

*Stethoscopic Fantasies**Melissa Dickson*

In Wilkie Collins's 1860 melodrama *The Woman in White*, Hester Pinhorn, an illiterate cook, recounts the mysterious events that have taken place in the villain Count Fosco's house since Lady Glyde fell ill. Hester reports:

The poor unfortunate lady fell out of one fit into another, and went on so till she was so wearied out, and as helpless as a new-born babe. We then got her to bed. Mr Goodricke went away to his house for medicine, and came back in a quarter of an hour or less. Besides the medicine he brought a bit of hollow mahogany wood with him, shaped like a kind of trumpet; and after waiting a little while, he put one end over the lady's heart and the other to his ear, and listened carefully.¹

Although this fictional account was published more than forty years after the invention of the stethoscope by the French physician René Laennec in 1816, Hester does not refer to the object by name. Rather, she reacts to the instrument as though it is unknown to her, a curious device that intervenes between doctor and patient, and operates in a manner separate from, or 'besides the medicine' which the physician has brought. Within the context of the novel, Hester's reaction is evidence of her lack of education as well as her lack of access to modern medical care. However, her description of the stethoscope as a form of musical rather than medical instrument helps establish for readers a means of understanding what has taken place during the medical consultation. When Mr Goodricke declares to Hester's mistress that this is a serious case of heart disease, and 'told her exactly what he thought was the matter, which I was not clever enough to understand', it becomes clear that, in Hester's world of semi-literacy and partial understanding, it is the physical object and not the medical rationale that has captured her attention.² The object becomes representative of the doctor's practice and those medical realms of information that Hester can neither access nor understand. In so doing, it draws attention to the



Figure 10.1 Laennec-type monaural stethoscope, 1851–1900. Science Museum, London.

potential interplay between those pulses and vibrations that lie beyond the thresholds of human hearing, and the new ways of knowing, understanding, and making sense of, the human body through the medium of sound that were emerging in nineteenth-century British medicine.

Hester's analogy is, in fact, a sound one, as in many ways the stethoscope was a logical extension of the ear trumpet, which had been in use for centuries. Like the ear trumpet, it was originally designed to be applied to only a single ear (see Figure 10.1). It was also, like the musical trumpet, an instrument of communication through the transmission of sound which conveyed an internal state (albeit a material and pathological rather than an emotional one) to an external auditor. It was perhaps for this reason that in 1824, the London *Times* introduced the stethoscope to its non-medical British readers as a 'wonderful instrument' in 'complete vogue at Paris', which was 'merely a hollow wooden tube, about a foot in length (a common flute, with the holes stopped and the top open, would do, perhaps, just as well)'.³ Later, in 1841, the editors of *Punch* similarly referred to the stethoscope as 'a curious instrument, something like a sixpenny toy trumpet with its top knocked off'.⁴ The musical instrument was an easily recognized stand-in for the physical appearance and the mystifying operations of the stethoscope from the perspective of the medically untrained. In this framework, the medical consultation becomes a kind of performance and the physician himself a kind of musician, capable of drawing sounds from the human body and from the instrument at hand in a strangely medicalized production, whose tones remained inaudible to the patient's ear.

The advent of the stethoscope was an integral component of the burgeoning field of modern clinical diagnosis in the early nineteenth century, which, as Foucault has claimed in *The Birth of the Clinic* (1963), saw the ‘opening up of the concrete individual, for the first time in Western history, to the language of rationality’.⁵ Mediate auscultation – literally, listening with the aid of a mediating instrument – facilitated a new mode of medical investigation oriented towards the body, which might exist independently of the patient’s own narrative or free will. It marked, as both Stanley Joel Reiser and Jonathan Sterne have observed, an important shift in the Western history of listening, whereby the voice of and the subjective account given by the patient were no longer the primary basis of diagnosis, but now existed in relation to an array of other scientifically meaningful sounds, made by and within an increasingly objectified body.⁶ In Sterne’s words, ‘speaking patients with mute bodies gave way to speaking patients with sounding bodies’.⁷ While Sterne and Reiser offer detailed accounts of the significance and use of the stethoscope as a particular mode of listening in everyday medicine, one that transformed methods of diagnosis and led to ‘the expansion of audile techniques’ in media contexts such as sound reproduction technologies, surprisingly little attention has been paid to the social, cultural, and psychological ramifications of this shift in listening for the newly objectified patient, now acutely aware of and yet unable to hear or to interpret the sounds of their own body.⁸ Not only did the stethoscope mark a new way of listening in medical diagnosis, but, as a visible, material conduit between doctor and patient, it was understood to give the doctor access to potentially frightening sounds and intimate knowledge beyond the limits of average sensory perception.

This chapter addresses the medical developments of the stethoscopic age in the context not of the trained physician, but of the untrained patient, or, to adapt Jonathan Sterne’s useful phrase, those non-‘virtuoso listeners’ who were denied the privileged access of the physician to the soundings of the body.⁹ My primary sources are, for most part, literary, as fictional interactions with stethoscopes provide the most detailed evidence of its effects in the broader cultural imagination in the decades after its introduction. As medical institutions accepted new technologies and became increasingly professionalized and specialized throughout the century, the stethoscope became for many patients an object of anxious contemplation, serving as a palpable interface between doctor and patient, between hope and fear, and between the visible and invisible. Many fictions of the period speculated upon the nature of that interface. While early, Realist modes of

exploration tended to focus on the practicalities and potential social embarrassments of stethoscopic diagnosis, later, gothic works seized upon the new powers and the restrictions of both medical science and the human sensorium in positing human experiences that were attuned to realms beyond normal consciousness and corporeality. Throughout the period, the stethoscope's presence in consultations remained a stimulus to the imagination and to fantasies of super-sensory and extra-sensory hearing, as it emphasized to the general public the limitations of the undiscerning, unassisted human ear, as well as the penetrability and vulnerability of the human body, whose inner motions and secrets might now be unwittingly exposed.

Questions of Decency and Privacy

The stethoscope emerged as a tool of the medical consultation, and it was a response to a specific set of social and technical challenges facing physicians performing a diagnosis. From the perspective of the physician, those eight inches of distance between doctor and patient marked out by the stethoscope were frequently celebrated in no small part for reasons of hygiene. To use the London-based doctor Henry Hyde Salter's words, 'the foul and sordid condition in which the sick members of "the great unwashed" present themselves to us' in hospitals not only rendered them 'intolerable', but it was 'often really almost impossible, to touch them'.¹⁰ It was for this reason that Dr William Lennard designed an unusually long monaural stethoscope in the 1850s, intended not for any acoustical purpose but rather to keep the physician at a safe distance from any particularly filthy or flea-ridden patients.

Not only was the stethoscope a tool for the physical distancing of a doctor from his lower-class patients, but it also served in the maintenance of gendered expectations. The benefit of using a stethoscope to distance oneself from a female patient and to preclude any necessity for exposure of the chest for the application of the naked ear was frequently lauded in medical journals. From the perspective of the patient, this physical distancing potentially lessened any embarrassment or sense of indecency derived from the examination. As Hyde Salter noted, while 'a physician in search of a diagnosis is a being of no sex' and a 'mere machine' to whom 'a woman's bare breast is . . . only so much integument intervening between him and the object of his interest', it is not so with his patient. There is 'the feeling that has to be overcome', for 'a woman in undergoing a thorough and free auscultation does so at the sacrifice of a certain amount

of instinctive sensitiveness and modesty'.¹¹ The stethoscope, then, protected those sentiments which Salter insisted are 'a most important element in our constitution' and 'a most important part in the social and moral system of our race'.¹² The medical instrument thus became a mediating object between doctor and patient which enforced both the social and physical distance between the two.

Questions of female dignity and the potentially improper nature of the cardiovascular medical examination were explicitly addressed by Elizabeth Gaskell in her 1851 story 'Mr Harrison's Confessions'. This tale, often understood as a prequel to Gaskell's *Cranford* (1851–53), is set in a small country town called Duncombe, where the young Will Harrison, having recently finished his medical training and qualified as a surgeon at Guy's Hospital in London, joins the medical practice of the elderly Mr Morgan. Gaskell herself was well acquainted with the medical apprentices of her maternal uncle Peter Holland (1766–1855), a surgeon in Knutsford, and she devotes much of her tale to Harrison's struggles in navigating social and professional boundaries as a young surgeon.¹³ Gaskell exploits the intimate and potentially embarrassing nature of the doctor–patient relationship to great comic effect. Although attracted to the vicar's beautiful young daughter Sophy, Harrison nonetheless finds himself embroiled in a series of romantic misunderstandings involving three young women in the town, as rumours spread about his engagement to each of them. These misunderstandings are largely derived from his behaviour as an aspiring young doctor, instructed by Morgan to study the 'slight, delicate attentions' of the medical profession in both manner and facial expression in order to identify with his patients and to 'really feel pain when listening to their account of their sufferings'.¹⁴ Ambiguities surrounding the limits of the doctor's professional role and the extent of his duties as a sympathetic listener mean that Harrison extends this behaviour from the confines of the medical consultation to his social life in Duncombe more generally. Thereafter, the obliging but naïve Harrison lends his arm to fatigued young ladies on walks, accompanies one woman on a boating party because her overbearing mother insists that she be paired with a strong swimmer, and remains in attendance on another young woman who claims to be feeling faint lest she have a nervous attack.

In the case of Miss Caroline Tomkinson, rumours about Mr Harrison are explicitly exacerbated by his use of a stethoscope. Although operating, at least in part, as a tool for the maintenance of gendered and social boundaries, this instrument ironically places Harrison in a

situation that makes possible new violations of those boundaries. Harrison reports:

One day [Caroline] told me she thought she had a weakness about the heart, and would be glad if I did bring my stethoscope the next time, which I accordingly did. And, while I was on my knees listening to the pulsations, one of the young ladies came in. She said, 'Oh dear! I never! I beg your pardon, ma'am' and scuttled out. There was not much the matter with Miss Caroline's heart: a little feeble in action or so, a mere matter of weakness and general languor. When I went down I saw two or three girls peeping out of the half-closed schoolroom door, but they shut it immediately, and I heard them laughing.¹⁵

Harrison's behaviour in this scene is entirely professional, although it is misunderstood by witnesses as a romantic proposal. Stethoscope designs of the time were not at all flexible, and care had to be taken to position the end of the instrument flat against the body, which often required kneeling on the part of the physician. It is clear, however, that Caroline intends to create a private moment of intimacy with Harrison by requesting such an examination, and her insistence that she is experiencing heart palpitations can be read as an expression of her own emotional, metaphorical heartache for him.

Although she does not discuss 'Mr Harrison's Confessions' in her study, this, I would suggest, is an instance of what Kirstie Blair has identified in *Victorian Poetry and the Culture of the Heart* (2006) as the uneasy oscillation in both nineteenth-century literary and medical texts between 'the primary physical sense of the organ within the breast and traditional associations of the heart with romantic love, spirituality, and the play of the emotions and passions'.¹⁶ Indeed, Caroline's elder sister later melodramatically warns Harrison that if he rejects Caroline after encouraging her attentions, 'this disappointment will kill her', Caroline's heartache taking on the material qualities of a medical condition.¹⁷ More broadly, Harrison's medical assessment of Caroline's heart has both romantic and social implications, as others in Duncombe conflate the medical with the metaphorical, and interpret Harrison's examination of Caroline as a profession of his love for her. Even Mr Morgan, himself a medical man, rebukes Harrison when he hears the gossip in town: 'You were discovered on your knees to her – a positive injury to the establishment.'¹⁸

Although in the course of Gaskell's narrative all the romantic misunderstandings inspired by Mr Harrison's medical practice are satisfactorily resolved, it is important to note the challenge to the balance of social

hierarchies that occurs in the stethoscopic examination. As Lilian Furst has observed, the priority of physical diagnosis provoked new forms of negotiation between doctor and patient and fundamentally altered the balance of power between the two. With the increasing identification of disease by means of probing medical instruments and a cumulative scientific understanding of disease, the social power of doctors 'swelled, whereas that of patients was inevitably diminished when their word came to have lesser significance'.¹⁹ Mr Harrison's examination of Miss Caroline, however, indicates that despite the doctor's supremacy in treating the medical matters of the heart, the social aspects of the medical examination were inescapable and might well be manipulated by a shrewd or lovesick patient.

The editors of *Punch* had already recognized this intrusion of the stethoscope into the medical and social operations of the doctor by way of a brief sketch in 1842 entitled 'Reminiscences of a Stethoscope'. In keeping with the genre of the it-narrative, or novel of circulation, this tale follows the changing fortunes of a material object in Britain, in this case a 'well-shaped, good-looking, and portable' stethoscope, narrated from the point of view of the instrument itself.²⁰ Early in life, the stethoscope tells us, it attracted the notice of one Dr Hammer Roses at a shop on the Strand. Roses then introduced it into society, where it gained the confidences of hundreds of men and women. In another slippage between the metaphorical and the literal in questions of the heart, these confidences, it transpires, are not of disease or pain. In one instance, the stethoscope is applied to the side of an 'old miserly stock-jobber', where it detects a strange metallic tinkling, taken as evidence of an 'incurable case' of penny pinching. In the case of a sweet and delicate young girl, the stethoscope reports:

I discovered a peculiar murmur not mentioned either by Laennec or the lamented Dr Hope . . . when her bosom heaved a sigh, I distinctly heard 'Henry Corbelle', *vale*-ing from one air passage to another. Upon this hint Dr Hammer Roses spoke – the parents adopted his prescription, and I soon afterwards noticed in the doctor's library, cards bearing the names, 'Mr Henry Corbelle' – 'Mrs Henry Corbelle'.²¹

This light-hearted piece is testament to the wonder and novelty of this medical technology as it increasingly comes into contact with, and intervenes in, the personal affairs of Victorian society at large. In this way, *Punch* demonstrates the ways in which social relationships were being renegotiated around the physical presence of the stethoscope and the secrets it exposed.

Punch had fantasied about the stethoscope's life and its heightened, extra-sensory experiences a year earlier, in its piece titled 'The Physiology of the London Medical Student'. Here, it advised its readers that 'to keep up his character, a new man ought perpetually to carry a stethoscope', which, it noted somewhat contemptuously, was a 'curious instrument' that was used 'for the purpose of hearing what people are thinking about, or something of the kind'.²² Again hinting at fears that the stethoscope could reveal not only the inner sounds but also the private thoughts of a patient within the mechanical/scientific process of stethoscopic diagnosis, it went on to observe that 'when medicine arrives at such a pitch that the secret of the human heart can be probed, it need not go any further, and will have the power of doing mischief enough'.²³ The notion that a stethoscope, and by extension a physician, might hear one's thoughts or access the secrets contained in one's heart moves once again between the metaphoric and material operations of the heart. There is a curious sense of invasion incited by the stethoscope as the human body becomes vulnerable to the scientific instrument transmitting its innermost sounds – sounds that the patient themselves can neither access nor control. The use of the stethoscope is identified here as a method of revealing intimate secrets and unspoken, indeed unacknowledged, passions.

It was in such a vein that William Makepeace Thackeray employed the stethoscope as a metaphor in his historical novel *The Virginians* (1859), in his observation that 'tis cruel to babble the secrets of a young man's love: to overhear his incoherent vows and wild raptures, and to note, in cold blood, the secrets – it may be, the follies – of his passion'.²⁴ Drawing on an image of intimate listening from contemporary medicine, the narrator goes on to ask, 'Shall we play eaves-dropper at twilight embrasures, count sighs and hand-shakes, bottle hot tears: lay our stethoscope upon delicate young breasts and hear their heart throbs?'²⁵ In this aside, he aligns the medical practice of listening to the motions of the heart with the rather more ignoble practice of eavesdropping. As an anonymous poem published in the *Lancet* in 1829 made clear, there are no dark, enclosed chambers within the human body or society in general into which the stethoscope might not intrude:

Quoth Rod'rick, 'I'll a place contrive
So dark and safe, no man alive
Shall to our private meetings grope:
'Egad,' cries Johnny, 'that won't do,
If there's no crack to listen through,
They'll take "reports" by Stethoscope!'²⁶

Whatever its flaws and limitations in medical practice, the stethoscope was frequently bestowed with extraordinary powers of penetration in the popular imagination. Its receptive capacities both promised and threatened to surpass the usual limits and boundaries of the senses, the self, and society.

In most cases, this sense of invasion into the patient's domestic and social life, as well as into their body, was not romantically thrilling but unsettling and physically exhausting. Such exhaustion was frequently the result of the rigidity and awkwardness of the instrument to hand, which generally required the unsettling and rearrangement of the physical positions of both the physician and the patient in order to facilitate diagnosis. It was absolutely 'fatal to auscultation', Hyde Salter insisted, that there should be any chink between the stethoscope and the chest-wall, which would effectively bring the column of air within the stethoscope into communication with the external air and thereby produce an incessant humming akin to the sounds one hears on applying the ear to a shell.²⁷ Pressing the instrument firmly against the patient to avoid such reverberation also produced complaints regarding the coldness of certain metals, the weight of them pressed against ailing bodies, and the physical pain of examination.²⁸ In his chapters on practical directions in *The Physical Examination of the Chest* (1861), Somerville Scott Alison not only emphasized the importance of the material conditions of the examination, but reflected that 'I have seen patients not greatly wasted, faint under the fatigue and excitement of the erect examination'. Furthermore, 'the stethoscope sometimes causes so much pain that the patient winces much, and thus interferes with auscultation'.²⁹ Fictional patients also testify to the sheer exhaustion induced by a stethoscopic examination. Thus the narrator elicits sympathy for sixteen-year-old Katie Woodward in Anthony Trollope's *The Three Clerks* (1857) by observing that 'the poor girl lived beneath a stethoscope, and bore all their pokings and tappings with exquisite patience'.³⁰ Homer Sivewright in Mary Elizabeth Braddon's *Lucius Davoren* (1873) invites his physician to visit him often in the role of friend, but adds that 'I suppose there will be no necessity for any more serious examinations like this morning's, with a faint smile, and a disagreeable recollection of the stethoscope'.³¹ Later, in *Vixen* (1879), Braddon's nervous Mrs Winstanley also complains that the London doctor who was called to examine her 'tired me dreadfully with his stethoscope'.³²

So widespread were such complaints of the exhaustion induced by stethoscopic examination in already weakened patients that some attributed the increase in mesmeric practice in the mid-nineteenth century to a

determination on the part of the patient to avoid granting a physician what was still quite experimental access to the invisible parts and sounds of the body. Mesmerism, with its emphasis upon the powers of one individual to influence or control the mind and body of another, was, as Alison Winter has demonstrated, not a 'fringe' activity or a pseudo-science that operated at the margins of Victorian society. Rather, it held a 'central place among the preoccupations of Victorian culture' and it was practised and debated 'widely and continuously from the 1830s through the 1860s and beyond'.³³ In undergoing mesmeric treatment, the *Athenaeum* noted in 1846:

No doctor intrudes with his troublesome and disagreeable questions; no pulse need be felt, no tongue need be shown; no horrid *percussor* or more horrid *stethoscope* need frighten the gentle breast from its propriety. . . . The dropped *Morning Post* is picked up, the new novel is resumed; the ripple of a moment vanishes, and the surface of life is as tranquil as before.³⁴

Cast here as a respectable family practitioner akin to the medical professional, the mesmerist is clearly preferred because his treatments do not trouble or interfere with the body. Mesmerism stands in stark contrast to the physicality, intrusion, and disruption represented by the stethoscope and the physical examination. In this context, it represents detachment, decency, and a mere 'ripple of a moment' in the patient's consciousness, while those treated mesmerically clearly regard it as a valuable form of therapy for potentially serious physical ailments.

The itinerant lecturer and mesmerist William Davey sought to make the therapeutic value of mesmerism clear in the illustrations accompanying his 1854 manual *The Illustrated Practical Mesmerist, Curative and Scientific*.³⁵ In this work, Davey had sections dedicated to the use of mesmerism in treating consumption and tuberculosis, two diseases which were frequently diagnosed in earlier stages thanks to the advent of the stethoscope. In the accompanying illustrations, the patient is recumbent and calm while the physical distance between doctor and patient (with no medical instrument intervening between the two) is clear (see Figure 10.2). A clairvoyant diagnosis of internal complaints seemingly negotiated the threshold between the heard and unheard sounds of the body in far more abstract and subtle ways than any crude instrument. Unlike the stethoscope, it not only penetrated the threshold between the individual body and its surrounding environment, but it supposedly had access to, and could incite responses from within, the different layers of the human mind. Significantly, this reinforced the importance of the (inner) voice and

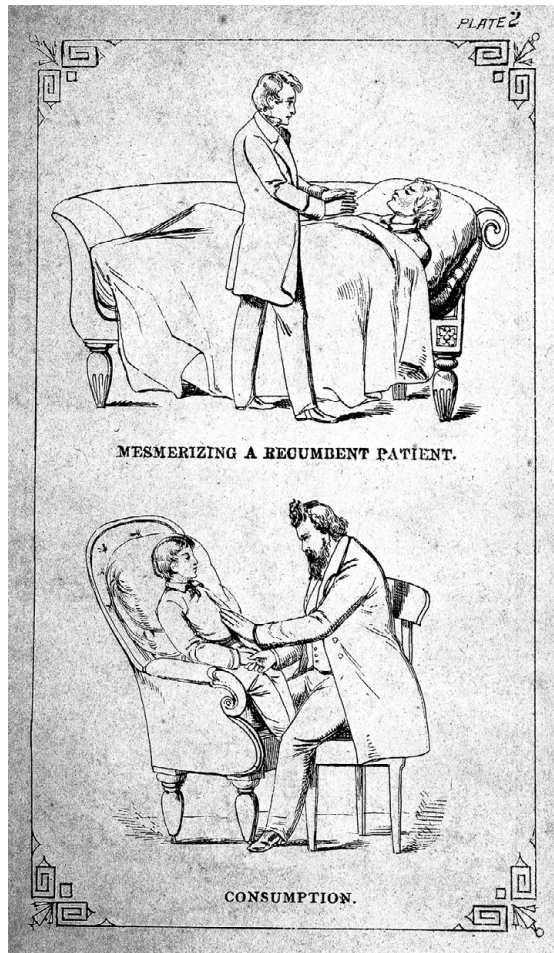


Figure 10.2 William Davey, *The Illustrated Practical Mesmerist, Curative and Scientific* (Edinburgh: William Davey, 1854), plate 2. Science Museum, London.

subjective experiences of the patient, which were declining in importance when it came to more clinical methods of diagnosis.

Although the stethoscope provided a new clarity of medical insight, it was nonetheless a source of deep confusion and anxiety for many early patients. Stanley Joel Reiser has attributed much of this anxiety to the fact that in the early decades of the century, medical instruments were almost exclusively associated with surgery and the possibility of being cut open.

He observes that some physicians were themselves hesitant to use the stethoscope for fear that such an instrument might class them with surgeons, lesser medical types who were seen to work with their hands as mere craftsmen.³⁶ Certainly, the use of an instrument was new and potentially unsettling in its physical interference with the body and its treatment of the human subject as an object of examination. It is perhaps little wonder that, as Scott Alison noted, in some cases 'the sight of the stethoscope, the idea that an examination is about to be made, causes so much distress and agitation to some patients, that it is prudent and justifiable to postpone the inquiry'.³⁷ More than this, however, there are numerous accounts, both historical and fictional, of patients being left utterly exhausted and unable to speak after their physician has conducted what was often seen as a thoroughly draining, intrusive examination. It is clear that the application of the stethoscope in physical examinations was something of a shock to many nineteenth-century patients, who were made painfully aware of new efforts to access and to interpret the sonic realm within their own bodies, despite the fact that they themselves were deaf to its sounds. It is this concept of sounds that were only accessible to and able to be interpreted by highly trained physicians that gave rise to what, I want now to suggest, was the primary cause of patients' fear and distress relating to the new stethoscopic practice: fear of the unknown becoming real.

A Very Trump of Doom

Although John Forbes registered his anxiety that the very presence of a stethoscope in consultations made 'a sort of bold claim and a pretension to certainty and precision of diagnosis' that he did not believe was warranted, Hyde Salter insisted that 'anything that increases our patient's confidence is of value; the strict adoption of the advice given often depends upon it'.³⁸ Certainly, patients seemed more willing to accept a diagnosis made with a stethoscope than one made by immediate auscultation, believing, in one case, that 'auscultation without the use of that mysterious instrument was ... a thing of nought'.³⁹ As early as 1828, Dr J. P. Kay of Manchester, who advocated the use of the stethoscope as a means of avoiding simple but potentially fatal errors in clinical examination, declared that despite the resistance that the stethoscope was meeting among the British medical profession, it would soon be 'dangerous, positively *suicidal* to the professional reputation, to object to the use of the stethoscope'.⁴⁰ In an interesting rhetorical shift in focus from the

internal sounds of the human body to the external babble of human voices, Kay announced that 'the public ear is awake, rumour speaks with a loud voice and a hundred tongues', and 'the public is acutely sensible of impressions'.⁴¹ The stethoscope not only allowed for greater precision, it lent an impression of authority to the examination as visible proof to the patient that analysis and diagnosis were taking place by way of the physician's ear.

As the years passed, the materiality of the stethoscope also lent the figure of the physician himself a greater degree of credibility, giving greater weight to his words and the impressions of his ear. It is for this reason that in the opening pages of Wilkie Collins's novel *A Rogue's Life* (1879), we read of the narrator's hatred not only of what he considers to be the abstruse studies of the medical profession, but also of the 'diurnal slavery of qualifying myself, in a social point of view, for future success in it'. Seeking social acceptance requires presenting himself in the guise of a doctor, making visits in the brougham 'with a stethoscope and medical review in the front pocket, with Doctor Softly by my side' in order to canvass for patients.⁴² A similar tactic is employed by the young doctor in Arthur Conan Doyle's 1894 story 'A False Start', in which he seeks to impress and recruit new patients by leaving a copy of Sir Richard Quain's *Dictionary of Medicine* out on the table in his consulting room alongside his stethoscope and other instruments. He believes that his abstract medical knowledge and highly trained ear are physically realized in these objects.⁴³ In Doyle's story 'A Question of Diplomacy', which appeared in the same collection, the physician is referred to by one resistant patient as a 'medical autocrat' who 'with his stethoscope and thermometer is a thing apart' and strangely 'beyond the reach of an argument'.⁴⁴ By the later decades of the nineteenth century then, such instruments had become material signs, tangible objects that helped to create a 'profession' of medical practice in the broader social and cultural consciousness.

As an embodiment of the medical profession, the stethoscope became for many patients a focal object in consultations and in later memories of those consultations. As *Blackwood's* observed in 1847, this was an object that 'had long ceased to excite merely professional interest', for 'there are few families to whom it has not proved an object of horror and the saddest remembrance'.⁴⁵ Reflecting upon its status as an instrument 'on which the hopes and fears, and one may also say the destinies of mankind, so largely hang', the writer noted that 'it appears to present a fit subject for poetic treatment'.⁴⁶ And it was indeed the subject of poetic treatment. *Blackwood's* followed this rumination with a rather lengthy and extravagant

poem by an anonymous poet. Throughout, the stethoscope is referred to by a range of metaphors, including a musician's trumpet (which has heraldic overtones to it while aligning the physician with a musical performer), a king's sceptre, a prophet's source of vision, and a priest's sacrificial altar. It is all-powerful, all-knowing, and entirely indifferent to human desire. From the perspective of the unhearing and unknowing patient, it is the stethoscope, not the doctor, that makes a declaration of health or disease as it whispers its secrets into the ear of the physician:

Stethoscope! Thou simple tube,
Clarion of the yawning tomb,
Unto me thou seem'st to be
A very trump of doom.

Wielding thee, the grave physician,
By the trembling patient stands,
Like some deftly skilled musician;
Strange! The trumpet in his hands,
Whilst the sufferer's eyeball glistens
Full of hope and full of fear,
Quietly he bends and listens
With his quick, accustomed ear –
Waiteth until thou shalt tell
Tidings of the war within:
In the battle and the strife,
Is it death, or is it life,
That the fought-for prize shall win?⁴⁷

There is, the poem makes clear, a battle being waged inside the human body that the individual sufferer is not and cannot be privy to, and the stethoscope therefore comes to operate as a kind of interface on the threshold between life and death. While many doctors were eager to establish their authority by employing the stethoscope as an instrument of science and an objective measurer of human health, those subjected to stethoscopic examinations, it seems, rather more anxiously imbued this process with wonder and magic. The instrument became a symbol of hope, anxiety, dread, and horror that would ultimately augur life or death, providing significant scope, I would suggest, for individual fears and fantasies of the occult and the quasi-magical.

It is far from unusual for new technologies to be described as magical, wonderful, or frightful by their first users. However, the association of the stethoscope with magic and strange, supernatural happenings by those on whom it was first used marks a deep cultural fascination with that

potentially distressing and intimate knowledge of one's own body and future health or pathology which lay beyond the limits of normal auditory perception. While an anonymous doctor writing to the editor of the *London Medical Gazette* in 1828 might draw upon a popular framework of technological magic to insist that the authority conveyed by the stethoscope had a remarkable ability to soothe and calm a patient if the physician 'let him but once feel its soft and gentle touch, stealing over the seat of decay, and by a sort of magic influence drawing to itself the venom that lurks within', his extraordinary image of the stethoscope as an enchanted and beneficent healer was certainly not shared by all.⁴⁸ More often, it provoked distress and a sense of the possible futures and temporalities of one individual life contained within the stethoscope, when, as in Sheridan Le Fanu's *Willing to Die* (1873), 'there were the hushed, dreadful moments, while [the physician] listened, thoughtfully, through his stethoscope, to the "still, small voice" of fate, to us inaudible, pronouncing on the dread issues of life or death'.⁴⁹ It was an instrument of ordeal that, as the narrator of Braddon's *All Along the River* (1894) observes, 'thrills us all with the aching pain of fear when we see it in the doctor's hand'.⁵⁰

Given that such sensations as horror, dread, and insight into the unknown or the supernatural are staples of Victorian sensation and gothic literature, it is not surprising that medical facts and cultural anxieties surrounding the use of the stethoscope provided an anxious site for the medical and the imaginative to disrupt and inform one another in fictional explorations of the powers of the stethoscope. In the opening scenes of Sheridan Le Fanu's gothic novel *Uncle Silas* (1864), the young heroine Maud Ruthyn is informed by the housekeeper that a 'Doctor Bryerly, a great conjurer among the Swedenborg sect' is coming to visit her father, Austin. Maud's imagination runs wild with suspicions of 'necromancy, and a weird freemasonry, that inspired something of awe and sympathy'.⁵¹ The day after this mysterious guest's arrival, Maud interrupts her father and Bryerly in the study, where they are surrounded by strange instruments, and 'too intent on other matters to hear her'. Maud recalls:

My father was sitting in his chair, with his coat and waistcoat off, Mr Bryerly kneeling on a stool beside him, rather facing him, his black scratch wig leaning close to my father's grizzled hair. There was a large tome of their divinity lore, I suppose, open on the table close by. The lank black figure of Mr Bryerly stood up, and he concealed something quickly in the breast of his coat.⁵²

As her father stands up, looking very pale, and brusquely orders Maud from the room, it is clear to the reader that Austin is anxious that his

daughter has interrupted his medical examination and discovered the truth regarding his declining health. Mr Bryerly has been leaning forward, listening to Austin's exposed chest, and we presume that he conceals a stethoscope from view as Maud enters. Maud, however, is frightened and confused by what she has seen, and mistakenly believes these figures to be engaged in some kind of occult worship:

I remember so well the kind of shock and disgust I felt in the certainty that I had surprised them at some, perhaps, debasing incantation – a suspicion of this Mr Bryerly, of the ill-fitting black coat, and white choker – and a sort of fear came upon me, and I fancied he was asserting some kind of mastery over my father, which very much alarmed me.⁵³

Maud's conflation of the figure of the physician with an enigmatical, 'lank high-priest' (as in the *Blackwood's* poem above) and of her father with a penitent sinner 'confessing to this man in black' is, of course, erroneous. It nonetheless replicates the inescapable hierarchy of the doctor–patient relationship as well as the cultural and social power bestowed upon the physician because of his medical knowledge and application of scientific instruments.⁵⁴ Austin Ruthyn is not confessing his sins to a priest; rather, his body is revealing the truth of its physical condition and future deterioration to a skilled auscultator. An intimate exchange of information largely inaudible to the naked ear is taking place as Austin looks to his physician for guidance and insight into his future. Here, the medical professional exerts a new form of power over matters of life and death, and one which is as awe-inspiring and potentially 'haunting' as that inspired by religious institutions or the occult.

Such responses to the stethoscope interweave traditions of magic, science, religion, and the occult in order to inculcate a popular sense of mystery and power in this object, which blurs the boundaries between magical phenomena and scientific possibilities. The stethoscope offers a kind of mystical communication between doctor and patient. It presents a delicate balance between science and mystery in its apparent ability to foretell the future and the hitherto unknown. It was doubtless this tradition that, as late as 1910, prompted Rudyard Kipling's short story 'Marklake Witches' featuring a young man called René Laennec, who is a French prisoner on parole and in the process of inventing the stethoscope (though it is never named as such). While the local village physician is suspicious of Laennec and his collection of 'toy trumpets', old Jerry Gamm, known locally as the 'Witchmaster on the Green' because he cures people 'by herbs and charms', is far more open-minded, and uses

Laennec's trumpets on some of his patients.⁵⁵ However, as René and Jerry debate the best materials for their trumpets and discuss the sounds made within the chests of various sick people in the village (including the buzzing 'like breakers on a reef' emanating from the consumptive Laennec himself), they are interrupted by a group of angry villagers who insist that they are practising devilry and 'prying into God's secrets by means of some papistical contrivance'.⁵⁶ With no understanding of the acoustical properties of the trumpet, or indeed of its medical purpose, they fear the stethoscope as a cause of pain and suffering rather than a mere means of listening to suffering bodies:

They said Old Gaffer Macklin was dying from stitches in his side where Jerry had put the trumpet – they called it the devil's ear-piece; and they said it left round red witch-marks on people's skins, and dried up their lights, and made 'em spit blood, and threw 'em into sweats. Terrible things they said. You never heard such a noise.⁵⁷

Each of these complaints is in fact a symptom of consumption, which manifests itself on the body's surface much later than the sounds emanating from Old Gaffer's chest might reveal the disease to the attentive ears of René and Jerry. That this earlier knowledge is perceived as some kind of satanic foresight is not only testament to the villagers' paranoia, but, beyond Kipling's story, points to the ways in which, from the perspective of 1910, by which time the stethoscope had emerged as the iconic image of modern medical practice, fear of such an instrument had been rendered absurd.

Cultural fears and fantasies that the stethoscope would reveal both the medical and metaphorical secrets of the body, particularly the human heart, were, in some ways, rather prescient. Alongside explorations of the body's sonic soundscape, over the course of the century, techniques for rendering visible and capturing a more permanent record of the heartbeat, blood pressure, and circulation were also being developed. In 1831, the Frenchman Jules Hérisson developed the sphygmometer, which was designed to display the pulse visually, and like the stethoscope his instrument underwent numerous modifications throughout the nineteenth century. In 1854, the German physiologist Karl von Vierordt combined Hérisson's instrument with a device that would record the movement of the pulse on paper to create a sphygmograph, and could be used to record a human pulse over a longer period of time. In 1863, the French physiologist Étienne-Jules Marey improved the device by making it portable. After the invention of the telephone, a later method of recording rendered the pulse wave audible by means of an electromagnetic induction coil and was essentially a stethoscope fitted with an electric microphone.

In the 1890s, these same techniques were put to use by the Italian criminal anthropologist Cesare Lombroso in what is now recognized as the first lie detector, which similarly measured the changes in a subject's blood pressure and pulse over the course of a criminal interrogation. Lombroso's device required the subject to wear a glove attached to a rubber membrane, which was in turn connected to a stylus that rolled across the surface of a kind of drum in response to variations in the subject's blood flow. The basic principle of this was that no matter what the subject's words might tell the listener, their pulse would reveal the 'true' story. In his study *Detective Fiction and the Rise of Forensic Science* (1999), Ronald R. Thomas presents Lombroso's lie detector as 'the fulfillment of a dream' inspired by nineteenth-century detective fiction.⁵⁸ In fiction such as Edgar Allan Poe's 'The Tell-Tale Heart', Thomas notes, 'what the culprit imagines to be the still-beating heart of his victim', announcing its hiding place beneath the floor-boards, is in fact his own physiological reaction to his body's suppression of the ugly truth, 'a truth his pulse spells out as if it were directing the automatic writing of the gloved hand of Lombroso's lie detector'.⁵⁹ Thomas's argument that Poe's literary transformation of the body 'into a text that seems to speak the truth for itself' emerges 'from the same configuration of cultural needs and anxieties' which gave rise to the lie detector as a machine of law enforcement, can be read here as part of the longer history of the social and cultural reception of the stethoscope and of the new body of medical knowledge acquired, represented, and constructed through sound that this inspired.⁶⁰ That knowledge demanded a cultivated and highly trained medical ear to distinguish different internal body sounds, as well as the ability to 'read sounds' as physical signs and interpret their significance. However, a wider reading of cultural materials tells us that this new way of listening in medical diagnosis also emphasized more broadly the limitations of the unassisted human ear, unable to hear the wars being waged within, as well as the penetrability and vulnerability of the human body, whose inner motions and secrets might now be exposed to a third party in the figure of the physician. A challenge to the subjective experience of pain and illness, and an object of fear, hope, and cultural fantasy, the stethoscope became a material testimony to human frailty and the limits of human auditory perception.

Notes

- 1 Wilkie Collins, *The Woman in White*, ed. Matthew Sweet (London: Penguin, 2003), p. 400.
- 2 Ibid.

- 3 Cited in George Rosen, 'A Note on the Reception of the Stethoscope in England', *Bulletin of the History of Medicine*, 7.1 (January 1939), pp. 93–94.
- 4 'The Physiology of the London Medical Student. III – Of His Gradual Development', *Punch, or the London Charvari*, 1 (1841), p. 165.
- 5 Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A. M. Sheridan (London: Routledge, 2003), p. xvi. For a detailed analysis of Foucault's approach to the role of auditory perception in the development of clinical medicine, see Lauri Siiisäinen, *Foucault and the Politics of Hearing* (Abingdon: Routledge, 2013), pp. 10–54.
- 6 Stanley Joel Reiser, *Medicine and the Reign of Technology* (Cambridge: Cambridge University Press, 1978), pp. 23–33; Sterne, *The Audible Past*, pp. 87–136.
- 7 Sterne, *The Audible Past*, p. 117.
- 8 *Ibid.*, p. 137.
- 9 *Ibid.*, p. 136.
- 10 Henry Hyde Salter, 'Lecture v. – On the Stethoscope', *British Medical Journal*, (7 February 1863), pp. 105–8, 133–35, at p. 105.
- 11 *Ibid.*, p. 134.
- 12 *Ibid.*
- 13 Gaskell's connection to Holland's apprentices is noted in George Payne, *Mrs Gaskell and Knutsford*, 2nd ed. (Manchester and London: Clarkson and Griffiths, 1905), pp. 36–37.
- 14 Elizabeth Gaskell, 'Mr Harrison's Confessions', in *Cousin Phillis and Other Tales* (Oxford: Oxford University Press, 1911), pp. 109–95, at p. 122.
- 15 *Ibid.*, p. 156.
- 16 Kirstie Blair, *Victorian Poetry and the Culture of the Heart* (Oxford: Clarendon Press, 2006), p. 2.
- 17 Gaskell, 'Mr Harrison's Confessions', p. 174.
- 18 *Ibid.*, p. 179.
- 19 Lilian R. Furst, *Between Doctors and Patients: The Changing Balance of Power* (Charlottesville: University Press of Virginia, 1998), p. 62.
- 20 For a study of the British it-narrative from a range of theoretical and historical vantage points, see Mark Blackwell, ed., *The Secret Life of Things: Animals, Objects, and It-Narratives in Eighteenth-Century England* (Lewisburg, PA: Bucknell University Press, 2007).
- 21 'Reminiscences of a Stethoscope', *Punch, or the London Charivari*, 2 (1842), p. 76.
- 22 'The Physiology of the London Medical Student', p. 165.
- 23 *Ibid.*
- 24 William Makepeace Thackeray, *The Virginians: A Tale of the Last Century* (London: Bradbury and Evans, 1859), vol. 2, p. 144.
- 25 *Ibid.*, p. 144.
- 26 'Auscultation Extraordinary', *Lancet*, (10 October 1829), p. 96.
- 27 Salter, 'Lecture v. – On the Stethoscope', p. 134.

- 28 The material instability of the stethoscope throughout the nineteenth century reflects the ongoing attempt within the medical profession to obviate the sounds of echoes, roars, and reverberations emanating from within the instrument itself, while listening to the sounds of the body more effectively and reducing the degree of pain and discomfort caused to the patient at hand. Laennec himself experimented with a range of materials for his stethoscope, including lead, leather, cedar, ivory, and horn.
- 29 Somerville Scott Alison, *The Physical Examination of the Chest in Pulmonary Consumption and Its Intercurrent Diseases* (London: John Churchill, 1861), pp. 303–4.
- 30 Anthony Trollope, *The Three Clerks* (New York: Harper and Brothers, 1860), p. 443.
- 31 Mary Elizabeth Braddon, *Lucius Davoren; or, Publicans and Sinners* (London: John Maxwell, 1873), pp. 177, 181.
- 32 Mary Elizabeth Braddon, *Vixen*, 3 vols. (London: John and Robert Maxwell, 1879), vol. 3, p. 286.
- 33 Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (Chicago: University of Chicago Press, 1998), pp. 4–5. For a detailed account of the arrival and reception of mesmeric practice in Victorian London, see *ibid.*, pp. 32–59.
- 34 ‘Mademoiselle Julie: Or, Witchcraft for the Aristocracy’, *Athenaeum*, 957 (28 February 1846), pp. 221–23, at p. 222.
- 35 William Davey, *The Illustrated Practical Mesmerist* (Edinburgh: William Davey, 1854).
- 36 Reiser, *Medicine and the Reign of Technology*, p. 36.
- 37 Alison, *The Physical Examination of the Chest*, p. 299.
- 38 John Forbes, ‘Translator’s Preface’, in R. T. H. Laennec, *A Treatise on the Diseases of the Chest and on Mediate Auscultation*, trans. John Forbes, 2nd ed. (London: G. and T. Underwood, 1827), p. xix; Salter, ‘Lecture v. – On the Stethoscope’, p. 106.
- 39 Salter, ‘Lecture v. – On the Stethoscope’, p. 106.
- 40 J. P. Kay, ‘Use of the Stethoscope’, *Lancet*, (23 February 1828), pp. 754–57, at p. 757.
- 41 *Ibid.*
- 42 Wilkie Collins, *A Rogue’s Life* (Gloucester: Alan Sutton, 1984), p. 7.
- 43 Arthur Conan Doyle, ‘A False Start’, in *Round the Red Lamp*, 2nd ed. (London: Methuen, 1894), pp. 65–88.
- 44 Arthur Conan Doyle, ‘A Question of Diplomacy’, in *Round the Red Lamp*, pp. 174–99, at p. 182.
- 45 ‘To the Stethoscope’, *Blackwood’s Edinburgh Magazine*, 61 (March 1847), pp. 361–67, at p. 361.
- 46 *Ibid.*
- 47 *Ibid.*
- 48 ‘Stethoscope’, *London Medical Gazette*, (8 March 1828), pp. 408–9.

- 49 Sheridan Le Fanu, *Willing to Die* (London: Chapman and Hall, 1876), p. 22.
- 50 Mary Elizabeth Braddon, *All Along the River* (London: Simpkin, Marshall, Hamilton, Kent, 1894), p. 200.
- 51 Sheridan Le Fanu, *Uncle Silas*, ed. W. J. McCormack (Oxford: Oxford University Press, 1981), p. 4.
- 52 *Ibid.*, p. 4.
- 53 *Ibid.*, p. 5.
- 54 *Ibid.*
- 55 Rudyard Kipling, 'Marklake Witches', *Rewards and Fairies* (New York: Doubleday, 1910), pp. 91–116, at p. 98.
- 56 *Ibid.*, pp. 106–7.
- 57 *Ibid.*, p. 107.
- 58 Ronald R. Thomas, *Detective Fiction and the Rise of Forensic Science* (Cambridge: Cambridge University Press, 1999), p. 22.
- 59 *Ibid.*, p. 23.
- 60 *Ibid.*