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# Science Images and Popular Images of the Sciences

Edited by Bernd Hüppauf and Peter Weingart



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## 6 Science from Hell

Jack the Ripper and Victorian Vivisection

Colin Milburn

1888...if any fluids typified that year then blood and ink would surely be the main contenders.

(Alan Moore and Eddie Campbell, From Hell, 1999)

Everybody is a book of blood; Wherever we're opened, we're red.

(Clive Barker, Books of Blood, 1984)

#### **DEAD LETTERS**

The killer known to history as Jack the Ripper, who murdered at least five and perhaps as many as ten women in the Whitechapel district of London during the autumn of 1888, was also, it would seem, an inveterate writer of letters. Between 1888 and 1891, upwards of 300 letters, postcards, notes, scraps of graffiti, telegrams, and other correspondences purporting to be written by Jack the Ripper were received by Scotland Yard, the City of London Police, various newspaper offices, prominent public figures, and private homes all over London and beyond (Evans and Skinner 2001). While the vast majority of these communications were obvious hoaxes, police investigators nevertheless passed several of the more credible letters to the newspapers for facsimile publication, in hopes that some witness might recognize circumstantial details or even features of the handwriting that would disclose the murderer's identity. The deluge of "Ripper letters" circulating in the postal system and reproduced by the press-both those purporting to be written by the killer and those from concerned citizens hoping to offer insight on the case-joined the frenzy of sensationalistic newspaper reportage of the "Whitechapel horrors," the several coroner reports on the victims' mangled bodies, and the police drawings and photographs of the crime scenes to form a media mosaic clustered around a phantasmagoric criminal, a figment of the gothic imagination. While the brutal Whitechapel murders in 1888 of Polly Nichols (31 August), Annie Chapman (8 September), Catherine Eddowes and Elizabeth Stride (both

30 September), and Mary Kelly (9 November) are tragic facts of history, the figure of Jack the Ripper was entirely a composite construct of the Victorian media ecology (Curtis 2001). Taking a cross-section of this media ecology, I aim to show how circulating images of illicit writing, diabolical murder, and scientific research triangulated a Ripper mythos for Victorian culture, a nightmarish fable of outcast London that implicated experimental physiology and medicine as accessories to serial atrocity.

I begin with two of the "Ripper letters." The first, received by the London Central News Agency on 27 September 1888, three weeks after the gruesome murder of Annie Chapman and only three days before the "double event" murder of Elizabeth Stride and Catherine Eddowes, was written in red ink and adorned with bloody fingerprints (Figure 6.1). Coining the "trade name" of "Jack the Ripper," the letter reads as follows:



Figure 6.1 "Dear Boss" letter (front and back), 27 September 1888 (UK National Archives ref. MEPO 3/3153. Courtesy of the National Archives. This material is in the copyright of the Metropolitan Police and is reproduced here by the permission of the Metropolitan Police Authority). The fading postscript ("They think I'm a doctor," etc.) is now almost indiscernible; it is located on the back of the letter in the bottom left corner, perpendicular to the body of the text.

Dear Boss,

I keep on hearing the police have caught me but they wont fix me just yet. I have laughed when they look so clever and talk about being on the right track. That joke about Leather Apron [an early suspect in the case] gave me real fits. I am down on whores and I shant quit ripping them till I do get buckled. Grand work the last job was. I gave the lady no time to squeal. How can they catch me now. I love my work and want to start again. You will soon hear of me with my funny little games. I saved some of the proper red stuff in a ginger beer bottle over the last job to write with but it went thick like glue and I cant use it. Red ink is fit enough I hope ha, ha. The next job I do I shall clip the ladys ears off and send to the police officers just for jolly wouldn't you. Keep this letter back till I do a bit more work, then give it out straight. My knife's so nice and sharp I want to get to work right away if I get a chance. Good Luck.

Yours truly

Jack the Ripper

Dont mind me giving the trade name

[PS] Wasnt good enough to post this before I got all the red ink off my hands curse it. No luck yet. They say I'm a doctor now. ha ha

The second letter was received on 16 October 1888 by George Lusk, president of the Whitechapel Vigilance Committee (Figure 6.2). The Vigilance Committee had recently organized to hunt down the person (or persons) responsible for the escalating mutilation-murders of Whitechapel prostitutes, from whose flayed bodies select vital organs had been removed. The letter arrived in a small cardboard box along with a portion of human kidney. As one of Catherine Eddowes's kidneys had been stolen by her murderer, this ghastly missive was given particular attention by Scotland Yard. The letter reads:

From hell

Mr Lusk

Sor

I send you half the Kidne I took from one woman and prasarved it for you tother piece I fried and ate it was very nise. I may send you the bloody knif that took it out if you only wate a whil longer

signed

Catch me when you can Mishter Lusk

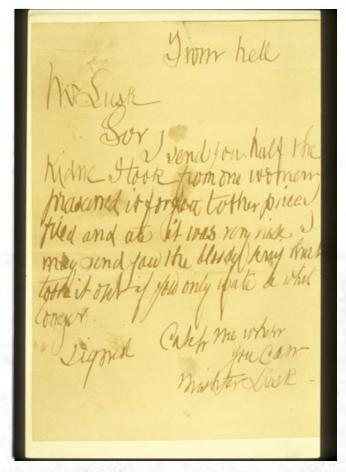


Figure 6.2 "From Hell" letter, 16 October 1888 (Royal London Hospital Archives, ref. GB 0387 LH/X/97. © Royal London Hospital Archives. Courtesy of Royal London Hospital Archives). This image is reproduced from an original photograph of the letter; the letter itself went missing from City Police archives sometime in the 1960s.

These two letters, among the most widely publicized of the voluminous Ripper correspondence, register three aspects of the killer's "profile" commonly accentuated by the Victorian newspapers and by hundreds of other Ripper letters. These were the "writerly" and "inscriptional" obsessions of the murderer as a user of media networks; the "diabolical" and "gothic" qualities of the murders; and the patterns of "scientific experimentation" seemingly discerned in this series of crimes; that is, the persistent question of physiological or anatomical "knowledge" that haunted the coroner's inquests, police reports, and newspaper accounts of the crimes.

The very existence of these Ripper letters cemented the killer's persona as a writer and a consummate navigator of the postal system, a logorrheic composer of tantalizing documents directed to the forensic gaze of the police, the press, and various authority figures around the city. Signed by "Jack the Ripper" and often following the style and diction of the "Dear Boss" and "From Hell" letters, these texts emanated an imaginary "author-function" that appeared to unify and resolve them en masse, neutralizing their contradictions as the fantasized origin and organizational principle of their circulation (Foucault 1977). Certainly, the letters as a whole are deeply inconsistent in terms of their content, and their attempts to enact various faux dialects are radically unconvincing. Scotland Yard immediately dismissed almost all of them as attention-seeking counterfeits (although a few were less obviously so, especially one postcard that seemed to accurately predict the "double event" murder of Stride and Eddowes in the same night). Despite their overtly fraudulent nature, however, the letters signed by "Jack the Ripper" contributed to the murderer's reputation as a heckler of the police who used the media channels of Victorian England to send various textual clues, scripts, tracks and traces of his criminal autobiography, playing "funny little games" and boldly taunting: "Catch me when you can." A repetitive, serial author of grisly letters who writes, after all, from the depths of hell.

lack the Ripper's epistolary self-fashioning as a demonic force "from hell" in the letter to George Lusk provoked numerous copycat Ripper letters that referenced satanic and infernal motivations. The occultist Dr. Roslyn D'Onston (alias of Robert Donston Stephenson) further stoked such associations in promoting his theory that the Whitechapel killings were really the "unholy rites" of an elaborate necromantic ceremony, figuring lack the Ripper—"The Whitechapel Demon"—as a black magician guided by "agencies of evil spirits and demons" (D'Onston 1888: 5). (A few of Stephenson's contemporaries even suspected him of being the saturically inspired Ripper; see Whittington-Egan 1975: 68-98; Harris 1994). An extensive diabolic vocabulary equally fueled the Victorian journalistic conventions of "sensation-horror" reportage that bodied forth a gothic idiom in narrating the murders (Curtis 2001). Typically describing Jack the Ripper as the "demon of Whitechapel," a "ghoul" or "vampire" stalking the streets to fulfill his "fiendish lust," a "crazed devil" and a "cruel monster" acting out of motives "beyond human imagination," the London newspapers shrouded the killer in a semiotic cloak of sadistic perversion, monstrous fury, and unspeakable appetites (Curtis 2001: 109-163; Walkowitz 1992: 192-201).

Such "appetites" are displayed in the "From Hell" letter when the author implies that he cooked and devoured a portion of Eddowes's kidney ("I send you half the Kidne I took from one woman and prasarved it for you tother piece I fried and ate it was very nise"). The syntactical overlapping

here of the "raw" and the "cooked," the shared textual space of the "abattoir" and the "kitchen," or the "savage" and the "civilized," would itself seem to correspond to the gothic models of "split personality" offered up by several contemporary commentators (including famous journalist W.T. Stead) to explain the killer's psychology as a "savage-savant." Journalistic accounts of the killer as a subject divided between fierce intelligence and raging violence frequently relied on direct allusions to Robert Louis Stevenson's The Strange Case of Dr. Jekyll and Mr. Hyde (1886) (Smith 2004: 76-81; Curtis 2001: 32-119). In Stevenson's gothic fable, the war between the civilized and the atavistic self is a physiological reality, and this horror-fantasy image provided an immediately accessible means for the London press to comprehend the mind of the Whitechapel killer (Frayling 1986; Walkowitz 1992: 206-211). Moreover, frequent citations of Stevenson's quintessential narrative of the "mad scientist" in the context of the murders imaginatively supplemented theories that the Whitechapel killer himself belonged to the scientific professions.

Indeed, the "From Hell" letter notes those ubiquitous hypotheses circulating in the Victorian media ecology that Jack the Ripper might be a physiologist or medical experimenter: "They think I'm a doctor now, ha ha." This particular representation of the Ripper entered public discourse with the assertion, raised repeatedly during the official inquests into the victims' deaths, that the killer displayed a certain scientific "knowledge" in performing these eviscerations and removing select organs. The specter of human vivisection was first suggested by police surgeon Dr. George Bagster Phillips on 19 September 1888 during the Annie Chapman inquest. Phillips described the "deliberate, successful, and apparently scientific manner in which the poor woman had been mutilated," and he speculated that the "mode in which the knife had been used seemed to indicate great anatomical knowledge" ("The Whitechapel Murder" 1888: 98). The question of medical or scientific motives became an early focus of the investigation, and Coroner Wynne Baxter later publicly announced that the uterus of Annie Chapman

had been taken by one who knew where to find it, what difficulties he would have to contend against, and how he should use his knife so as to abstract the organ without injury to it. No unskilled person could have known where to find it or have recognized it when it was found. For instance, no mere slaughterer of animals could have carried out these operations. ("The Whitechapel Murder" 1888: 105)

The implication that a sadistic medical scientist could be conducting hideous vivisection experiments or "operations" on the women of Whitechapel spread almost instantly throughout the Victorian media and the popular imagination.

"Medical knowledge" became a major motif of reportage on Jack the Ripper and of police inquests as the slavings increased from two to four during the month of September. One letter written to the Evening News on 17 September 1888 by an "Ex-Medico's Daughter" hypothesized that the Whitechapel killer was a "medical maniac," a "human vivisectionist" whose crimes were committed "in the cause of science" for gynecological purposes, to reveal "the mysterious changes that take place in the female sex at about the age of these poor women" (quoted in Walkowitz 1992: 209). This writer's portrait of Jack the Ripper as a maniacal hybrid of gynecologist and vivisectionist echoed the antivivisection propaganda produced at the fin de siècle that often strategically linked women and experimental animals together as victims of medical violence (Elston 1987). As Coral Lansbury has argued, "women were the most fervent supporters of antivivisection, not simply for reasons of humanity, but because the vivisected animal stood for vivisected woman: the woman strapped to the gynaecologist's table, the woman strapped and bound in the pornographic fiction of the period" (Lansbury 1985). Such fears found a visible exemplar in a real-life killer who seemingly had transferred his scientific attention from tortured animals to tortured women.

I am less concerned with the "real" identity of Jack the Ripper than with the cultural logics that were animated to make sense of the "Whitechapel horrors": what Elana Gomel has called the "bloodscripts" that emerge at sites of excessive violence to narrativize and account for violent subjectivities (Gomel 2003); or what Mark Seltzer has called the "splatter codes" of the pathological public sphere linking word counts and body counts, relaying wounded bodies through public media (Seltzer 1998). For Jack the Ripper, never identified and never caught, became a cipher, a blank space into which numerous social anxieties could be channeled. Among these contemporary anxieties were longstanding class conflicts (between the west of London and the crime-ridden East End) and anti-Semitism (John Pizer, a Jewish butcher allegedly nicknamed "Leather Apron," was an early Ripper suspect, and ambiguous graffiti found at the scene of Catherine Eddowes's murder—"The luwes are the men that will not be blamed for nothing"—threatened to inflame public hostilities), as well as concerns about the effectiveness of police in preventing crime (Walkowitz 1992). But perhaps most prominently the killings came to instantiate an entrenched iconography of male violence against women that eerily echoed images of the opening, dissection, and mutilation of women prevalent in Victorian medical science (Walkowitz 1992; Showalter 1992; Jordanova 1989).

Though there were several criminal "types" offered as possible culprits-including the degenerate aristocrat, the working-class "Jack," and the sinister foreigner—the mad medical scientist was perhaps the most compelling and enduring for the Victorians (Frayling 1986). Indeed, nearly half of over 300 Ripper-related letters addressed to the City of London police from 1888 to 1889 speculated that the killer was a human vivisectionist (Curtis 2002). One letter signed by "Jack the Ripper" sent to Dr. Thomas Openshaw (the medical examiner of the "Lusk kidney") seems to endorse this prominent theory by ending with the following rhyme: "O have you seen the devle/ with his mikerscope and scalpul/ a looking at a Kidney/ with a slide cocked up" (Letter reprinted in Evans and Skinner 2001: 67). This ditty fashions the killer as a diabolical (if surprisingly illiterate) physiologist crudely poeticizing his own specular exploits. Altogether, the media confluence of newspapers, police reports, autopsies, and the flood of Ripper correspondence produced a resonant configuration of the Whitechapel killer as gothic vivisector and literary experimenter: a satanic scientist who writes.

Indeed, Jack the Ripper writes in blood: "I saved some of the proper red stuff in a ginger beer bottle over the last job to write with." And even as the killer appeared to document his crimes by dispatching hundreds of macabre memos. Victorian culture imagined the murders themselves as acts of bloody writing. Coroner Baxter, summing up the Chapman inquest, stated: "The body [of Annie Chapman] had not been dissected, but the injuries had been made by some one who had considerable anatomical skill and knowledge. There were no meaningless cuts" ("The Whitechapel Murder" 1888: 105).

The cuts are now meaningful marks. The bleeding female corpses literally become semiotic, bearing legible inscriptions—even "writing" as such (Derrida 1974). Under the gaze of medical examiners and police investigators, the ghastly wounds appear as material signifiers of great complexity, suggesting not only a motive—"The conclusion that the desire was to possess the missing abdominal organ [the uterus] seemed overwhelming" ("The Whitechapel Murder" 1888: 105)—but also a suspect profile. As Dr. Frederick Gordon Brown, surgeon of the City of London Police Force, remarked during the subsequent inquest into Catherine Eddowes's murder: "The way in which the mutilation had been effected showed that the perpetrator of the crime possessed some anatomical knowledge...[and the pilfering of Eddowes's kidney in particular required a good deal of knowledge as to the position of the organs in the abdominal cavity and the way of removing them" (Brown quoted in "The East-End Murders" 1888: 223). The kind of knowledge potentially gained, according to Brown's official written testimony, by a skilled professional "in the habit of cutting up animals":

I believe the perpetrator of the act must have had considerable knowledge of the position of the organs in the abdominal cavity and the way of removing them.... It required a great deal of ["medical" —deleted] knowledge to have removed the kidney and to know where it was placed, such a knowledge might be possessed by some one in the habit of cutting up animals.... (Coroner's Inquest 1888: 207)

While belated deletion of the word "medical" from the archived inquest record here seemingly leaves open possibilities that other professionals accustomed to "cutting up animals"—such as butchers, hunters, or cooks-might possess sufficient "anatomical knowledge" to have carried out these murders, the lingering trace of "medical" experimentalism could not so easily be effaced from public media. One Ripper letter even makes the equation directly in doggerel poetry, associating the killer with a man "Mad on Vivisection (the cutting up of animals).... Who wrote essays on women bad" (Letter reproduced in Evans and Skinner 2001: 288-289). In this letter, the "cutting up of animals" means vivisection, and its practice links to the sadistic scriptor in Whitechapel who "wrote essays" on the bodies of wayward women.

The mutilated bodies become "essays" documenting their own status as subjects of experimental science gone mad. The thoroughly "meaningful" cuts announce the skillful method through which they were performed and the "scientific" goal for which they were intended. They are read through a certain interpretive lens as the signature of the vivisectionist, making visible the motive and occupation of their author. Frances Power Cobbe, outspoken Victorian feminist and antivivisection crusader, seeing signs of physiological knowledge in the crimes, announced her support of police bloodhounds for tracking down the killer: "Should it so fall out that the demon of Whitechapel prove really to be ... a physiologist delirious with cruelty, and should the hounds be the means of his capture, poetic justice will be complete" (Cobbe 1888).

The horrid events in Whitechapel seemed to fulfill Cobbe's worst nightmares. After all, the possible existence of such a demon physiologist recalled assertions in her Dante-esque tract The Nine Circles; or The Torture of the Innocent (1893) that vivisection would inevitably turn respectable scientists into skilled torturers filled with inhuman lusts. We see dire pronouncements throughout the writings of Cobbe and other antivivisectionists, such as G.M. Rhodes's The Nine Circles of the Hell of the Innocents (1892), prefaced by Cobbe, that the science of vivisection unleashes base and devilish forces lurking in human beings. Likewise, in H.G. Wells's 1896 novel of wild vivisection, The Island of Dr. Moreau, the shipwrecked Prendick observes the outcome of vivisection and feels "a nasty little sensation, a tightening of my muscles.... It's a touch—of the diabolical, in fact" (Wells 1896/1993: 23). The vivisector Dr. Benjulia in Wilkie Collin's 1883 novel Heart and Science confronts an eyewitness to his harsh treatment of a monkey directly on this point: "Do you think I'm the Devil?" (Collins 1883/1996: 109). Benjulia's own brother later echoes this intimation when, watching the physiologist erupt into a vivisectional fervor, whispers to himself, "I begin to believe in the devil" (191).

Even professional physiologists tended towards a lexicon of diablerie when writing on the topic of vivisection. In 1882, Ronald Ross-fifteen years prior to his celebrated work on malaria that would be recognized by

the Nobel Prize in 1902—composed a gothic science-fiction story called "The Vivisector Vivisected." In this satirical tale, two daring vivisectors use an artificial heart-machine to resurrect a deceased fellow physiologist, making him over as a test organism. The victim-scientist perceives this fate as his own personal inferno, seeing signs of hellfire all around as he says to his experimental tormentors:

"I went in for physiology, and so got ruined. I say! [W]on't the devil give me hot for my vivisecting—for the cutting—eh? for the fastening up-eh?...[W]hat is this? what is this? I am dead! Begorra, I died just now—I died of a cut on the head, and drank a bottle o' whiskey upon it to die drunk! Oh! Lord I see it-ochone! I am in hell, and I am drunk still!" He wrenched again at his wrists, screaming.... "Ah! Krimy!" groaned the man, his eye wandering down to the instrument stuck in his chest, the stitches in his skin and the tubes leading to the pumps: "[O]ch! St. Pathrick, I see it! And my punishment is, to be done to as I have been done by. And you are a couple of devils, and I a vivisection; and I shall be vivisected for iver and iver, wurrld without end-oh! Lord—damn—damn—." (Ross 1882/1988: 347)

Ross's vivisectors appear to each other as devils lurking in stygian pits of the experimental lab. A similar tableau of the pandemonic laboratory was evoked by Cambridge physiologist Michael Foster for his vehement 1874 defense of vivisection in Macmillan's Magazine. Upholding the necessary value of vivisection for the advance of medical knowledge, Foster nevertheless allows that, in terms of actual practice, "a physiologist...might be an angel in the bosom of his family, but a demon in the laboratory" (Foster 1874: 368). In late Victorian England, then, vivisection was frequently configured as a science from hell—and in the autumn of 1888, Jack the Ripper became its poster boy.

Rhetorical critiques of experimental physiology from the antivivisectionist camp undoubtedly bolstered the rumor the Jack the Ripper was a crazed vivisectionist practicing his nefarious science in the back alleys of the East End. Antivivisectionists had been responsible for arousing public suspicion that the practice of vivisection would dehumanize students of science, turning them into heartless sadists filled with uncontrollable barbaric desires, or vicious monsters abandoned of all morality (French 1975). Lewis Carroll suggested in 1875 that the vivisection of animal victims would inevitably drive scientists to vivisect human victims, and "successive generations of students, trained from their earliest years to the repression of all human sympathies, shall have developed a new and more hideous Frankenstein—a soulless being to whom science shall be all in all" (Carroll 1875: 854). In Carroll's invocation of a Frankensteinian monstrosity inextricable from the practice of science, we see mirrored a similar claim by H.G. Wells, who writes in a postscript to The Island of Dr. Moreau that,

"[s]trange as it may seem to the unscientific reader, there can be no denying that...the manufacture of monsters—and perhaps even of quasi-human monsters—is within the possibilities of vivisection" (Wells 1896/1993: 88). Wells's phrase "quasi-human monsters" would seem to refer not only to the constructed Beast-Folk of his gothic scientific romance, but also to their half-monstrous creator, the vivisectionist Moreau.

But as much as these critics contributed to the idea that vivisection produces monsters and pointed to Jack the Ripper as exemplifying their warnings, there is something more epistemic in the way that the authorial hand of vivisection was read through the ghastly wounds of eviscerated prostitutes during the autumn of 1888. When police surgeons, coroners, reporters, and even medical practitioners and scientific researchers took seriously the signifying wounds of the female bodies as leading inexorably back to the inscribing hand of some "half-mad physiologist," as the East London Observer put it on 22 September, working to secure "living tissues or organs from a healthy subject for experiments" (quoted in Curtis 2001: 227), we see more than the vitriol of antivivisectionists—who were fairly marginal, anyway, even among animal welfare groups (Ritvo 1987: 157-166)—but a cultural discourse in which "mad science" is the logical context of serial slaughter (Turney 1998: 43-63). The successive iteration of mangled bodies in Whitechapel immediately appeared to be a form of communicative inscription-"There were no meaningless cuts"-and this was a particular form of inscription that experimental physiology had already claimed as its own.

I want to argue that nineteenth-century vivisection-by which I mean the set of technical and discursive operations that made vivisection available as an experimental method for Victorian physiology-produced an interpretive community conditioned to observe "meaning" in wounds. That is to say, the practice of vivisection constructed an epistemic frame of reference, a specific hermeneutic horizon, expanding beyond the physiological laboratory and into the media networks of Victorian culture, which primed readers to "see" vivisection within serial mutilations of bodies. In this frame of reference, the methodically wounded body signifies: it gives forth biological secrets from within its organic depths while simultaneously announcing on its bleeding surface its transformation into an object of scientific inquiry. Enmeshed in the space of the experimental laboratory, manipulated and recreated by the scalpel and the graphical recording instrument, the vivisected body conveys meanings unavailable to the closed and contained body. In other words, the Victorian discourse on experimental physiology rendered vivisection as a media practice, and the vivisected body thereby became a vehicle for scientific communication, a book of blood. In doing so, it created the conditions of possibility wherein the carnal signatures "From Hell" and "Yours Truly, Jack the Ripper" could be read as the infernal marks of a vivisection event.

#### **MEANINGFUL CUTS**

The notion that Jack the Ripper might be a crazed doctor or physiologist had become so widespread in the aftermath of the first two Whitechapel murders that the scientific community moved to defend their profession. The Lancet ran an article cautiously admitting "the improbability of anyone but an expert performing the mutilations described in so apparently skilful a manner," especially considering that Annie Chapman's uterus had been removed by someone seemingly possessed of "such knowledge of anatomical or pathological examinations as to be enabled to secure the pelvic organs with one sweep of a knife" ("The Whitechapel Murders" 1888). The article nevertheless stated that the theory of a medical scientist turning to murder was "highly improbable, although it may have a small basis of fact, which will require exercise of much common sense to separate from the sensational fiction that surrounds it." In any case, The Lancet chastised Coroner Baxter for publicizing his speculations about medical organ harvesting without regard to potential public reactions:

The public mind—ever too ready to cast mud at legitimate research will hardly fail to be excited to a pitch of animosity against anatomists and curators, which may take a long while to subside. And, what is equally deplorable, the revelation thus made by the coroner, which so dramatically startled the public last Wednesday evening, may probably lead to a diversion from the real track of the murderer, and thus defeat rather than serve the ends of justice. ("The Whitechapel Murders" 1888)

Scientists and physicians as far away as Australia also became concerned about the public "pitch of animosity" arising from unchecked international rumors that a medical maniac was vivisecting prostitutes in London, Dr. Andrew Wilson wrote in the Port Philip Herald:

The medical evidence given at the inquest on the last victim [Annie Chapman bore out that the manner in which the woman's body was mutilated gave evidence of some acquaintance with anatomy. Upon this declaration a writer in a London evening paper had the effrontery to suggest that the murders may have been the work of some physiologist who desired to gain possession of human organs for purposes of science! Such an outrageous proposition, it is to be presumed, only requires to be mentioned to be reprobated as itself the product of a diseased mind. Anatomists do not require to kill subjects to obtain human organs for investigation, and it is not possible to name any "vivisection" experiment in the same breath with such a brutal and unmeaning crime. (Wilson 1888)

Defending experimental physiology by mocking the mad scientist rumors, Wilson insists that "vivisection" cannot be associated with "brutal and unmeaning crime." Experimental physiology is not the product of a "diseased mind" but of a self-evidently sane mind, and far from "unmeaning crime," vivisection instead would be, according to Wilson's logic, deeply "meaningful." While defending experimental physiology against Jack the Ripper, Wilson here echoes a motif of Victorian scientific discourse that vivisection produces meaning, that it is a method for generating signification: a scientific merger of the pen and the knife.

Vivisection was regularly figured as the conjoined action of dissection and writing, a mode of producing graphical meaning across the organic body. Michael Foster, for example, writes of vivisecting a rabbit:

Did the reader ever see a rabbit completely under the influence of Chloral?... You prick with a needle the exquisitely sensitive cornea of its eve; it makes no sign, save only perhaps a wink. You make a great cut through its skin with a sharp knife; it does not wince.... Yet it is full of action. To the physiologist its body, though poor in what the vulgar call life, is still the stage of manifold events, and each event a problem with a crowd of still harder problems at its back. He therefore brings to bear on this breathing, pulsating, but otherwise quiescent frame, the instruments which are the tools of his research. He takes deft tracings of the ebb and flow of blood in the widening and narrowing vessels; he measures the time and the force of each throb of the heart, while by light galvanic touches he stirs this part or quiets that; he takes note of the rise and fall of the chest-walls...he divides this nerve, he stimulates that, and marks the result of each...and having done what he wished to do, having obtained, in the shape of careful notes or delicate tracings, answers to the questions he wished to put, he finishes a painless death by the removal of all the blood from the body, or by any other means that best suit him at the time. (Foster 1874: 370-371)

Foster describes the opened animal body as a medial surface, a "stage of manifold events," that in itself "makes no sign"-it does not produce its own meanings-but upon which meanings and "answers" are made to appear through the work of vivisection. The "instruments which are the tools of his research" are used to take "deft tracings of the ebb and flow of blood," to measure, to record, and to "take note": "he...marks the result of each." The theatrical performance of vivisection on the "stage" of animal form involves an intimate choreography where cutting and inscribing, excavating and marking, exposing and signing intertwine and become indistinguishable:

The chemistry of living beings, one would imagine at first thoughts, might be investigated without distressing the organisms...[but the]

shifts and changes of the elements within our bodies are too subtle and complex to be divined from the results of the chemical laboratory; the physiologist has to search for them within the body, and to mark the compounds changing in the very spot where they change; otherwise all is guess-work. (Foster 1874: 373)

The vivisector digs into the animal body to precisely "mark" the "very spot" of buried chemical compounds, a scientific treasure hunt that eliminates fruitless speculation by drawing a piratical map into the flesh of the ruined organism.

In the same vein, several Victorian novels featuring vivisection emphasize the hybrid nature of instruments of writing and instruments of cutting within the space of the physiological laboratory: the pen and the knife serving the same purpose of making meaningful the mute animal structure. For instance, in H.G. Wells's The Island of Dr. Moreau, the clinical and calculating Moreau explains his program of vivisection research to the shipwrecked Prendick through recourse to inscriptional metaphors and graphic demonstration. Exploring "the extreme limit of plasticity in a living shape" (Wells 1896/1993: 48), transforming animal bodies into ersatz humanoids, Moreau has come to see pain as a durable trace of animality: "pain, Prendick, is the mark of the beast upon them, the mark of the beast from which they came!" (48). Moreau, with an "artistic turn of mind" (47), uses pain like a writer or painter would use ink or paint, coating over the "mark of the beast" by "dip[ping] a living creature into the bath of burning pain" (51) and then engraving the tortured organism with humanity: "Moreau took them [infant animals] and stamped the human form upon them" (53). For Moreau, the body is a medium to be "carven and wrought into new shapes" (46), "stamped," or written upon by instruments of pain: "As he spoke he drew a little penknife from his pocket, opened the smaller blade, and moved his chair so that I could see his thigh. Then, choosing the place deliberately, he drove the blade into his leg and withdrew it" (48). This evocative "penknife" metonymizes vivisection as a media practice, as a science of drawing and withdrawing meaningful cuts from malleable tissues.

Similarly, in Collins's Heart and Science, the authorial hands and cruel instruments of the vivisector Dr. Benjulia leave behind trails of "horrid stains, silently telling their tale of torture" (Collins 1883/1996: 185). Vivisection becomes a form of storytelling, writing Grand Guignol fables with the body's spilt fluids. Certainly, for some Victorian intellectuals working across the fields of literature and science, like H.G. Lewes and George Eliot, the relationship between the pen and the knife went beyond analogy, standing rather for the potential of novelistic experimentation to parallel physiological experimentation in exposing the workings of human consciousness: a "recognition of the potential affinity between the literary and scientific imaginations, between the real investigations of the scalpel and the imaginary invasions of the pen, between vivisection and fiction" (Menke 2000: 647).

Considering this frequent conjunction of the pen and the knife in Victorian discourse on vivisection—biological science imagined as both serial killing and serial writing—the forensic reading of the autopsied victims and the autopsied letters in the Jack the Ripper case predictably focused on questions of "signature" evidence, and therein, among other tantalizing clues and possible leads, discovered signs of physiological knowledge and its disciplinary tools. Chief Inspector Swanson's report to the Home Office on the murder of Annie Chapman states the opinion "that the murderer was possessed of anatomical knowledge from the manner of removal of viscera, & that the knife used was not an ordinary knife, but such as a small amputating knife" (Swanson 1888: 67). Several Ripper letters captured the overlay of violence and writing in the killer's signature by focusing on this murder weapon as a pen as much as an "amputating knife," a stylus as much as an experimental instrument. One letter sent to Chief Commissioner Charles Warren of Scotland Yard on 3 November 1888, signed "I. T. Ripper" and announcing more vicious murders to come ("one or two more will feel my knife"), ends with the postscript: "next one I copp I'll send the toes and earoles to you for supper." The postscript is followed by the Ripper's signature, and below this, a drawing of a man's hand holding a narrow knife upright by the fingertips, as one would hold a pen. The tip of this knife rests just under the signature, as if the knife has been the instrument used to write this letter, to sign off the bloody deed (Letter reproduced in Evans and Skinner 2001: 107).

In this missive, there is little difference between a letter and a dismembered body (both here imagined as items that travel through the postal system, "earoles" alongside text, like the kidney and note sent to Lusk), between a crime scene and a kitchen (both here imagined as places where one might prepare a grisly "supper"), or between a epistolary pen and an amputating knife (both here imagined as instruments for signing murder). All of these features—evoked repeatedly in the innumerable hoax letters, medical autopsies, police reports, and newspaper stories constituting the Victorian media mosaic of Jack the Ripper—lent themselves towards an already emergent bloodscript of the experimental vivisector. For Victorian culture had been taught to perceive the authorial signature of vivisection in the mangled body, to understand vivisection as a media practice working to draw meaning from living flesh. In essence, through the didactic efforts of both professional physiologists and their antivivisectionist opponents, the Victorian public had been encouraged to consider vivisection—as Thomas De Quincy had suggested of murder—as one of the fine arts.

The revolution in English physiology that began during the 1870s under the influence of Michael Foster, John Scott Burdon Sanderson, and Edward A. Schäfer received considerable public attention both in Britain and abroad. Importing techniques and laboratory protocols from the physiological schools of Germany and France-notably refined practices of experimental vivisection—and renovating the institutional framework of physiological education in England between 1870 and 1900, the scientific successes of the new English physiology soon achieved international prominence (Geison 1978; Romano 2002). The publication of Foster's Textbook of Physiology and his foundation of the British Physiological Society in 1876, the inauguration of the Journal of Physiology in 1878, along with the publication of Burdon Sanderson's notorious two-volume Handbook for the Physiological Laboratory in 1873, gave exposure to the new techniques and provided a strong image of experimental physiology to the Victorian public-and in the process provided tangible targets for the newly organized antivivisectionist movement (French 1975). The contents of certain continental physiological textbooks that informed the reformation of English physiology became widely known through their citation in both professional scientific publications and antivivisection treatises. (Ironically, English physiologists sometimes themselves gained an impression of continental technique through the translations and quotations contained in antivivisection publications; physiologist Gerald F. Yeo once wrote that "my knowledge of [Italian physiologist Paolo Mantegazza's] work was derived solely from Miss Cobbe's writings, and may be quite incorrect" [Yeo 1882]). These texts, along with graphic diagrams of the physiological laboratory, its instrumentation, and its experimental organisms disseminated by English scientists, shaped the public image of the vivisected body as a communicative medium.

The Atlas zur Methodik der physiologischen Experimente und Vivisectionen (1876) by Russian-born physiologist Elie de Cyon was not only highly influential in the disciplinary world of experimental vivisection, but also something of a bête noire among Victorian antivivisectionists for its unabashed celebration of scientific violence towards "animal material." De Cyon defended himself in the English press, sarcastically counterattacking those critics who stood aghast at his depiction of the work of the vivisector as the work of the artist, the belletrist, the sculptor (de Cyon 1883). In a passage from the Methodik frequently quoted by the Victorian media, de Cyon writes:

The true vivisector...must approach a difficult vivisection with the same joyful excitement, with the same delight, as the surgeon when he approaches a difficult operation from which he anticipates extraordinary consequences. He who shrinks from the section of a living animal, he who approaches a vivisection as an unpleasant necessity, may perhaps be able to repeat one or two particular vivisections, but will never become an artist in vivisection.... The sensation of the physiologist when, from a gruesome wound, full of blood and mangled tissue, draws forth some delicate nerve thread . . . has much in common with

that of a sculptor. (De Cyon quoted in Cobbe 1882: 611; Coleridge 1882: 227)

The "artist in vivisection," like a "sculptor," working within the mess of meaningless material, the unformed medium of the "gruesome wound, full of blood and mangled tissue," pursues a line of significance, shaping the meaning of his material at the moment when he "draws forth some delicate nerve thread," drawing out the hidden value from the otherwise senseless mass. The vivisector literally and figurally "draws forth" the vital thread of physiological meaning from out of the organic medium; he discovers and makes visible the truth of the organism that had been concealed by the shapeless chaos of the bleeding body. Vivisection gives meaning to wounds, it finds the "delicate" within the "gruesome," and it exposes the work of fine art that lies dormant within the block of animal matter.

We find similar accounts of the vivisector as media artist in the work of Claude Bernard, who personally trained several leading Victorian physiologists-including Burdon Sanderson-in vivisection techniques, and whose experimental protocols profoundly influenced development of the new physiology in England (Richards 1986). Bernard's most famous text, An Introduction to the Study of Experimental Medicine (1865), construes the physiological experimenter as producing meaning at the surface of the animal body. Bernard writes, "In a general and abstract sense, an experimenter, then, is a man who produces or induces, in definite conditions, observed facts, to derive from them the instruction which he wishes,—that is, experience" (Bernard 1865/1927: 21). The vivisectionist produces or induces "observed facts" by cutting into the organism, and the meanings of these material signs are then "derived" hermeneutically, interpreted as the experimenter "wishes." The "experimenter," as the French language would here suggest, "experiences" the meanings of those facts that he causes to take place on the body of the organism: he is simultaneously a producer and an interpreter, a writer and a reader. For the observed "facts" are read, "instruction" is derived. Yet as we see throughout Bernard's text, these physiological "facts" are literally the wounds as such, and the instructive value of these meaningful wounds is to expose not only the truth of the organism, but more specifically, the truth of the experimenter and his desire, the truth of vivisection itself:

Facts materially alike may have opposite scientific meanings, according to the ideas with which they are connected. A cowardly assassin, a hero and a warrior each plunges a dagger into the breast of his fellow. What differentiates them, unless it be the ideas which guide their hands? A surgeon, a physiologist and Nero give themselves up alike to mutilation of living beings. What differentiates them also, if not ideas? (Bernard 1865/1927: 103)

Bernard suggests that the same "fact," the same act of physical "mutilation," conveys different "meanings" relative to the intentions and the "ideas" with which it was informed. Ideas would thus be intimately "connected" to the material facts of wounds, whose significance would be determined by the authorial intentions guiding their differential production.

The material facts of the vivisected body are therefore signifiers of both physiology and character, namely, the character of the scientist and his ideas. For Bernard immediately continues:

A physiologist is not a man of fashion, he is a man of science, absorbed by the scientific idea which he pursues: he no longer hears the cry of animals, he no longer sees the blood that flows, he sees only his idea and perceives only organisms concealing problems which he intends to solve. (103)

Under the physiological gaze, the animal body is rendered a pure medium. Blood is no longer visible as blood, cries are no longer audible as cries: these expressions of the body have become transparent to the scientist who sees the organism only as a vehicle for communicating occulted biological "problems." But these problems are overdetermined by the volition of the scientist and his acts of inscription, for the vivisectionist "sees only his idea" within the bleeding wounds he produces. The cuts on the body are full of meaning, but the scientist reads therein only his own intentionality. For the "scientific idea" embedded in the signifying wounds on the animal body contains the man of science: he is "absorbed by the scientific idea which he pursues." Within the wounds, the vivisectionist discovers himself. In other words, the wounds appear as the scientific signature of the vivisectionist.

But this signature of the vivisectionist is legible only through the lens of conditioned interpretation: "It is impossible for men, judging facts by such different ideas, to ever agree: and as it is impossible to satisfy everybody, a man of science should only attend to the opinion of men of science who understand him, and should derive rules of conduct only from his own conscience" (103). Bernard here argues that because the "facts" of wounds can be judged in such different ways, depending on the ideas with which they were conceived and the ideas through which they are received, only a common horizon of expectation will allow scientifically generated wounds to escape the restrictive realm of social mores and thereby achieve their fullest experimental value. That is, in order to "agree" on the scientific meanings of the wounds generated by vivisection, and to distinguish this practice from common murder—from the crimes of a "cowardly assassin" or the perversities of a "Nero"-one must be disciplined to see like a vivisectionist. Only "men of science who understand" will be able to discern true vivisectional intent in the bleeding configurations of violated organisms. The properly trained physiological gaze, then, will see "cutting up animals" as

experiment rather than butchery, will see "mutilations" as authentic signs of "scientific ideas" rather than as "meaningless cuts." Men of science, according to Bernard, would be conditioned to see vivisection itself as the efficient meaning of eviscerated and ripped apart bodies.

For the new experimental physiology in Victorian England, then, establishing the legitimacy of vivisection practices would necessarily derive not only from a rhetoric of future clinical applications—perhaps the main argumentative strategy used by defenders of vivisection to make their science palatable to the Victorian public (Richards 1986, 1987; Rupke 1987)—but also, following Bernard's logic, from the heuristic construction of a kind of general observer trained to read wounds in the correct way, just like a vivisectionist. Proper differentiation of "vivisection experiment" from "unmeaning crime" demands "men who understand," observers who see "ideas" embodied within the gashes of tortured animals. And indeed, in the process of publicizing and defending their scientific enterprise, Victorian physiologists made the public capable of seeing both the future benefits of vivisection research and the honorable "ideas" of vivisection itself within the bleeding body. As Michael Foster quoted in his 1881 Inaugural Address to the Physiology Section of the International Medical Congress: "For either in this way, namely through death and wounds, through dissection and, as it were, by a Caesarean operation, will truth be brought to light or otherwise it will lie for ever hid" (quoted in Richards 1992: 166).

Experimental physiology created a way of seeing the bleeding body as a medium, whereupon every cut becomes an extension of a scientific system of inscription, a seriation of legible meanings. Even critics of vivisection in Victorian England came to understand the physiological researcher as uniquely capable of "understanding...the full meaning and extent of the waves and spasms of agony he deliberately creates" (Cobbe 1894: 666-677). Vivisection makes meaning take place on the wounded body: pain becomes legible, torture signifies, and wounds are writing.

Within Victorian culture, then, scientific discourse constructed an interpretive community able to understand the scientific meaning of wounds, to see vivisection within images of flaved and rended bodies (Figure 6.3). So it is not really surprising that this interpretive community would then also see vivisection in the image of Catherine Eddowes at the site of her murder in Mitre Square, Aldgate (Figure 6.4). In both of these images, the wounded body literally gives forth writing: there are no meaningless cuts.

#### SCENES OF THE CRIME

The laboratory and the crime scene both emerge as spaces of writing, enclosures in which wounded bodies are made to signify. Where the Ripper strikes, letters and more letters proliferate, spinning a literary cocoon around the corpses. Near Annie Chapman's head, investigators find a torn

Fig. 3. — Représentation du système circulatoire du chien.

Figure 6.3 Textbook image of vivisection: "Représentation du système circulatoire du chien" (Bernard 1871) (Courtesy of Widener Library, Harvard University).

envelope bearing fragments of addresses ("Sp" [Spitalfields?] and "Sussex Regiment") and, on the back, the lone letter "M." In Goulston Street, investigators find a blood-soaked shred of Catherine Eddowes's apron, discarded by the killer directly below a brick archway adorned with mysterious chalk graffiti: "The Juwes are the men who will not be blamed



Figure 6.4 Inquest sketch: Catherine Eddowes crime scene, 30 September 1888. Sketch made by Frederick William Foster, the City of London Architect and Surveyor (Royal London Hospital Archives, ref. GB 0387 LH/X/97. © Royal London Hospital Archives. Courtesy of Royal London Hospital Archives).

for nothing." No less mysterious are the two deep chevrons sliced into Eddowes's face—noted in Dr. Frederick Brown's postmortem examination as "on each side of cheek a cut which peeled up the skin, forming a triangular flap about an inch and a half" (Coroner's Inquest 1888: 205)—which some mythographers of the case have seen as alphabetic carvings, doubled Vs or perhaps an M, personal signs of the Ripper (Fido 1987: 75; Harrison 1993: 170; Feldman 2002: 56-7; also Didbin 1978). At the murder scenes, cuts become telltale clues in a broader syntax of criminal marks, inscrutable communiqués made by chalk, pen, and knife.

Likewise in the physiological laboratory, the wounded body communicates through its articulation with tools of inscription: the scalpel, the kymograph, and the myograph. An illustration plate from Burdon

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Sanderson's 1873 Handbook for the Physiological Laboratory—reproducing images from the works of German physiologist Eduard Pflüger and French physiologist Etienne-Jules Marey-shows the living wounds and severed muscles of frogs hooked up to myographic instruments (Figure 6.5). Nerve-muscle extracted from the sliced skin, strung between electrodes and recording levers of the instruments, becomes medial connective tissue in linking marks of the scalpel to marks of the stylus, knife to pen. The ripped amphibian body disperses into the lines of the laboratory. Physiology transfers itself into the graphical curve, a calligraphic expression of the meaning of wounds which Marey, in La méthode graphique en sciences experimentales (1878), appositely called the "language of the phenomena themselves" (quoted in Brain 2002: 166). In these instrumental images from the physiological laboratory, the vivisector is invisible, the organism as such disappears, and all that remains are written traces of occulted biology: the irrefutable truth of the organism recorded as a machinic line of automatic writing, the graphical relay of natural processes (Brain 2002). Vivisection initiates a chain of signification, the "observable facts" of wounds spewing forth the "language of the phenomena themselves," material signifiers drawing out other material signifiers, and everything is red.

The image of the nineteenth-century physiological laboratory as the scene of writing, a spatialized chain-reaction of material signifiers, prefigures the modern lab as a vast "system of literary inscription" orchestrated by scientists who appear as "compulsive and almost manic writers" (Latour and Woolgar 1986: 52, 48). In this active site of systemic inscriptions, the experimental arrangement of the vivisected body with graphical recording instruments enfolds the real into discursive networks of interlocked graphemes, constituting what Hans-Jörg Rheinberger has called the "graphematic space" of science:

The whole experimental arrangement...has to be taken as a graphematic articulation. Written tables, printed curves, and diagrams are further transformations of a graphematic disposition of pieces of matter, a disposition that is embodied in the design of the experiment itself.... It is not simply the measuring devices that produce the inscriptions. The scientific object itself is shaped and manipulated 'as' a traceable conformation. Temporally and spatially, the object is a bundle of inscriptions. It displays only what can be handled in this way. (Rheinberger 1997: 111)

The vivisected body, traced by the scalpel and relayed by the instrumentation of the laboratory, becomes itself a literary object precisely because the laboratory apparatus and the physiological gaze has prepared it for presentation in this manner. The metamorphosis of bleeding wounds into scientific inscriptions drawing forth other scientific inscriptions within the boundaries of the laboratory spins a material web of signs that even incor-

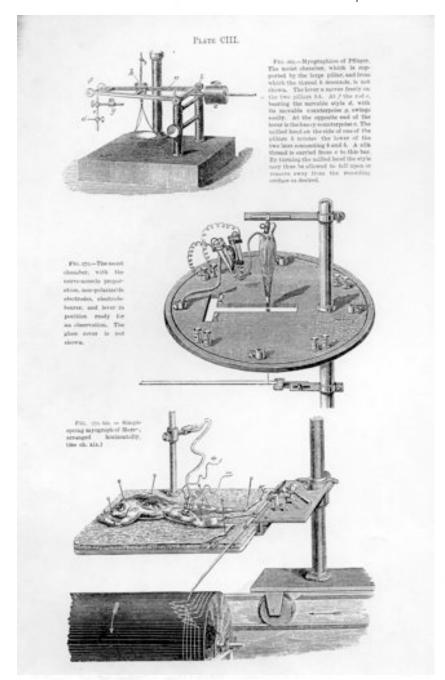


Figure 6.5 Handbook for the Physiological Laboratory: Myographic apparatuses of Pflüger and Marey (Burdon Sanderson 1873) (Courtesy of Widener Library, Harvard University).

porates the scientific author presiding "manically" over the operation. If these reduplicated images from The Handbook for the Physiological Laboratory present the space of vivisection as authorless, as a space of automatic writing where phenomena record themselves directly into the graphical line, this is only because the hand of the vivisector has already been traced by the wounds themselves. The vivisectionist has become the absent subject of the scene of vivisection: as Claude Bernard writes, "The physiologist is...absorbed by the scientific idea which he pursues" in the laboratory to such an extent that, indeed, "We cannot imagine [him] without his laboratory.... Without it [the lab], neither experimenters nor experimental science can exist" (Bernard 1865/1927: 148).

For the scientist, there is no outside the laboratory, no "without" the laboratory: the scientist is "absorbed" by the experimental ideas that are given material form inside the space of physiological inscription, the space of wounding. The scientist dissolves into this space, discernable only as a ghost, a signature.

The enchained graphemes of the vivisection laboratory appear to contain and reciprocally project the subject of vivisection; that is, the subject position of the vivisector as "scientific author" (see Biagioli and Galison 2002)—which is also to say, the locus of "physiological knowledge" as such, the putative "signified" or the "meaning" of those laboratory marks made by pen, knife, and recording instrument. Such marks signify physiological knowledge, which is precisely why the crime scenes of Jack the Ripper, also spaces of graphematic violence, so vividly animated the subject of vivisection, exhibiting marks of a skilled hand ostensibly disciplined by the dissection room, a hand accustomed to sampling from what Bernard called the "ghastly kitchen."

Indeed, Bernard's culinary metaphor itself conceptualizes the vivisection lab as a medial space outwardly projecting the authorial position of scientific knowledge. Narrating the pilgrim's progress of physiology, Bernard describes the experimental laboratory as an enclosed room of horror beyond which lies a realm of profound meaning, the dazzling knowledge of "life" as such: "If a comparison were required to express my idea of the science of life, I should say that it is a superb and dazzling lighted hall which may be reached only by passing through a long and ghastly kitchen" (Bernard 1865/1927: 15). The laboratory, while leading the scientist towards revelation, towards a transcendental signified, is itself deeply material; it is the space of the signifier, the carnal surface of incision. Like the vivisected organism, the laboratory operates as a book of blood, promising meaning and the light of truth on the other side, a "passing through" towards rare knowledge, but appearing on its crimson surface as nothing so much as a butcher's block, a wet and grisly place where the "cutting up of animals" might also entail cooking and eating them. This ghastly kitchen, a domestic room of unmentionable "appetites," opens up the "science of life." The professional progress of the physiologist towards knowledge occurs then

within a moist training ground of both medical slaughter and medical cuisine. Or, as Jack the Ripper wrote of his own ghastly experiments: "I send you half the Kidne I took from one woman and prasarved it for you tother piece I fried and ate it was very nise."

On 10 November 1888, at the scene of Mary Jane Kelly's death—the last and most gruesome of the five so-called "canonical" Ripper murders—the Daily Telegraph reported:

A most horrifying spectacle was presented to the officers' gaze, exceeding in ghastliness anything which the imagination can picture. The body of the woman was stretched out on the bed, fearfully mutilated. Nose and ears had been cut off, and although there had been no dismemberment, the flesh had been stripped off, leaving the skeleton. The nature of the other injuries was of a character to indicate that they had been perpetrated by the author of the antecedent crimes in the same district; and it is believed that once more there are portions of the organs missing. That the miscreant must have been some time at his work was shown by the deliberate manner in which he had excised parts, and placed them upon the table purposely...Dr. J.R. Gabe, who viewed the body, said he had seen a great deal in dissecting rooms, but he had never witnessed such a horrible sight as the murdered woman presented. Before anything was disturbed a photograph was taken of the interior of the room.... It was evident that a large keen knife had been used by a hand possessed of some knowledge and practice. ("The East End Tragedies" 1888: 337-338)

The enclosed space of the Kelly murder, inside her room at 13 Miller's Court, 26 Dorset Street, Spitalfields—the only Ripper murder to take place completely indoors-appears to the forensic "gaze" as a scene of violent writing. For each injury translates a "character" in the style of "the author of the antecedent crimes," an author with a trained "hand possessed of knowledge and practice." This hand has left a signature in its "deliberate" and "purposeful" manner of cutting and removing organs: this is no "unmeaning crime." And at this scene of violent authorship, with its residues of deliberation and purpose, knowledge and practice, the medical witness Dr. J.R. Gabe can only summon an inadequate comparison to the horrors of the "dissecting room."

This crime scene, "exceeding in ghastliness anything which the mind can picture," nevertheless conjures pictures of clinical dissections, the deliberate and purposeful "ghastliness" of the physiological laboratory. This domestic room of vicious slaughter is haunted by Bernard's "ghastly kitchen," For once again, organs are missing, and in their worrisome absence appear signs of an appetite for both cutting and cooking—the same conflicted appetites given life in the vivisection lab, which Wilkie Collins called "the atrocities of the Savage Science" (Collins 1883/1996: 136). The forensic gaze upon

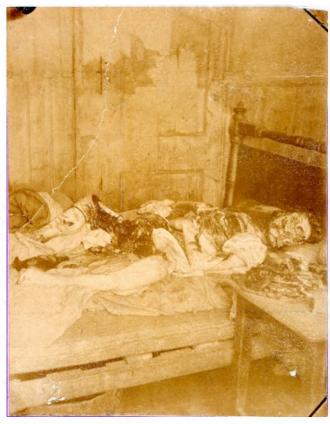


Figure 6.6 Crime scene photograph: Mary Jane Kelly, 9 November 1888. (UK National Archives ref. MEPO 3/3155. Courtesy of the National Archives. This material is in the copyright of the Metropolitan Police and is reproduced here by the permission of the Metropolitan Police Authority). At least two photographs were taken of Kelly's body at the crime scene; both are currently held at the National Archives. In this photograph, the dubious letters "FM" are said to be seen on the wall immediately above Kelly's left hand, among other fugitive and fleeting signs.

the Kelley scene thus connects the dots between serial murder, experimental biology, and incisive writing, drawing conclusions even as it produces more writing—the reportage of the crime scene—and even as it produces other forms of graphical representation: "Before anything was disturbed a photograph was taken of the interior of the room" (Figure 6.6).

This photograph extends and retraces, as another iteration, the enchained characters, records, graphemes, and graphics framed by the room at 13 Miller's Court. Certainly, Victorian photography was readily pictured as an inscriptional, even "autographic" practice—as the titular metaphor of William Henry Fox Talbot's pioneering photography book, *The Pencil of Nature* (1844), might suggest—whose value as "eyewitness" documenta-

tion for both forensic and natural science could be secured only within a broader interpretive architecture of drawings, diagrams, and textual redescriptions (Tucker 2005). But more particularly, this photograph of Mary Kelly has continued to disclose traces of writing long after its original creation, revealing uncanny afterimages of letters etched in the sanguinary walls of Kelly's room. Although no investigator on the scene made note of any mural messages, the very fact that a photograph had been taken triggered contemporary rumors that hitherto obscured writing might yet be revealed. As one newspaper reported:

Profiting by previous blunders the police called a photographer to take a picture of the room before the body was removed from it. This gives rise to reports that there is more handwriting on the wall, though three or four people who were allowed into the room say they did not observe it; but possibly they were too excited to notice such a detail. ("Fiendish Atrocity" 1888)

While such "handwriting on the wall" was not to be forthcoming for sleuths in 1888, latter-day Ripperologists studying this photograph have reputedly discovered significant scrawls in the blood spray just above Kelly's body: confessional graffiti, satanic sketches, the initials "FM," and other fanciful spoor of the Ripper (e.g., Begg et al. 1996: 487 ["Wood, Simon"]; Harrison 1993: 100-101; Feldman 1998: 71-72). Others have even seen words, numerals, and elaborate designs printed on Kelly's body itself (e.g., Derrico 2005; Keating 2005; Ryan 2005). These phantom etchings have materialized only belatedly, inadvertently, as artifacts of this photograph's reproduction and circulation (the image has appeared in dozens of publications: first in Lacassagne 1899; famously in Rumbelow 1975; with greater clarity of the supposed graffiti in Knight 1976; etc.). The photo seems to carry along its own contextual mythos of criminal logorrhea and authorial purpose, inducing pareidolia and ensuring that all marks are remarkable, recoverable as signs, productive of new meanings. Jacques Derrida has written: "By all rights, it belongs to the sign to be legible, even if the moment of its production is irremediably lost, and even if I do not know what its alleged author-scriptor meant consciously and intentionally at the moment he wrote it, that is, abandoned it to its essential drifting" (Derrida 1982: 317). Hence, in the drifting of a police photograph, accidental sprays of arterial blood become decipherable as writing: at the graphematic scene of the crime, as in the vivisection laboratory, there can be no meaningless cuts.

By the end of November 1888, the medico-scientific community had formed a cohesive front on the implausibility of the "scientific Ripper" theory. Where articles in *The Lancet* cautiously entertained the topic through September and October, by December medical writers raised the idea only for ridicule. Even Dr. Thomas Bond's report to the Home Office following

the postmortem examination of Mary Jane Kelly actively directs attention away from notions of physiological knowledge and scientific sadism. Despite expert testimonies in the previous cases and opinions of eyewitnesses at the crime scenes, Bonds writes that the entire series of murders was, after all, simply unmeaning crime: "In each case the mutilation was inflicted by a person who had no scientific or anatomical knowledge. In my opinion he does not even possess the technical knowledge of a butcher or horse slaughterer or any person accustomed to cut up dead animals" (report reproduced in Evans and Skinner 2000: 361). Bond instead shifts the motivational profile of the killer away from "scientific sadism" towards either "erotic mania" or "religious mania." With nary a contrary voice in their ranks by the end of 1888, medical researchers adopted strategies for crushing lingering rumors about the Whitechapel killer's ties to scientific medicine similar to their strategies for dealing with antivivisectionist rhetoric broadly, publicly disputing the very idea as nothing but ignorant folly while upholding the inherent morality of trained scientists (see Bryant 1977). Thus would physiology seemingly save itself from association with its most damaging exponent, Jack the Ripper.

But as I have attempted to suggest, it was not simply antiscientific critiques of vivisection that led to widespread imaginary connections between the Ripper's crimes and the experiments of the physiological laboratory. It was also the responsibility of physiologists themselves, who had deployed a certain vivisectional gaze, a certain readerly frame of reference, in remediating the practices of experimental physiology in England. After all, the scientific community's galvanized refutations of the mad vivisector theory did not dispel a cultural desire to see scientific meaning in the victims' wounds. Even years after the last murder, the vivisection theory retained potency. As late as 1895, the Chicago Times-Herald alleged that Scotland Yard detectives, guided by the clairvoyant Robert James Lees, had long ago apprehended Jack the Ripper but concealed the investigation, precisely because the killer turned out to be a respected medical researcher and practitioner of vivisection:

When "Jack the Ripper" was finally run to earth it was discovered that he was a physician in good standing, with an extensive practice. He had been ever since he was a student at Guy's Hospital, an ardent and enthusiastic vivisectionist. Through some extraordinary natural contradiction, instead of the sight of pain softening him, as is the case with most devotees of scientific experiments, it had an opposite effect. This so grew upon him that he experienced the keenest delight in inflicting tortures upon defenceless animals.... [A]n exhaustive enquiry before a commission in lunacy developed the fact that while in one mood the doctor was a most worthy man, in the other he was a terrible monster. He was at once removed to a private insane asylum in Islington, and he is now the most intractable and dangerous madman confined in that establishment. ("The Capture of Jack the Ripper" 1895)

While this newspaper exposé of the secret capture of a lunatic vivisectionist and subsequent elite cover-up was in all likelihood a hoax (Harris 1987, 1994), it nevertheless reflects the tenacity of the "mad scientist" as a prevalent and compelling profile of the Ripper, one that has endured in popular media throughout the last century. (For example, Sir William Withey Gull, Royal Physician and arch vivisectionist, has been fingered as the Ripper by several modern accounts that connect mad science to elaborate conspiracy theories of Freemasonry and royal scandal; see Knight 1976; Moore and Campbell 1999; see Odell 2006: 125-181). The survival of the sadistic scientist theory notwithstanding, there is some figural sense in which the Whitechapel killer, regardless of his "real" identity, was indeed intimately involved with the arts of Victorian vivisection. Because as a product of the Victorian media ecology, the Ripper inhabited the same frame of reference, the same cultural logic, as those laboratory physiologists who were understood to render the body legible as a text of experimental operations, an inscriptional surface for the vehiculation of scientific meanings. With horrifying literalness, Jack the Ripper exposed the Victorian image of the vivisected body as a grisly epistle addressed to the scientific gaze, a letter signed in ink and blood, a postcard, as it were, from hell.

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