgeon performed it, the patient who underwent it, and what happened once the abdomen had been opened, making claims of intellectual ownership problematic. We will re-visit these problems of definition in chapter five.

For Clay incision size in ovariectomy was a deal breaker definition and he used it to fend off claims during his dispute with Wells that others had successfully performed ovariectomy before him, particularly the 'minor' operations of William West and William Jeaffreson

³⁸⁰ Charles Clay 'On Ovariectomy and Ovariectomists,' *The Lancet* 85, no. 2166 (4 March 1865) 226-8; 227.

³⁸¹ *Ibid.*

³⁸² During their exchange of letters in *The Lancet* in 1865, Wells and Clay quibbled a great deal over the minutiae of their disclosed statistics – for instance, whether incomplete or slightly different operations should be included or not – however, both admitted broadly similar success rates.

which Clay insisted were an entirely different type of operation from his. This division had been encouraged by Jeaffreson who, perhaps as a way of ensuring his *own* priority claim, in the wake of others beginning to practise the ‘major’ operation, described himself in a letter in 1843 to *The Lancet* as ‘the *originator* of the *minor* operation’.³⁸³ This was shortly before the term ‘ovariotomy’ came into general use, yet the division between the two operations would remain necessary to credit claims even after the coining of the term.

³⁸³ William Jeaffreson, ‘Mr Jeaffreson’s Operation for Ovarian Dropsy,’ *The Lancet* 41, no. 1055 (18 November 1843): 217.



Fig. 4. Grave of Thomas Spencer Wells, Brompton Cemetery

A testament to Wells' carefully sculpted reputation as the man who made ovariectomy respectable, his epitaph reads "He Revived the Operation of Ovariectomy" [sic]. (Photograph by John Mathew, 2011).

The dispute between Clay and Wells descended into further bitterness. Wells was angered, particularly by his opponent's claim that Wells had taken on a case that Clay had rejected on the grounds of the tumour being malignant, and therefore inoperable. Clay had accused Wells of knowing this to be the case, yet performing the operation so that he would receive the large fee that was being offered. The patient died a few hours later. Raising the extremely delicate question of fees was a step too far on Clay's part, and Wells took legal action directed at this particular accusation, forcing Clay to make a public apology and to

acknowledge that Wells knew nothing about the patient's previous visit to Clay. Even *The Lancet* came in for criticism from the *British Medical Journal* for allowing Clay the space to publicise this particular grievance against Wells.³⁸⁴

This unfortunate episode of the dispute did prevent other claims arising. Like Clay, many surgeons resisted Wells' conception of ovariectomy before the 1860s as unworthy of credit. In the 1870s an attempt was made to resurrect the name of Frederic Bird, the memories of whose earlier work in the field had been scuppered somewhat by the controversy surrounding the statistics of his operations. A colleague of Bird's, writing to *The British Medical Journal* in 1873, suggested that Bird was in danger of succumbing to the same fate as Charles Clay in being one of the ignored but true pioneers of the operation. His claim was not met with success; mirroring the problems of Clay, the journal's demands for the claim to be substantiated with statistics from Bird's work could not be met.³⁸⁵

The significance of reviving older priority claims were perhaps most obviously relayed in a letter the Kent physician John Gorham sent to *The Lancet* in 1874 in which he reminded readers of the role played by William West, one of the pioneers of the so-called 'minor operation'. Gorham was keen to highlight West's all but forgotten role in the evolution of ovarian surgery as part of an appeal on behalf of the now deceased surgeon's daughter who he described as living in straitened circumstances. Gorham played on the financial successes of present-day practitioners of the operation – 'I believe that some members of the profession are receiving as much as one hundred guineas for a single operation for ovariectomy' he wrote – to request financial assistance for West's daughter: 'may it not be fair to ask these gentlemen to contribute a trifle to the daughter of one who stood foremost in

³⁸⁴ 'Freedom V License,' *British Medical Journal* 2, no.259 (December 16th1865) 637-638.

³⁸⁵ Jonathan Potter 'The History of Ovariectomy,' *British Medical Journal* 2, no.678 (27th December1873) 770-771.

introducing this operation to the metropolis of London, and so to the whole world?'³⁸⁶

Throughout the century numerous other claims would arise, seeking credit for surgeons now deceased and in danger of being forgotten. Most of these claims would fall on deaf ears.³⁸⁷

The dispute between Clay and Wells would continue virtually until their deaths (Clay died in 1893, Wells in 1897). In 1880, the public debate between the two erupted again, this time – rather ironically given their previous position - in the pages of the *British Medical Journal*.

Clay had been perturbed by an editorial which celebrated Wells' performance of his thousandth ovariectomy, and which again alluded to the fact that Clay's operations had failed to win the confidence of the profession.³⁸⁸ Clay responded by sending another letter reiterating once more his claim to be the true originator of ovariectomy in Britain. Aside from repeating the points he had already made, and again pointing out specific elements of the operation that were being attributed to Wells rather than himself (in particular including the peritoneum in the sutures that closed the wound), he also contributed additional points to his claim for the operation. Fundamental this time around was his argument that the term 'ovariectomy' had been coined by James Young Simpson specifically for Clay's operation. The etymological link was significant. Nomenclature, as we have seen was a potential way in which an operation's characteristics could be summarised, defined and intimately linked with an innovator and Clay quoted correspondence from Simpson which seemed to clearly indicate Clay's claim to ownership, Simpson writing 'my dear Dr. Clay, the operation is your own; none can rob you of your claim. Call it ovariectomy, not peritoneal section. Your

³⁸⁶ John Gorham 'On the Revival of Ovariectomy,' *The Lancet* 103, no.2639 (March 28th, 1874) 440-1; 441.

³⁸⁷ Samuel Lane's nephew wrote to the *British Medical Journal* in 1884 to remind readers that his uncle performed the first successful ovariectomy of London, and Heywood Smith that his father Protheroe Smith performed successful ovariectomy even before Charles Clay. See James R Lane 'The Revival of Ovariectomy,' *British Medical Journal* 2, no.1250 (December 13th 1884) 1212 and Heywood Smith 'The Early History of Ovariectomy,' *The Lancet* 142, no.3658 (October 7th 1893) 898.

³⁸⁸ 'Ovariectomy,' *British Medical Journal* 1, no.1016 (June 19th, 1880) 931-932.

success is brilliant.’ Clay used this to again assert his direct ownership over the operation: ‘let me remind you, my operations in this country were my own’ he wrote, ‘I had no pilot to guide me, no one to assist me, in my difficult task.’³⁸⁹

This was the last time Clay publicly involved himself in the dispute. Ultimately, the outcome was a strengthening of Wells’ grip upon the legacy of ovariectomy and for the most part the ‘ovariectomy controversy’, as it came to be known, did little to dent Wells position of eminence. Nonetheless his rather aggressive dismantling of Clay’s legacy did not go unnoticed. In the 1870s the Birmingham based surgeon Robert Lawson Tait (1845-1899), who was making a name for himself both as a successful performer of ovariectomy and a stern critic of what he saw as the highly elitist world of London surgery, took up Clay’s cause. Tait wrote numerous letters condemning Wells’ behaviour towards the Manchester surgeon, in one arguing that ‘if it is to be contended that, from the time of McDowell till 1857, there was nothing being done in ovariectomy and that the revival took place in that year at the hands of Spencer Wells, I say it may as well be claimed for him that he revived the moon.’³⁹⁰ Tait was a firebrand, always happy to help pull apart the reputation of a London surgeon, but he was also astute and a well-respected surgeon and his words would not have fallen on deaf ears. Nor was he alone in believing that Wells received a disproportionate amount of credit. Wells was accused in at least one other situation - to being the first to perform successful ovariectomy in Ireland - of making a false priority claim.³⁹¹ These insinuations would come back to haunt him in the late 1870s when he became a target for anti-vivisectionists (he was an outspoken supporter of vivisection), who published a derogatory pamphlet on Wells which contained within it an account of the dubiousness of

³⁸⁹ Charles Clay ‘History of Ovariectomy’ *British Medical Journal* 2, no.1020 (17th July 1880) 19-110; 110.

³⁹⁰ Lawson Tait ‘The Revival of Ovariectomy,’ *British Medical Journal* 2, no.1249 (December 6th 1884) 1165.

³⁹¹ ‘Dublin,’ *The Lancet* 82, no. 2098 (November 14th, 1863) 578-579.

some of his claims for credit.³⁹² Clay's obituary in *The Lancet* suggested that Tait's defence of his work gave him some peace at the end of his life. In what could only have been an allusion to Wells, who had been a surgeon to the Royal Household since 1863 and was created a baronet in 1883, Clay was in the habit of telling friends near the end of his life that 'some men have got baronetcies, some wealth, some positions at Court, but I have got peace of mind.'³⁹³

3.5 A British Innovation?

The identity and intellectual property of ovariectomy was not only understood in terms of individual practitioners. Less well-documented is the way British surgeons also sought to definitively establish ovariectomy as a British operation. This lay in stark contradiction to the rhetoric of universality accompanying the rapidly expanding field of nineteenth-century science and medicine which repudiated possessiveness of knowledge; as historian of geography David N Livingstone has pointed out, 'credible knowledge, we assume, does not bear the marks of the provincial'.³⁹⁴ But in the mid-nineteenth century, the diffusion of new knowledge across national boundaries was not just an ideal, for some it was simply *inevitable*. The French author Edmund About (1828-1885), paraphrased in the popular British periodical *The New Monthly Magazine*, depicted ovariectomy as one of a number of far-reaching novelties that had quickly self-perpetuated and snaked across Europe:

One of the characteristic features of the time we live in is the almost lightning rapidity with which progress develops itself, completes itself, spreads and bears its fruit to the extremity of the globe...in the present day, if a person makes a discovery in science in

³⁹² George Jesse, *Correspondence of George Jesse with T.S Wells and Other Medical Men on Ovariectomy* (London: Pickering & Co, 1882).

³⁹³ 'Obituary,' *The Lancet* 142, no. 3657(30 September 1893) 846; 845-846.

³⁹⁴ David N. Livingstone, *Putting Science In Its Place: Geographies of Scientific Knowledge* (Chicago: The University of Chicago Press, 2003) 1.

one country it is simultaneously effected in two or three others. Witness photography, ovariectomy, new planets, chloroform, new metallic bases in the spectrum, and the improvements in the sewing machine.³⁹⁵

As with British-centred credit disputes however, the necessity of imitation and the speed of progress which seemed to characterise modern society did not preclude resistance to it, and on the Britishness of ovariectomy there was for some, little question. ‘Ovariectomy is an operation of British origin, and it is to the labour of British surgeons that its subsequent progress is chiefly due’,³⁹⁶ proclaimed Spencer Wells in 1863. Retaining British identity and authorship of the operation was becoming increasingly important in the face of French surgeons beginning to take up the operation in the mid decades. Having largely abandoned thoughts of the operation’s possibility during the early nineteenth century, French surgeons such as Auguste Nélaton (1807-1873) and Eugene Koeberlé were beginning to make the operation respectable. This left British surgeons with mixed feelings. Some welcomed it, seeing it as additional armour for those fighting still in the 1860s to definitively establish the operation as respectable. But it also revealed a possessiveness of the British, not only over ovariectomy but of a general reputation for surgical pre-eminence. In a column in 1864, *The Lancet* happily characterised French surgeons as smug and delusional, cattily contending that ‘the pretensions of the French school of surgery to a distinct pre-eminence have been maintained by themselves with a self-satisfaction and an apparent confidence which have always been regarded in this country with a secret and placid amusement.’³⁹⁷ As the British

³⁹⁵ ‘Progress in a French Point of View’ *New Monthly Magazine* 131, no.523 (1864) 253-269; 255.

³⁹⁶ Thomas Spencer Wells, ‘On the History and Progress of Ovariectomy in Great Britain,’ *Medico-Chirurgical Transactions* 46 (1863): 33-55; 36.

³⁹⁷ ‘Medical Annotations: A Laurel for English Surgeons,’” *The Lancet* 79, no. 2001 (4th January 1862): 12.

saw it, the French may have once led the way in surgery but this was certainly no longer the case and it was not *their* surgeons who had risked their reputation on ovariotomy.

Integral to this viewpoint was the idea that the French were frequently in the habit of imitating British surgical practices without giving their British counterparts full credit and it was not long before gentle ribbing of the French turned to outright disdain, especially in their taking up of ovariotomy: the *British Medical Journal* in 1864 described Koeberlé as ‘merely a copyist of the English in the matter of ovariotomy.’³⁹⁸ The year before the journal had also poured scorn on the prize and the reward of 2,000 francs Koeberlé had received as ‘official’ recognition of two successful cases of ovariotomy. Using the occasion to undermine French surgeons, the journal scoffed that ‘it would be rather an expensive undertaking for the French Academy to reward our successful ovariotomists at the same rate as M. Koeberlé’, reminding readers of the greater prolificacy of ovariotomists on the *British* side of the channel. By the time Koeberlé wrote the first French language monograph on the operation, *L’Ovariectomie*, in 1865, it was generally regarded as a damp squib by British journals. The book, aside from the accompanying raw material of the cases, was perceived to draw almost wholly on the opinions and debates which had already been discussed for years in Britain.³⁹⁹

This nationalist rhetoric was not always one way; reports from the Parisian correspondent in *The Lancet* keenly asserted that there were in fact many French surgeons who objected to attempts to introduce ovariotomy into French surgery.⁴⁰⁰ What is more the defensiveness of British surgeons seems to have been somewhat unfounded: the French were generally happy to accept the national identity of the operation which they often described as a *mode a*

³⁹⁸ ‘The Week,’ *British Medical Journal* 2, no. 201 (November 5th 1864) 528.

³⁹⁹ ‘Reviews and Notices of Books,’ *British Medical Journal* 2, no. 239 (July 29th 1865)121.

⁴⁰⁰ See for example: ‘The Week,’ *British Medical Journal* 1, no. 55 (January 18 1862) 69.

l'Anglaise, despite the fact that it was from their own country that the first suggestion of extirpating diseased ovaries had sprung.⁴⁰¹ Rather, the defensiveness of British surgeons betrayed wider concerns about the international life of British innovations. While Graeme Gooday and others have critiqued oversimplified characterizations of the 1860s as a period of rapid industrial decline,⁴⁰² in Britain the prospect of new international competition in science and industry *was* looming, particularly in the form of Germany and America, undermining the country's hitherto unrivalled dominance in industrial development. The *Exposition Universelle* in Paris in 1867, in particular, seemed to crystallise fears of competition and was regarded with suspicion by some British observers concerned that successful British inventions ran the risk of being copied by foreign inventors and then re-imported back to Britain under the guise of a different nationality.⁴⁰³ These concerns infiltrated the surgical profession. In 1867, the Birmingham surgeon Sampson Gamgee (1828-1886) set off on a two week holiday to Paris which took in both the Exposition as well as providing him the opportunity to investigate the state of surgery in the city. He reported his findings to *The Lancet*: 'many are crowding to Paris, and wondering at the progress made by the French nation in a variety of manufacturing and industrial departments, in which not many years ago, we enjoyed a clear, and scarcely questioned supremacy.'⁴⁰⁴ His investigation of French surgery was likewise infused with the language of comparison as he diplomatically negotiated his way through similar and contrasting aspects of French and British surgery. Gamgee depicted French surgeons as better organised and well-educated –

⁴⁰¹ Jean Delaporte 'Hydropsie Enkistée de l'Ovarie Attaquée Par Incision,' *Mémoires de l'Académie Royale de Chirurgie* 2 (1753) 455.

⁴⁰² Graeme Gooday 'Lies, Damned Lies and Declinism: Lyon Playfair, the Paris 1867 Exhibition and the Contested Rhetorics of Scientific Education and industrial Performance,' in *The Golden Age: Essays in British Social and Economic History, 1850-1870*, ed. Ian Inkster, 105-20 (Aldershot: Ashgate Publishing Lt, 2000) 120.

⁴⁰³ Gooday (2000) 114. English patent law would be unable protect against this.

⁴⁰⁴ Sampson Gamgee, 'The Present State of Surgery in Paris,' *The Lancet* 90, no. 2296 (August 31st, 1867): 273; 273-4.

indeed perhaps *too* well-educated, at the cost of their practical abilities. British surgeons on the other hand, he viewed as practically-minded *doers*, who, in general, were more fearless as operators. Gamgee stretched out this analogy to British industry as a whole; ‘The engine-driver on a French railway is often a good pupil of the *École des Arts et Métiers*, knows a great deal about physics, and every now and then is nearly as good a mathematician as he is a mechanic’ he wrote, ‘but he would be sorely puzzled to match one of our men in piloting the Holyhead mail at fifty miles an hour through a November fog.’⁴⁰⁵ It was these uniquely British characteristics of courage and persistence that, for Gamgee, defined British surgeons and enabled them to retain their standing even in the face of national competition.

The relationship between the British and American surgeons was of a rather different nature to that between the French and British. The kinship British surgeons felt towards their American counterparts was strong and based on an assumption of shared style; ‘the bent of the mind of the American surgeon is, like ours, practical rather than scientific’⁴⁰⁶ mused the surgeon John Erichsen (1818-1896) after a trip to America in 1874. It was not unknown for priority disputes to arise. As Jean Bowra has noted, the partial excision of an ovary by Scottish surgeon Robert Houstoun in 1701, was, by the late nineteenth century, being claimed by some British surgeons to have been the first ovariectomy rather than Ephraim McDowell’s procedure in 1809 and Lawson Tait, in particular, championed this version of ovariectomy’s history.⁴⁰⁷ But for the most part, McDowell’s contribution was easily slotted into the operation’s ‘British’ identity because McDowell had been educated in Edinburgh,

⁴⁰⁵ Sampson Gamgee, ‘The Present State of Surgery in Paris,’ *The Lancet* 90, no. 2313 (December 28th, 1867): 799-802; 802.

⁴⁰⁶ John Erichsen, ‘Impressions of American Surgery,’ *The Lancet* 104, no. 2673 (November 21st, 1874): 717-20; 717.

⁴⁰⁷ Jean Bowra, ‘Making a Man A Great Man: Ephraim McDowell, Ovariectomy and History’ (<http://eprints.qut.edu.au/3454/1/3454.pdf>) (Paper presented to the Social Change in the 21st Century Conference, Centre for Social Change Research, Queensland University of Technology, 28 October 2005) 1-9; 4.

allowing the operation's innovation to still be conceived of as, philosophically speaking at least, British. This was in stark contrast to the debates on ovarian surgery in eighteenth-century France, which were either sufficiently unknown or sufficiently inconvenient that they were not present in most early British histories of the operation.⁴⁰⁸

While there were a small number of active ovariologists in America in the mid-decades, in general American societies and journals were content to let the British lead on the topic, periodicals often publishing articles which simply recounted discussions of the operation's justifiability from the other side of the Atlantic.⁴⁰⁹ As John Burnham has identified, it was not really until the latter part of the century that American practitioners began to forge their own sense of professional culture distinct from British medicine.⁴¹⁰ But as American surgeons began to find their voice, some expressed concern about their lack of contribution to the operation's development, lamenting that British surgeons had been quicker to accept the operation than their American counterparts.⁴¹¹ America had been able to maintain its priority to the 'first' ovariectomy at least, but its surgeons had not built upon this with further innovation.

For the British surgeons, what happened in America in regards to the operation had made little impact on their own debates regarding justifiability. But in the 1870s that started to change. The work of James Marion Sims (1813-1883), in particular, put American gynaecology on the map. Sims was a well-known figure on both sides of the Atlantic, having

⁴⁰⁸ For example Thomas Spencer Wells, 'An Inaugural Address on the Revival of Ovariectomy, and its Influences on Modern Surgery' *The Lancet* 124, no.3194 (15th November 1884) 857-860; esp.857.

⁴⁰⁹ Randolph E. Peaslee, *Ovarian Tumors: Their Pathology, Diagnosis and Treatment, Especially by Ovariectomy* (New York; D. Appleton, 1872) 247. In a situation akin to that of Charles Clay, Philadelphia surgeon Washington Atlee (1808-1878) was the only surgeon performing the operation with consistency during the 1850s and 1860s but with little publication of his operations.

⁴¹⁰ John Burnham 'The *British Medical Journal* in America' in *Medical Journals and Medical Knowledge: Historical Essays*, ed. William F. Bynum, Stephen Lock and Roy Porter (London and New York; Routledge, 1992), 165-187; 166.

⁴¹¹ Peaslee (1872) 250.

spent periods working in London and Paris performing his operation for vesico-vaginal fistula, It was Sims who at the end of 1877 introduced to Britain a procedure which he called ‘Battey’s operation’ after its claimed originator, Georgia surgeon, Robert Battey (1828-1895). Battey’s operation has become rather notorious in the history of medicine. The operation involved the removal of both ovaries as a means of curing various diseases, from localised conditions like amenorrhoea and dysmenorrhoea to the non-localised such as chronic rheumatism and even hysteria and insanity. This led many to quickly condemn the pathological basis of the operation as worryingly vague and its performance upon women for mental disorders – which though infrequent, certainly did occur in Britain - an unseemly cross-pollination of alienism and surgery.⁴¹² Battey had been performing the operation since the early 1870s but usually under the name ‘normal ovariectomy’, a reference to his belief that non-diseased ‘normal’ ovaries could be the cause of disease elsewhere in the body. He had chosen it also because he believed his method to be a ‘truer’ ovariectomy than that which was usually performed, which he described as ‘irregular ovariectomy’. As he rather audaciously described it, ‘it was I who had really and truly done an ovariectomy rather than Dr. Ephraim McDowell.’⁴¹³ On this understanding of the operation Battey viewed himself as an original pioneer of ovariectomy.

Unfortunately for Battey the term ‘normal ovariectomy’ was not understood by everyone else in the way he wished it to be. For other medical men the suggestion that perfectly normal ovaries were being removed did nothing to help Battey’s cause. It was partly for this reason that the operation was re-named by Battey and Sims in the late 1870s. But it was also a convenient opportunity to re-brand the operation in a manner that would bring future glory

⁴¹² Most surgeons who performed ‘Battey’s Operation’ in England claimed however, to do so for gynaecological disorders like dysmenorrhoea.

⁴¹³ Lawrence D. Longo, ‘The Rise and Fall of Battey’s operation: A Fashion in Surgery,’ *Bulletin of the History of Medicine* 53, no. 2 (1979): 244-67; 249.

both to Battey and America, for by naming it after him the home-grown nature of the operation was asserted. In 1877 Marion Sims urged European surgeons to ‘unite with us in America in giving it the name of the man who originated the operation.’⁴¹⁴ Sims no doubt believed he did Battey great service by naming the operation for him and the former’s high standing in the profession meant that his decreeing it ‘Battey’s operation’ would not be ignored. Certainly the operation was American in a way ‘ovariotomy’ never quite was. British doctors at times described the procedure simply as the ‘American’ operation, and American operators, in general were more enthusiastic about radical ovarian procedures like Battey’s than their British counterparts.⁴¹⁵

The uniqueness of Battey’s operation was contested once it reached the international stage. Surgeons across the globe, after all, were using the improving outcomes of ovarian surgery to further innovate in the area and by the end of the decade it was apparent that German gynaecologist Alfred Hegar (1830-1914) had begun performing similar operations as Battey at around the same time.⁴¹⁶ But more often than not Battey’s ownership of the operation was acknowledged by British surgeons, usually because they wished to distance themselves from what was, from its inception, a controversial procedure. This was especially so in the case of Robert Lawson Tait. His own procedure, ‘Tait’s operation’, involved the removal of the ovaries and fallopian tubes to cure inflammatory disease and, although Tait always denied using ovarian surgery to treat mental afflictions, his operation was similar enough to Battey’s that Tait repeatedly felt the need to emphasise their difference: ‘what Dr. Battey has advocated and practised, I, for one, practically have never performed’ he wrote to the *British*

⁴¹⁴ James Marion Sims, ‘Remarks on Battey’s Operation,’ *British Medical Journal* 2, no. 877 (December 29th 1877) 916-8; 918.

⁴¹⁵ Alexander Russell Simpson ‘History of a Case of Double Oophorectomy, Or Battey’s Operation: With Remarks,’ *British Medical Journal* 1, no. 960 (May 24, 1879) 763-766.

⁴¹⁶ Alfred Hegar, Robert Battey and Thomas Spencer Wells ‘Castration for Nervous and Mental Diseases: A Symposium,’ *American Journal of Medical Sciences* 184 (October 1886) 455-90.

Medical Journal.⁴¹⁷ Soon after, the procedure of removing ovaries for reasons other than for tumours would be increasingly fixed to a much more vague term: ‘oöphorectomy’, which seemed to distance the operation from any specific objective. Battey’s name and operation would go down in history, but not for the reasons he hoped; as ovarian operations for mental diseases increasingly fell out of favour in Britain, it was this particular aspect of the operation’s use with which Battey was increasingly associated. Battey had gambled his name in the hope that personal association with his innovation would bring enduring fame. Instead it brought enduring notoriety.

Was the nationality of an operation determined by its country of origin or the country where it had been made respectable? How could a country claim ownership of an operation? *Why* did they need to claim ownership? Broadly speaking ovariectomy was identified as a British invention; British practitioners succeeded in making it so through consistently publicising their contribution to the speciality and by calling into question the contributions of other countries. Defensive and possessive in equal parts, British ovariectomists were suspicious both of the alleged imitations of the French and the deviations of the Americans, both of which potentially threatened the carefully cultivated identity of ovariectomy within Britain. Thus, on the international stage, retaining the Britishness of the operation was essential in the face of competition from other nations.

3.6 Conclusion

Ovariectomy is generally understood as a milestone innovation, but what has not been made explicit is how surgeons *managed* the vast proliferation of knowledge that was being generated, and how this knowledge was then *possessed*. At first glance there may seem little

⁴¹⁷ Lawson Tait, ‘Removal of the Uterine Appendages,’ *British Medical Journal* 2, no. 1125 (July 22, 1882) 153. For more on Tait’s operation see Morantz-Sanchez (1999) esp.100.

to connect ovariectomy with intellectual ownership. After all, medicine and surgery played a lesser role within the wider societal debates on patenting and credit occurring at the time, and no patenting existed in relation to the operation, even in relation to surgical instruments. Yet on closer inspection, the surgical knowledge and practice that constituted ‘ovariectomy’ is revealed to be a site of tension, a place where the question of possession was of major concern to the actors involved. The chronology of these disputes also reveals how they signalled the ostensible establishment of the operation; it was only in the 1860s as ovariectomy came to be viewed as justifiable by the majority of the profession as an acceptable practice that credit claims around it proliferated. In an atmosphere of heightened awareness about the role of the inventor in society, ovariectomists and those with an interest in the operation used appropriations of intellectual ownership to construct the rules of the game for receiving credit in surgery. Being the first to perform an operation – even being the first to *consistently* perform an operation - did not necessarily secure one’s legacy. Nor was credit an inevitable consequence of innovation. Rather, to ensure credit one had to *maintain* it – in particular, one had to remain visible: publishing - preferably monographs - witnessing and the naming of operations and instruments were all acceptable ways in which this could be achieved. But maintaining ownership was as much to do with a surgeon’s status and location, as Charles Clay was only too painfully aware.

The need to answer the ownership question was crucial and not only for personal gain. It brought order to the operation and it allowed surgeons to re-shape the narrative of ovariectomy, imbuing it with a desired sense of teleology, a national identity, as well as its own heroes. But it was also difficult to do just this. At the heart of the matter was the problem of definition. Debates over the nuances of the operation highlighted that a procedure was the sum of many parts – the size of the incision made, the method of treating the pedicle, the type of instrument used – all of which could have intellectual ownership established around them and all of which could be used to deconstruct the operation’s

identity and to question other people's claims. The need for definition and classification were fundamental to bringing respectability to the operation – both while it was being established and later in the century when new forms of ovarian surgery began to flourish. Yet how individual practices of the operation related to collective identity was not always easy to reconcile; operations had a tendency to be highly individualistic, moulded by the uniqueness of the operator and patient. In ovariectomy especially, where there was so often disagreement about what the best mode of performance was, the operation was malleable.

Intellectual ownership in medical practice has generally been integrated into broader narratives of science and technology; but knowledge production in surgery frequently defied 'scientific' organization and management. The idea of surgery as both an art and a science was often evoked as a positive characteristic of the profession, yet these dual components were sources of major tension when it came to reconciling individualised practices of surgeons with fixed definitions of operations. 'People...forget that operative surgery is an art [emphasis in original]' wrote the surgeon and lithotomist Sir Henry Thompson (1820-1904) to Ernest Hart (1835-1898), editor of the *British Medical Journal* in 1886, 'the personality of the artist should be largely taken into account'.⁴¹⁸ Practitioners of ovarian surgery were keen to have their personal contributions to the field recognized but, as Bland-Sutton's comments implied, there was often a fine line between attaining sufficient credit for their work and potential accusations of egoism.

⁴¹⁸ Letter from Sir Henry Thompson to Ernest Hart (August 29th 1886) MS 5424/13 (Wellcome Collection).

Chapter Four

Business

4.1 Introduction

The previous chapter examined how those who performed ovariectomy increasingly strived to have their personal role in the development of that operation credited to them. This chapter extends the theme of personal recognition by considering more closely the financial aspects involved in performing the operation and in particular its financial rewards. The economic implications of the operation should not be considered an addendum to the process of its innovation; rather cost was perhaps the element to its innovation which had to be most carefully negotiated. Ovariectomy existed in a medical culture where there were two competing perspectives of practitioners: one that they were impartial providers of the best possible care for their patients, motivated primarily by humane concerns; the other that they were men of trade, profiting financially from that care. This dichotomy was perhaps first explicitly clarified in Britain by the Scottish physician John Gregory's popular Baconian exultation of medical knowledge-making, *Observations on the Duties and Offices of a Physician* (1770). Bacon noted that medicine could be 'considered either as an art the most beneficial and important to mankind, or as a trade by which a considerable body of men gain their subsistence.'⁴¹⁹ While Gregory (1724-1773) did not see these two identities as necessarily incompatible, his influential work keenly asserted that medical practitioners were

⁴¹⁹ John Gregory *Observations on the Duties and Offices of a Physician, and on the Method of Prosecuting Enquiries in Philosophy* (London: W. Strahan and T. Cadell, 1770) 9.

expected to prioritise ‘the life and health of the human species’ above all else. As Gregory went on: ‘the dignity of such a profession can never be supported by means that are inconsistent with its ultimate object, and that can only tend to swell the pride, and fill the pockets of a few individuals.’⁴²⁰

As historians such as Roy Porter have evocatively depicted it, this deep-seated medical morality did not preclude a bustling medical world in eighteenth-century Britain in which physicians competed with surgeons, apothecaries, midwives, quacks, tooth-pullers, bone-setters and a myriad of others for the patronage of patients. By this logic, it has been argued, practitioners of all kinds were on level pegging in terms of their potential for profit making, regardless of their professional or educational status.⁴²¹ As was briefly discussed in the preceding chapter, by the nineteenth century, rhetorical strategies were increasingly being employed by doctors to prise apart medicine from any notion of it being motivated by personal gain, something that was predominantly achieved by qualified practitioners’ stressing a distinction between themselves and ‘unorthodox’ uneducated, practitioners. As Michael Brown has put it in his recent monograph, ‘by the mid-nineteenth century, English medicine and its associated cultural forms had been undoubtedly and irrevocably transformed’.⁴²² These ‘cultural forms’ included a re-alignment of what we might term medico-economic morality, something that was part of a wider move in the early decades of

⁴²⁰ *Ibid.* 40.

⁴²¹ Roy Porter *Health for Sale: Quackery in England 1660 - 1850* (Manchester & New York: Manchester University Press, 1989). Porter famously described this as ‘the medical marketplace’, a term still frequently used by historians although increasingly subject to criticism. As Mark Jenner and Patrick Wallis have argued in their revisionary volume of essays addressing the ‘medical marketplace’, the term has come to have a variety of meanings, referring both to the specific characteristics of eighteenth-century medicine but also more generally to the material ‘reality’ of all medicine. The expansive use of the term, they argue, has increasingly emptied it of historical meaning. Mark Jenner and Patrick Wallis ‘The Medical Marketplace’ in *Medicine and the Market in England and its Colonies, c.1450-c.1850* ed. Mark Jenner and Patrick Wallis, 1-23 (Basingstoke: Palgrave Macmillan, 2007).

⁴²² Michael Brown *Performing Medicine: Medical Culture and Identity in Provincial England, c.1760-1850*. (Manchester & New York: Manchester University Press, 2011) 226.

the century towards driving out bastions of medical corruption in all their forms, and establishing a democratic but highly regulated profession. For reformists like Thomas Wakley after all, corrupt medical corporations and nepotistic hospital surgeons were as morally dubious as quacks.⁴²³

These rigorous attempts to professionalize medicine have frequently been addressed by historians and the economic aspect to ‘orthodox’ practitioners doing so has been commented upon. In particular the professionalization of medicine has been read as a method by which orthodox practitioners attempted to undermine the economic competition presented by their unorthodox rivals.⁴²⁴ This has been further fleshed out by Anne Digby, who has stressed that divisions between market and medicine constructed by nineteenth-century orthodox doctors were just that: constructions, for medical men across the spectrum remained deeply in the thrall of economic circumstance.⁴²⁵ Linked to the ‘rise’ of social history in the late twentieth century and that discipline’s prevailing concerns of class and material wealth, Digby’s intricate and richly sourced work resists a simplistic binary of doctor and patient and instead posits that power did not necessarily lie with one or the other, but rather that the economic experiences of both were deeply intertwined.

While Digby discusses surgery, her objective is, however, to look at the expansive range of medical services that were on offer, of which surgery was but one.⁴²⁶ Relatively little work

⁴²³ G. R Searle *Morality and the Market in Victorian Britain*. (Oxford: Clarendon Press, 1998) 123-4.

⁴²⁴ The literature on professionalization is too numerous to cite everything. However S.E.D Shortt’s 1983 essay is exemplary of the type of work produced on the ‘rise’ of the medical profession in the late nineteenth century. In general such literature looked to the cultural (rather than only technical) value of ‘scientific’ knowledge and its use in doctor’s rhetorical strategies, as they sought to present themselves as professional, highly organized men of science. S.E.D Shortt ‘Physicians, Science and Status: Issues in the Professionalization of Anglo-American Medicine in the Nineteenth Century’ *Medical History* 1983; 27, no.1 (1983) 51–68.

⁴²⁵ Digby (1994).

⁴²⁶ Indeed Digby notes in the introduction her emphasis is on medical encounters that involved general practitioners rather than elite physicians and surgeons, general practitioners making up the vast majority of practitioners. While their work involved some surgery, it would likely only occasionally have involved major surgery. *Ibid.*3.

has built on Digby's to focus specifically on the economics of operative surgery. Sally Wilde is one of the few to have addressed the topic. Writing in *The History of Surgery* - her examination of Australian surgery between 1890 and 1940 - Wilde rightly argues that it is unsatisfactory to consider the economics of surgery as 'driven exclusively by the logic of market forces.'⁴²⁷ Yet her insistence that it is rather 'two interlocked economies, one driven by market forces, and the other a moral economy, driven by the logic of a gift relationship' equally suggests an ahistorical framework based upon an essentialist rationale of both economics *and* altruism. 'Logic' is not particularly helpful as an explanatory term, as this chapter will go on to show;⁴²⁸ in Wilde's work, present-day understandings of market forces and competition have been all too easily transplanted into the past.

What is more, recent work scrutinising the apparent division between orthodox and unorthodox practitioners suggests historians have become embedded in – perhaps even confused by – the Victorian profession's guarded attitude towards money matters. This in turn appears to have impeded further work on the economics of nineteenth-century surgery. Lori Loeb's otherwise excellent exploration of the use of patent medicines in orthodox professionals' practice, for example, as described in the previous chapter, decisively puts to bed the idea that qualified practitioners and patent medicine vendors were operating in distinct spheres.⁴²⁹ Takahiro Ueyama's more recent and extensive work on medical commodification in nineteenth-century London, has similarly pointed to the involvement of physicians in commercial enterprises.⁴³⁰ Yet works such as Loeb's and Ueyama's, despite

⁴²⁷ Sally Wilde *History of Surgery: Trust, Patient Autonomy, Medical Dominance and Australian Surgery, 1890–1940*. Byron Bay: Finesse Press. p.75

⁴²⁸ Wilde (2010) 86.

⁴²⁹ Lori Loeb 'Doctors and Patent Medicine in Modern Britain : Professionalism and Consumerism' *Albion: A Quarterly Journal of British Studies*, 33, no.3 (2001) 404-425.

⁴³⁰ Takahiro Ueyama *Health in the Marketplace: Professionalism, Therapeutic Desires, and Medical Commodification in Late-Victorian London*. (Palo Alto: The Society for the Promotion of Science and Scholarship, 2010).

integrating the orthodox profession into their accounts, retain a focus upon patent medicines and devices. A fundamental problem with this approach is that surgery, and especially major surgery like ovariectomy, tends to be missing from such accounts, as ‘capital’ operations generally remained in the province of well-known, well qualified surgeons and their respectable instrument makers, with little interaction with the market for patented drugs and devices. The focus on medical men’s forays into explicitly commercial medicine continues to draw away from explorations of the relationship that resolutely orthodox medical men had with the money they *earned* from their *services*. Money *was* important to these men. Dig a little deeper, and the question of pecuniary gain permeates professional discourse much more extensively than has previously been suggested; money, you might say, was everywhere, but most especially where it wasn’t.⁴³¹

In this chapter I focus primarily on the economics of the operation during the period between the 1870s to the 1890s as ovarian surgery came to be definitively recognized as a successful and perhaps even revolutionary operation. This was a time when a great deal else was happening in the field; the introduction of antiseptics had an influential effect on surgery, although as we shall see, its use was greatly contested in the field of ovarian surgery. There was also increasing concern about the over-use of the ovariectomy, something which has been well addressed by historians. This chapter, while taking in these developments, offers a new approach to this period by setting the expansion of the operation within a discourse of trade and business, rather than reading it solely through changing notions of female pathology; although, as we shall see, the two concerns were by no means separate. In the first part of this chapter I begin by considering how ovariectomy was understood as an

⁴³¹As Christopher Herbert has eloquently remarked on Victorian attitudes, and in specific reference to their approach to money: ‘writers of the day insistently described their society as a great many-layered system of occluded awareness, one in which not knowing what one knew, became almost the defining principle of consciousness, at least in the sphere of middle-class life.’ Christopher Herbert ‘Filthy Lucre : Victorian Ideas of Money’ *Victorian Studies* 44, no.2 (2002) 185-213; 186

innovation of specialist and private practice, as those who performed ovariectomy were increasingly identified (and identified themselves) as specialist ‘ovariotomists’. I follow this by examining how fees for ovariectomies were determined, situating this within broader debates that were occurring in the profession as to the need for more regulation of fees. As will be shown, the fees for ovariectomy were not determined through any self-evident medical reasoning but rather a multitude of factors, some of which were intimately connected to its status as an innovative procedure. In the third part I look at how in the 1880s and 1890s, ovariectomy came to be considered a fashion, as growing concerns emerged regarding patients’ demands for ovarian operations. This led to troubling questions regarding the patient’s place as a consumer and the impact of their consumerism upon medical authority. Was it possible, as some commentators argued, that ovariectomy had become nothing more than a business?

4.2 The Operator becomes the Ovariectomist: Specialism and Private Practice

The mid-to-late nineteenth century is very often characterised as a period that saw the ‘rise’ of hospital medicine; that is, that medical theory, practice and innovation become centred within the walls of large general hospitals at this time.⁴³² Surgical advance in particular has been closely linked to the changes brought about by the establishment of antiseptic and aseptic techniques in the 1870s and 1880s and especially the germ theory and wound management system of Joseph Lister (1827-1912). As Christopher Lawrence and Richard

⁴³² See for example Mark W. Weatherall, M. W. (1996). Making Medicine Scientific: Empiricism, Rationality, and Quackery in Mid-Victorian Britain. *Social History of Medicine*, 9 (2) (1996) 175-94. Weatherall argues that during this time ‘the advancement of medical knowledge was to become concentrated in a few medical schools and hospitals.’ 180.

Dixey note, Lister himself ‘regarded the unquestionable decline in hospital fevers in the late nineteenth century as his achievement’.⁴³³

The idea pervasive in older, whiggish historiography that Lister’s theory and practice constituted a rapid and uncontested ‘revolution’ in surgery has been more or less put to bed by historians who have more closely scrutinised the contemporary impact of antiseptics. It is clear that not only did Lister himself frequently modify his system but many surgeons were sceptical of his theories and practice. Even more failed to see what was novel or innovative about his system, when many already employed scrupulous aseptic techniques in practice.⁴³⁴ But it is important to note that in the 1870s and 1880s ovarian surgery played a particularly important part in these debates. For while it is true to say that some performers of ovariectomy used and even championed Lister’s work, it is also true that in no other field of surgery was the usefulness of the antiseptic system more fiercely contested. This was partly due to concerns about the effectiveness of the system when used within the abdomen. The peritoneum was known to have rapid absorbing qualities and practitioners such as Thomas Keith championed the idea that if it was found to be in a healthy state upon opening the abdomen, the combination of a drainage tube and the peritoneum’s natural absorption mechanism was potentially sufficient in preventing any build-ups of fluid that could lead to putrefaction. Keith believed that this rendered external chemicals like carbolic acid possibly unnecessary and perhaps even injurious.⁴³⁵ But perhaps the most significant point of contention for many who practised ovariectomy was that the safety of the operation had clearly and rapidly improved some time *before* the introduction of carbolic acid for the

⁴³³ Christopher Lawrence and Richard Dixey ‘Practising on Principle: Joseph Lister and the Germ Theories of Disease’ in *Medical Theory, Surgical Practice: Studies in the History of Surgery* ed. Christopher Lawrence, 153–215 (London and New York: Routledge, 1992) 156.

⁴³⁴ Lawrence and Dixey (1992) 153-154.

⁴³⁵ Thomas Keith ‘Results of Ovariectomy Before and After Antiseptics’ *British Medical Journal* 2, no.929 (19th October 1878) 590-3.

treatment of surgical wounds. Here again it was Keith who sought to highlight this in the medical press. In a letter to the *British Medical Journal* in 1878, he argued that it was technical developments such as the use of drainage tubes, the wide-scale application of the cautery (rather than clamp) when treating the pedicle and the introduction of compression forceps, which had had the greatest impact upon the declining mortality rate of ovarian surgery, *not* antiseptics.⁴³⁶

This contention was closely connected to ovariectomy's identity as an innovation that had emanated from specialist, predominantly private practice *not* from the larger general hospitals. While ovariectomies were certainly performed in the latter type of institution, and increasingly so towards the end of the century, up until the 1890s at least, the majority of ovarian operations still continued to take place in private practice and in smaller specialist hospitals for women (the latter of which included both charitable and private institutions).⁴³⁷ This was reflected also in the professional positions of those who by the 1870s had become pre-eminent in the field: Thomas Spencer Wells at the Samaritan Free Hospital and Robert Lawson Tait at the Birmingham and Midland Hospital for Women, for example, both built up names for themselves without ever having an appointment at a general hospital. Many others eschewed hospital practice altogether once they were established; Charles Clay for instance, resigned his position at St. Mary's Hospital in 1858 after just one year, due to the

⁴³⁶ *Ibid.*

⁴³⁷ In 1883 in the London Hospital for example, six ovariectomies were performed by a variety of surgeons. See 'Surgery Beadle's Return of Operations Performed' (1883) LH/M/3/7 (Royal London Hospital Archives). However other general hospitals, such as Kings College Hospital, continued to maintain a reputation for avoiding all types of abdominal operation. Joseph Lister's house surgeon StClair Thomson recorded in his memoirs that during Joseph Lister's time at Kings (between 1877 and 1892) 'I never saw him do an abdominal section. During my term of office we never heard the word 'appendicitis'; gastric ulcers were diagnosed but never treated surgically; ovarian cysts were tapped and tapped until the patient died; that a calculus could be removed from a ureter or a bile-duct never entered the imagination of the wildest dreamer.' StClair Thomson 'Memories of a House Surgeon' *The Lancet* 209, no.5406 (9th April 1927) 775-780; 777. Unsubstantiated rumours suggest that ovariectomy was unofficially banned from the hospital at this time, see: Berkeley Moynihan 'Lister as Surgeon' *The Lancet*, 209, no.5406 (April 9th, 1927) 746-8; 747.

burden of his private practice. Although this decision would lead to his respectability later being questioned by Spencer Wells (as discussed in the previous chapter),⁴³⁸ it did little harm to his local reputation and practice, the latter of which remained large. Many more specialists in ovarian disease, including George Granville Bantock (1837-1913), Wells' successor at the Samaritan, Thomas Keith and Robert Lawson Tait also set up private nursing homes for their ovariectomy patients.⁴³⁹

This supports the observation made by Marguerite Dupree and Anne Crowther in their recent work that during this time 'specialists' in diseases of women and in obstetrics were especially notable in that they tended to remain attached to smaller hospitals throughout their career and in general were less dependent on appointments at larger, charitable institutions for the provision of social cachet.⁴⁴⁰ On the contrary, as the careers of specialists in ovariectomy progressed, they tended to become increasingly immersed in private practice. Wells was as a case in point: he retired from active practice at the Samaritan in 1877 aged fifty-nine, but his private practice flourished for another decade, his reputation both as charitable and skilful operator established enough that he could focus on private cases. As the Manchester practitioner David Lloyd Roberts (1835-1920) - who made a fortune out of his practice in ovariectomy - once brazenly quipped, it seemed that 'a hospital was useful to a man during the first ten years on the staff; during the second ten years, honours were about equal; during the third ten years the man was useful to the hospital.'⁴⁴¹

⁴³⁸ Peter D. Mohr, 'Clay, Charles (1801–1893)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, Oct 2006 [<http://www.oxforddnb.com/view/article/5558>, accessed 12 June 2012].

⁴³⁹ Keith (1878) 590-3; Lawson Tait 'Removal of the Uterine Appendages' *Medical Press* 42 (8th September 1886) 202-3; 203; Myrrha Bantock *Granville Bantock: A Personal Portrait* (London: J.M Dent, 1972) 27.

⁴⁴⁰ M. Anne Crowther and Marguerite W. Dupree *Medical Lives in the Age of the Surgical Revolution* (Cambridge: Cambridge University Press; 2007) 196. At the Samaritan, virtually every surgeon ever connected to the institution continued their links with it until they retired from hospital practice.

⁴⁴¹ 'David Lloyd Roberts' *The Lancet*, 196, no.5067 (9th October 1920) 766-767; 767.

That the operation was understood as specialist had important currency in medical politics. As Lindsay Granshaw has persuasively argued, medical specialists of all kinds, particularly those who had begun to set up institutions, faced a great deal of hostility from within the profession during the mid-decades. At this time hospitals which catered to specific types of disease were frequently accused of being little more than money-making ploys, ostensibly charitable, but in fact set up only to gain the patronage and support of the rich, who could then be used to gain a foothold in the market for private practice.⁴⁴² The reputation of specialist hospitals improved somewhat in the later decades of the nineteenth century, as they became increasingly accepted as a viable way for young, entrepreneurial practitioners to make a name for themselves, particularly in light of the relative paucity of positions available in general hospitals. But it is important to note, as Granshaw does, that ‘mixed feelings about specialist hospitals continued to be voiced in the last third of the nineteenth century’.⁴⁴³ The close association between specialism and money-making was not easily shaken off.

Those who described themselves as specialists in diseases of women were often considered the most avaricious of all.⁴⁴⁴ A pamphlet which appeared in 1877, wittily entitled *Contradiction! Or English Medical Men and Manners* and authored by a practitioner named James O’ Flanagan, reserved particular venom for specialists in female disease – ‘other kinds of specialists there are, but they being for the most part harmless, I shall not waste time describing them’ O’ Flanagan remarked pointedly.⁴⁴⁵ He went on to use not-so-subtle

⁴⁴² Granshaw (1989). Some also viewed specialist hospitals as detrimental to medical education, as they ‘stole’ away cases from general hospitals, thus depriving medical students walking the wards of experience.

⁴⁴³ *Ibid.* 212.

⁴⁴⁴ Granshaw (1989).

⁴⁴⁵ James O’ Flanagan *Contradiction! Or English Medical Men and Manners of the Nineteenth Century* (London; Ballière, Tindall and Cox, 1866) 53.

word play to make insinuations about the financial aspects of this particular specialist's relationships with their patients:

If named after his occupation he would have – as in some other trades he has – the amiable title of ‘ladies man’. I propose however, to call this gentleman the speculum specialist.....from nervousness or indigestion or hysteria, and certain deranged functions, a woman gets it into her head that she is a subject for the speculum. She sets out, is ‘speculated’ upon, and re-returns to the operation with periodicity in recurrence equal to a complete repetend in circulating decimal fractions.⁴⁴⁶

Despite these connotations of impropriety, as the operation attained greater success, those who performed it became more confident in – and more protective over - the operation's status as a specialist procedure. Indeed in the eyes of those practitioners who saw specialism in medicine as a sign of growing maturity in the organisation of medicine, ovariectomy was in fact a prime example of a genuine innovation that had emanated from private and specialist practice and not from the larger hospitals. ‘Are the triumphs of ovariectomy and abdominal section to be reckoned among ‘the great advancements’ which have come from general hospitals?’ wrote the laryngologist and ardent advocate of specialism, Morell Mackenzie in 1885: ‘the fact is that a general hospital is about the last place from which one would naturally expect any striking innovation to come. Such institutions are from the conditions of their existence schools of routine.’⁴⁴⁷ Rather than seeing ovariectomy more closely integrated into general practice, most performers of the operation wanted the procedure to retain a distinctive identity, performed only by those with ‘special’ skill in the area. This was in part a response to technical concerns: the incompatibility of ovariectomy

⁴⁴⁶ *Ibid.*52

⁴⁴⁷ Morell Mackenzie ‘Medical Specialism’ (August, 1885) *Fortnightly Review* 38 no.224 (August 1885) 272-276; 267.

with ‘Listerism’ seemed to clarify that fundamental differences remained between surgery that went into the abdomen and that which didn’t. But there were also professional and economic implications too. Much to the chagrin of some specialists, general hospital surgeons were increasingly asserting their right to perform the operation, arguing that antiseptics and the general move towards scrupulous cleanliness had had something of a democratising effect on ovariectomy, opening the peritoneum to all who practiced clean, safe surgery and wished to perform the operation.⁴⁴⁸ As Ornella Moscucci has already highlighted, the economic implications of this were clear: if general hospitals’ surgeons took up the operation, they would gain a foothold in the market for private ovariectomies too.⁴⁴⁹

It was perhaps for these reasons that the term ‘ovariectomist’ was one increasingly used in the medical press during the 1880s, although it had first appeared in the medical press in the 1850s.⁴⁵⁰ Along with ‘lithotomist’ it was one of the few titles used to denote an operator’s special skill in one particular operation. The way the term was used was varied and not always clear-cut. Occasionally it was used to describe *anyone* who performed ovariectomy; as the *British Medical Journal* declared in an editorial on the operation in 1885 ‘few operators would refuse to perform it, excepting where there is evidence...that the tumour is malignant.’⁴⁵¹ This suggests that all surgical practitioners were generally expected to be

⁴⁴⁸ The Irish surgeon William Thomson was one prominent figure who challenged Lawson Tait and others, instead advocating general surgeons’ right to perform ovariectomy. See: William Thomson ‘Three Cases of Ovariectomy’ *Transactions of the Royal Academy of Medicine in Ireland* 3, no.1 (1885) 121-30. As Ornella Moscucci has noted, within the general hospitals, surgeons were also busily ensuring that it was they and not their obstetric physician colleagues who performed ovariectomy. At St. Bartholomew’s Hospital this even extended to an outright ban on obstetric physicians performing ovariectomy. Moscucci (1990) 168. However it is important to remember in relation to this that, in general, comparatively few ovariectomies were being performed in these institutions, even in the 1880s.

⁴⁴⁹ Moscucci (1990) 171.

⁴⁵⁰ It is not entirely clear who exactly coined the term, although it is possible that like ‘ovariectomy’ it was Charles Clay, who often used the term to describe himself.

⁴⁵¹ ‘Ovariectomy, Hysterectomy and Oöphorectomy’ (Jan 31st, 1885) *British Medical Journal* 1, no.1257 (Jan 31st, 1885) 239-240; 239. See all Lawson Tait ‘Recent Advances in Pelvic Surgery’ (April 9 1884) *Medical Press* 37 (April 9 1884) 321-323.

trained in and ready to perform the operation if necessary in an emergency situation, an operation as essential to the young surgeon's repertoire as amputation, lithotomy or ligation. The term was also on occasion a label thrust upon others with derogatory connotations. For the most part however, 'ovariotomist' was a term of self-identification from Charles Clay onwards, used with pride by those who performed the operation. It referred to a particular *identity*: men who considered themselves and were considered by others as especially skilled and experienced in the operation. They were 'specialists' in one operation, but by sculpting a reputation for surgical skill, successful ovariotomists were also generally considered to be part of the surgical elite, in spite of their professional rivalries with general surgeons. This was especially the case for ovariotomists practising in London, many of whom played important roles in the city's surgical societies.⁴⁵² Thus, as British medicine began to be modelled around a bifurcate model of 'consultants' (those who were in the elite of 'pure' physicians and surgeons) and general practitioners, ovariotomists slipped easily into the former group.⁴⁵³ As Dupree and Crowther have argued, this division between general practitioner and consultant was not necessarily one with any definitive demarcations of practice, a reputation as a surgical 'consultant' was something that was cultivated rather than acquired with any inevitability relating to technical skill.⁴⁵⁴ But to become defined as a consultant-level practitioner had significant financial implications. As we shall see in the

⁴⁵² Many London ovariotomists were quite clearly in the elite, embodied for example, in their close association with the Royal College of Surgeons of England and other London surgical societies. Wells was President of the College in 1882. His assistant both in private practice and at the Samaritan, Alban Doran, was closely connected to the College's Hunterian Museum throughout his career. For more on the London-centric nature of the surgical elite at this time see Frampton (2008).

⁴⁵³ Irvine Loudon *Medical Care and the General Practitioner, 1750-1850* (Oxford: Clarendon Press, 1986).

⁴⁵⁴ See Crowther and Dupree (2007) 178. Spencer Wells' assistant Alban Doran for instance, despite being a successful ovariotomist, was described as 'having no surgical hands' 'Obituary - Alban Henry Griffiths Doran' *British Journal of Obstetrics and Gynaecology* 34 no.3 (1927) 546-7; 546; another successor of Wells', William Meredith was described as a 'careful but rather slow operator' but who nonetheless built up an extremely lucrative practice; 'Obituary - W.A Meredith' *The Lancet* 188 no.4860 (21st October 1916) 727.

next section, this was perhaps nowhere more the case than in the practice of ovariectomy, where the financial rewards could be lucrative.

4.3 Surgical Fees: Determining the Cost of Ovariectomy

Historicizing notions of financial value can be difficult. While it is relatively easy to translate the cost of something from the past into contemporary monetary value, by extension it is all too easy to evaluate that figure through modern day assumptions of what the value of certain goods and services should be. Instead economic values need to be recognized as historically contingent. For this reason the economics of ovariectomy can never just be about numbers, although the numbers, which we will come to presently, are important. It is also about considering the social, cultural and even personal contexts, within which the price of ovariectomy was formulated.

The suggestion that ovarian surgery was lucrative was present from early on in its inception. In the mid-decades of the nineteenth century it was an association that was almost invariably negative and no-one emphasised the operation's connection with money more so than its staunchest critic, Robert Lee. From Lee's smarting comments about money-making ovariectomists in the 1850s and 1860s emerge fragments of information about the charges that were being made for the operation. In 1862, when Lee was still actively denouncing the operation, and at one of the many meetings around this time in which the justifiability of the operation was heavily debated, the obstetrician had declared that the 'the question now under discussion was a money question, and not one of science and humanity.' Lee defended this claim by producing anecdotal evidence that at least one English ovariectomist had charged the rather extraordinary sum of three hundred guineas for an operation performed in

Ireland (over £10 000 in present day money),⁴⁵⁵ followed by a hundred guineas each day afterwards that he was in attendance. With a certain amount of sinister glee, Lee reported that the operation had resulted in the death of the patient just eighteen hours later.⁴⁵⁶ For Lee, the invention of ovariectomy was never about saving lives or even scientific advance, but about profit. In this way it was about as far from being morally justifiable as an operation could be.

While Lee could well have been exaggerating the fees paid by this particular patient, they were by no means figures pulled out of the air. Although a private ovariectomy could be purchased for as little as five guineas, if you were lucky enough to find a surgeon willing to perform on poorer cases,⁴⁵⁷ fees for private ovariectomies in London and in the major metropolitan cities could easily stretch to a hundred guineas (£5000 in present day money). Indeed this appears to have been the accepted price for an ovariectomy performed by an ovariectomist from the 1860s until at least the mid-1880s.⁴⁵⁸ Few ovariectomists directly addressed the question of how much they earned but this did not prevent the subject being speculated upon in the medical press, although noticeably more so in the pages of the American press than the British. As *The American Practitioner* put it in 1877, with a speck of gallows humour, rumour had it that Spencer Wells at least, did ‘not lift a knife for less than one hundred guineas’ - a claim that Wells never directly denied.⁴⁵⁹ As Moscucci has suggested, such a fee was about equal to the annual income of a young doctor in the early

⁴⁵⁵ <http://www.nationalarchives.gov.uk/currency/> has been used for all the currency conversions cited. The converter calculates money into the value would have been in 2005 and should only be taken as approximate.

⁴⁵⁶ ‘Royal Medical and Chirurgical Society, Tuesday November 11th 1862’ (1862) 569.

⁴⁵⁷ *The American Practitioner and News* reported that Robert Lawson Tait, who was the most renowned ovariectomist in the Midlands charged ‘five guineas to one hundred for an ovariectomy.’ ‘Notes and Queries’ *The American Practitioner and News* 3 (1887) 224.

⁴⁵⁸ ‘Within the Hospital Walls: A Matter of Fact Narrative’ *The Lancet* 127, no.3277 (19th June 1886) 1194-1205; 1202.

⁴⁵⁹ Notes and Queries *The American Practitioner and News* 16 (1877) 59.

years of his practice,⁴⁶⁰ underscoring the appeal the operation might have held to a young practitioner.

Extending this comparison with wages into the broader economic context of nineteenth-century income, we gain an understanding of just how expensive a private ovariectomy was. One study of nineteenth-century wages posits the average annual income in 1871 for an engineer at around £571, that of a Government Civil Servant at around £281 and that of a schoolmaster at just ninety-seven pounds.⁴⁶¹ This suggests that most sufferers of ovarian disease seeking surgery would have been priced out of the private market and that for all but the reasonably well-off, the services of a charitable institution would need to be sought instead, be it one of the larger hospitals or, as was more likely, through the charity of a specialist institution like the Samaritan Hospital. A supplement that appeared in *The Lancet* in 1886 as part of a Hospital Sunday Fund appeal, and presumably aimed towards the wider public, seems to confirm this. The appeal stated that even within the walls of hospitals, every ovariectomy cost a sizeable ten pounds, predominantly because of the amount of nursing that was required after the operation was completed.⁴⁶² Keen to draw attention to the amount of surgical work that was dependent on charity, the appeal noted that ‘except with well-to-do people, the doctors mostly recommend the hospital.’⁴⁶³

Thus while the private ovariectomy market was lucrative it was also small, and pursuing a career as an ovariectomist could be a high risk strategy in terms of regular income generation. The evident attraction of students, nonetheless, to doing just that, did not go unremarked

⁴⁶⁰ Moscucci (1990) 170.

⁴⁶¹ R.V Jackson ‘The Structure of Pay in Nineteenth-Century Britain’ *Economic History Review* 40, no.4 (1987) 561-570; 563.

⁴⁶² ‘Within the Hospital Walls: A Matter of Fact Narrative’ (19th June 1886) 1202.

⁴⁶³ *Ibid.* 1202. Acting as a nurse for critical ovariectomy cases was difficult work and both those working in public and private hospitals were expected to work exceptionally long hours watching over the patients. Ideally one or two specialist nurses were appointed to a case. ‘Nursing Echoes’ *Nursing Record* 1, no.25 (20th September 1888) 336-338; 337.

upon by some of the older generation, one of whom was the Manchester gynaecologist William Japp Sinclair (1846-1912). Addressing the Annual Meeting of the British Medical Association in 1897, Sinclair's main point was to express concern as to the surgically orientated training of future obstetricians and its implications for their style of practice. But by doing so he also alluded to the *economic* limitations in specialising in ovariectomy once confronted with the everyday realities of medical practice, where cases of difficult labour would easily predominate over the comparatively fewer cases of ovarian tumours that would appear in private practice. As the *British Medical Journal* summarised from his speech:

The main evil of a medical school has become especially prominent in the special women's wards. That evil is the tendency to glorify major operations in the mind of the student. Instead of trying to learn midwifery - an impossibility under the circumstances - he yearns to be an ovariectomist, to do the brilliant operations which he sees done in the special wards. So when he tries to earn his bread, having as Dr. Sinclair puts it learnt surgery which he will never practise, he naturally practises on surgical lines midwifery which he has never learnt.⁴⁶⁴

Nonetheless the attractions of specialising in ovariectomy remained. The operation was now safer than it had ever been; so much so that Thomas Keith was moved to comment in 1878 that 'it almost makes one envy the younger ovariectomist to whom the way in these days is made easy'.⁴⁶⁵ But equally, the operation continued to engender a sense of daring, of singularity, of being something *special*. It was a combination of factors that gifted performers of the operation with a visible authority. Major operative surgery with its sense

⁴⁶⁴ 'The Address in the Section of Obstetrics and Gynaecology' *British Medical Journal* 2, no.1916 (18th September 1897) 726-7; 726.

⁴⁶⁵ Keith (October 19th, 1878) 593.

of risk and urgency had an electric impact,⁴⁶⁶ nowhere more than in ovariectomy, in which the change in condition – the removal of a large tumour - was immediately noticeable to the patient and her friends and family. Ovariectomy, if successful, offered a potential one-off quick fix for a chronic condition that made its victims miserable and socially isolated. This had numerous economic implications. Specifically it meant ovariectomists could suggest that their services, despite their high prices, were actually a more financially sensible option than continual resorting to medical palliatives. It was precisely in these terms that Isaac Baker Brown described a successful case of ovariectomy in 1865 that had taken place at the London Surgical Home, an institution set up by Brown in 1858 where patients paid fees according to what they could afford. Brown referred to a case where the patient had:

Spent her substance in obtaining medical aid, but God had not seen fit to give her relief. She was a patient sufferer truly, and a great invalid when she came into this Home. I said to her ‘I think I can cure you, but the operation is new; it is almost experimental’ she replied – ‘Do what you like;’ and I think her expression was ‘Cut me to pieces, if you can cure me’.⁴⁶⁷

More broadly one can speculate upon the appeal that specialising in ovariectomy had in what was a rather a gloomy economic climate in Britain in the 1870s and 1880s. The depth and length of economic depression during the last quarter of the nineteenth century has been the subject of much debate among economic historians and the suggestion that there was a distinct period of consistent depression experienced by the majority of the country has been heavily critiqued. Nonetheless most economic historians agree that if there was not a

⁴⁶⁶ Regina Morantz-Sanchez also addresses the impact of ovariectomy’s daring and bold nature as a means of explaining resistance to the operation by many American surgeons. See Morantz-Sanchez (1999) 92.

⁴⁶⁷ *Proceedings at the Seventh Annual Meeting of the London Surgical Home* (London: Savill & Edwards, 1865) 34. Tait used a similar argument when his motives for performing oöphorectomy were questioned, see: Tait (8th September 8th, 1886) 202-3.

depression per se, the 1870s did see a tailing off of the economic boom that had characterised the mid-nineteenth century, when new technological industries had rapidly expanded.⁴⁶⁸ As a result the 1870s and 1880s were comparably times of slow growth. Medical men were aware of this and worried about the consequences of commercial depression upon their profession. This showed itself in renewed anxieties about overcrowding,⁴⁶⁹ much of which centred on the idea that medical schools were overfilled with unsuitable students, men who in brighter economic circumstances, would have gone into business and industry, but who were instead entering into an already crowded profession, selecting medicine because of a dearth of business positions. In the pessimistic words of the *Medical Press and Circular*, an Anglo-Irish periodical, medical education was increasingly viewed in stark economic terms as the ‘profession most likely to offer a speedy remunerative return on the capital invested in the preparation for its practice.’⁴⁷⁰

How much substance there was to these claims about overcrowding is debatable,⁴⁷¹ but the spectre of commercial depression touched a raw nerve in doctors. Commercial depression seemed only to highlight that, disproportionate to other businesses and industries, those in the medical profession were often not sufficiently rewarded for their services, something that

⁴⁶⁸ C. K. Harley ‘Trade, 1870-1939: From Globalisation to Fragmentation’ in *Cambridge Economic History of Modern Britain, Vo.11: Economic Maturity, 1860-1939*, ed. R. Floud and P. Johnson, 161–189. (Cambridge: Cambridge University Press, 2004). 168.

⁴⁶⁹ Overcrowding cropped up as a source of anxiety again and again throughout the nineteenth century. Although most historians have tended to focus on the concerns about overcrowding that were expressed in the mid-decades. As Irvine Loudon has argued, it was then that the expansion of the middle classes, the high productivity of Scottish medical schools as well as the introduction of the Apothecaries Act in 1815 appeared to increase the number of practitioners and consequently led to the increased stigmatisation of irregulars and growing anxieties about competition, soon to be expressed in the 1858 Medical Act (hence the abundant historical attention). See Loudon (1986) esp.208-227.

⁴⁷⁰ ‘The Prospects of the Profession’ *The Medical Press* 40 (16th September 1885) 256-257; 257.

⁴⁷¹ Despite imputations from many doctors that the profession was much overcrowded, the statistics compiled by Walter Rivington in his exhaustive account of the state of the medical profession during the late nineteenth century suggested that there was a decline in the proportion of doctors to the general population between 1851 and 1881; see Walter Rivington *The Medical Profession of the United Kingdom* (Dublin: Fannin & Co, 1888). This was also picked up on by the *British Medical Journal*. See: ‘Review: The Medical Profession of the United Kingdom’ *British Medical Journal* 1 no.1474) (30th March 1889) 717-8.

seemed increasingly incompatible with doctors' *social* status as men of culture and refinement.⁴⁷² It compelled medical men to address an issue they rarely liked to talk about openly: fees. Of particular concern was the damage done by the tradition of annual billing that most practitioners worked under; a system which, as Anne Digby has highlighted, often meant large patient debts unpaid for long periods of time, if not permanently.⁴⁷³ This often left doctors having to chase down their debtors in a manner that was somewhat undignified to the learned, professionalised practitioner. But it was also the *value* of medical and surgical services that needed to be addressed.⁴⁷⁴ The *British Medical Journal*, became the central focus point for this campaign and the journal pushed for the British Medical Association to produce a standardised scale of fees to counteract the generic prices for medical services which were generally utilised but which, they argued, could not account for the complexities and complications of medical services.⁴⁷⁵ Practitioners wrote in to express gratitude to the journal for vocalising a taboo subject; as one enthused correspondent to the *BMJ* put it in

⁴⁷² Henry Thompson, perhaps the Victorian surgeon most famous for his polymathic bent and cultivation of fine tastes in art, and literature commented in one of his pseudonymous novels that 'it is not a curious fact, for it is an indispensable one, that almost every medical man of ordinary intelligence, who achieves a fair share of success in his profession – and unluckily the taste sometimes exists without success enough to warrant its cultivation – becomes a fine art collector of some sort, and has a hobby, which when you know him, and not until then, you are perhaps astonished to discover.' Pen Oliver (Henry Thompson) *Charley Kingston's Aunt*. (London: Macmillan, 1885) 14.

⁴⁷³ Digby (1994) 193.

⁴⁷⁴ The Manchester Medico-Ethical Association wrote in 1879 that it was 'convinced that the subject of medical charges must ever remain a somewhat open one, so long as the profession, unlike all other trades and professions, continues to claim its remuneration not according to the abstract worth of its services alone, but also according to the ability of its clients.' Manchester Medico-Ethical Association *Tariff of Medical Fees Issued by the Manchester Medico-Ethical Association* (1879) (Manchester; J.E Cornish, 1879) 3.

⁴⁷⁵ In 1878 the *British Medical Journal* wrote that 'it is somewhat disgusting for the professional mind to have to discuss fees at all. This sentiment is materially expressed by the piece of paper in which the fee is habitually wrapped, and the tacit manner in which it is paid. But advantage should not be taken of this attempt to bind professional men to the uniform acceptance of an insufficient payment for services of very various value.' 'Consultation Fees' *British Medical Journal* 2, no.923 (7th September 1878) 375-6; 376. See also 'Physicians, Practitioners, Patients and Fees' *British Medical Journal* 1, no.889 (12th January 1878) 56-7.

1878, praising a previous editorial on the topic, ‘I feel sure you have struck off once and for all the galling fetter of the uniform guinea-fee.’⁴⁷⁶

The BMA itself never produced a definitive scale of fees. But various other medical societies did, some of them affiliated branches of the BMA. However these scales were often limited in their coverage. In their tariff of medical fees issued in 1879 for example, the Manchester Medico-Ethical Association refused to make a judgment regarding the costs of surgery, including suggested fees only for general practitioners and consulting physicians’ visits and advice, *not* for operations. ‘The Association cannot undertake to define individual skill or reputation in this respect,’ it decreed in its third edition in 1879 in relation to surgery. This remained the case throughout the editions produced in the following decades.⁴⁷⁷ This reluctance to judge the value of private surgery left a nebulous gap in the pricing of major operations, in which the value was left to be written in by the surgeon himself, suggesting just how much more potentially lucrative surgery was compared to medicine.

⁴⁷⁶ ‘Consultation Fees’ *British Medical Journal*, 2 (927) (5th October 1878) 539.

⁴⁷⁷ Manchester Medico-Ethical Association *Tariff of Medical Fees issues by the Manchester Medico-Ethical Association* (Manchester: J & E Cornish, 1893) 10. The tariff’s only concession to this was to include the Poor Law’s scales of surgical fees as a possible guide to minimum charges.

GENERAL SURGICAL PRACTITIONERS.	Minimum.		Medium Fees.		Maximum.	
	£	s. d.	£	s. d.	£	s. d.
For the Talicotian Operation	5	5 0	to		21	0 0
For the operation for the removal of a Nævus or Aneurism by Anastomosis	1	1 0			5	5 0
For the operation for the removal of Cicatrices	1	1 0			5	5 0
For the operation of Dermic-Grafting		10 6			3	3 0
For the operation for Cleft-Palate	5	5 0			15	15 0
For the operation for Hare-Lip	2	2 0			10	10 0
For the removal of Polypus Nasi... ..		10 6			5	5 0
For the removal of Foreign bodies from the Ear, Eye, Nose, Pharynx, or Œsophagus		10 6			2	2 0
For the operation of Tracheotomy	3	3 0			10	10 0
For the introduction of the Stomach Pump	1	1 0			3	3 0
For the operation of Trocar-Suction-or 'Aspiration'	1	1 0			5	5 0
For Paracentesis Thoracis	2	2 0			5	5 0
For Paracentesis Abdominis	1	1 0			5	5 0
For the reduction of Hernia by Taxis	1	1 0			5	5 0
For the operation for Strangulated Hernia	5	5 0			15	15 0
For the operation of Cholecystotomy	5	5 0			21	0 0
For the operation of Colotomy	5	5 0			15	15 0
For the operation of Duodenostomy	5	5 0			21	0 0
For the operation of Enterostomy	5	5 0			15	15 0
For the operation of Gastrostomy	5	5 0			15	15 0
For the operation of Hysterectomy	10	10 0			21	0 0
For the operation of Laparotomy... ..	5	5 0			21	0 0
For the operation of Laryngotomy	3	3 0			10	10 0
For the operation of Lithotomy	10	10 0			26	5 0
For the operation of Lithotriety	5	5 0			26	5 0
For the operation of Nephrotomy	10	10 0			21	0 0
For the operation of Œsophagotomy	3	3 0			10	10 0
For the operation of Ovariotomy... ..	15	15 0			31	10 0 and upwards.
For the operation of Pneumotomy	5	5 0			15	15 0
For the operation of Prostectomy	3	3 0			10	10 0
For the operation of Pylorotomy	5	5 0			15	15 0
For the operation of Splenotomy... ..	10	10 0			26	5 0

Fig. 5. *The Medical Chirurgical Tariffs*, Jukes de Styrup (1890)

Table taken from the fifth edition of Jukes de Styrup's *The Medical Chirurgical Tariffs*, a popular reference manual with general practitioners and young surgeons and physicians, published in 1890. Notably, even though ovariotomy was no longer by any means novel, it remained more expensive than comparatively riskier operations such as hysterectomy, nephrotomy or splenectomy and was the only operation to appear on de Styrup's extensive list with a note in the maximum fee column that suggested an almost unlimited price tag upon a private procedure, denoted by the insertion of 'and upwards.'

But not all shied away from considering the value of operations. Why, some observers reasoned, construct a scale of fees only for surgery to be left out? While there was vague

understanding of operative prices among practitioners, in particular that all operations risking life – ovariectomy, lithotomy and major amputations – should cost at least a hundred guineas, many felt that leaving prices to individual judgement was pernicious and embarrassing to surgical the profession.⁴⁷⁸ A paradox was at work here; the profession wished to move away from standardised charges which did not recognize the fluidity of value in medical and surgical services, something that was better served by a more nuanced scale of fees. But it also needed and wanted guidance about what that scale of fees should be, surgery included. In 1874 there appeared the first tariff in Britain to do just that. The pamphlet, *The Medical Chirurgical Tariffs*, was authored by Jukes de Styrap (1815-1899), a general practitioner well-known for his work *A Code of Medical Ethics* (1878).⁴⁷⁹ Written on behalf of the Shropshire branch of the British Medical Association with new editions being produced in 1888 and 1890, the pamphlet was the first to include a suggested scale of operative fees (see **figure 5**).⁴⁸⁰ Prices were given for over sixty surgical operations and the pamphlet was envisioned as a guide to general practitioners as well as younger physicians and surgeons starting out in their career. Thus the prices given were considerably lower than those that London consultants were charging. Indeed to the disappointment of some reviewers de Styrap, like others, had avoided suggesting prices that consultants might charge.⁴⁸¹ In general though, de Styrap's pamphlet was warmly welcomed by the profession. As the *Edinburgh Medical Journal* put it, de Styrap's work taught 'the young practitioner promptitude, business habits, and consideration both for his own position and the

⁴⁷⁸ 'Professional Fees' *British Medical Journal*, 1, no.737 (13th February 1875) 223. Although some physicians admired surgeons for charging in so varied a manner, directly opposing the uniform guinea-fee payment that they were more likely to be subjected to.

⁴⁷⁹ Jukes de Styrap *A Code of Medical Ethics* (London: J & A Churchill, 1878).

⁴⁸⁰ Jukes de Styrap *The Medico-Chirurgical Tariffs (Prepared for the Late Shropshire Ethical Branch of the British Medical Association)* (London: H. K Lewis, 1890).

⁴⁸¹ The *Edinburgh Medical Journal* noted that 'it did not profess to be a guide as to how the wealthy should be charged by their ordinary attendant, or how consultants should estimate the value of their own services.' 'Review: The Medical-Chirurgical Tariffs' *Edinburgh Medical Journal* 34, no.1 (July 1888) 62.

circumstances of his patient.”⁴⁸² Fees were not just about getting the ‘right’ price but about *managing* medicine practice, something that might be connected to a broader trend in medicine which has been described by Steve Sturdy and Roger Cooter as ‘managerial concern with collective efficiency’, inspired in part by the increasingly important role of administration and management in hospitals.⁴⁸³

De Styrap’s work served not only to clarify just how remunerative ovariectomy was but, as a pamphlet produced by a branch of the British Medical Association, to morally authenticate it being so. De Styrap suggested as a general guide that ovariectomies were to be charged at between ‘£15/15 and £31/10 and upwards’ and throughout the three editions of the pamphlet, ovariectomy and Caesarean Section were deemed by de Styrap to be the most expensive operations in surgery.⁴⁸⁴ Even more strikingly, de Styrap also pointedly demarcated between ovariectomy and other operations, including Caesarean Section, by his use of the phrase ‘and upwards’ after the suggested price for the operation, seemingly giving practitioners a moral licence to charge virtually whatever they wanted for the operation. To no other operation or service in his table did de Styrap apply those two telling words. This was despite the appearance by then of operations which were arguably riskier than ovariectomy; splenectomy for example, which had only been introduced into practice in the mid-1880s, was given a suggested price of between ten and twenty-five guineas, while nephrectomy, also new and risky, was priced at between ten and twenty guineas, as, intriguingly, was hysterectomy. This is especially notable, considering that by the 1880s, ovariectomy was comparatively safer and more established than hysterectomy, which had replaced it as the most dreaded of abdominal operations. Like ovariectomy, there had been a

⁴⁸² ‘Review: The Medical-Chirurgical Tariffs’ (July 1888) 62.

⁴⁸³ Steve Sturdy and Roger Cooter. ‘Science, Scientific Management, and the Transformation of Medicine in Britain C.1870-1950.’ *History of Science* 36 (1998) 421–466; 422.

⁴⁸⁴ De Styrap (1890) 20-27. For the highest socio-economic class listed, de Styrap suggested 315 to 610 shillings could be charged for a Caesarean Section.

chequered history of experimentation with hysterectomy from the mid-century onwards and by the early 1880s, the mortality rate for abdominal hysterectomy remained abysmal – far worse than for ovariectomy.⁴⁸⁵ 1885 had seen a wisp of hope come from Thomas Keith's successes with the operation – he reported that of his total of thirty-eight cases he had had only three deaths – the most successful set of hysterectomies to yet be reported.⁴⁸⁶ But the operation remained a fearful prospect, belying the idea that antiseptic and aseptic techniques had acted as some kind of panacea for surgeons who ventured in the abdomen. Even the provocative Robert Lawson Tait, who performed ovariectomy with a certain abandon, quivered at the thought of extirpating the uterus and his mortality rate for the operation reached over thirty-five per cent. This was far higher than the mortality rates for any of the other abdominal operations he performed, for which he had achieved some of the best results in the country.⁴⁸⁷ Interestingly the *British Medical Journal* paraphrased Tait translating his horror of the operation into tangible, pecuniary terms: 'he has stated...that the amount of worry which is given him by every case of hysterectomy, even when successful, is such as to be almost beyond the recompense of any fee' the journal reported.⁴⁸⁸

⁴⁸⁵ For a detailed discussion of uterine surgery in the nineteenth century see Ilana Löwy 'Because of Their Praiseworthy Modesty, They Consult Too Late': Regime of Hope and Cancer of the Womb, 1800-1910' *Bulletin of the History of Medicine* 85, no.3 (2011) 356-83. Large statistical studies of hysterectomy mortality rates were comparatively sparse around this time as so few were being performed. But a table of 365 hysterectomies compiled by American surgeon Theodore Gaillard in 1880, of hysterectomies performed by surgeons across the world, put the mortality rate of hysterectomy at 70%. Theodore Gaillard *A Practical Treatise on the Diseases of Women* (London: Henry Kimpton, 1880) 547. By the end of the 1880s vaginal hysterectomy was also being practised although this too had a high mortality rate. De Styrac does not specify which method of hysterectomy he is referring to.

⁴⁸⁶ Thomas Keith 'Thirteen Cases of Hysterectomy, With Remarks on Carbolic Acid Spray in Abdominal Surgery' *British Medical Journal*, 1, no.1257 (31st January 1885) 214-5 and 'Editorial: Ovariectomy, Hysterectomy and Oöphorectomy' *British Medical Journal* 1, no.1257 (31st January 1885) 239- 240.

⁴⁸⁷ Lawson Tait 'Abstract of an Address on One Thousand Abdominal Sections' *British Medical Journal* 1, no.1257 (31st January 1885) 218-19; 218.

⁴⁸⁸ 'Editorial: Ovariectomy, Hysterectomy and Oöphorectomy' (Jan 31st, 1885) 240.

De Styrap's tariff acted only as a *guide* for practitioners and furthermore practitioners lower down the scale – a well-known and successful lithotomist such as Henry Thompson, for example, could probably have charged as much for his services as Spencer Wells or Thomas Keith could.⁴⁸⁹ Nonetheless *The Medico Chirurgical Tariffs* had the respect of the profession and its suggestions were taken seriously in light of there being few other similar works for the profession to look to, de Styrap himself assuring readers that the prices were devised using the advice of specialists in each field rather than based solely on his own estimations (suggesting that a specialist ovariologist had informed de Styrap's judgment of the operation's price).⁴⁹⁰ Thus the pricing of ovariectomy by de Styrap poses significant questions about *how* exactly its pecuniary value was determined and why it continued to be deemed the most expensive operation a practitioner could undertake. Undoubtedly operative risk was one of the key factors in its pricing, although really the risk being compensated wasn't so much that to the patient's life but the risk to a surgeon's professional reputation. Well into the 1880s every ovariectomy performed remained risky; intertwined with that risk was also the potential for a deeply traumatic experience for the surgeon if the operation was difficult or if it failed and this in itself acted as a major force upon their choice to operate. A high price, therefore, essentially acted as a form of pecuniary compensation for the anxieties produced by the possible death of a patient and subsequent damage that might be done to one's reputation. As one American surgeon described his experiences with ovariectomy in 1884, with unusual candour, 'in 1883, 1881 and 1882....my ovariectomies died right off as

⁴⁸⁹ Thompson was well-known to command huge fees for his services, spurred on by the prestige he had garnered from treating King Leopold of Belgium for bladder stones in 1863. Zachary Cope notes that in 1865 Thompson earned £2000 for treating a high ranking British Admiral in Paris. Zachary Cope *The Versatile Victorian: Being the Life of Sir Henry Thompson, 1820-1904* (London: Harvey & Blythe, 1951) 45.

⁴⁹⁰ De Styrap, J. (1890) 4.

fast as I could operate upon them. It made me so sick, that I could scarcely bear to hear of a case of ovariectomy.⁴⁹¹

The price was also likely to have been inflated by the professional risks peculiar to those who performed serious surgery upon the female genital organs. All doctors who specialised in diseases of women were peculiarly susceptible to charges of misconduct, mistreatment or immodesty, as women continued to be conceptualised as vulnerable child-like creatures, towards whom the paternalistic medical profession saw their role to be that of their modest protectors. At least three prominent surgical specialists in female diseases – all well-known as ovariectomists – Isaac Baker Brown, Heywood Smith (1837-1928) and Francis Imlach (1851-1920), had their careers brought to virtual ruin by disgraces in their practice. Isaac Baker Brown's case is perhaps the most notorious. Having made a name for himself as an ovariectomist, Brown had become embroiled in scandal in the late 1860s when he had begun to perform clitoridectomies to treat hysteria and epilepsy in women. The operation had been performed at his London Surgical Home under circumstances of dubious consent and, in the opinion of many London medical men, with what seemed to be little sound physiological reasoning; Brown was subsequently expelled from the Obstetrical Society.⁴⁹² The scandal surrounding Heywood Smith was no less controversial, Smith having been revealed in 1886 to have assisted the well-known but controversial journalist W T Stead in his investigations into child prostitution. Stead (1849-1912) had 'purchased' a thirteen year

⁴⁹¹ 'Essay on Desperate Surgery in its Relation to Women: The Proper Place for it; Who Should and Who Should not Attempt it' *Journal of the American Medical Association*, 3, no.12 (20th September 1884) 318-325; 322.

⁴⁹² 'Obstetrical Society of London' *The Lancet* 89, no.2275 (6th April 1867) 429-441. The Obstetrical Society called a special meeting to consider the fate of Brown and for members to vote as to whether he should be expelled. The debate, published in *The Lancet*, makes for fascinating reading as Society members packed in to the crowded hall to hear the case for and against Brown. It seems likely however, that the die was cast before Brown even walked into the room, for his supporters were few and far between by this point. Brown was barely given a chance to speak and jeers broke out whenever he attempted to do so. He was expelled with 194 votes for and 38 against.

old girl as part of his exposé into the trade in young virgins. In an effort to prevent Stead being accused of sexually assaulting her, Smith had been drafted in to prove the girl's virginity through a vaginal examination, in what was seen by the profession as a flagrantly immoral and unnecessary act. Smith only narrowly avoided the same fate as Baker Brown, expulsion from the Obstetrical Society.⁴⁹³ Liverpool surgeon Francis Imlach was also disgraced in 1886 when he was alleged to have removed both ovaries of a woman without her consent, an episode which will be discussed in more detail in the next part of this chapter. The financial impact on all three men was catastrophic. Brown, who at the height of his powers had received huge patronage from the wealthy and elite of London, died virtually penniless, supported in his final years only by the charity of sympathetic members of the profession. Smith fared a little better, having managed to resurrect a semblance of a career post-scandal and going on to set up the New Hospital for Women. But his reputation never quite recovered and he died with a comparably paltry £4232 to his name. Imlach also died poor, with just £125, his earnings having plummeted from £800 to £37 the year after the controversy surrounding his operations, showing just how drastic the financial impact of such an episode could be and how rapidly a carefully built-up practice could disintegrate. High prices provided at least some form of insurance.⁴⁹⁴

The high price accorded to ovariectomy might also be attributed to another aspect not unrelated to risk, that of the *time* post-operatively that needed to be spent on a case. De

⁴⁹³ 'Obstetrical Society of London' *The Lancet* 127, no.3258 (6th February 1886) 255-256. Stead was well-known for his crusade against child prostitution. This particular case however, in which Stead had attempted to 'buy' a child prostitute was somewhat botched and led to Stead's conviction for child abduction.

⁴⁹⁴ By the end of the 1880s some ovariectomists, such as Tait, had begun to identify themselves as 'abdominal' surgeons. This in part reflected the growing expansion of surgery into the abdomen as splenotomies and nephrotomies began to be performed with success, often by those who had made their names as ovariectomists (like Tait). But possibly it was also seen as more desirable, perhaps even more respectable, to be viewed as an abdominal specialist, rather than an ovariectomist, because it signalled a gender-neutral approach to surgery, less loaded with the risky politics of gender and sex, which specialists in female diseases had to be wary of.

Styrup never specifies whether he was factoring in attendance after the operation in his suggested fees, but the considerable aftercare required after an ovariectomy would have contributed significantly to the overall price. All major operations required investment of a surgeon's time. A lithotomy case in the 1880s, for example, even if the operation was deemed successful, generally required a month of careful attendance afterwards.⁴⁹⁵ A successful ovariectomy was seen to require slightly less time. Bantock and Wells' colleague at the Samaritan, John Knowsley Thornton (1845-1904) for example, believed that most hospital patients were ready to leave after around eighteen to twenty four days, although for those who could afford it, this was usually followed by a stay in a convalescent institution.⁴⁹⁶ However abdominal operations required a *depth* of care that extended beyond the remit of most other operations, as surgeons guarded against worrying signs of any the array of complications that might occur; septic disease, haemorrhage, fistula, intestinal obstruction and so on. If an ovariectomy case became complicated it could mean months of careful attendance. Much of this care demanded only watchful waiting and careful feeding on the part of the referring practitioner and nurse, rather than active treatment. But the burden of responsibility remained heavy on the operating surgeon, whose attendance was routinely required. Fears of being accused of concealing poor outcomes in ovariectomy remained prevalent and those who performed it were encouraged to keep abreast of their former patient's condition for at least a year after the operation, meaning that every case – in theory at least – required serious investment of a surgeon's time.⁴⁹⁷ Very little was written about the

⁴⁹⁵ William Cadge 'Lithotomy' in *Dictionary of Practical Surgery, Vol.1* ed.Christopher Heath, 934 – 943 (London: Smith, Elder & Co, 1889).

⁴⁹⁶ John Knowsley Thornton, J. (1886). 'Ovariectomy'. in *Dictionary of Practical Surgery, Vol.2* ed. Christopher Heath, 151 - 159 (London: Smith, Elder & Co, 1886)

⁴⁹⁷ Alban Doran *Handbook of Gynaecological Operations* (Philadelphia: P. Blakiston & Son, 1887) 271. The American ovariectomist Edmund Peaslee claimed to have rejected over 100 ovariectomy cases on the basis that he wouldn't be able to adequately oversee the after-care, writing in 1867 that the operating surgeon's part in the after-treatment consisted of 'three fourths the responsibility, and nine-tenths the anxiety'. Edmund Peaslee 'Ovariectomy, When and How to Operate; After-Treatment' *Southern Journal of the Medical Sciences* 2 (November 1867) 546-552; 551.

pricing of aftercare following an ovariectomy, other than *The Lancet's* observation (cited above) that it was the heavy cost of nursing that pushed up the price of the operation. But it seems likely that surgeons often charged separate fees for the operation itself and the aftercare, as the latter's price varied considerably depending on where the patient was convalescing and how frequently their medical services would be called upon. Charles Clay's case notes preserved from the late 1850s to the early 1860s, while detailing an earlier time period, give a significant perspective on this particular financial aspect of the operation. Clay charged between fifteen and forty pounds per case, the equivalent today of between £650 and £1800, but in his records he often broke these charges down into the constituent parts of the whole process, noting separate fees for 'operation', 'attendance' and on occasion 'lodging' too, all of which required payment.⁴⁹⁸

But the figures provided by De Styrap suggest that these were not the only factors coming into play. If we once more take as a comparison hysterectomy, there seems to be little 'logical' about the difference in their price. Technically speaking, ovariectomy was not more demanding than hysterectomy; in fact as Keith's comments in 1878 implied, it was rapidly gaining a reputation for being a fairly simple operation to perform.⁴⁹⁹ Both abdominal and vaginal hysterectomy on the other hand often involved dealing with complex vascular tissues which were at risk of haemorrhaging. Furthermore, those who performed hysterectomy were for the most part primarily ovariectomists, thus liable to the same professional risks that might be endured when performing ovariectomy. The high fees then probably reflected other factors. The unique identity of ovariectomy as an innovation which had substantially changed surgery quite possibly played a part. It was ovariectomy that had paved the way for making abdominal surgery safe. Yet early ovariectomists had not been

⁴⁹⁸ Charles Clay's case book, M/C Medical Collection – cat.9.11.54 MNB (Manchester Medical Collection, University of Manchester).

⁴⁹⁹ Keith (October 19th, 1878) 593.

rewarded for their innovations, rather they had been interrogated, scorned and derided for performing the operation. For the newer generation revelling in the acceptance the operation had now gained and its grand status as *the* operation that had changed the landscape of surgery, high fees were perhaps, compensation for the troubles ovarian surgery had been put through and the high status of the operation had now achieved.

But there was also another factor that was possibly responsible for the continued expense of ovariectomy: patient demand. By the 1880s real fears were forming in the profession that ovarian surgery was being performed excessively and that women were in fact *demanding* to have their ovaries removed. As we shall see in this next section, such a possibility not only had professional implications but significant financial ones too.

4.4 Oöphorectomy, Operative Mania and Surgical Consumption

The lucrative nature of ovariectomy and other ‘gynaecological’ practices did not go uncontested. As we have seen, in the late 1870s, those who specialised in diseases of women continued to be vulnerable to accusations that they were exploitative and overly concerned with the sizeable remunerations they received from their female patients. But this perception - one that was present both in medical circles and in public imagination – was increasingly centred upon the surgical aspects of gynaecology.⁵⁰⁰ Nowhere more so was this apparent

⁵⁰⁰ See for example Frank Danby (pseudonym of Julia Frankau) *Dr. Phillips: A Maida Vale Idyll* (London: Vizetelly & Co, 1887). Frankau’s novel follows the life of ‘ladies doctor’ Benjamin Phillips, a man with many ‘remunerative patients’ (16-17). The adulterous Phillips eventually murders his wife Clotilde, a chronic sufferer of ovarian dropsy, with an overdose of morphine after an ovariectomy. The book was published at the height of the ovariectomy scandal. Also see physician Edward Berdoe’s satire of 1880s hospital medicine (also published under a pseudonym) which viciously pounced upon the excesses of gynaecology, including the fees that Berdoe felt were unnecessarily charged for gynaecological procedures: *Aesculapius Scalpel* (Edward Berdoe). *St. Bernards: The Romance of a Medical Student*. (London: Swan Sonnenschein, Lowrey & Co, 1887) 64. As Keir Waddington has highlighted Berdoe’s book was primarily written for a female audience, particularly those who were part of the flourishing anti-vivisection movement. Keir Waddington ‘Dying Scientifically: Gothic Romance and London’s Teaching Hospitals’. Conference paper: British Society for Literature and Science, Oxford, April 13th, 2012

than in the realm of ovarian surgery, the triumphant centrepiece of gynaecological surgery. Ovariectomy continued to be by far the most common operation performed in women's hospitals.⁵⁰¹ With the emergence of Battey's and Tait's operation in the late 1870s there was also growing interest among surgeons about how removing both ovaries might alleviate certain painful gynaecological conditions. However by the 1880s a backlash against Tait, Battey and their followers was gaining ground, exploding in 1886 in a veritable panic about an apparent 'laparotomy epidemic' in Britain, which centred almost entirely around the excessive use of ovarian surgery.⁵⁰² Fears were growing that surgeons were enthusiastically removing ovaries for increasingly 'trivial' reasons, most often for mild ovarian pain and inflammatory conditions. Ovariectomists were made acutely aware of this in 1885 when a scandal began to unfold at the Liverpool Hospital for Women.⁵⁰³ That year questions had begun to be raised by colleagues regarding the number of major abdominal operations being performed by one of the hospital's surgeons, Francis Imlach. A paper he had given to the Liverpool Medical Institution in December of 1885 had cited forty-one cases of salpingo-oophorectomy (removal of the ovaries and Fallopian Tubes) for pyosalpinx and ovarian abscess. Despite a comparatively low mortality rate of seven per cent, Imlach's paper sparked derision from colleagues, suspicious of the high numbers of patients he was operating upon; an inquiry was duly set up which revealed a substantial increase in the

http://www.academia.edu/1721140/Dying_Scientifically_Gothic_romance_and_Londons_Teaching_Hospitals (accessed 29th August 2013).

⁵⁰¹ As seen in the operative statistics of the Samaritan Free Hospital, where between 1878 and 1897, of the 1,643 abdominal sections undertaken at the hospital, exactly 1,000 were ovarian operations. Hysterectomies comprised just 163. Alban Doran 'Classification of Abdominal Sections in Index Form, 1877-1897' (c.1924) MS0155/2/2 (Royal College of Surgeons of England).

⁵⁰² The terms oophorectomy and laparotomy seemed to be used interchangeably in this context. Technically laparotomy indicated only an incision in the abdomen, but the 'laparotomy epidemic' referred specifically to the removal of ovaries and sometimes the removal of the fallopian tubes too.

⁵⁰³ For more detailed accounts of the Imlach affair see Moscucci (1990) 160-164 and Rivlin (1999).

number of abdominal sections undertaken at the hospital between 1884 and 1885.⁵⁰⁴ Things went from bad to worse for Imlach when an ex-patient and her husband, a Mr. and Mrs. Casey, began a civil action against the surgeon, claiming that the latter had not been properly informed of the consequences of the operation; namely that both her ovaries would be removed and that she would never be able to conceive again. In a case that brought forth many of the pressing questions of the day surrounding ovarian function, Mrs. Casey also cited loss of her sexual desire.⁵⁰⁵ Imlach won the case by the skin of his teeth, after one of the hospital's nurses came forward to claim that she had informed Mrs. Casey of the operation's consequences. But his reputation and his practice were ruined.⁵⁰⁶

Damage was also inflicted on the reputation of ovariologists more generally, as news of the case filtered into the public press, provoking several other women to come forward with similar claims.⁵⁰⁷ For the rest of the century, ovariologists would be encumbered with extensive moral concerns from both inside and outside the profession about their operating practices. The possibility that hundreds of women's reproductive abilities were being destroyed, often for chronic conditions rather than terminal ones, was a concern that easily fused with anxieties about degeneration and sterility in the 1880s and 1890s, as it did also

⁵⁰⁴ Rivlin (1999) 44 and also 'Editorial' *The Lancet* 128, no.3285 (14th August 1886) 304-307.

Imlach's colleague Thomas Grimsdale alleged that the number of abdominal sections in 1884 was found to be 44 compared to 111 in 1885.

⁵⁰⁵ Whether women lost their sexual desire after having both ovaries removed was one of the biggest issues of the oöthorectomy debate. Lawson Tait was always adamant that this was not the case and supported Imlach throughout his trial. Robert Lawson Tait 'Casey vs Imlach' *The Lancet* 128 no.3286 (August 21st 1886) 375-6.

⁵⁰⁶ Rivlin (1999) 48-9.

⁵⁰⁷ 'The Shaw Street Hospital' *Liverpool Mercury* no.12050 (23rd August 1886) 7; 'Nurse v. Doctor: A Claim for Damages' *Hampshire Telegraph and Sussex Chronicle* no.6010 (21st November 1896) 2. The latter report involved the controversial case of Charles Cullingworth (1841-1908) surgeon at St. Thomas' Hospital. In 1897 Cullingworth was taken to court by nurse named Alice Jane Beatty who alleged Cullingworth had removed both her ovaries without her consent. Beatty had requested an operation to remove one ovary, explicitly expressing her wish that under no circumstance should the other be removed. Cullingworth nonetheless had done so, claiming that it had been discovered to be necessary once the operation was begun. A number of surgeons including Thomas Spencer Wells gave evidence against Cullingworth but Beatty eventually lost the case. For an excellent overview of the case more firmly in the context of surgical risk and responsibility see Brock (2013) 330-333.

with the repulsion to vivisection that filtered through middle-class Britain.⁵⁰⁸ The revelation that the operation was also on occasion, being used to treat insanity startled many, even those who were themselves ovariologists. Thomas Spencer Wells' *On the Castration of Women*, originally published in America in 1886 but which he insisted on republishing in 1891, saw Wells angrily castigate the propensity of some ovariologists to preside over questions of mental disease with their knives; 'he who cuts mad people must himself be mad' wrote Wells.⁵⁰⁹

Crucially, this expanding use of ovarian surgery during the 1870s did not seem to be based upon any major developments in *physiological* understandings of the ovary. Rather it rested upon the growing confidence there was in the safety of removing ovaries which allowed surgeons to experiment more readily with already established ideas about the organ's relation to other bodily ills.⁵¹⁰ To some observers this chasm between developments in ovarian physiology and surgery had connotations of improprieties. Could it be, as some speculated, that pathologies were being invented by surgeons specifically so that they could be cured for a price?⁵¹¹ *The Medical Press and Circular* certainly thought so. Even before the Imlach affair, *The Medical Press* had been a vocal critic of the over use of ovarian surgery and particularly oöphorectomy - the term often used to describe the removal of both ovaries for pain or inflammation. In 1882 the periodical speculated in regards to the operation that 'greed and the predilection engendered by special and limited study are apt to

⁵⁰⁸ As described in the previous chapter, Spencer Wells in particular, who was open in his support of vivisection, was a target for anti-vivisectionists.

⁵⁰⁹ Thomas Spencer Wells *Modern Abdominal Surgery: the Bradshaw Lecture delivered at the Royal College of Surgeons of England December 18th, 1890 with an appendix on the Castration of Women* (London: J. & A. Churchill, 1891) 49.

⁵¹⁰ For example the connection between ovaries and hysteria intimated earlier in the century in the physiological writings of Thomas Laycock: Laycock (1840).

⁵¹¹ Henry Coe of the Women's Hospital in New York was reported by the *Medical Press* to have remarked that a peculiarity of the growth of abdominal surgery was that 'it owes its impetus to the surgeons rather than to the pathologists. 'The Frequency of Diseases of Uterine Appendages' *Medical Press* 42 (14th July 1886) 30-31; 30.

compel men to unravel all forms of disease.⁵¹² Thus the journal implied not only the oft-made accusation that ‘specialist’ practice was more about money than medicine, but that it also bred an unsavoury culture where diseases were invented simply so that they could be profited from.

The journal revived its attack on oöphorectomy after the revelations about Imlach’s practice. But it was another surgeon known for regularly performing the procedure, Robert Lawson Tait, who was the most subject to their criticism. Tait, an avid correspondent with the medical press, rarely let sleeping dogs lie when allegations were made about his practice and, as his practices increasingly came into criticism after Imlach, he was often quick to publicly defend himself. In 1886 *The Medical Press* began to make quite clear its opinion of Lawson Tait’s practice in a series of articles, the key allegation being that Tait ran little more than a *business*. When Tait complained to the journal, specifically for declaring his practice one of the ‘large centres in which spaying is practised wholesale’,⁵¹³ the *Press* refused to retract their inferences about the business aspects of oöphorectomy. Instead they plunged the knife in further: ‘if he objects to the word ‘wholesale’ he cannot deny that a very large ‘retail’ business of this kind is done in some very large centres.’⁵¹⁴ Once more Tait responded angrily, claiming that if anything, his practice in oöphorectomy was *costing* him money, describing how he had been forced to provide free beds in his private hospital for scores of women who could not afford to fund themselves. Tait claimed that each such case cost him ‘fifteen to twenty guineas’ and that ‘nine out of ten of those a rank above hospital patients’ who came to him, had already been drained of their resources. Like Isaac Baker Brown before him, Tait suggested that many had spent money trying to find a medical rather

⁵¹² ‘Editorial: Questionable Surgery’ *Medical Press and Circular* 33 (3rd May 1882) 385-6; 385.

⁵¹³ ‘The Frequency of Disease of the Uterine Appendages’ *Medical Press* 42 (14th July 1886) 30-31; 31.

⁵¹⁴ ‘The Frequency of Disease of the Uterine Appendages’ *Medical Press* 42 (21st July 1886) 57-58; 58.

than surgical solution to their problem, leaving them in an ‘absolutely impecunious position’.⁵¹⁵

A pejorative and highly loaded term was increasingly being used to describe the apparent craze for unnecessary ovarian surgery: it had become a *fashion*. Thomas More Madden (1838-1902), an Irish surgeon who worried deeply about the spread of excessive surgery of this kind, perhaps made the link most explicit in his article *On the So-Called Laparotomy Epidemic*, which he published in 1886 at the height of the controversy. ‘No one acquainted with ancient medical literature will question the continually recurring influence of fashion on medical opinion and practice in every age’ he wrote, ‘nor can it be gainsaid that in successive epochs various forms of disease and methods of treatment come into and go out of vogue with almost as little reasons as influences the ever-changing modes of dress.’⁵¹⁶ For Madden then, there was a certain alarming inevitability to medicine and surgery being swayed by trends, something which had to be kept carefully in check. This was not the first time that ovarian surgery had been described as merely a fashion. As we saw in chapter two, similar allegations had been made some forty years before when the justifiability of ovariectomy was being debated.⁵¹⁷ But surgeons like Spencer Wells were keen to highlight that oöphorectomy was an entirely different operation from ovariectomy which, it was felt, had proved its worth; oöphorectomy was an innovation upon an innovation, and an unwelcome one at that. For those outside of the profession, however (and indeed for many within it), the distinction was not clear-cut; the craze for oöphorectomy seemed to be simply a new unfolding of ovarian surgery’s often unnecessary use. When in 1909 playwright and

⁵¹⁵ ‘Removal of the Uterine Appendages’ *Medical Press* 42 (8th September 1886) 202-3; 203. Although in Tait’s case the accusation may have been unfair. As Regina Morantz-Sanchez has shown, Tait had a reputation for using the money he earned from treating rich patients to fund his work with the poor. Morantz-Sanchez (1999) 152.

⁵¹⁶ Thomas More Madden ‘On the So-Called Laparotomy Epidemic’ (July 1886) *Dublin Journal of Medical Science* 82, no.1 (1886) 1 – 9; 2.

⁵¹⁷ ‘Extirpation of Ovarian Tumours’ (1844) 557.

well-known critic of the medical profession, George Bernard Shaw (1856-1950), addressed the Medico-Legal Society on ‘the Socialist Criticism of the Medical Profession’, Shaw specifically pinpointed the ‘fashion’ for operations and in particular, ovariectomies. But it was not the more recent controversies surrounding oophorectomy he pinpointed but rather the more ‘traditional’ ovariectomy: ‘I cannot believe that all the ovariectomies that were performed after Spencer Wells found out how to do it were necessary’ Shaw argued, connecting Britain’s most famous ovariectomist to the fashion for operations.⁵¹⁸ The development of oophorectomy exacerbated already present concerns about ovarian surgery as an immoral money-spinner and the phrases increasingly used to describe it, as a *vogue*, a *fashion*, an *excess*, suggested not only the possibility of wastefulness and unthinking consumption but also the continued characterization of ovarian surgery as a novelty.

Regardless of whether these accusations had a solid foundation or not, the notion of a procedure being fashionable at once made it vulnerable, removing any perception of professional neutrality and imbuing it with worldliness; making it as much the product of whimsical fashion as a style of dress. The use of the word ‘fashion’ was slippery. It suggested trends among doctors in their proclivities for performing certain operations. But it also raised once more questions about trends in the *demand* for operation. For if there was no demand for an operation how could there be a fashion? Was it possible that women were at times, active pursuers, consumers even, of the oophorectomy operation? Two polarised perceptions of the oophorectomy patient were emerging in the eyes of critics. On the one end, the vulnerable victim robbed of their reproductive role and denied consent, on the other, the frivolous woman exercising economic power over the practitioner in pursuit of an

⁵¹⁸ George Bernard Shaw ‘The Socialist Criticism of the Medical Profession’ *Transactions of the Medico-Legal Society* 6 (1909) 202-228; 216.

operation that put her in unnecessary danger. Both perceptions inhabited dangerous moral ground.

Ornella Moscucci, Regina Morantz-Sanchez and more recently, Claire Brock, have all discussed this subject. Moscucci has speculated that oöphorectomies may have been sought by some patients as a method of contraception. Certainly as she suggests, in Britain discussion ensued as to the possibility that oöphorectomy could be extended in its use to produce sterility in women with serious pelvic deformities as a means of preventing further obstructed labours.⁵¹⁹ In America, where oöphorectomy was generally thought to be far more widely performed, the *New York Medical Record* went as far as suggesting that oöphorectomies were characteristic of a progressive instinct towards population control, something which they argued was also economically expedient:

No woman wants more than two children, many only one, and a large per cent, including all the unmarried, not any at all. But in fact the population is increasing at a seriously rapid rate, and the modern economist has had to revive and readopt the views of Malthus. In this exigency, when society's needs are antagonised by infant multiplicity, the laparotomist steps in as a kind of modern saviour from the threatened polypedic catastrophe.⁵²⁰

This brazen positioning of ovarian surgery as an elective choice related to lifestyle rather than a serious medical problem, articulated all the deep fears of the profession and caused outcry in Britain.⁵²¹ Such comments require us to think seriously about how the female patient was positioned within this dialogue, as the recipient of the surgical operation on

⁵¹⁹ Moscucci (1993) 148-9.

⁵²⁰ As quoted in the *Medical Press and Circular*. 'Editorial: The Virtues of Laparotomy' (June 2nd 1886) *Medical Press and Circular* 41 (2nd June 1886) 502-3.

⁵²¹ *Ibid.* See also Mary J. Hall-Williams (1899). *Ovariectomy Averted*. (Plymouth, 1899).

offer. Certainly notions of demand in ovarian surgery should always be considered in conjunction with risk, which in the 1880s had dropped significantly but remained at a level where one would likely be very concerned: somewhere between five to fifteen per cent of British patients were still dying.⁵²² We can presume therefore, that anxieties about operating would have been as prevalent then as they are today and probably more so.⁵²³ But as Morantz-Sanchez and Brock have both suggested, even the *possibility* of surgery-by-choice had a significant impact on practitioners; the very notion of it suggested a disempowering of doctors and an increase in the authority of female patients. As Brock argues, it was once more the question of *necessity* that was central. That an operation might principally be carried out because of a patient's request rather than as a consequence of the surgeon's judgment served only to undermine the idea that the operation was – medically speaking – necessary at all.⁵²⁴

The problem of patients seeking unnecessary operations was openly alluded to by American ovariologists, particularly those wishing to disparage the operation. But the issue was also picked up upon by the profession in Britain and Ireland, where the press published stories of women's apparent disregard for their ovaries, concerned only with being cured from their trivial aches and pains.⁵²⁵ An important class aspect was at work here: the quick-fix of an

⁵²² By 1883 the mortality rate at the Samaritan was about one in eighteen: Thomas Spencer Wells 'An Inaugural Address on the Revival of Ovariectomy, and its Influence on Modern Surgery' *The Lancet* 124, no. 3194 (8th November, 1884) 857-60; 857. At the other end of the spectrum, Charles Cullingworth lost 13.5% of his thirty seven ovariectomy patients during the first half of the 1880s; Charles Cullingworth, 'A Tabular Statement of Sixty-Four Abdominal Sections; Including Forty-Five Completed Ovariectomies with Remarks.' *The Lancet* 130, no.3335 (30th July 1887) 205-9; 205.

⁵²³ Anxieties about operations remain virtually universal according to current research. N Panda, and E. Al 'Pre-operative Anxiety: Effect of Early or Late Position on the Operating List' *Anaesthesia*, 51 no.4 (1996) 344-346 and E. Carr *et al* 'Patterns and Frequency of Anxiety in Women undergoing Gynaecological Surgery' *Journal of Clinical Nursing*, 15, no.3 (2006) 341-52.

⁵²⁴ Brock (2013) 330.

⁵²⁵ Morantz-Sanchez (1999) 106-7; 'Editorial: Removal of the Uterine Appendages' (8th September 1886) 203. The editorial detailed the case of a woman about to have her ovaries removed by an anonymous operator. Found by an observer to have 'full round rosy cheeks and red lips', closer scrutiny of her troubles found she suffered pain 'only three or four days a month.' The operation did not go ahead.

oöphorectomy for painful conditions was seen to have far greater worth when applied to working-class women who had heavier domestic and economic duties to cope with, while middle-class women were seen as having less need to resort to such measures, as they generally had more time and greater financial resources to continue with palliative treatments.⁵²⁶ Thus the performance of the operation upon richer women in particular was seen as lavish: evocative of the idea of women as consumers, desirous of commodities and services that would ease their life, regardless of consequences. It was a perception that increasingly infused with late nineteenth-century ideas of women as frivolous, and signalled complex power relations between the sexes, in which women wielded considerable economic power but always in a framework in which 'men formed and informed their desires.'⁵²⁷ It was within this nexus that the high price of ovariectomy was constructed; a financial relationship which saw ovariectomists at liberty to charge whatever they wanted, dependent only upon competition from other practitioners, and where patients, it seemed, were queuing up to have the operation performed.

How far this was actually the case, that women were indeed allowing themselves to be operated on 'merely' because of minor discomforts brought to their lives by suspected ovarian disease, or even because they wished to make choices about their reproductivity is difficult to know, the dearth of female patients' accounts proving here as it does in so many areas of the history of medicine, to limit our understanding of the patient experience. But the *idea* that this was happening provided powerful fodder for opponents of oöphorectomy who

⁵²⁶ Morantz-Sanchez (1999) 50. Morantz-Sanchez cites the American experience specifically but contemporary reports suggest a similar attitude appeared to prevail in Britain: Heywood Smith 'Successful Case of Battey's Operation or Oöphorectomy' *British Medical Journal* 2, no.967 (12th July 1879) 41-5.

⁵²⁷ Judith Walkowitz *City of Dreadful Delight: Narratives of Sexual Danger in Late Victorian London* (Chicago: University of Chicago Press, 1992).48; see also Mary Louise Roberts 'Review Essay: Gender, Consumption and Commodity Culture' *American Historical Review* 103, no.3 (1998) 817-844.

liberally sprinkled their protest pieces with anecdotes that suggested that this *was* the case. The possibility of female patients as economic actors, their desires acquiesced to by unscrupulous operators, provoked considerable consternation. It served to reaffirm anxieties that both the invention and expansion of ovarian surgery was motivated by profit.

4.5 Conclusion

If we see the function of history as informing our understanding of the present then continuing to engage with the economic history of medicine remains as important as ever today. Tensions over the financial aspects of medical services not only continue to permeate British medicine but to grow. State provision ‘free at the point of delivery’ is increasingly questioned by advocates of privatization, and as private healthcare initiatives expand, so too do concerns over financial barriers to access, as well as the possible risks associated with private medical services, especially surgery, which is often less regulated.⁵²⁸ The way doctor’s negotiate these financial issues still remains deeply embedded in medical humanist ethics that emanate not just from the perceptions of those outside of medicine but also from within.⁵²⁹

⁵²⁸ This was seen most recently in the scandal involving widely-used gel breast implants manufactured by the French company Poly Implant Prothèse (PIP). In 2011 the implants were discovered to contained industrial rather than medical grade silicone, leading to a higher risk of leakage and even rupture of the silicone. Nearly all breast implant surgery occurs outside the NHS. In 2013 the Royal College of Surgeons of England issued new guidelines on professional standards in cosmetic surgery in response to a perceived ‘lack of consistent professional standards in cosmetic surgical practice.’ Royal College of Surgeons ‘Professional Standards for Cosmetic Practice’ (Royal College of Surgeons, 2013) <http://www.rcseng.ac.uk/publications/docs/professional-standards-for-cosmetic-practice/> (accessed 28th August 2013) 6.

⁵²⁹ In 2012 *The Lancet* editor Richard Horton described the language used in the media to depict the BMA organised doctors’ strike in June of that year. The strike had been organised in response to changes in doctor’s pensions, which would see them having to work longer while their pensions were reduced: ‘The shameful self-interest of doctor’s’, said one newspaper. ‘Inexcusable’, ‘baffling’, ‘mistaken’, ‘unseemly’, ‘a massive own goal’ and ‘greedy’ were words used by others,’ Horton paraphrased. And yet rather than refute these denunciations, Horton conceded they contained a ‘kernel of truth’, going on to compare the strike unfavourably to the recent – and in his eyes, more moral – mobilisation of doctor’s against the government’s downsizing of the National Health Service via the Health and Social Care Bill. Richard Horton ‘Offline: Standing Down for Patients’ *The Lancet* 379, no.9832 (9th June 2013) 2134.

This chapter has sought to shade in how this moral-economic framework functioned in relation to major, innovative surgery in the nineteenth century. A number of historians have referred to the economic implications of ovariectomy, and in the case of Morantz-Sanchez, have offered significant contributions to our understanding of them; but none have situated it in the place it should be: central and absolutely integral to the history of the operation, where the huge potential value, economically, of the operation, framed its performance and its representation. As I showed in the first part of the chapter, ovarian surgery was identified as an innovation of private practice and specialist institutions, both of which suggested financial motivations for the operation. At this time the medical ‘specialist’ still occupied slightly dangerous ground in terms of medical morality, especially those who specialised in the diseases of women. Yet to become an elite practitioner in ovariectomy, also paved the way for a lucrative career, for as I show, ‘ovariectomists’, were virtually at liberty to charge what they wanted. In the second part of the chapter I looked more closely at the specific price of ovariectomy and in particular the judgment of Jukes De Styrup in his influential *Medico-Chirurgical Tariffs*, that ovariectomy was the most expensive operation in surgery. This, I argued, raises questions about how exactly operative value was determined. While conceptions of risk played a fundamental part, as did the level of commitment that would be required from a surgeon after the operation was performed, so too did the sense of entitlement among ovariectomists. The high price reflected the operation’s *status* as a striking and major innovation. Indeed even as other equally risky operations began to be used, such as hysterectomy, it was ovariectomy which remained conceived of as the most expensive operation a surgeon could perform. The prices can also be read in terms of patient demand. As I showed in part three, during the 1880s, there was widespread concerns that there was a ‘fashion’ for ovarian surgery. Ovariectomy was permanently informed by a male perspective; male surgeons for the most part ran the show and the vulnerability of women against the onslaught of oöphorectomy was a key concern during the so-called ‘laparotomy epidemic’.

Yet conversely ovarian surgery for more trifling conditions also raised the spectre, real or not, of female consumer power, of the possibility that ill-informed women were purchasing risky surgery simply for a more comfortable life, something, according to more conservative surgeons, that unscrupulous oöphorectomists were willing to acquiesce to, in their quest to make money. What becomes clear by looking at the financial aspects of ovariectomy is that historians must venture beyond the *explicitly* commercial when looking at ‘commercial’ medicine in the nineteenth century. Ovariectomists did not sell patent medicines or advertise in newspapers, but in the eyes of some of the medical community, their services were as much a commercial enterprise as those who did.

In the late nineteenth century, no surgeon who worked in ovarian surgery outwardly claimed that the lucrative nature of the operation was what motivated them to operate. Such an assertion would have been unpalatable in that medico-cultural context. Nor is it possible to definitively ascribe *what* did motivate the historical actors at play here to operate. The point however is that financial issues surrounding ovarian surgery had to be negotiated with great care. That it *was* lucrative was a double-edged sword; the prices were higher, but so were the stakes. Surgery like ovariectomy, still conceived of as a recent innovation, came with its own peculiar risks and responsibilities. Moreover, as new controversies arose with the ‘laparotomy’ epidemic, the possibility that ovarian surgery was an unseemly novelty, once more emerged. As we will see in the next chapter, the status of ovarian surgery was not by any means becoming simpler, in fact it was to become considerably more complex.

Chapter Five

The Afterlife of an Operation

5.1 Where does innovation go?

‘The perfecting of ovariectomy has resulted in the saving and prolonging the lives of multitudes,’ surgeon John Halliday Croom declared in 1896, invoking a religious overtone to the operation that was common among surgeons as they reflected upon the previous few decades.⁵³⁰ British surgeons of the late-nineteenth century had seen remarkable changes in their field and to Croom’s mind, as to many others, ovariectomy, one of the landmark operations of the era, could not be bettered, in terms of its ability to cure. Nor could the impact the operation had had on the lives of many sick women be denied. And yet fast forward to today and ‘ovariectomy’ is a word seldom used by surgeons and rather more by historians. This chapter then, takes as its starting point two questions which go on to raise many more: what happened to ovariectomy after the controversies surrounding it peaked in the late nineteenth century and how did it shift from being a contemporary phenomenon to an historical one?

During the late nineteenth and early twentieth centuries the operation had a complicated status. While thought by many to have revolutionized surgery, it also began to lose some of its eminence as a versatile surgical tool that could be used to rectify an array of medical problems. Increasingly the value of the operation – as well as the theories of surgical

⁵³⁰ John Halliday Croom, ‘Obstetrics’ *The Lancet* 148, no. 3805 (August 1st 1896): 343-344.

ablation which had long underpinned it - was challenged by new ideas in physiology. At the same time it remained an integral part of surgical practice, sometimes even flourishing in new ways and, despite the controversies of the 1880s explored in the previous chapter, procedures involving the removal of one or both ovaries, were still very often being performed. Indeed up until the late 1930s, the term 'ovariotomy' remained common in medical parlance, although the *meaning* of the word was becoming ever more complicated. For these reasons the transition of ovariotomy from a 'contemporary' practice to an 'historical' one was without any definitive lines of demarcation.

Through the operation, the past, present and future of surgery intermingled uneasily, as the operation - while still in use - was also used by surgeons to try and understand the peculiarly accelerated progress of surgery in the latter half of the nineteenth century. Surgery before this time was increasingly viewed with a sense of disbelief: how, some wondered, could surgeons have worked under circumstances where there was no anaesthesia, no antisepsis and no abdominal surgery? How could practitioners of the early-nineteenth century have been so blind to the possibilities of ovariotomy? Such sentiments were mixed with apprehension as to where the future of surgery lay and a desire on the part of many to look back at the past decades for guidance to the future. By the turn of the century ovariotomy had come to play a key role in the formulation of both disbelief as to how surgery had been only a few decades earlier, as well as nostalgia for the era that had passed.

Thus in this chapter I go beyond simply presenting an account of the 'decline' of ovariotomy, which was just one way the operation was understood during this time. Instead I offer something more akin to exploring its 'afterlife' following the more well-known part of its history. By doing so I show how circularity operated – and continues to operate – between contemporary and historical accounts of the operation, while also seeking to problematize our understanding of the 'end' of ovariotomy. The broader point I make is that histories constructed by turn-of-the century surgeons should be recognized for their

historiographical significance rather than only as ‘whiggish’ constructs. Such accounts have traditionally been grist for the mill to social historians of medicine. As Ludmilla Jordanova has written, encapsulating the attitude of many historians: ‘in a progressivist narrative, the search for truth was told in terms of blind alleys and right answers; the model was a journey, and the main emphasis was on content.’⁵³¹ Most medical historians appear to remain content with this evaluation, generally viewing such histories as simplistic accounts, waiting for historians to revise and to make analytical. To an extent such criticisms are valid: the historical reflections of doctors during the late nineteenth and early twentieth centuries were undoubtedly constrained in that both authorship and audience tended to be drawn from the medical profession - although with some notable exceptions⁵³² - and often did emphasise advance; their agenda was radically different to those of present-day historians. Nonetheless this chapter conceives of surgeons’ turn to history as a significant *part* of ovariectomy’s innovation, rather than merely triumphant reflections upon an already-established innovation. For it was through historicization that the operation’s identity as a striking and significant innovation was further moulded.

How nineteenth-century medical men used history has received plenty of attention from historians, many of whom have stressed the ways in which the history of medicine brought *cultural* authority to medicine. Increasingly so as the ‘art’ of medicine appeared to come

⁵³¹ Ludmilla Jordanova, ‘The Social Construction of Medical Knowledge’ in *Locating Medical History: The Stories and Their Meanings*, ed. Frank Huisman and John Harley Warner (Baltimore & London: The Johns Hopkins University Press, 2004), 338-363; 340.

⁵³² Perhaps most famously George Bernard Shaw (1856-1950). Known to be highly critical of the lucrative nature of medical practice, Shaw’s powerful introduction to his 1906 play *A Doctor’s Dilemma* was a scathing critique of the medical profession, which he argued was, in its current state a ‘murderous absurdity.’ See George Bernard Shaw *The Doctor’s Dilemma*. (London: Penguin, 1957); 9. Nonetheless his 1909 speech to the Medico-Legal Society also revealed his consciousness of the weight of history that rested upon his medical contemporaries and those who had come of age as part of the first ‘scientific’ generation, noting that he belonged to ‘a generation which, I think, began life by hoping more from Science than perhaps any generation ever hoped before and, possibly, will hope ever again.’ G.B. Shaw, ‘The Socialist Criticism of the Medical Profession’ *Transactions of the Medico-Legal Society* 6 (1909): 202-228; 202.

under threat from laboratory centred ‘scientific’ medicine. Practices such as collecting antiquarian medical books and interpreting their content, as John Pickstone has shown, seemed to restore some equilibrium between science and art, as doctors immersed themselves in the role of literary scholar.⁵³³ As Rolf Winau has similarly stressed, this extended also to the integration of history into medical education.⁵³⁴

But my approach differs from both Pickstone and Winau’s in that it is focused upon surgeons’ interest in their *recent* past. It also looks beyond use of the history of medicine in a pedagogical sense – although this is an aspect – and more broadly to how recent history figured in medical culture. In this way, it is an approach that derives more from Victorian Studies than the history of medicine. In the former, scholars have long recognized the nineteenth century to be a crucial period in historiography and central to my exploration is literary theorist Suzy Anger’s assertion that ‘questions of historical knowledge were central to Victorian intellectual debate, as was the Victorians’ sense of themselves as historical beings.’⁵³⁵ As Victorian surgeons grappled with connecting past, present and future, so too this chapter interlaces Victorian surgeons’ sense of history with contemporary medical historians’ sense of history, emphasising connectivity between understandings then and now of ovariectomy which are often underplayed. Thus, this chapter is about both ends and beginnings.

⁵³³ John V. Pickstone Review Article ‘Medical History as a Way of Life.’ *Social History of Medicine* 18, no. 2 (August 2005): 307–323; 310.

⁵³⁴ An example would be Rolf Winau’s account of the use of medical history in German medicine. Rolf Winau ‘The Role of Medical History in the History of Medicine in German.’ *In Functions and Uses of Disciplinary Histories*, ed. Loren Graham, Wolf Lepenies and Peter Weingart, 105-118. (Dordrecht: D. Reidel Press, 1983).

⁵³⁵ Suzy Anger ‘Introduction: Knowing the Victorians’ In *Knowing the Past: Victorian Literature and Culture* ed. Suzy Anger (Ithaca & London: Cornell University Press, 2001), 1-24; 3.

5.2 All in a Name? Decline, Diffusion and Surgical Linguistics

Medical innovations are often historicized as either comfortably diffused or ultimately rejected. Surgery is no exception, with Ann Dally asserting that ‘new operations were invented and either flourished and developed or declined into oblivion.’⁵³⁶ In the case of ovariectomy however, neither option is sufficiently explanatory as to what happened to the operation towards the end of the nineteenth century. Histories commonly conclude with the outcries that came from many in the profession in the 1880s and 1890s - most famously from Thomas Spencer Wells - that ovarian surgery was being performed excessively, an episode which perhaps acts as a convenient endpoint to the historical narrative of ovariectomy. Ornella Moscucci, for instance, acknowledges the continued ripples of the ovariectomy controversy in ensuing debates as to whether obstetricians or general surgeons had the ‘right’ to perform pelvic surgery.⁵³⁷ But it was, she argues, the Imlach affair in 1886 which ‘brought into relief not only beliefs about the biological basis of femininity, but also profound tensions within the obstetrical profession over the propriety of radical operations.’⁵³⁸ Lawrence Longo and Regina Sanchez-Morantz, mainly looking at the American experience, conclude similarly that there was a decline in radical ovarian surgery in the 1890s, followed by an unproblematic shift to more conservative procedures.⁵³⁹ As will be shown here, Britain at least did not see such a smooth transition.

⁵³⁶ Ann Dally, *Women Under the Knife; A History of Surgery*. (London: Hutchinson Radius, 1991); 210.

⁵³⁷ Ornella Moscucci, *The Science of Woman; Gynaecology and Gender in England, 1800-1929* (Cambridge: Cambridge University Press: 1990), 181-184.

⁵³⁸ *Ibid.* 164.

⁵³⁹ Longo (1979) 265; Morantz-Sanchez (1999) 110.

These historians give little consideration as to how exactly we should measure ‘decline’ in relation to surgical innovation and to what extent such a framework is even useful. Yet given the difficulties inherent in defining a surgical operation it seems vitally important to do so: does an operation in fact exist through language alone? If surgical nomenclature changes, does an operation become something different? Does the reducing use of a term like ‘ovariotomy’ necessary signal decline? More recently Sally Wilde has applied the ‘career’ innovation path – a characteristic approach in innovation studies ⁵⁴⁰ - to surgical operations. As she sees it, ‘operations have careers, and the processes through which they are developed have many parallels to the processes through which other technological innovations are developed.’⁵⁴¹ With regard to late nineteenth-century surgery, Wilde separates operations into those which could be classed as ‘production line operations’ and those which were ‘unstable objects’. In the former category she locates procedures such as tonsillectomy, performed with increasing frequency from the early twentieth century onwards and, despite going through various fashions and periods of decline, has been continually practised from the time of its inception. If not completely standardised, the operation has at least become a stable part of surgical culture. In the other category are operations that enjoyed a brief vogue before disappearing entirely. Wilde suggests as examples Battey’s operation and nephropexy, the latter a moderately controversial operation which became popular in the late nineteenth century and involved surgically treating the condition commonly known as ‘floating kidney’.⁵⁴² Thus Wilde establishes a dichotomy between those surgical novelties that ‘succeed’ and those that ‘fail’.

⁵⁴⁰ See thesis introduction, esp.11 and J.B. McKinlay, ‘From ‘Promising Report’ to ‘Standard Procedure’: Seven Stages in the Career of a Medical Innovation’ *The Milbank Memorial Fund Quarterly*, 59 no.3 (1981): 374-411.

⁵⁴¹ Sally Wilde, *History of Surgery: Trust, Patient Autonomy, Medical Dominance and Australian Surgery, 1890–1940*. (Byron Bay: Finesse Press, 2010); (e-book; <http://www.thehistoryofsurgery.com/the-operations/>; accessed 8th June 2013) 61.

⁵⁴² This was the common name for nephroptosis, a condition which sees the kidney detach from

Wilde is right that some operations have identities more durable than others. But as has been suggested throughout this thesis, surgical operations are inherently unstable entities and, as I briefly discussed in the introduction, the staged ‘career’ approach to technological innovation can oversimplify understanding of ‘new’ surgery. Meanings of different operations shift continually, no matter how long and established their history. A tonsillectomy is performed and experienced quite differently today than from how it was in the 1920s. Nephropexy as well, once ridiculed by much of the surgical profession, is in fact in use again today, but framed by an entirely difference medico-cultural context. Even if the objective remains the same, can these operations today be considered the *same* operation as they were in the past? There is no easy answer to this question. Such occurrences speak to the continual negotiation between surgical nomenclature and the meaning of operations, which complicates notions of success or failure.⁵⁴³

Ovariectomy similarly belies the staged career model. In the 1890s and early 1900s the question was less whether ovariectomy was to be accepted or rejected but what ovariectomy had come to *mean*. Such concerns, as we have seen, were by no means new to the ovariectomy debate where its definition was often in flux and where, in particular, defining the difference between ovariectomy and oöphorectomy had significant professional and even moral ramifications. But during the late nineteenth century the relationship between nomenclature and procedure grew steadily more unwieldy and was subject to increasing linguistic complexity. ‘Ovariectomy’, ‘double ovariectomy’, ‘oöphorectomy’, ‘removal of the uterine appendages’, ‘Battey’s Operation’: by the end of the 1880s the nomenclature to describe ovarian operations had expanded so greatly that it left many surgeons unsure about

surrounding connective tissues and sink down into the pelvis.

⁵⁴³ S.J. Srirangam, et al, ‘Nephropexy: Seriously Misunderstood?’ *BJU International* 103 no. 3 (2009):296-30.

what the original and most popular term, ‘ovariotomy’ actually meant. The problem was more deep rooted in Britain than America. As we have seen, in Britain, the term ‘Battey’s Operation’ was less popular than it was in the country of its origin due to its association with operations for mental conditions in women. Instead British surgeons tended to struggle around the terms ‘ovariotomy’ and ‘oöphorectomy’. ‘Ovariotomy’ usually indicated the treatment of tumours and cysts. Oöphorectomy, as discussed in the preceding chapter, usually signalled treatment for inflammatory conditions, diseases of the fallopian tubes and the removal of the ovaries as a means of bringing on the menopause. But these definitions were by no means hard and fast and the terms were sometimes used interchangeably, especially because ‘oöphorectomy’ was often taken to indicate the removal of both ovaries and ‘ovariotomy’ the removal of just one, unless otherwise indicated.⁵⁴⁴ The validity of these definitions was also challenged by the growing enthusiasm among surgeons for treating cystic ovaries and inflamed fallopian tubes simultaneously, through a procedure known as ‘salpingo-oöphorectomy’.⁵⁴⁵

Surgical textbooks only encouraged this vagueness with many surgeon-authors avoiding altogether making too nuanced definitions of what technique constituted what operation, usually defining instead through the objective of the operation (for example to remove a tumour or to relieve ovarian pain). Arthur Giles (1864-1936) and John Bland-Sutton (1855-1936), surgeons at the Chelsea Hospital for Women, were by the 1890s two of the most prolific performers of ovariotomy in London; Bland-Sutton in particular had built up a

⁵⁴⁴ This is certainly what surgeon John Bland-Sutton seemed to indicate noting that ‘when it has been found to be necessary to remove the ovary and tube on one side for inflammatory disease, experience teaches the necessity of removing the parts on the opposite side, or the operation will fail to be beneficial.’ John Bland-Sutton, *Surgical Diseases of the Ovaries and Fallopian Tubes* (Philadelphia: Leas Bros, 1891); 447.

⁵⁴⁵ See for example Alban Doran’s case notes from the Samaritan Free Hospital. Case 964 in 1888 saw 28-year old Mrs. Goodchild undergo an oöphorectomy involving removal of both ovaries and tubes for ‘double tubal disease’ as well as cystic ovaries. ‘Vol.3 of Notes on 1300 Abdominal Sections by the Staff of the Samaritan Free Hospital’ (MS0155/2/1/3; Royal College of Surgeons).

considerable reputation. Yet in their 1897 monograph *Diseases of Women: A Handbook for Students and Practitioners*, they eschewed a detailed definition of the procedure, describing it simply as ‘the removal through an incision in the abdominal wall of tumours and cysts of the ovary and paraovarium.’⁵⁴⁶ Fourteen years later, Victor Bonney (1872-1953) and George Comyns Berkeley (1865-1946), colleagues of Giles and Bland-Sutton, gave an equally uninvolved definition, describing ovariectomy as signifying ‘the removal of an ovarian tumour, either cystic or solid’, omitting to mention whether the term could be applied to operations where both ovaries were affected, whether it involved the removal of the whole ovary or just the diseased part, the latter, as shall be discussed below, now increasingly a possibility.⁵⁴⁷ ‘Oöphorectomy’ had to be handled even more carefully, so deeply associated was it with over-operating after the controversies of the mid-1880s; ‘the term is open to much criticism’ observed Bland-Sutton in 1891, although adding that ‘so are many other names in common use in surgery.’⁵⁴⁸ The sensitivity surrounding ‘oöphorectomy’ that continued into the 1890s may explain why ‘ovariotomy’ did not shift easily from medical language even as its meaning became uncertain and where ‘oöphorectomy’ was technically a more accurate term for *any* operation that involved the removal of the whole ovary as the majority of ‘ovariotomies’ actually did. The structure of the word formed a protective layer around the procedure, the erroneous suffix ‘otomy’ denoting surgical interference but *not* surgical removal and thus implying that removing the entire ovary was simply an unfortunate by-product of removing the ovarian cyst or tumour. Medical nomenclature is not easily changed once it has become common parlance, nor is clarity the only factor which occasions its use. As one medical commentator reflected in 1940, medical terminology is a

⁵⁴⁶ John Bland-Sutton and Arthur Giles, *Diseases of Women: A Handbook for Students and Practitioners*. (Philadelphia: W. B Saunders, 1897); 387.

⁵⁴⁷ George Comyns Berkeley and Victor Bonney, *A Textbook of Gynaecological Surgery* (London: Cassell & Company, 1911); 452.

⁵⁴⁸ John Bland-Sutton (1891); 447.

‘mixture in which historical and sentimental factors play a large part’.⁵⁴⁹ Ovariectomy, which had come to represent a poignant and triumphant episode in surgery and was deeply steeped in history *and* emotion, retained a powerful symbolic resonance that was not easily lost.

Evidently for these authors, the vague definitions surrounding ovarian surgery were not necessarily problematic. But this state of affairs was displeasing to some; ‘the nomenclature is so various, and some of its terms so ambiguous, that all will concur in the advisability for the adoption of certain words which will indicate clearly particular operations’, wrote one surgeon on the matter in a letter to the *British Medical Journal* in 1886. ‘What is ‘ovariectomy?’’ he appealed in its conclusion.⁵⁵⁰ A response one week later from an anonymous Fellow of the Royal College of Surgeons failed to give an answer to the question; ‘with every succeeding advance, fresh difficulties in division and in nomenclature have arisen’ the author argued, ‘the question, ‘what is ovariectomy?’ is one which, at the present moment, it is perfectly impossible to give a definite and scientific answer to’.⁵⁵¹ The author’s implication that ‘ovariectomy’ failed to provide an adequately scientific definition suggested that the proliferation of different types of procedure was not the only problem; by the end of the 1880s the term also appeared increasingly outdated, unscientific and unhelpful. It did little to indicate the pathology of the tumour being treated by the operation. Young surgeons were increasingly cognisant of histology and this was reflected in surgical pathology, a field that was led by John Bland-Sutton at the turn of the century. It is no coincidence that Bland-Sutton combined his specialism in ovarian surgery with a strong interest in the histology of tumours, for the ovaries were fertile ground in this respect. Histological investigations only reinforced the long-held notion among medical practitioners

⁵⁴⁹ ‘H.E.M’, ‘Medical Nomenclature’ *Canadian Medical Association Journal* 43 no. 6 (1940): 597-8

⁵⁵⁰ Charles Jennings, ‘Nomenclature for Operations upon the Ovaries’ *British Medical Journal* 2, no.1331 (July 3rd 1886): 187.

⁵⁵¹ ‘F.R.C.S’, ‘Nomenclature for Operations upon the Ovary’ *British Medical Journal* 2, no.1334 (July 24th 1886): 187-8; 187.

that the ovaries were an extremely common site of disease, Bland-Sutton asserting in 1906 that it was because of the structural complexity of the organ with its multiplicity of tissues that the ovaries were with ‘extraordinary frequency the source of tumours’.⁵⁵² Although ‘ovarian tumour’ and ‘ovarian cyst’ continued to be used, more precise terms were increasingly employed too to describe the variety of growths that could occur, such as adenomas, paraovarian cysts, fibromas and sarcomas. Regardless of speciality, many surgical terms failed to reflect precise pathology; but with the ‘infinite and endless gradations’ of ovarian tumour that were thought to exist, as well its misnomic suffix, ‘ovariotomy’ seemed to indicate more than most terms an old-fashioned type of surgery that was scientifically imprecise.⁵⁵³

Fig. 6. Number of articles in which ‘ovariotomy’ is cited in *The Lancet* and *British Medical Journal* (1880-1939).

Source: Elsevier Science Direct Database (<http://www.sciencedirect.com>) and *The British Medical Journal* online archives (<http://www.bmj.com/archive>) (accessed 29th August 2013)

	<i>The Lancet</i>	<i>British Medical Journal</i>
1880-1889	440	541
1890-1899	391	441
1900-1909	229	266
1910-1919	78	100
1920-1929	58	70
1930-1939	31	41

⁵⁵² John Bland-Sutton, *Tumours, Innocent and Malignant* (4th ed.) (London: Cassell & Company, 1906); 478.

⁵⁵³ ‘F.R.C.S’ (July 24th 1886); 187.

Thus on a purely lexical level, a decline in the use of the word ensued from the 1880s. Though a slightly crude approach - looking as it does at the quantity rather than content of conversation - the volume of discussion in regard to ovariectomy in the medical weeklies provides a useful overview. **Figure 6** details the number of times the word ‘ovariectomy’ was cited in an article of any type in *The Lancet* and *British Medical Journal* during the six decades between 1880 and 1939. It shows a continuous decline in the use of the word with a particularly sharp drop from the first to the second decade of the 1900s during which ‘oöphorectomy’ was increasingly favoured to describe ovarian operations of all types. By the 1940s the word had almost entirely disappeared from medical publications in Britain, except where older cases were being cited as supporting evidence to new developments in physiology and surgery, or where doctors prefaced their work with a brief historical introduction. And yet, while use declined, that decline was markedly slow, considering the acknowledged imperfections of the term. In 1933 the eminent obstetrician Herbert Spencer used the term to give a ‘Review of 658 Ovariectomies’ that he had performed in his career. Describing ovariectomy as ‘the removal of an ovarian or paraovarian tumour, including the excision of a tumour from the ovary, with the retention of the rest of the organ’ (although not including the removal of ‘normal or small cystic ovaries’).⁵⁵⁴ Spencer’s definition alluded to the greater use of conservative techniques that was by then occurring in ovarian surgery and his 658 cases included a range of technically distinct procedures. Yet given the nature of the publication - a review of his surgical work that spanned over forty years – it was only ‘ovariectomy’, it seems, that could adequately convey his practice over the years, in what was both a contemporary medical report and an historical account of his career.

⁵⁵⁴ Herbert R. Spencer, ‘A Review of 658 Ovariectomies’ *Proceedings of the Royal Society of Medicine* 26, no. 11 (1933): 1435-1444; 1435.

Indeed, ‘ovariotomy’ never *quite* disappeared from scientific use. Medical publications stemming from other countries, most often China and India, still use the term today,⁵⁵⁵ showing that ‘we never cleanse language completely’, as well demonstrating the subtle linguistic shifts that can occur trans-nationally in medicine.⁵⁵⁶ ‘Ovariotomy’ remained deeply embedded in medical language even after concerns began to be raised as to its clarity in the 1880s. Well into the twentieth century meaning was shifting to accommodate the term, rather than terminology being promptly altered to reflect changing understandings of the operation. The historic achievements that had occurred in ovarian surgery were indelibly associated with that one word: ‘ovariotomy’. Nonetheless by the end of the century, the reputation of ovariologists for remarkable success was coming under threat, as the long-term effects of ovarian surgery began to be scrutinised more closely. Past triumphs were now being challenged by fears for the future.

5.3 Afterlives: Assessing the Long-term Effects of Ovarian Surgery.

In the 1890s and early 1900s serious concerns about the fates of those who had undergone ovariotomy began to emerge. In the 1880s, as we have seen, anxieties about the effects of the operation had centred almost entirely upon the probable sterility of those who had had both ovaries removed and the consequences of this for the population. In the 1890s concerns became more focused on the long-term health of the patient; ‘what is the condition, mental and physical, which obtains in a castrated woman? I care not if it be said that mortality is small. But what are the symptoms in after life?’ asked Charles Routh, physician to the

⁵⁵⁵ One such recent example is: Joneja, G., & Chopra, S. (2012). ‘Obstetrics–Gynaecology and Changed Lifestyles of Women.’ *Medical Journal Armed Forces India*, 68, no.1; 2–3.

⁵⁵⁶ Stuart Hall, ‘The Work of Representation’ in *Representation: Cultural Representations and Signifying Practices* ed. Stuart Hall (Milton Keynes: Open University, 1997), 13-74; 33.

Samaritan Free Hospital, in 1894.⁵⁵⁷ As has been discussed in earlier chapters, the importance of tracking the post-operative fate of those who underwent abdominal surgery was already acknowledged by surgeons, who recognized that the risk of complications and subsequent death in the weeks after an operation often remained high. But by the early 1900s surgical mortality rates were sufficiently low so as to make serious discussion about the *long-term* effects of such operations worthwhile, something which intersected with the growing interest of life insurance companies in the risks of further ill-health in surgical patients.⁵⁵⁸ Monographs such as *The After-Treatment of Operations* published first in 1903 and authored by the young surgeon John Lockhart-Mummery (1875-1957), were novel in that they focused wholly on the recovery period and called for surgeons to give greater attention to the health and individual needs of their patients after an operation was complete.⁵⁵⁹

Having been performed so prolifically over the last three decades, the long-term effects of ovariectomy were beginning to be studied in some detail by the 1890s, and some of the conclusions were worrying. Perhaps the most serious of these was the possibility that ovarian surgery could be implicated in the development of cancer, a concern that stemmed perhaps as much from the increasing attention the medical community was giving to the ‘cancer problem’ as it did new ideas in reproductive physiology. Understandings of cancer were considerably transformed in the nineteenth century, as malignancies came to be understood as local in origin rather than constitutional. As Ornella Moscucci has shown, this

⁵⁵⁷ Charles H F Routh, ‘On Castration in Females: Its Frequent Inexpediency and the Signal Advantages of Conservative Surgery in These Cases - Part II’ *The Medical Press and Circular* 108, no.18 (May 2nd 1894): 457-459.

⁵⁵⁸ Thomas Schlich *Surgery, Science and Industry: A Revolution in Fracture Care, 1950s-1980s*. (Basingstoke: Palgrave Macmillan, 2002); 12.

⁵⁵⁹ Lockhart-Mummery commented that ‘the after-treatment of operation cases is a subject of such importance that it is not a little surprising to find how little has hitherto been written about it. What has been written is to be found, for the most part, in a somewhat fragmentary form in the larger text books.’ J.P Lockhart-Mummery, *The After-Treatment of Operations: A Manual for Practitioners and House Surgeons*. (London: Balliere, Tindall & Cox, 1903); v.

had a significant impact upon social and cultural perceptions of the disease. By the early twentieth century, Moscucci argues, cancer had become a potent public health issue, as doctors and other concerned parties strove to highlight that if the disease was caught early, it was possible to cure it surgically, challenging the sense of fatalism that had lingered around the ‘dread disease’.⁵⁶⁰ The long-held assumption that women were more susceptible to cancer than men only intensified during this time; cancer it seemed, was a disease that attacked women’s breasts and reproductive organs with peculiar aggression. It was also a disease that was seemingly on the increase and fears were growing for the real possibility that cancer was the physical price of industrialised, fast paced, nervous life. In particular there was frequent discussion among doctors as to the possibility that a nervous disposition in a woman could cause cell disruption, which in turn increased the risk of cancer, particularly breast cancer. A potent metaphorical reciprocity between degeneration and cancer began to play out unhappily and the language used to describe cancerous change was one that often served the language of inescapable decline.⁵⁶¹

Common and surgically accessible, malignancies of the womb were the focus of this new trend in radical cancer surgery in the 1890s.⁵⁶² By the first decade of the twentieth century, the curative rates for cancer of the cervix, including advanced cases, had increased substantially.⁵⁶³ In stark contrast, ovarian malignancies remained virtually untouched by

⁵⁶⁰ Ornella Moscucci, ‘Gender and Cancer in Britain, 1860-1910: the Emergence of Cancer as a Public Health Concern.’ *American Journal of Public Health* 95, no. 8 (2005): 1312–21.

⁵⁶¹ See Patricia Jasen ‘Breast Cancer and the Language of Risk, 1750-1950’ *Social History of Medicine* 15, no.1 (2002): 17–43;3 and James T. Patterson, *The Dread Disease: Cancer and Modern American Culture*. (Cambridge & London: Harvard University Press, 1987); esp. 13 – 26. In 1895 abdominal surgeon Arthur Mayo Robson described one of the causes of cancer as ‘senility and decadence of tissues which have passed the period of their usefulness and are about to undergo physiological rest are predisposing factors,’ Arthur Mayo Robson. ‘The Bradshaw Lecture on the Treatment of Cancer.’ *British Medical Journal* 2, no.2292 (Dec 3rd 1904): 1501-6; 1501,

⁵⁶² Ilana Löwy, ‘Because of Their Praiseworthy Modesty, They Consult Too Late: Regime of Hope and Cancer of the Womb, 1800-1910’ *Bulletin of the History of Medicine* 85, no. 3 (2010): 356-383.

⁵⁶³ This was principally to do with introduction of ‘Wertheim’s Hysterectomy’ into practice to treat carcinoma of the cervix. Pioneered by Austrian gynaecologist Ernst Wertheim, the operation involved

these developments. The difficulties in detecting ovarian tumours in their early stages remained a steadfast problem for surgeons, to whom cancer of the ovary remained as it always had been: a fearful and insidious disease. Surgeons in part rested the justifiability of radical surgery for ovarian tumours on the possibility that a growth *might* be an early malignancy or might become malignant.⁵⁶⁴ But in cases of undoubted cancer, operations carried very little hope and were rarely performed, particularly because cancers of the ovary were thought to often be secondary deposits, making any operation unlikely to cure the patient.⁵⁶⁵ Even by 1914 surgery for ovarian carcinoma was still deemed ‘an operation...of a desperate character...only carried through because the removal of the growth offers at least a small chance of life, whilst the alternative to removal is certain death.’⁵⁶⁶ As surgery for cancer of the womb became a symbol of hope in the battle against the disease, ‘ovarian cancer, on the other hand, was increasingly envisaged as a ‘silent killer’ which would secure its deadly victory before it was even discovered.’⁵⁶⁷

In fact changing understandings of cancer pathology seemed only to further muddy the connection between the disease and ovarian surgery, as some surgeons began to cast a critical eye upon the records of past ovariectomists, to suggest that the procedure might in fact *increase* the chances of a woman developing cancer. The most avid proponent of this theory was William Roger Williams, a surgeon at the Middlesex Hospital.⁵⁶⁸ As Williams

the removal of the entire womb as well as surrounding cellular tissue and lymph nodes. By 1905 Wertheim could claim that 30% of his cases were free from recurrence five years later. Ornella Moscucci, ‘The ‘Ineffable Freemasonry of Sex’: Feminist Surgeons and the Establishment of Radiotherapy in Early Twentieth-Century Britain.’ *Bulletin of the History of Medicine* 81, no. 1 (2007): 139-63; 142-5.

⁵⁶⁴ Bonney and Berkeley (1911); 452.

⁵⁶⁵ Doran (1906); 515-17.

⁵⁶⁶ Arthur E. Giles, ‘Meditation on 1000 Consecutive Abdominal Operations at the Prince of Wales’s General Hospital, Tottenham’ *The Lancet* 184, no. 4740 (1914): 8-16; 9.

⁵⁶⁷ Patricia Jasen, ‘From the ‘Silent Killer’ to the ‘Whispering Disease’: Ovarian Cancer and the Uses of Metaphor.’ *Medical History* 53no.4 (2009): 489-512. 495-6.

⁵⁶⁸ The Middlesex Hospital played a hugely important role in the development of cancer treatment in Britain. In the late eighteenth century the hospital opened the first dedicated ward for cancer patients,

saw it, cancer was a disease of ageing. Breast cancer, in particular, was most likely to occur after the menopause when the ovaries were no longer active. By this logic, Williams argued that removing the ovaries caused a premature ageing of the reproductive system and thus increased the risk of malignancy. Somewhat controversially, Williams pointed to Spencer Wells' records and what appeared to be an abnormally high incidence of cancer among women who had had ovaries removed by Wells, particularly - but not exclusively - those who had had both removed. Of the eighty-eight cases of Wells' that had died since the operation and where the cause of death was known, Williams reported that thirty-two had 'succumbed to cancer, that is to say, 1 in 2.75.' This he compared to cancer mortality in the general population of women which he put at one in fifteen.⁵⁶⁹ Williams' analysis brought an unwelcome angle not only to the much revered legacy of Thomas Spencer Wells but to ovariectomy as a whole. By Williams' estimation, there were two possibilities: the first was that Wells had operated on more malignancy cases than he had admitted to, whether knowingly or unknowingly. If that was not the case, then his statistics suggested to Williams a second possibility: that surgical ablation for local disease had potentially devastating effects on the rest of the body, especially if performed upon the reproductive organs.⁵⁷⁰

Williams's views do not appear to have gained widespread acceptance. But they mingled uneasily with other concerns that were being raised in regards to the possible consequence of ovarian surgery, the most widely-discussed of which was whether the operation might be responsible in causing insanity when performed upon women who already exhibited

going onto become a leading institution in cancer research; for a detailed account of this see; R.S. Handley, 'Gordon-Taylor, Breast Cancer and the Middlesex Hospital' *Annals of the Royal College of Surgeons of England* 49, no.3 (1971): 51-164. Williams' dates are unknown.

⁵⁶⁹ Roger W. Williams, 'Some Reasons for Believing that Oophorectomy Tends to Favour Rather Than to Prevent the Development of Cancer' *British Medical Journal* 2, no.2081 (Nov 17th, 1900): 1471-2.

⁵⁷⁰ By 1902 Williams had begun to suspect that radical operations on the uterus could have a similar effect. Roger W. Williams, 'Correspondence' *British Medical Journal* 1, no.2141 (Jan 11th 1902): 111-112.

tendencies towards mental fragility. If this *was* the case, which many believed it was, this directly undermined the panacean optimism of the 1880s, where some practitioners had removed ovaries to *cure* madness. As with cancer, this possibility hinged upon the relationship of the ovaries to the menopause which was increasingly identified as a period of considerable mental precariousness.⁵⁷¹ As Edinburgh gynaecologist John Halliday Croom (1847-1923) argued in 1901, while reflecting on his own cases where this had occurred, because ‘the climacteric was induced...the woman was placed in all the possible risks of that period’.⁵⁷² These concerns were evidently serious enough for the matter to be discussed in some detail by the Life Assurance Medical Officer’s Association in 1906. In a discussion on the subject of ‘the Influence of Surgical Operations upon the Expectation of Life’, the surgeon Alfred Pearce Gould (1852-1922) asserted that while acute melancholia could feasibly occur after any type of operation, ‘it is believed to be more common after ovariectomy and castration’.⁵⁷³

⁵⁷¹ Edward Tilt *The Change of Life in Health and Disease* (Philadelphia: P. Blakiston, Son & Co, 1882); 160-210.

⁵⁷² John Halliday Croom, ‘Edinburgh Obstetrical Society: Psychoses Following Pelvi-Abdominal Operations’ *The Lancet* 157, no.4044 (2nd March 1901): 630-631;631.

⁵⁷³ ‘Surgical Operations and Life Assurance 1901-1930’; Frederick Weber Parkes Collection (PP/FPW/B.308; Wellcome Collection). Pearce does not specify as to whether he means ‘castration’ of women, men or both.

188 AFTER-RESULTS OF ABDOMINAL OPERATIONS							TABLE M				189
TABLE M. Total Extirpation for Ovarian Tumours.											
Serial No.	Initials, Age, C.S.	Date.	Place.	Doctor.	Operation Notes.	Wound.	General Health.	Local Conditions.	Remarks.	Date.	
1	J. O. 49 S	1905 Dec. 11	C. H. W.	—	Left ovarian (1 parovarian) cyst; uterus and right ovary previously removed for fibroid	—	Not very good: has headaches: "much better than before"	Uterus absent: vagina normal	Spinster. Depressed sometimes	Oct. 10, 1907	
2	R. H. 36 M	1907 June 27	P. W. H.	Dr. D. McAskie	Large right parovarian cyst, densely adherent to floor of pelvis: left salpingo-oophoritis	S. A.	Very good: "much better"	Normal stump of cervix: vagina normal	Has normal feelings and desire. Cheerful	Mar. 10, 1909	
3	A. C. 32 M	1908 Feb. 20	Do.	Dr. W. H. Hewlett	Left ovarian cyst in broad ligament and hydrosalpinx: right tubo-ovarian cyst: hysterectomy for dense adhesions	—	Indifferent: has indigestion: "nerves in myself at times"	Normal stump of cervix: vagina normal	No difference in marital relations. Gets depressed	Feb. 20, 1909	
4	A. C. 33 W	Oct. 14	P.	Dr. Menro Dr. W. R. Orr	Right ovarian cyst with papilloma: left ovarian cyst	S. A.	Very good	Not examined	Cheerful	Oct. 13, 1909	
5	J. B. 34 S.	Nov. 2	C. H. W.	Dr. A. T. Scott Dr. W. Paul Jones	Large left ovarian cyst (15 lbs.): cystic right ovary: uterine fibroids	11" long	"Very good indeed"	Normal small stump of cervix: vagina normal	Cheerful. Spinster	Oct. 21, 1909	
6	M. A. L. 55 M	Nov. 5	P. W. H.	Dr. W. Love	Large left ovarian cyst: smaller right: small fibroids in uterus	—	"Very good: much better"	Vagina atrophic: normal small stump of cervix	Menopause 8 years before operation. Marital relations unaltered. Cheerful	Dec. 14, 1909	
7	A. L. 51	Nov. 19	Do.	—	Double ovarian carcinoma: hydroperitoneum	—	Patient died of recurrence, May 12th, 1909.				
8	H. S. 48 S.	Dec. 12	Do.	Dr. C. R. Salisbury	Large left intraligamentary ovarian cyst with grumous contents: right cystic ovary: uterine fibroids	H.	"Very good indeed: I feel perfectly well"	Normal small stump of cervix: vagina normal	Cheerful. Spinster	Dec. 16, 1909	
9	J. B. 40 M	1909 Feb. 15	C. H. W.	Dr. R. B. Marjoribanks	Large right ovarian cyst with intra-cystic haemorrhage: left cystic ovary: multiple small fibroids	—	"Very well: as well as before operation: was not ill before"	Normal small stump of cervix: vagina normal	Desire and feeling never much developed, but both diminished since operation. Cheerful	Jan. 23, 1910	
10	C. S. 57 W	May 13	P. W. H.	—	Large left ovarian multilocular cyst: extensive adhesions, multiple fibroids, flattened over cyst	9 1/2" long	Good, but still rather weak: much better altogether than before	Small atrophic stump of cervix: some atrophy of vagina	Menopause in 1903. Cheerful widow	Jan. 21, 1910	

Fig. 7. Arthur Giles A Study of the After-Results of Abdominal Operations on the Pelvic Organs: Based on a Series of 1,000 Consecutive Cases (1910).

This shows Arthur Giles' table containing all operations from his first one thousand cases which involved the 'total extirpation for ovarian tumours.' Giles' results provided one of the most detailed accounts yet of the long-term effects of ovariectomy and other forms of ovarian surgery.

But it was not just these rather dramatic revelations about the possible after-effects of ovarian surgery that changed perceptions of its success. Increasing availability of follow-up information on ovariectomy patients simply emphasised that life after the operation, even in cured cases, was not necessarily a healthy one. Chelsea Hospital Surgeon Arthur Giles took a deep interest in this subject and for many years kept meticulous follow-up records of his patients. Published in 1910, *A Study of the After-Results of Abdominal Operations on the Pelvic Organs*, gave records of his first a thousand operative cases, performed since 1894, as

well as follow-up information on the 728 cases he'd been able to trace (see **figure 7**).⁵⁷⁴ Predominantly consisting of operations upon the ovaries, fallopian tubes and uterus, his results were paradoxical. If they were to be believed – some were hesitant about Giles' self-reporting on his own cases⁵⁷⁵ - they appeared to show just how great an impact these operations had had on his patients' lives, 90% reporting that their health was better than it had been before the operation.⁵⁷⁶ Giles also dispelled some of the more extreme fears about what happened to women who had both ovaries removed. Reflecting on two hundred such cases, he reported that '70 per cent of the patients regained perfect health and rigour and retained their sex-instincts; that the legends of women developing bass voices and growing beards were pure romance; and that there was no more tendency to insanity after double ovariectomy than there was after any other abdominal operation,' thus challenging the concerns voiced by Croom and others.⁵⁷⁷

Nonetheless by dint of the sheer detail of Giles' report, the shimmers of heroism associated with ovariectomy could only be eroded by this in-depth analysis of patient's lives after surgery. Using direct quotes from his patients, Giles showed the variation in post-operative experience. Those such as A.C. who complained of being 'worse in myself at times' or C.S. who, although better than before the operation was 'still rather weak', were statistically successes, but for whom the long-term outcome had been rather less good. Giles' results also showed just how long and drawn out the process of recovery from abdominal operations was; one year on from their procedure only sixty-eight per cent of his patients had fully recovered, while a further eight to ten per cent were 'incapacitated during all this time'.⁵⁷⁸

⁵⁷⁴ Arthur E. Giles *A Study of the After-Results of Abdominal Operations on the Pelvic Organs: Based on a Series of 1,000 Consecutive Cases*. (London: Baillière, Tindall and Cox, 1910).

⁵⁷⁵ 'Reviews and Notices of Books' *The Lancet* 177, no.4562 (February 4th 1911): 308-311; 310.

⁵⁷⁶ Giles, A. E. (1910) 88. This was in regards to their health twelve months after the operation.

⁵⁷⁷ Arthur E. Giles, 'Address in Surgery,' *Canadian Medical Association Journal* 2, no. 9 (1912): 751-763; 760.

⁵⁷⁸ Giles, A. E. (1910); 96.

Assessments of the long-term effects of ovarian surgery augmented fears concerning over-use of the operation and by the early 1900s the justifiability of radical ovarian surgery was once again being challenged.

5.3 Could Ovariectomy ever be Conservative?

It has been suggested by Annmarie Adams and Thomas Schlich that during the late nineteenth century a significant shift occurred – a new paradigm even – in which surgery came to be principally based upon physiology. Increasingly surgical innovation, they argue, was centred on restoring or correcting physiological function through surgical measures, exemplified by the growing interest among surgeons in experimental organ transplantation.⁵⁷⁹ Applying this to ovarian surgery, Regina Morantz-Sanchez has contended that while ‘moral qualms may have produced the most dramatic of the critiques of over-operating’ it was in fact these ‘ongoing attempts to explore the chemical, physiological, and pathological processes of the female reproductive system’ that was the coup-de-grace for the regular use of radical ovarian surgery at the end of the nineteenth century.⁵⁸⁰ Historians have highlighted a deeply symbiotic relationship between physiology and clinical practice that was at the centre of this; both Schlich and Chandak Sengoopta argue that it was increasing concerns about the long term effects of ovarian surgery that in fact spurred on experimental ovarian transplants by European gynaecologists in the early 1900s. At the heart of this was the work of Viennese gynaecologist Emil Knauer (1867-1935), whose experimentation with re-grafting transplanted ovarian tissue in rabbits was prompted by his concerns about the

⁵⁷⁹ Annmarie Adams and Thomas Schlich, ‘Design for Control: Surgery, Science, and Space at the Royal Victoria Hospital, Montreal, 1893-1956’ *Medical History* 50, no.3 (2006) 303–24; 313.

⁵⁸⁰ Regina Morantz-Sanchez, *Conduct Unbecoming of a Woman: Medicine on Trial in Turn-of-the-Century Brooklyn* (Oxford: Oxford University Press, 1999); 108-9.

acute menopausal-like symptoms some women experienced after having both ovaries removed.⁵⁸¹ Although ultimately abandoned by the 1930s, Knauer's experiments inspired numerous performances of ovarian transplants in Europe and America over the next three decades, not only to restore ovarian function in women who had had ovaries removed but also to treat a vast range of other conditions, including mental illnesses. As Schlich notes, during this early phase of transplantation surgery it was ovarian transplantations that were 'probably...the most commonly performed kind of organ transplantation in practice;'⁵⁸² thus the early decades of the century saw a striking turnaround in physiological understandings of the ovary, which – in theory at least - saw the *introduction* of ovarian tissue replace its *removal* as a cure-all for the maladies of women; if the rationale and technique of surgery had changed, one thing was consistent: the identity of the ovaries as organs highly amenable to surgical interference.

From these physiological experiments – both animal and human – an idea was gaining ground that the ovary produced 'internal secretions', somewhat mysterious products of the organ which appeared to influence the development and maintenance of the reproductive system. If this was the case it drastically compounded and confirmed fears that the ovaries had for years been removed recklessly with little consideration for the long-term effects. Regina Morantz-Sanchez has contended that this precipitated a shift towards conservative ovarian surgery in the 1890s characterized by 'the trend among younger students to resect (cut away parts) of organs wherever possible' as well as increasing divisions between 'conservative' and 'radical' ovariologists.⁵⁸³ Here however, the British and American

⁵⁸¹ Chandak Sengoopta, 'The Modern Ovary: Constructions, Meanings, Uses.' *History of Science*, 38, no.122, pt 4 (2000): 425–88; 442; Thomas Schlich *Origins of Organ Transplantation: Surgery and Laboratory Science, 1880-1930* (University of Rochester Press; Rochester and Woodbridge, 2010); 85-98.

⁵⁸² Schlich (2010); 95.

⁵⁸³ Morantz-Sanchez (1999);110.

experiences seemed to have differed considerably. In Britain, not only was there considerable scepticism as to the usefulness of taking a more conservative approach, what exactly constituted conservative surgery of the ovary was not clear. ‘Conservative surgery’ is a rather problematic term which has received surprisingly little attention from historians since Gert Brieger addressed the shift between ‘radical’ and ‘conservative’ types of operative surgery in late nineteenth-century America. Principles of conservative surgery were of course not novel to the late nineteenth century: John Hunter’s aphorism that operations were ‘the defect of surgery’ had long been embedded in surgical philosophy.⁵⁸⁴ But, as Brieger contends, by the end of the nineteenth century the meanings to both ‘radical’ and ‘conservative’ surgery were complicated, the latter in particular, having a number of meanings. *Generally* it alluded to the preservation of as much bodily tissue from the surgeon’s knife as possible; but, as Brieger contends, ‘in the last decades of the nineteenth century radical could also mean conservative in the sense of complete or finally curative; conservative of life’.⁵⁸⁵ To add a further complication, if it was also possible for tissue-preserving techniques to be potentially curative, as they were increasingly believed to be, it also meant that ‘radical’ and ‘curative’ were no longer necessarily equated with one another as they had been earlier in the century but that the conservative could also be curative.⁵⁸⁶

⁵⁸⁴ John Hunter’s Lectures (c.1775-86): Western Manuscripts MS5598; (Wellcome Collection), p.2; see also Stephen Jacyna, ‘Physiological Principles in the Surgical Writings of John Hunter’ in Christopher Lawrence (ed.) *Medical Theory, Surgical Practice: Studies in the History of Surgery*. (London: Routledge, 1991).

⁵⁸⁵Gert H. Brieger ‘From Conservative to Radical Surgery in Late Nineteenth-Century America’ in Christopher Lawrence (ed.), *Medical Theory, Surgical Practice: Studies in the History of Surgery* (London & New York: Routledge, 1992), 216–231; 216.

⁵⁸⁶A further intricacy was that conservative and radical techniques often converged in a surgeon’s practice. Brieger for example, cites the work of William S Halsted (1852-1922). As a general surgeon Halsted was known for his emphasis on tissue preservation and controlling blood loss. However he was equally well-known for pioneering radical mastectomy, which involved removing the whole breast as well adjoining muscular tissue. Brieger (1992); 226-9. See also P. Jasen, ‘Breast Cancer and the Language of Risk, 1750-1950’ *Social History of Medicine* 15, no. 1 (2002): 17–43; 30; Terrie M. Romano. ‘Halsted, William Stewart’; <http://www.anb.org/articles/12/12-00365.html>; *American National Biography Online* Feb. 2000 (Accessed May 25 2013).

Brieger's rather complex analysis concludes with his assertion that during the mid to late decades, *technically* conservative surgery prevailed in America, with resection deemed considerably more effective and desirable than radical surgical ablation. But the most important aspect of his analysis is that it shows that competing surgical philosophies of radicalism and conservatism did not necessarily form the basis of a hard and fast professional schism; the definitions of both were simply too elastic, especially when it came to ovariectomy. In part this was because conservative surgery had thus far tended to be defined through external operations,⁵⁸⁷ making *any* kind of relationship between internal and conservative surgery a rather novel concept. From the early decades of its innovation, ovariectomy had been conceived of and understood as radical; radical morally in that it represented a major shift away from surgical norms, and radical in that, up until this time, surgical removal of the whole ovary had been seen as the only sure way to cure an ovarian tumour, while therapeutics such as tapping and medicine were viewed as the conservative alternative. But by the 1890s being thought of as 'conservative' was an increasingly attractive prospect to some ovariectomists, keen to distance themselves from the unfortunate associations 'radical' surgery had with unnecessary surgery. Aided by its rather flexible definition, some even began to depict ovariectomy as a conservative procedure, one abdominal surgeon, Arthur Mayo Robson (1853-1933), arguing that 'the performance of ovariectomy in place of paracentesis' was just as exemplary of conservative surgery as was 'enucleation of thyroid tumours instead of thyroidectomy'. Robson mixed both curative and tissue preserving definitions to suggest that by this time the operation could conceivably be

⁵⁸⁷ As described in chapter two, in Britain it was often associated with the practice and publications of William Fergusson (1808-1877). William Fergusson, *Lectures on the Progress of Anatomy and Surgery during the Present Century* (London: John Churchill and Sons, 1867); 37.

defined as radical *or* conservative depending on how it was framed.⁵⁸⁸ Samaritan Free Hospital surgeon George Granville Bantock, was evidently less taken by the possibility of conservative ovarian surgery, but similarly pointed to a multitude of meanings that could fall under the term, arguing it could equally apply to the removal of the second ovary in cases of suspected double disease, removal of just one ovary, if the second ovary was not thought sufficiently pathological to necessitate removal, *or* simply resection of the diseased part of the organ to ensure preservation of healthy tissue.⁵⁸⁹ Furthermore it had also become common practice to remove the ovaries along with the womb during hysterectomy, the logic being that without the uterus the ovaries would become useless and possibly dangerous appendages. Thus conservative surgery of the ovary was also at times applied to hysterectomies where ovarian tissue was preserved.

⁵⁸⁸ Arthur Mayo Robson, 'An Address on the Surgery of To-Day as Compared with that of Twenty-Five Years Ago: Illustrated by the Work in the General infirmary at Leeds' *The Lancet* 146, no.3766 (2 November 1895); 1094-1096; 1095.

⁵⁸⁹ George Granville Bantock, 'The Conservative Treatment of Lesions of the Uterine Appendages' *The Lancet* 162, no. 4169 (25th July 1903): 220-221; 221.

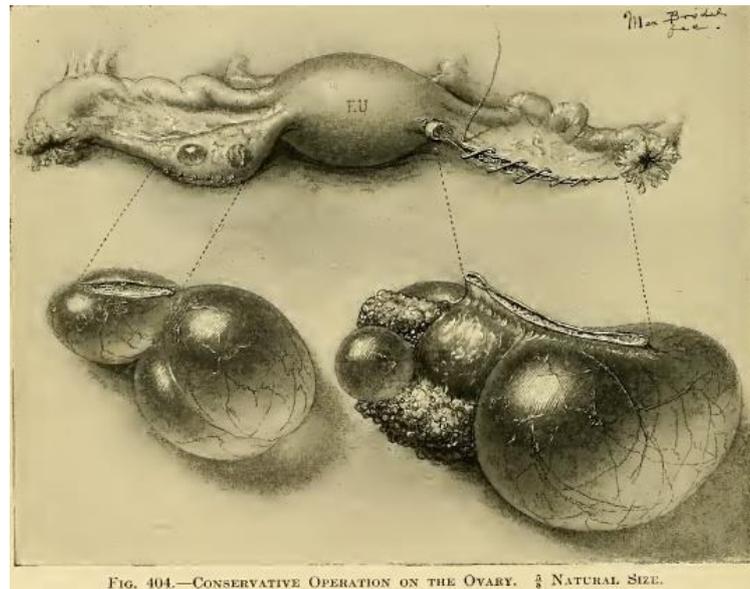


Fig. 8. Howard Kelly *Operative Gynecology* (1906)

Illustration showing the difference between conservative sectioning with preservation of the organ (left) and radical extirpation (right) of the ovary from American surgeon Howard Kelly's *Operative Gynecology* in 1906. This image, taken from a fairly straightforward case of enlarged cysts, belied the frequent complexities that arose in conservative surgery, particularly concerns that diseased tissue was often being inadvertently preserved

Chief among the early champions in Britain of resectioning was Christopher Martin (1866-1933); a Birmingham based gynaecological surgeon and protégé of Lawson Tait at the Birmingham and Midland Hospital for Women.⁵⁹⁰ Working at one of the largest and most well-known women's hospitals outside of London, no longer under the control of Tait (who had perhaps been the most notoriously radical abdominal surgeon in the country),⁵⁹¹ Martin began to experiment with conservative techniques on diseased ovaries and fallopian tubes, spurred on by his concerns about the various physiological after-effects of oöphorectomy, including menopausal symptoms, obesity and loss of sexual desire. Publishing his results in

⁵⁹⁰ 'Obituary: Christopher Martin' *British Journal of Obstetrics and Gynaecology* 40, no. 2 (1933): 305-9.

⁵⁹¹Tait retired from hospital practice in the mid-1890s, following controversy surrounding both his private and professional life. He had also become seriously ill with renal disease and died aged fifty-four in 1899.

1898, Martin was cautiously optimistic about his findings.⁵⁹² Among the operations were five resections of the ovary for cystic, dermoid and fibrous disease, histological tissues that, it appeared, were actually relatively easy to ‘shell out’ from the rest of the ovary (see figure 8). All five cases had been successful and the fact that the patients were aged between twenty and thirty-three, and thus of childbearing age, gave extra weight to Martin’s argument for more conservative measures.

Urging ‘gynaecologists to give a fair and unbiased trial to the conservative surgery of the ovary’, he referenced similar operations that were already being performed by surgeons in Paris and Berlin.⁵⁹³ Indeed as Martin’s words implied, there was a quite striking difference between the uptake of tissue-preserving surgery in Britain compared to France, Germany and America where it was already well-established by this time.⁵⁹⁴ This may have been in part to do with a reticence within the British medical community to embrace fully the new understandings of ovarian physiology that were emerging, or at least to apply them to clinical practice. Schlich has noted that despite the great interest in ovarian transplantation in the early twentieth century, ‘the British...hardly became involved at all’.⁵⁹⁵ Certainly physiological and

⁵⁹² Christopher Martin, ‘On the Conservative Surgery of the Ovary’ *British Medical Journal* 2, no. 1968 (17th September 1898): 791-2.

⁵⁹³ Specifically August Martin in Berlin and Samuel Pozzi in Paris.

⁵⁹⁴ See: A. Palmer Dudley, ‘The Trend of Gynecologic Work To-Day’ *Journal of the American Medical Association* 41, no. 25 (December 19th 1903): 1527-1532; esp.1530. Dudley gave statistics collated from the work of a number of surgeons. Of a total of 1276 operations upon diseased ovaries, he found that 754 had been conservative (resection or puncture) and 522 were radical (removal). Like many other surgeons Dudley saw the ovaries as more amenable than diseased Fallopian Tubes to resection which were seen as liable to be the seat of returning disease especially in inflammatory conditions such as pyosalpinx. See also Florence Nightingale Boyd’s 1903 overview of conservative surgery which records the numerous cases recorded in France, Germany and America that had occurred in the 1890s. Boyd notes that ‘when we come to enquire into the work done in this direction in Great Britain it is difficult to acquire accurate information, as so few results have been published;’ Florence Nightingale Boyd, ‘Conservative Surgery of the Tubes and Ovaries’ *British Gynaecological Journal* 3, no.3 (1903): 241-261; 254.

⁵⁹⁵ Schlich (2010) 95. For more on physiological surgery in Austria see Tatjana Buklijas, ‘Surgery and National Identity in Late Nineteenth-century Vienna.’ *Studies in History and Philosophy of Biological and Biomedical Sciences* 38, no.4 (2008) Buklijas contends that an approach to surgery based on physiological pathological was in present in the teachings and followers of Theodor Billroth

surgical concerns do seem to have been less closely aligned in Britain than elsewhere. Until the 1910s, the ‘internal secretions’ of the ovaries were oblique enough that there were still prominent ovariologists who remained dubious about their existence; ‘there is not a particle of evidence to support this view of an internal secretion,’ asserted Granville Bantock in 1903.⁵⁹⁶ John Bland-Sutton speaking four years later was less dismissive, acknowledging that ‘modern research tends to exalt the importance of the ovary and indicates that its ovigenous function is by no means the only duty it performs;’ like Martin he believed that retaining a small piece of ovarian tissue where possible was in the interest of patients.⁵⁹⁷ However, Bland-Sutton admitted that precisely what these secondary functions were remained mysterious and the existence of an internal secretion was only ‘hypothetical’.⁵⁹⁸

It seems unlikely that surgeons were actively resisting the advance of physiology into their professional territory; plenty of surgeons expressed great interest in the possible the role of internal secretions.⁵⁹⁹ What is more, as Chandak Sengoopta has detailed, developments in ovarian physiology were also at times being used to justify *radical* surgery in Britain. This came in the form of an experimental use of oöphorectomy to treat breast cancer. The logic behind this procedure was distinctly physiological: if the ovaries *were* responsible for influential actions and secretions around the body, as well as the primary seat of reproductive action, then it seemed quite possible that they played a part in controlling physiological changes in the breast, and thus by removing the former, cancerous degeneration in the latter

during the mid-nineteenth century, suggesting that physiological surgery was much more confidently established in central European surgery in the nineteenth century than it was in Britain.

⁵⁹⁶ Bantock, G.G (1903); 221.

⁵⁹⁷ John Bland-Sutton, ‘A Clinical Lecture on the Value and Fate of Belated Ovaries’ *Medical Press and Circular* 135 (July 31 1907): 108-111; 111.

⁵⁹⁸ *Ibid.* 108.

⁵⁹⁹ For example the Leicester surgeon C.J. Bond (1856-1939) conducted numerous experiments into ovarian and uterine physiology in the early 1900s. This included work looking at possible compensatory hypertrophy in cases where one ovary remained after surgery. C.J. Bond, ‘Some Points in Uterine and Ovarian Physiology and Pathology in Rabbits’ *British Medical Journal* 2, no. 2377 (21 July 1906): 121-127.

could be halted; this was in direct contrast to the views expressed by William Roger Williams who, as we have seen, believed the procedure could cause the disease. Initial experimentation with oöphorectomy in breast cancer patients in the late 1890s appeared to garner some success although optimism surrounding the procedure was relatively short lived.⁶⁰⁰ Nonetheless, that it occurred at all, suggests that British surgeons' comparative reluctance to embrace conservative surgery was not necessarily to do with a disbelief in its physiological logic but an unwillingness to give up radical surgery *regardless*, making the idea of a paradigm change occurring in surgery problematic. There was possibly an element of national pride to this: British surgeons were fiercely protective of ovariectomy's British identity. But it seems more likely it was related to a deep concern among surgeons as to whether the advantages of retaining ovarian tissue could be balanced against the risks of accidentally retaining ovarian disease. Extirpation of the entire ovary, if nothing else, virtually ensured that a diseased organ was obliterated; resectioning ovaries, on the other hand, or maintaining ovaries with some disease still present meant new risks emerged, in particular that the disease might return or even that a second operation might later be required. The vigilant aftercare that such cases would need weighed heavily on surgeons' minds, as did the potential technical complexities of conservative surgery. Where once it had been the removal of an ovary that had required the utmost surgical courage, it was now the choice to conserve – to run the risk of not curing or missing diseased tissues – that called for prowess, skill and nerve; 'as experience grows no doubt conservatism will be more practised' concluded Stanley Boyd in 1900, 'but there are

⁶⁰⁰ Sengoopta (2000); 437-440. Primarily performed by Stanley Boyd and George Beatson (Beatson employed a dual treatment of oöphorectomy and thyroid extract). See Stanley Boyd 'on Oöphorectomy in the Treatment of Breast Cancer' *British Medical Journal* 2 no.1918 (2nd October 1897): 890-896. Boyd presented five cases to tentatively suggest that the lives of those suffering from breast cancer might be considerably extended by treatment with oophorectomy. By the following year even this seemed unlikely; experiments with the operation by Joseph Lister's former right-hand man, William Watson Cheyne, had ended in disappointment and Cheyne reported only brief regression in the size of the breast cancer tumours before the condition worsened once more after a short period. W.W. Cheyne, 'Two Cases of Oöphorectomy for Inoperable Breast Cancer' *British Medical Journal* 1 no. 1194 (7th May 1898): 1194-5.

some cases in which it needs a certain amount of courage to leave within the abdomen diseased structure which may prove by no means harmless.’⁶⁰¹ Some years later, in 1911, even self-declared pioneer of conservative gynaecological surgery, Victor Bonney, in his textbook co-authored with Comyns Berkeley, encouraged practitioners to err on the side of extirpation when in any doubt about the nature of an ovarian growth, cautioning that ‘nothing requires more experience or wiser judgement in abdominal surgery than to decide when not to interfere with an ovarian cyst.’⁶⁰² Bonney and Berkeley’s book certainly acknowledged resection of the ovary as an option in many cases but it was the ‘classic’ ovariectomy operation – the removal of the ovary as a whole – that remained key to ovarian surgery, because in an emergency it was likely to be this operation that a surgeon would need to take recourse to.

Indeed with the attention given both then and now to the moral objections that were raised against ovarian surgery for reasons other than gross pathology, it is perhaps easy to forget what led to the comparatively speedy development of ovariectomy: the tendency of ovaries to grow large, debilitating cysts. At the turn of the century this aspect of the disease remained stubbornly unchanged. The records of the London Hospital for the first decades of the twentieth century show patterns in patient experience and presentation that could have been from fifty years previously; women who had suffered the slow onset of symptoms for years, before presenting with diseased ovaries that had grown cysts of huge sizes. When sixty-five year old Eliza Hold, for instance, was brought into the hospital in 1900, she was found under operation to have an ovarian cyst, the ‘size of a pumpkin’; ⁶⁰³ not much different from the huge tumours which had warranted practitioners’ attention back in the eighteenth century. In fact it would be the 1930s before surgeons began to consider such cases of enormous cysts a

⁶⁰¹ Stanley Boyd, ‘Conservative Surgery of Tubes and Ovaries’ *British Medical Journal* 2, no. 2072 (September 15th 1900): 727-734; 734.

⁶⁰² Berkeley and Bonney (1911); 462.

⁶⁰³ Surgical In-patients 1900, case 228 LH/M/15/4 (Royal London Hospital Archives).

comparative rarity, as women began to report symptoms earlier. Large tumours still generally required radical treatment and this is reflected in operation records of the time. At the Chelsea Hospital for Women for example, of the hundred and eighty or so ovarian operations performed in 1912, the vast majority of these were salpingo-oophorectomies. Many more – at least a third - involved the removal of both ovaries, sometimes as part of treatment for uterine disease, which meant both the uterus and ovaries were removed. Resection on the other hand, remained comparatively uncommon at the hospital.⁶⁰⁴ The records of the London Hospital give a similar picture; general hospitals, as we have seen, tended to undertake few ovariectomies in the earlier decades of the nineteenth century, the majority being performed in private practice or in specialist hospitals. At the London Hospital at least, it was only in the 1890s, *after* the panic about ‘operative mania’, that the operation flourished within its walls, suggesting that the Imlach affair did very little to quell the supply or demand for ovariectomies. In 1883 just five were undertaken; in 1895 just over forty ovarian operations were performed, the vast majority of which were described as ‘ovariotomy’ or ‘double ovariotomy’. This was compared to approximately twenty-eight appendectomies and eleven major operations of the uterus, showing it to be by far the most common abdominal operation performed at the hospital at that time.⁶⁰⁵ It would be the 1920s before radical ovarian surgery grew less common at the hospital – only thirteen bilateral oophorectomies occurred in 1925, compared to 111 total hysterectomies.⁶⁰⁶ Nonetheless operations upon the ovary were increasing as a whole, in line with other

⁶⁰⁴ Chelsea Hospital for Women – Register of Major Operation (1912) H27/CW/B/10/03/014 (London Metropolitan Archives). In cases where disease was clearly confined to one side, there perhaps seemed to be little logic of attempting to preserve part of that ovary, it being well established by then, that it made little difference to a woman’s physiology or fertility if she had both ovaries or just part of one. See C. Martin (1898); 791.

⁶⁰⁵ Surgical Beadles Register of Operations performed (1895) LH/M/3/112 and the Surgical Index of the same year (1895) LH/M/2/1 (Royal London Hospital Archives). The nature of the records means that only approximate statistics can be given.

⁶⁰⁶ Obstetric and Gynaecology case indexes (1925) LH/M/2/142 (Royal London Hospital Archives).

operations; altogether 114 procedures were performed upon the ovary that year.⁶⁰⁷ Such records suggest that while the rhetoric of ‘conservative’ surgery was appealing to ovariologists, in practice, radical surgery remained the favoured form of treatment for ovarian disease well into the twentieth century,

Ann Dally has characterized the ‘decline’ of ovariectomy at the end of the century as intimately connected with the ‘rise’ of hysterectomy in the early twentieth. Taking a polemical view, Dally argues that ‘hysterectomy became a substitute for those with beliefs that urged them to operate on women’s internal organs and by the middle of the twentieth century hysterectomy was becoming the most commonly performed operation in the West’.⁶⁰⁸ Hysterectomies certainly did increase hugely during this period and probably eclipsed radical ovarian surgery as the indications for removing the uterus expanded. But the trajectory of ovariectomy suggests a more complicated diffusion of surgical ideas and ethics than one where ovariectomy was simply replaced by hysterectomy as a means for misogynistic surgeons to blindly carry on their subjection of women. The legacy of ovariectomy, the enduring idea that ovaries are organs which are amenable to surgery remains; nowhere is this more apparent than in the growing management of ‘precancer’, a field where by far the most common and well-known procedures are prophylactic mastectomy and oöphorectomy for women with the faulty BRCA gene, a trend Ilana Löwy has linked to ‘the tradition of surgical management of gynaecological problems’.⁶⁰⁹ Ovaries remain uncertain and dangerous organs, the treatment of which errs on the side of radical, surgical caution. Thus it is problematic to assume that radical ovarian surgery disappeared as surgeons’ interests moved from the anatomical to the physiological. In fact in Britain especially, this did not align with a neat shift from the radical to the conservative in surgery,

⁶⁰⁷ *Ibid.*

⁶⁰⁸ Dally (1991); 220

⁶⁰⁹ Löwy. (2010). *Preventive Strikes*; 237.

and where the move towards conserving ovaries was markedly slow, *despite* genuine concerns about the long-term effects of removing them.

5.4 Disbelief and Nostalgia: Using History to Make Sense of Ovariectomy.

Towards the end of the nineteenth century, another type of ovariectomy was appearing regularly in the medical periodicals; an ovariectomy that was principally an historical artefact. This came as the operation's history began to play an increasingly important part in the reflective narratives of medical men – particularly surgeons – looking back on the past fifty years to assess the rapid changes that had occurred in their field. The 'history' of ovariectomy was not, of course, a particularly new topic; as discussed in chapter three, priority disputes regarding the operation often took the form of history, as surgeons attempted to ascertain the order in which various innovations in the field had occurred. Establishing an historical element to the operation also helped to give it a sense of authority and weaken its associations with the slightly unsavoury notion of 'novelty'. Nor was it a new development that surgeons were using history in the forging of their group identity. Historical narratives were already in use as a way of making sense of the perceived 'barber to brain surgery' rise of surgeons. Christopher Lawrence for example, notes the re-configuration of anaesthesia into 'a significant *historical* moment' in the 1860s.⁶¹⁰

At the turn of the century however, doctors' historicizing of their recent past intensified dramatically. Such contemplations swept through the medical profession as a whole,⁶¹¹ but

⁶¹⁰ Christopher Lawrence, 'Democratic, Divine and Heroic: The History and Historiography of Surgery' in *Medical Theory, Surgical Practice: Studies in the History of Surgery*, ed. Christopher Lawrence (London: Routledge, 1992), 1 – 47; 8.

⁶¹¹ In 1925 the American neurosurgeon Harvey Cushing published a book about his former mentor Sir William Osler. In the preface to the book Cushing similarly emphasised the importance of connecting medical culture, biography and history writing that 'because of Osler's interest in the history of his profession the effort has been made in these volumes to bring him into proper alignment with that most remarkable period in the annals of Medicine through which he lived and of which he was part.' H. Cushing, *The Life of Sir William Osler: Vol. 1*. (London, New York & Toronto: Oxford University Press, 1940), Author's Note.

surgery was especially notable for its presence in and surgeons for their production of these narratives, as the latter used the opportunities afforded by the turn of the century for reflective thinking, much of which attempted to sum up what appeared to be the considerable – perhaps incomparable - legacy that their era had gifted upon surgery. In 1902, just before he moved to London from Leeds, where he had been learning, teaching and practising surgery for over thirty years, the abdominal surgeon Arthur Mayo Robson delivered an opening speech to new students of his *alma mater*, the Leeds School of Medicine that exemplified this historicizing impulse. Addressing a mixed sex crowd - a new characteristic of many early-twentieth century medical schools - Robson chose as his topic ‘the Advance in Surgery during 30 Years’:

In comparing the present with the past of medicine and surgery and in attempting to forecast the future I have the advantage of being able from my own experience to contrast the work of 1870 with that of 1902. During that interval of 32 years so great have been the changes and so marked have been the advances that one cannot but feel a profound sense of gratitude that it has fallen to our lot to have lived and worked through this important period in the world’s history and to have contributed in however so small a degree to the reformation which has occurred in our noble profession.⁶¹²

Robson imagined himself as *living* history, connecting his own long career with the profound changes that had occurred. Furthermore through his reference to the ‘world’s history’ he intimated that the impact of medical and surgical advance over the past thirty years went far beyond the professional world but was a significant aspect of the monumental changes that were thought to have occurred throughout the nineteenth century. As Mayo Robson put it, in a manner which echoed the sentiments of many of his fellow surgeons, the

⁶¹² Arthur Mayo Robson, ‘An Introductory Address on the Advance in Surgery During 30 Years.’ *The Lancet* 160, no.4127 (October 4th 1902): 912-916; 914.

nineteenth century had been ‘the surgical century;’⁶¹³ in particular, surgical innovations of the second half of the century were seen to have revolutionized society. Ovariectomy was hugely important to these accounts. Not only like antiseptic surgery was it symbolic of the progress that had been made in surgical practice, it was also a robustly utilitarian innovation with its success clearly measurable through the publication of thousands of successful cases where patients had been permanently cured from debilitating disease. The progress that had been made was so great that it made anxieties surrounding the operation earlier in the century seem almost unimaginable; ‘the younger generation of to-day could not realise the wonder which a successful case of ovariectomy then excited or the dread of opening the peritoneal sac’ reflected one gynaecologist in 1906, looking back to his student days forty years previously.⁶¹⁴

This powerful sense of disbelief at the past - disbelief at what had come before changes like ovariectomy and antiseptics, as well as disbelief at those who had stood in the way of what was now conceived of as progress – coloured much of this rhetoric. ‘Can we to-day believe’ commented Lionel Weatherly in an address to the Bristol branch of the BMA in 1898, in a reference to the old pejorative used to describe ovariectomists, ‘that it was only a comparatively short time ago that the benches of the Royal Medical And Chirurgical Society rang with excited cries of “Down with the belly-rippers!”’.⁶¹⁵ Weatherly’s words evoked an almost unimaginable era – yet one only fifty years before - in which ovariectomy was castigated rather than celebrated. Surgeons who had early on opposed ovariectomy, such as Robert Liston, were now adversaries, indeed the *past* in general came to function as a convenient enemy to progress; when Lawson Tait, for instance, described the first stages of

⁶¹³ Mayo Robson (1902); 913

⁶¹⁴ W. Stephenson, ‘The British Association Meeting at Swansea: Obstetrics and Gynaecology’ *The Lancet* 162, no. 4170 (1st August 1903): 350-2; 350.

⁶¹⁵ Lionel Weatherly, ‘Remarks on Medical Progress.’ *The Lancet* 152, no. 3918 (1st October 1898): 851-854; 853.

the evolution of abdominal surgery as ‘slow and tardy’ in 1896, it was not necessarily done to imply that these early abdominal surgeons could be *blamed* for not being bold enough, but such words did nonetheless serve to build a subtle distinction between Tait’s era and those surgeons of the mid-century.⁶¹⁶

Reinforcing this was a frequent recourse to imagining how doctors of the past would experience the surgical present.⁶¹⁷ Imagining both how those from the past and the future would experience the Victorian era was a fairly common literary device during this time and played an important role in defining what exactly the ‘Victorian’ was.⁶¹⁸ These accounts are at once insightful and curious in their shifting of surgeons across time; in a talk given by abdominal surgeon James Greig Smith in 1894, Robert Liston was re-located to the 1890s as a figure who would have in fact been rather amenable to the expansive range of operations now performed. Smith imagined that Liston would have “revelled in all our “otomies,” “ectomies” and “ostomies” of today!” - this in spite of Liston’s fierce opposition to the most well-known ‘otomy’ of them all!⁶¹⁹ Another interesting account which employed a temporal shift came in the form of speech delivered by the physician James Lindsey on the penultimate day of the 1800s. Lindsay played on the turning year to imagine the sparse professional world of his counterpart of 1799:

He knew of the virtues of opium and quinine, of iron and mercury, but he had never heard of digitalis, or of salicin or of cocaine. He knew almost nothing of the physiology

⁶¹⁶ Lawson Tait, ‘The Evolution of the Surgical Treatment of the Broad Ligament Pedicle’ *The Lancet* 147, no.3794 (16 May 1896): 1338-1334; 1338.

⁶¹⁷ Mayo Robson (1902); 914.

⁶¹⁸ An excellent overview of this can be found in Kelly J Mays’ essay. Although principally looking at the ways Victorian era writers imagined how future people would look back at them, Mays’ analysis of this literary device - as a way to ‘apprehend the present as a coherent ‘age’ can, I argue, be equally applied to invoking figures from the past. See Kelly J. Mays ‘Looking Backward, Looking Forward: The Victorians in the Rearview Mirror of Future History’ *Victorian Studies* 53, no. 3 (2011): 445–456; 453.

⁶¹⁹ James Greig Smith ‘The Art of the Surgeon, and How we Train Men to Practise It.’ *The Lancet* 144, no. 3701(4th August 1894): 245-9; 248.

of the nervous system and had never heard of reflex action or of cortical centres. He had never counted the corpuscles in his own blood or seen a radiogram of his own vertebral column. He probably regarded ovariectomy as criminal.⁶²⁰

Lindsay's words are interesting in regards to ovariectomy. While he mainly describes medical innovations that were yet to be invented, with ovariectomy, he imagined instead an innovation already in existence but with criminal connotations. Extirpation of the ovary had of course been suggested by 1799, as discussed in the first chapter, but the operation was not well-known, and certainly not by the name 'ovariectomy', suggesting that Lindsay's reference to ovariectomy in this context was in part for the dramatic effect of imagining a distant past where removing ovaries would have been considered murderous. Unlike the other innovations mentioned, it was not a question of that which was 'waiting' to be understood or discovered, but one which remained morally dubious until it was perfected by the Victorians. This aspect was hugely important to the historicization of ovariectomy; certainly as important as the intellectual victory of perfecting the procedure. It fitted in with broader understandings Victorian surgeons had of themselves as a civilizing force, both an intellectual *and* a moral one, their life-saving work a melding of sagacity and selflessness.⁶²¹

Looking back, these narratives can seem triumphant, whiggish and perhaps a little bit silly; they are often taken as evidence of the limited powers of Victorian surgeons for a robust and honest assessment of their practices – at least in public. Certainly these narratives were used to boost the self-confidence of surgeons and provide a spirited rallying call to a younger

⁶²⁰ James A. Lindsay, 'An Inaugural Address on our Position and Outlook' *The Lancet* 154, no.3983 (30 December 1899): 1797-1800; 1798.

⁶²¹ For more on this see: Thomas Dixon, *The Invention of Altruism: Making Moral Meanings in Victorian Britain* (Oxford & New York: British Academy and Oxford University Press, 2008). Dixon repudiates any idea that Victorians 'generally endorsed an individualistic, competitive, or even selfish ethos,' but in fact existed in parallel with a 'cult of sentimental selflessness'; Victorians 'invented' a dichotomy of altruism and egoism that became deeply embedded in notions of morality;10.

generation – it is no coincidence that many of the speeches were given in front of crowds of medical students – as well as to provide a metaphorical pat on the back to those surgeons who had dared to innovate; rhetoric such as this is important to many group identities, regardless of profession, cause or time period. But these narratives were by no means unmitigated or simplistic; for surgeons they were an important way, perhaps *the* most important way through which to understand the immense changes that had occurred in their field. Looking back enabled them to look forward and inward too and what they found was not always a cause for optimism. In fact this intense retrospection was characterized by fear, pessimism and nostalgia as much as it was progress and advance. The culture of triumphant obituaries and celebratory accounts that prevailed often caused surgeons to feel somewhat uneasy and the two often melded to an uncomfortably close degree. As one American surgeon privately complained to his British counterpart D’Arcy Power in 1926, upon a public celebration in his honour, ‘these are trying occasions; more especially when one has to speak after hearing his obituary and is actually buried, - even though it be under a bank of flowers’; ⁶²² certainly looking back on these triumphalist narratives, one is struck by how they seem to read collectively as an obituary to an era.

Cultural anxieties regarding societal decline during the last two decades of the nineteenth century - commonly described as the ‘fin de siècle’ period - have been the subject of a great deal of scholarship since the end of the twentieth century, deeply intertwined with the turn towards cultural history.⁶²³ As a result many historians have addressed the relationship between medicine and degeneration as it was channelled through psychiatry, sexology and

⁶²² Letter from Rudolph Matus to D’Arcy Power Dec 31st 1926; (MS0289/6; Royal College of Surgeons of England).

⁶²³ Sally Ledger and Scott McCracken, ‘Introduction’ in *Cultural Politics at the Fin de Siècle*, ed. Sally Ledger and Scott McCracken (Oxford: Oxford University Press, 1995), 1-10. Ledger and McCracken give a useful overview of this historiographical turn.

gender during this time.⁶²⁴ The medical *profession* itself however, and its group self-identity, features much more rarely in this discourse which has been primarily concerned with how doctors both sculpted and reflected fin de siècle concerns within their practice and less on how this was played out in their own understandings of themselves as a professional group. Yet ‘the epoch of endings and beginnings’, which characterized the Victorian fin de Siècle impacted on this too.⁶²⁵ The complex crossover of fractured endings and doubtful beginnings that was being played out in surgical theory and practice, as discussed above, reflected in surgical self-identity.

The feeling of many was that surgical innovation was beginning to dwindle, or at least was not occurring at the startling pace that it had been in the previous few decades; ‘[the] wave of progress has largely spent itself, or reached its full height’ opined *The Lancet* about surgery in 1891.⁶²⁶ This idea had been gaining momentum since the late 1880s, most notably encapsulated in a speech given by John Erichsen, surgeon at University College London, in 1886. ‘That the final limits of surgery have been reached in the direction of all that is manipulative and mechanical there can be little doubt’ Erichsen argued, noting like John Halliday Croom later would that ovariectomy had reached ‘perfection’.⁶²⁷ Erichsen did not go as far as to suggest that surgery had reached its most advanced state but that surgical *technique* at least could not be improved upon, having been perfected by the vast array of operations now performed and which made almost the entire body surgical territory.⁶²⁸

⁶²⁴ For example: Andrew Scull, *The Insanity of Place/ The Place of Insanity*. (London: Routledge, 2006); Lucy Bland & Laura Doan, ed., *Sexology in Culture: Labelling Bodies and Desires* (Cambridge: Polity Press, 1998); James Eli Adams, *Dandies and Desert Saints: Styles of Victorian Manhood*. (Ithaca: Cornell University Press, 1995).

⁶²⁵ Daniel Pick, *Faces of Degeneration: A European Disorder, c.1848-c.1918*. (Cambridge: Cambridge University Press, 1989); 1.

⁶²⁶ ‘The Annus Medicus 1891’ *The Lancet* 138, no. 3565(Dec 26th 1891): 1443-1462; 1447.

⁶²⁷ John Eric Erichsen, ‘An Address Delivered at the Opening of the Section of Surgery’ *British Medical Journal* 2, no. 1337 (August 14th, 1886): 314-6; 314.

⁶²⁸ Operations of the appendix, liver and gall bladder were relatively common by the end of the century. The brain too had become surgical territory, Rickman Godlee’s (ultimately unsuccessful)

Erichsen's comments hinted at the dying embers of an unprecedented era of surgery – with ovariectomy as its symbolic operation - where the surgical ablation of each internal organ had represented the inching grasp of surgical hands. For some, it was simply difficult to look beyond perfecting the survival rates for each of these operations to where surgery could possibly go on from there. Writing in 1888, Bristol surgeon James Greig Smith cited Thomas Keith's achievement of a two per cent mortality in ovariectomy as the pinnacle of surgical achievement; 'surely this is the *ne plus ultra*, not only of abdominal surgery but of all surgery' Smith argued.⁶²⁹ This possibility - that surgical innovation had peaked or at the very least would have to be completely reconceptualised for innovation to continue - undermined more optimistic rhetoric which imagined the progress of surgery as one of steady and continual advance. As Erichsen saw it, future generation of surgeons would have to be content with being mere imitators of *his* generation.⁶³⁰

Not everyone agreed with Erichsen.⁶³¹ Well into his sixties when he made this speech, his perspective was that of a man coming to the end of his professional life, which chronologically speaking, was closely aligned with the period of highly visible surgical success that was passing; younger surgeons were unlikely to have viewed the future in such stark terms. But his words *were* cause for concern; if surgeons of the 1870s and 1880s had perfected the manual techniques of their craft, what was left to do that was original?

Advances in physiology and bacteriology seemed to indicate that surgery in the future would

operation to remove a brain tumour paving the way for Victor Horsley, Britain's first specialist brain surgeon.

⁶²⁹ James Greig Smith, *Abdominal Surgery* (2nd ed.) (London & Bristol: J. & A. Churchill & J. W. Arrowsmith, 1880); 120.

⁶³⁰ Erichsen (1886); 314.

⁶³¹ Sir William Stokes, President of the Royal College of Surgeons of Ireland described Erichsen's views, in an address to the Academy of Medicine in Ireland, as 'a dismal view of the present as well as the future.' Stokes pointed out both the continued 'infancy' of brain and abdominal surgery (inferring its probable growth) as well as the development still awaiting to be introduced that might enable heart and lung surgery. W. Stokes 'An Address on Finality of Surgery' *The Lancet* 128, no. 3299 (November 20th, 1886): 959-962.

be increasingly reliant on medical knowledge and less on surgical skill, something which set it apart from the high era of 1880s surgery, where many surgeons had seemed almost entirely independent of their physician counterparts, their work based on a ‘surgical’ rationale of local pathology. By this logic, Arthur Mayo Robson predicted, while the nineteenth century was the ‘surgical century’, the twentieth would be the medical one, as signalled by Robert Koch’s discovery of the tubercle bacillus.⁶³²

This shook the group identity of surgeons. When we think to the gender dynamics of ovariectomy, it is usually the way it reflected upon femininity that we consider. But ovariectomy was built upon conceptions of masculinity too. Writing on physical representations of doctors, Christopher Lawrence has identified the complex identity of Victorian surgeons, who aspired to be gentlemen and scientists while retaining an important connection to their strong masculine identity, which relied on ‘physical endurance, courage, solidity and honesty’, something which gave them an important advantage in Victorian culture.⁶³³ This was played out evocatively through ovariectomy. While the operation itself was not viewed as particularly technically complex, it could be physically demanding, because of the size of the tumours being dealt with and because the lack of certainty as to what would be found upon opening the abdomen which often meant a rapid response was required. What had previously been considered the reckless behaviour of early ovariectomists had by the 1880s been re-shaped as courageous and altruistic. This was enhanced by the operation’s gender dynamics which allowed a narrative to be constructed in which early pioneers became the heroic saviours of sick women – and who had risked their livelihood to be so. Spencer Wells recalled in 1884 his thoughts about continuing with ovariectomy after

⁶³² Robson (1902); 916.

⁶³³ Christopher Lawrence, ‘Medical Minds, Surgical Bodies’ in *Science Incarnate: Historical Embodiments of Natural Knowledge*, ed. Christopher Lawrence and Steven Shapin (Chicago & London: University of Chicago Press, 1998), 156-201; 194.

his first attempt had ended in the death of the patient, revealing that the fatality had led him to ‘fear that I might be entering upon a path which would lead rather to an unenviable notoriety than to a sound professional reputation.’ Wells went on, ‘if I had not seen increasing numbers of poor women hopelessly suffering, almost longing for death, anxious for relief at any risk, I should probably have acquiesced in the general conviction... rather than have hazarded anything more in the way of ovariectomy.’⁶³⁴ A decline in surgery relying on ablation and an increase in that based on science and technical conservatism, suggested an identity more in line with surgeons’ understandings of themselves as scientists; but it was at the cost of the more ‘masculine, physical’ qualities of the surgeon. Now that manual skill and strength were increasingly side-lined, some expressed serious concerns as to how this would impact on the type of person who would be attracted to profession.⁶³⁵

⁶³⁴ Thomas Spencer Wells, ‘An Inaugural Address on the Revival of Ovariectomy, and its Influences on Modern Surgery’ *The Lancet* 124, no. 3193 (8 November 1884): 811-814; 812.

⁶³⁵ See Sally Frampton ‘*Applause and Amazement*’: *Social Identity and the London Surgical Elite, 1880 - 1905*. (MA Thesis University College London) in particular 21-23. In 1892 *St. Thomas’ Gazette* used the death of the surgeon Frederic Le Gros Clark to lament that ‘in these days of Chloroform and bloodless surgery, when time, though more precious in every other department, can yet be more lavishly expended at the operating table, almost any ‘pudding headed, leaden hearted man’ (to use a Carlyian epithet) can if he acquired sufficient technical knowledge, operate successfully, nay more guarded and defended by Antiseptics.’ ‘Obituary of Frederick Le Gros Clark.’ *St. Thomas’ Hospital Gazette* 7, no. 2 (October 1892); 110; TH/PUB2/1 (Kings College London). Interestingly, this rarely seemed to be connected to the entry of women into the medical profession; although given the significant impact of this development in the late 1860s, it is possible it played into concerns. Initially the entry of women into the profession had little impact on the standing of ovariectomy. Early female pioneers, fighting for their acceptance by the British medical elite in the late 1860s and early 1870s, did not play a direct role in controversies happening with ovariectomy at this time. However as Claire Brock has shown, female surgeons did begin to perform ovariectomy in the late 1870s and for similar reasons to their male counterparts: to help seriously ill patients, to gain surgical experience and to achieve professional status. As Brock argues, Elizabeth Garret Anderson actively pursued experience of ovariectomy in her surgical work at the New Hospital for Women and encouraged its performance at the hospital, either by herself or one of the institution’s male surgical associates. But in the small community of British based female doctors, not all took this view of ovariectomy, some instead coming out against the operation, in response to a feeling of moral and medical responsibility for their sex. As Brock notes, for early female ‘pioneers’ like Elizabeth Blackwell and Frances Hoggan, the operation was an affront to femininity and mere human vivisection. A pamphlet which appeared in Britain in 1897 *Ovariectomy Averted* authored by a female physician named Mary J. Hall-Williams also took a similar view. The pamphlet, apparently self-published, was advertised consistently in the *Woman’s Signal* in the following two years, suggesting a clandestine but furtive campaign by Hall-Williams to reach out to the female populace and draw attention to the alarming consequences of ovariectomy; although by advertising in such a journal, her

It has been well documented by historians that doctors at this time were struggling to find a balance between ‘science’ and ‘art’ both in their practice and rhetoric.⁶³⁶ This was particularly so for surgeons as their ‘craft’ became increasingly reliant on experimental physiology and bacteriology. Different surgeons had different opinions as to the extent to which they should consider themselves scientists; this was apparent in the flexible role of operative surgery in different historical narratives. Many surgeons gave pride of place to advancements in scientific knowledge over actual operations when historicizing surgical innovation, the latter of which instead came to be depicted as predominantly the sum of theoretical achievements rather than practical ones.⁶³⁷ In these, ovariectomy – or at least the success of ovariectomy – was carefully reconfigured as the *product* of broader changes in surgery, rather than an innovation itself, surgeons instead emphasising the triumphs of antisepsis. As Mayo Robson put it in 1895, referring to high surgical mortality twenty-five years previously, ‘in certain operations, had not a change come, their performance would have had to remain a matter of history.’⁶³⁸ The appeal of such a narrative was that it prioritised innovation away from manual technique and towards the broader developments which had more clearly obliterated two of the most unpalatable aspects of surgery: pain and dirt, thus revolutionizing surgery as a *whole*. The rise of antisepsis and its clear connection with the ultimate surgical hero – Joseph Lister – in particular, was an appealing aspect of the

audience would likely have been confined to middle-class women with pre-existing interest in ‘feminist’ issues. Little else is known about the author. See Mary J Hall-Williams, *Ovariectomy Averted* (Plymouth, 1899).

⁶³⁶ For an overview see Steve Sturdy, ‘Looking for Trouble: Medical Science and Clinical Practice in the Historiography of Modern Medicine,’ *Social History of Medicine* 24, no. 3 (2011): 739–757.

⁶³⁷ Abdominal surgeon Frederick Treves in 1900 described the four greatest modern innovations in surgery as ‘an improved knowledge of anatomy, a readier method of arresting haemorrhage, the employment of anaesthetics and the introduction of antiseptic measures.’ Frederick Treves ‘Address in Surgery: The Surgeon in the Nineteenth Century’ *The Lancet* 156, no. 4014 (4th August, 1900): 312-317.

⁶³⁸ Mayo Robson (1895); 1094. Mayo Robson did not refer directly to ovariectomy here, but as it features in some detail in the statistics given later in the article (Mayo Robson asserting that in no area had greater progress been made than in abdominal disease), it is clear that it was one of the operations he had in mind.

history of recent surgery because it represented not only science but beyond that, perhaps also a surgical *philosophy*.

Nonetheless not all surgeons depicted innovation in this way. For those more personally invested in ovariectomy, a historical stock take of the operation allowed them to do quite the opposite - to conceptualise the operation as an innovation *independent* of such changes. Spencer Wells' historical account of ovariectomy written in 1884 squarely put the operation at the centre, emphasizing a process of development that was fragile and often at risk of failing altogether. As Wells put it rather evocatively:

One hundred years ago it was but a germ that might be described in a lecture by John Hunter. Ten years later it was seed that fell from the hand of Bell. In little more than another decade it germinated as a living vitalising reality in Kentucky. Sixty years ago it was transplanted to the land of its philosophical conception. In twenty years more we find it a sapling on English soil, growing slowly at first, and up to 1858 looking as if it might prove no more than a withering gourd. But by 1865 its root had struck firm, its stem stood erect, its branches were wide and strong, known and sought as a refuge by the sick and dying. That it was no withering gourd has been proved by all that the world has since seen.⁶³⁹

Indeed throughout Wells' entire piece on the history of ovariectomy, he made little reference to the effect of anaesthesia and antisepsis on the operation. In line with many ovariectomists, Wells tended to view these developments as complements to the advance of ovariectomy rather than its cause - something which likely tied in with the scepticism of many late-century ovariectomists regarding Listerism. Thus Robson and Wells' contrasting viewpoints attest to

⁶³⁹ Thomas Spencer Wells, 'An Inaugural Address on the Revival of Ovariectomy, and its Influences on Modern Surgery' *The Lancet* 124, no. 3194 (15th November 1884): 857-860; 857.

the flexibility already apparent in the historicization of ovariectomy. For some, the decisive and practical success of the operation made it an ideal symbol of recent surgical success, for others the success of the operation was simply the product of ‘greater’ innovations like antiseptics.

5.5 Conclusion

To say language plays a significant role in defining an operation may seem to be stating the obvious. Constructivist approaches to semantics have long served to pull apart any suggestion that language is merely self-evident or inevitable but is in fact both deeply layered and deeply embedded in its cultural context. Nonetheless, in the arena of surgery, where sick bodies and theatrical performances are the most visible signifiers of its practice, surgical language remains under-explored and under-estimated. In this chapter I have sought to bring to the fore the role of language in our understandings of ovarian surgery. As I have shown, during the period under question, ‘ovariectomy’ had an increasingly vague definition; indeed, given the variety of meanings attached to the term by the early twentieth century, it might be suggested that it is only *through* that word - ‘ovariectomy’ - that the operation existed at all. Building on this I have sought to move away from the rather simplistic picture that can be painted of surgical innovation as a one of either acceptance or rejection. In the case of ovariectomy, such a dichotomy is limiting. Ovariectomy, as understood to be radical ovarian surgery, began to decline in the 1920s, as did use of the term; but in Britain a shift to more conservative measures was both slow and incomplete *despite* changing ideas of ovarian physiology which seemed to confirm that removing ovaries could have implications for the patient’s health. These risks had to be carefully weighed against the risk of retaining ovarian disease.

I have highlighted also the complex relationship of ovariectomy to ideas of past, present and future. At this time, as ovariectomy still continued to be practiced, it was also becoming an

historical phenomenon as the history of the procedure began to be looked back upon intensely and transformed into an artefact of the passing Victorian era; this historical narrative was part of the innovation process rather than separate from it. Should these histories be considered triumphant and ‘whiggish’? Certainly they could be both those things. Speeches such as John Erichsen’s on the ‘finality’ of operative surgery and the ‘perfection’ of ovariectomy seem to betray the worst excesses of ‘whiggish’ nineteenth century history; buttressing a story of surgery in which continual advance peaked in the hands of Victorian surgeons and their saving graces of anaesthesia and antisepsis. But to say the function of these narratives was *only* as a means for the profession to congratulate itself is a rather limiting way to understand what was a rather complex group psychology and the mixture of jubilation, anxiety, disbelief and nostalgia that surgeons were feeling. Defining the legacy of nineteenth surgery fulfilled important professional functions. But it was a difficult task and through ovariectomy tensions were crystallised regarding how to historicize the practical and theoretical elements of surgery. Some historical narratives of ovariectomy such as Spencer Wells’, while hardly penetrating in their analysis, nonetheless resisted a linear trajectory. Other narratives too contained elements of disbelief and nostalgia for the past and fears for the future which resisted the idea of a smooth continuous shift from ‘past’ to ‘present’, as did ovariectomy’s contemporaneous existence with its own historicization, an existence increasingly troubled by concerns as to the true physical toll of the operation.⁶⁴⁰

Thus, deriding as simplistic the use of history by these surgeons does little justice to what was playing out; as historian William Cronon has advised when dealing with ‘progressivist’

⁶⁴⁰ P.B.M Blaas, *Continuity and Anachronism: Parliamentary and Constitutional Development in Whig historiography and in the Anti-Whig Reaction Between 1890 and 1930*. (The Hague: Martinus Nijhoff, 1978). Blaas has highlighted the excessive recourse to ‘finality’ in nineteenth-century history as one of the key aspects of the approach to history at this time which would come to be critiqued by twentieth century historians. 15.

histories of the past, ‘we still cannot evade the storytelling task of distilling history’s meaning’.⁶⁴¹

Strikingly, given surgeons’ attempts to provide what was essentially an intellectual history of their era, the place of surgery *in* intellectual history and Victorian Studies remains marginal, a mark perhaps of the continued separateness of ‘history’ from the ‘history of medicine’, as well as the paucity of historical work in the field of Victorian Studies, an arena dominated by literary theory.⁶⁴² What is more, the professional lives of nineteenth century medical men can sometimes feel like a topic that has been rather ‘done’ by medical historians, such is the amount written on it. This, along with the general lack of work on surgery in the history of medicine, may go some way in explaining why the historicizing impulse among Victorian surgeons has been rather side-lined in recent historical explorations. But the way history figured in surgeons’ understandings of themselves and the way in particular *operative* surgery could be both problematic *and* advantageous to this narrative, is a rich source of information as to how surgeons placed themselves in Victorian society and their struggles to define the surgical age that was passing.

⁶⁴¹ William Cronon, ‘Two Cheers for the Whig Interpretation of History’ *Perspectives on History* 50, no. 6 (2012) <http://www.historians.org/perspectives/issues/2012/1209/Two-Cheers-for-the-Whig-Interpretation-of-History.cfm> (accessed 6th June 2013).

⁶⁴²J. Vernon, ‘Historians and the Victorian Studies Question: Response’ *Victorian Studies* 47, no. 2 (2005): 272–279.

Conclusion

In his monograph *The Shock of the Old* historian of science and technology David Edgerton laments the tendency in the history of technology towards ‘innovation-centric history’.⁶⁴³ Hugely successful innovations, he argues, are mined for historical value, while failed inventions and innovations, which in fact make up a much greater part of the history of science and technology, are side-lined. Although addressing technology in general, rather than medicine specifically, Edgerton, like John Pickstone before him, seems to once more call attention to the easy slippage there can be between histories of innovation and histories which document advance. For Edgerton this calls into to question the whole value of using innovation as an historical framework.

But his thesis sets up a straw man. Such criticisms of innovation-focused history rely on a simplistic notion of what innovation is and how it is experienced. In fact the history of innovation is only this narrow if we let it become so: if we make it our business as historians to shoehorn innovations into unflinching categories of successful diffusion or ultimate failure, depict those associated with innovations as winners or losers and if we assume that the process of innovation is an ordered one. In the preceding chapters I have sought to show that in the case of ovarian surgery no such order or simplicity can be found, nor is this a desirable way to frame the negotiation of ovarian surgery into medical practice. Rather as I argue

⁶⁴³ David Edgerton *The Shock of the Old: Technology and Global History since 1900* (London: Profile, 2006). xiv.

throughout, no aspect of the innovation process can be treated as self-evident; that which we might initially take for granted as being unambiguous about an innovation: its beginning, its ending, its representations, even its definition, are not necessarily so. Moreover, as I have shown, innovation in operative surgery came with its own set of problems and peculiarities, which neither broader histories of medicine nor of technology adequately convey. Caught between overlapping but still distinct worlds of theory and performance, this interplay factored not only into the way new knowledge of ovarian surgery was diffused but how it was understood, represented, owned and profited upon.

As a means of showing this, I set out with the objective of examining one surgical procedure, the extirpation of the ovary, thus making the operation central to my thesis. This began with some revisionist work in chapter one, where I argued that the diffuse roots of ovarian surgery have so far been omitted from the secondary literature. This lacuna has sustained a long-held supposition among historians that ovarian surgery's comparatively rapid development reflected upon women's susceptibility to becoming experimental material for doctors, particularly in the Victorian era. While I argue that gender *did* play a role in the operation's development, I have shown also that the advance of ovarian surgery over other forms of abdominal surgery cannot be explained by this alone, or at least not only in terms of the submission of female patients. Rather it was due to numerous factors specific to understandings of the diseased *ovary* - which was not always read as gendered in the context of surgery. I went on to argue that it was in fact the relative expendability of reproductive organs, rather than their usefulness in maintaining the bodily economy, which in part made the ovary a potential site of surgical intervention. By focusing on the eighteenth and early nineteenth centuries, I argued for a more temporally expansive view of innovation in ovarian surgery by considering a period where the possibility of extirpating the ovaries was much discussed by practitioners before ever being performed. By doing so I sought to stretch the

idea of surgical innovation beyond the first performance of a procedure, to consider the numerous factors which made possible even the discussion of its possibility.

In chapter two I continued to expand the usual chronology ascribed to ovarian surgery by focusing on the early to mid-decades of the nineteenth century. In it I argued that the increasingly polarised debate between advocates and opponents of the operation at this time must be considered in terms of how *representations* of the operation were formed in the public sphere. In particular I demonstrated the operation's malleable identity as it was variously presented as progressive and regressive, as well as subject to both highly emotive 'subjective' accounts and 'objective' statistical ones. I conclude by considering how for those involved in the debate around ovarian surgery, the formulation of this latter representative dichotomy was crucially important because having *both* types of account was suggestive of an exhaustive attempt at ascertaining a 'true' representation of the operation, in particular the nature of risk and responsibility around it. Thus, neither was considered satisfactory without the other.

In chapter three I considered how we might understand intellectual ownership - how surgeons gave and received credit for ovarian surgery. Building on recent work in the history of science and technology, which so far has not been drawn on by medical historians, it examined the interplay between notions of credit and innovation, showing first that credit only became desirable once the operation were broadly conceived of as established in the 1860s. At the crux of my argument was that rather than credit disputes in ovarian surgery being considered as internal to surgery, they should be read within the context of a rapidly changing field of intellectual property in Britain. The inapplicability of protective legal measures such as patenting, increasingly a subject of interest in Britain, meant ovariologists like Thomas Spencer Wells and Charles Clay instead had to construct parallel methods of intellectual ownership. 'Owning' ovariectomy - as the operation was increasingly known - presented particular problems as different surgeons presented different definitions both of

credit and of the operation. Moreover imitating the practices of others was an important aspect to the diffusion of surgical innovation. This further complicated understandings of intellectual ownership, both in terms of individual surgeons and - in the international context - different surgical communities.

Chapter four continued to address the theme of personal gain by framing ovariectomy as a business. Historians have previously alluded to the potentially lucrative nature of the operation but have written very little about how and why the price of ovarian surgery was what it was (or even what, exactly, that price was). In this chapter I argued for the economics of the operation to be considered integral to its innovation, considering how the economic value of ovarian surgery was determined, how practitioners of ovarian operations negotiated the delicate issue of their high prices and how alleged patient demand for the 'fashionable' operation factored into understandings of the operation as economically motivated, both on the part of the practitioner and the patient. Ultimately a rather complicated picture is revealed of the economics of nineteenth-century surgery, which goes beyond any 'logical' model of how value in surgery might be determined. Professional and surgical risks, expectations of aftercare, feelings of entitlement amongst ovariectomists, as well as patient demand, all factored in to the pricing of the operation.

In my final chapter I sought to tease apart the idea of an innovation 'ending'. Generally medical innovations are considered to have two potential fates: integration or failure. As I proposed, such a dichotomy does not really speak to ovarian surgery where both elements of decline and integration were present. Changing and inconsistent nomenclature further complicated matters as the definition of 'ovariectomy' became increasingly uncertain. I further probed the idea of endings by considering how the medical profession began to historicize recent innovations in ovariectomy even as they remained in contemporary use. Through the operation, I argued, historicizations of the last fifty years tangled uneasily with anxieties about the future of surgery.

To an extent, the broader conclusions of this thesis speak to those of both Pickstone and Thomas Schlich in their cautioning against reliance on models of innovation which suggest a one-size-fits-all staged ‘career’. Schlich in particular alludes to the unhelpfulness of a ‘sharp distinction between innovation, invention and diffusion, which is so typical of economic models of innovation,’ when both the context and the technology of a surgical innovation are liable to change.⁶⁴⁴ But this thesis has taken a further deconstructive step by questioning the fragile identity of innovation. A new surgical operation is generally constructed from a set of constituent parts: those performing (and assisting) the operation, those undergoing it, as well as the surgical tools, spaces and even organ being operated upon. These are all elements to an operation. Labels such as ‘ovariotomy’ helped to make sense of surgical innovation, to give a firm, single identity and status to the operation; but underneath that label, and increasingly so during the nineteenth century, there often struggled multiple identities and meanings, over which were layered differing representations. This factored into almost every key debate around the operation: the way it could be represented, the way surgeons were credited, even the way it was profited from. Thus I have sought to show that the definition of a surgical operation – perhaps the most material and visceral of medical procedures - is in fact a precarious thing. Commonly scholars seek to situate historical actors and entities in a network. When situating operative surgery, it seems useful to think of it as a network itself, and one that perhaps more closely resembles a cobweb; formed of gossamer thin threads that constitute an unstable whole.

The significance of my study also lies in its chronology. Recent literature on the history of surgical innovation has generally focused on innovations from the 1880s onwards. If the chronological focus remains this way then ‘innovation’ and attendant concerns of risk,

⁶⁴⁴ Schlich (2002) 241.

responsibility, intellectual ownership and so forth remain indelibly linked to recent times, when, as the history of ovarian surgery demonstrates, such concerns were already central to the process of surgical innovation and were played out in a very different medico-cultural context. By addressing a relatively lengthy time period, this thesis obliges re-consideration of the temporality of innovation. Pickstone long ago drew attention to distinctions between invention and innovation, insisting that innovation involves not just a new product or phenomenon but its negotiation into medicine.⁶⁴⁵ But it is the ‘new’ that studies of innovation remain wedded to. I do not deny this association, nor that ovarian surgery represented genuine and significant novelty among the historical actors under scrutiny here; the entry of surgeons into the peritoneum was viewed as a striking innovation by many, whether in a positive or negative sense. But by reviewing the lengthy process of negotiation that ovarian surgery underwent, we also see that the ‘new’ is as much a representation, as it is an essential quality of a product or process, fixed to a specific time period. When the apparent novelty of the operation proved unpalatable in the late eighteenth century for example, precedents of ovarian extirpation from the ancient world were emphasised in order to insinuate that the operation was not novel at all. When at the tail end of the nineteenth century ovariectomy was historicized by some as the pinnacle of Victorian surgery’s achievement it was its identity as a novelty *of that era* which became increasingly significant. Thus notions of ‘newness’ are to be seen as constructed rather than necessarily pertaining to a linear temporality.

It may seem odd to claim an operation-centred approach as a novel one in the history of surgery, but in modern historiography, it almost is. While the history of surgery has expanded rapidly over the last few years – even as I have written this thesis - the seemingly

⁶⁴⁵ Pickstone (1992) 1.

highly technical content of surgery (especially modern surgery) still seems to derail any wide-scale expansion of the field. Without wishing to detract from their validity, recent trends in the history of medicine, responses to the ‘neuro’ turn in humanities for example, or even the history of emotions, imply the continued dominance of psychiatry, mental illness and neurology within the field. For even critiques of reductionist ‘neuro’ interpretations of history, which seek to historically embed emotions and behaviour, prioritise - like that which they critique - experiences of illness connected to these areas. And yet surgery is not only equally abundant in human drama but an aspect of medicine which affects almost everyone in some capacity, for operations are by no means rare occurrences. In addition to the arguments presented above then, the operation-centred approach serves to magnify the deficiencies that remain in the history of surgery: surgical patients’ journeys through referral networks, the relationship between the aftercare period and understandings of surgical responsibility, the negotiation of price in private operations - all these are issues nuanced in this thesis but which would certainly benefit from further exploration. What is more, even with the operation as the central focus, there remain parts to the history of ovariectomy that this thesis has not been afforded the space to go into in detail. Perhaps most significantly, the role of the patient in the process of its innovation. Patients undergoing risky operations – particularly those of the pre-anaesthetic era – are often conceptualised as brave and heroic, enduring frightening procedures; but there remains less emphasis on the *patient* as a risk-taker and how this fed into innovation. More often than not it is the ‘pioneering’ surgeon who is historicized as pushing the boundaries in terms of surgical risk and justifiability, but what about the role patients played, not just in enduring risks but in inciting them as well? If relevant primary sources could be unearthed, this might further mature conceptualisations of the patient-practitioner relationship, from one which works on the assumption of dichotomy to that which considers a symbiotic relationship between the two actors to be equally plausible.

No one operation could ever seamlessly reflect the unfolding of *all* surgical innovations during the time period under question and there is no doubt that ovarian surgery in many respects occupied a singular place in surgery during this time. But the controversies surrounding the operation leveraged it to a status that meant that through it conceptions and concerns regarding surgical innovation were visibly channelled. These conceptions and concerns can be read more widely into the negotiation of surgical novelty during this time, where innovation did not simply equate to progress and where a single surgical procedure, the extirpation of the ovary, gave rise to deep seated questions about the objectives – and even the very meaning – of surgery.

In Memory of Joan Frampton

Patient at the Chelsea Hospital for Women, 1966.



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