Introduction

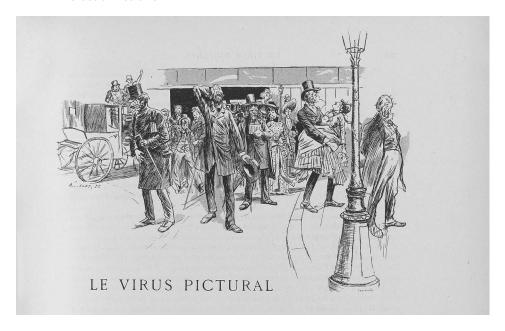
The 1887 Salon in Paris was a site of illness, addiction, and inoculation, according to art critic Chamillac. A 'pictorial virus' had infected the world of art:

Young men, old men, women – blonde or red, brunette or green – decorated people, panic-stricken and anaemic poets and merchants, showing all the signs of the deepest dejection as they leave the Palais de l'Industrie. Stooped and expressionless, wobbling along on their weakened legs, they struggle mightily to carry a red booklet, a distinctive sign of their current state, intended to warn healthy people to move away from them as fast as they can. These unfortunates have in effect just been infected with the germ of painting.

This terrible vaccine, which certain princes of science consider fatal, has entered into their standard practices ... to such an extent that they couldn't live without it, and every year they ask for more. That and morphine! Will our race withstand it? Time will tell.¹

Chamillac's review was accompanied by an illustration showing frail and nauseated spectators stumbling out of the Salon as if they had received a lethal injection (Figure 1). He described the viewers as patients and the paintings as infectious microbes to illustrate his theory of inoculation: unlike the actual procedure, in which one's dosage gradually increased until immunisation, these 'patients' were forced to swallow up to 2,500 'germs' on their first visit, receiving smaller doses until the end of Salon. Through visual ingestion, visitors were infected and cured. By using inoculation as a metaphor for viewing modern paintings, Chamillac linked art and scientific medicine to question their roles in France's future. Could the French body endure mass inoculation? Would the art 'microbes' kill the nation or ensure its survival?

Chamillac's medical metaphors exemplify the entanglement of art, science, politics, and popular culture in the early Third Republic.² They also allude to the three large oil paintings of famous men from the Parisian medical and scientific elite on display that year at the Salon. The famed microbiologist Louis Pasteur (1822–95) was portrayed by his relative, the emerging artist



1 Illustration from 'Le Virus pictural', *La Revue illustrée*, I, 1887, p. 337.

Laurent Lucien-Gsell (1860–1944), surrounded by scientific colleagues as they prepared to vaccinate French and foreign patients with Pasteur's newly invented rabies vaccine (Figure 2). Henri Gervex (1852–1929), known as the painter of the scandalous nude *Rolla* (1878), depicted the wealthy surgeon Jules-Émile Péan (1830–98) pontificating about his new surgical tool before an attentive crowd while a bare-breasted young woman lies unconscious on an operating table (Figure 3). The third painting, by André Brouillet (1857–1914), shows renowned neurologist Jean-Martin Charcot (1825–93) lecturing to Parisian personalities from medical, artistic, and political fields about the hypnotic state of a salaciously dishevelled hysteric swooning in the arms of one of his handsome protégés (Figure 4).

These life-size paintings attracted Salon visitors and critics; reviews were written, reproductions made, and prints sold. Often discussed together in Salon criticism, these works – which merged and complicated the genres of portraiture and history painting – formed a thematic group that symbolised the importance of the sitters and the greatness of their occupations.³ Significantly, the works owed much to the three paintings of Pasteur displayed at the Salon the previous year and to the related art criticism that debated how scientific heroes should be pictured in art that could serve as trustworthy historical documents for future viewers. The most discussed paintings were by the established academic Léon Bonnat (1833–1922) – who portrayed a serious Pasteur and his well-dressed



Lucien Laurent-Gsell, *La Vaccine contre la rage au laboratoire de M. Pasteur* (1887), oil on canvas, 250 x 290cm.

granddaughter against a dark backdrop – and the young Finnish painter, Albert Edelfelt (1854–1905), who depicted a focused Pasteur working alone on his cure for rabies in a laboratory (Figures 5 and 6). Gsell's small painting, which shows his relative hard at work amongst other men, received little attention: it was small, hung high, and hard to see (Figure 7).

This book argues that these 1886 and 1887 paintings are crucial to the visualisation of elite medical masculinities in the late nineteenth century. They exemplify the medical community's social and political uses of art and aesthetics, and are vital for investigating artists' cultural appropriation of scientific and medical principles in the last decades of the nineteenth century. Each of the three chapters is anchored in an examination of a portrait of Pasteur, Péan or Charcot, and expands to analyse lesser-known depictions of bodies that the men commissioned and collected for professional and personal gain, including anatomical wax models, photographs, stained-glass windows, and

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Henri Gervex, Avant l'opération: le Docteur Péan enseignant à l'hôpital Saint-Louis sa découverte du pincement des vaisseaux (1887), oil on canvas, 242 x 188cm.



André Brouillet, *Une leçon clinique à La Salpêtrière* (1887), oil on canvas, 290 x 430cm.

funerary monuments. Images and objects were central to social and professional exchanges, the performance of individual and collective identities, and the production of knowledge in medical and scientific worlds. *The Face of Medicine* explores how, why, and where artists and medical men worked collectively by examining archival sources surrounding the production, display, and reception of these works. It considers how doctors, artists, and scientists – as well as journalists, art critics, and art historians – partook in the diverse rhetorics of realism, nationalism, and scientific and medical objectivity to varying degrees and different ends.

The Face of Medicine sheds new light on the relevance of the visual in medicine and science, and the relationship between artistic and medical practices and imagery. By examining previously unstudied sources across disciplinary boundaries – oil paintings, medical textbooks, popular caricatures, personal letters, Salon criticism, and waxworks – it rethinks the politics of medical representations and their social impact. In this sense, it departs from standard models of the social history of art and feminist scholarship by focusing not only on the portrayal of specific male physicians and scientists, but also on the role of images, objects, inventions, and procedures in the making of what Lorraine Daston and Otto Sibum call 'scientific personae'.4

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Léon Bonnat, *Pasteur et sa petite fille Camille* (1886), oil on canvas, approx. 160 x 130 cm.



Albert Edelfelt, Louis Pasteur (1885), oil on canvas, 154 x 126 cm.

The popular and political cultures of medicine

The scientific themes of these 1886 and 1887 Salon paintings and the corresponding criticism show how medical thinking permeated the culture of late nineteenth-century Paris. Like Émile Zola's Rougon-Macquart series, Charcot's famous lectures at the Hôpital de la Salpêtrière, and the rise of entertainment venues showing disease and deformity, to name but a few contemporary cultural

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7 Lucien Laurent-Gsell, *Le Laboratoire de M. Pasteur* (1886), oil on canvas, 91 x 78cm.

manifestations, these paintings encouraged a shared fascination with medicine that familiarised the public with the leading men of the scientific and medical elite. The popularity of these artworks was the product of great social, political, and economic change. The new visibility of medical men and the success of their experiments contributed to their rise in status. As more patients survived modern procedures, public confidence grew. Scientific and medical advances provided France with strength and power: medicine cured the sick, vaccinations protected soldiers from infection, and newly patented procedures and technologies increased economic and intellectual prowess. Although Chamillac described the illness provoked by paintings, French art, like French medicine,

was simultaneously associated with strength because of its long-standing role as a prominent cultural force. Both were necessary for the formation – and promotion – of a healthy French nation. 6

Scientific knowledge was essential to the capitalist world order of late nineteenth-century Europe. French technological advances in photography, electricity, bacteriology, and surgery, as well as newly invented vaccinations and medical treatments had wide-ranging financial consequences that increased not only the incomes of scientists and physicians, but also those of industrial leaders, lawyers, trade merchants, and others whose work was tied to these fields. With their increase in wealth, many men of this new elite attempted to secure their recently acquired social positions through displays of status. The production of portraits, sculptures, political positions, ceremonies, and professional collections reinforced the authority of this new group, and linked scientific advancement to national identity and personal gain.

These associations were grounded in concrete cultural and political conditions, since the newly established republican administrations of the early Third Republic heralded modern science and medicine as prerequisites for national salvation.7 While the particular politics of republicanism evolved over the Third Republic's seventy years, its guiding tenets of liberty, equality, and fraternity, and its rejection of the monarchy, clericalism, and Bonapartism, were consistent. Fuelled by patriotic sentiment and a desire for national preservation after defeat by Prussia in 1870 and the brutal suppression of the Commune in spring 1871, the French Republic stressed the national, military, and industrial importance of scientific medicine. Between 1871 and 1914, 358 physicians became government deputies and senators. These men - who predominantly aligned themselves with the republican left - had a disproportionately large political influence.8 This was especially the case after January 1879, when republicans achieved a majority in the Senate and Chamber of Deputies, and when Jules Grévy, the first unequivocally republican politician, became president. The republican physician-legislators supported further funding of the sciences, major institutional reforms in education and health, and the establishment of new social laws. By utilising their social authority, these medical men passed laws that brought healthcare to the public and began to rid hospitals of clerical influence. As Philip Nord argues, by the 1880s, the Latin Quarter - the neighbourhood containing many institutions of higher learning, including the Paris medical school - was a 'republican territory outright' where the 'republicanisation' of academic life was complete.9

Pasteur, Péan, and Charcot all benefited from republican policies (though their personal politics and religious beliefs differed), particularly as the government increasingly funded laboratories, academic chairs, hospital photographic studios, and medical museums. These medical collections – some of which were publicised in the popular press, such as Charcot's museum at the

Salpêtrière – contributed to the wide-ranging visual culture of medicine that fulfilled republican aims of collectivity, education, and world leadership.

Medical masculinities

'Today's doctor has been placed at the very top of our social ladder, a rank he merits because he is one of our great educators and one of the active leaders of our civilisation,' wrote Horace Bianchon (Maurice de Fleury) in *Nos grands médecins d'aujourd'hui* (1891).¹⁰ As opposed to the so-called quacks of the past, whose interventions often caused more harm than good, these 'new' doctors were regarded as trustworthy modern heroes (generally).¹¹ They provided new models of masculinity as their occupations became associated with the positive traits attributed to the male sex; the ideal medical persona comprised reason and objectivity whether the actual men had any of these defining virtues or not.

The Face of Medicine examines how the masculinities of medical men were conceptualised visually, and explores how these men provided archetypes of health and virility to which other bodies and sexualities could be compared.¹² These ideals could never be fully realised, but they were aspirational models, roles to enact and heroic masculinities to perform. While examining the historical commonalities of medical manhoods and scientific personae are key components of the book, particularly in the first chapter on Pasteur, masculinities are not considered unified or stable. As Robert Nye argues, 'Masculine scripts, however widely supported by the wider culture, are inherently unstable because they have to be performed.'13 Masculinities are, after all, numerous and constantly renegotiated. They are 'configurations of practice' produced through social action and vary in accordance to gendered exchanges in specific social situations, as R.W. Connell and James W. Messerschmidt argue.¹⁴ These plural masculinities (and femininities) are related to hierarchical positions occupied by the hegemonic gender norms. 15 Established medical leaders, like Pasteur, Péan, and Charcot, were representative of the masculine elite. However, as my analyses of medical men and their collections of images and objects demonstrate, relationships amongst men were complex. While some associations produced alliances and bonds, others were marked by competition and subordination. 16 The republican underpinnings of medical culture indicated a desire for democracy even though scientifically justified racism and misogyny also informed medical manhoods, masculine norms, and their visualisation.

By focusing on the medical male elite, this book departs from the majority of recent studies on nineteenth-century medical culture that concentrate on the female body, with a particular emphasis on hysteria. While the intense focus on this 'female malady', particularly during the 1980s and 1990s, enabled productive methodologies for studying the construction of sexuality and disease, other components of nineteenth-century French medicine have gone

largely ignored. This book offers a focused investigation of male doctors and scientists, and provides a detailed analysis of the role of visual images and practices in the formation of these identities. Salon paintings and criticism point to the anxieties surrounding masculinities, scientific occupations, and medicine's role in modern life. By exploring the moments when the assumed stability of masculinity and the seemingly undisputed objectivity of medical practice were questioned, The Face of Medicine moves beyond treating representations of male doctors as one-dimensional heroic characters who define female patients as 'other' (man vs. woman, rational vs. irrational, health vs. sickness, sanity vs. madness). While these binaries were surely prevalent and played out in nineteenth-century medical and artistic discourse – particularly in visual images – they were not static or rigid. French feminism's development, women's integration into medical schools, and Marie Curie's rise to prominence in the 1890s destabilised gender norms. Furthermore, some female patients displayed agency. The celebrity performer Jane Avril (who was once a Salpêtrière patient), for example, transformed the signs of female illness associated with hysteria into cutting-edge artistic practice; pathology was re-appropriated as a form of subversion. By studying the intricacies and fabrication of male scientific and medical personae, my approach examines the prevalence of 'othered' female bodies in histories of art and medicine, while also acknowledging the centrality of this 'othering' to contemporary cultural discourse. Indeed, the instances when the focus on the female body went beyond the requirements of artistic and medical duty, and challenged the rationality and reason often associated with ideal medical masculinity and realist aesthetics, demonstrate the complexities and contradictions of gender.

It has been well documented that the male mind and body – bourgeois, working-class, and aristocratic – came under intense scrutiny after the Franco-Prussian war (1870–71). French fears of degeneracy, depopulation, heredity, and illness were conflated with those surrounding modern masculinity and, as is evident in Chamillac's criticism, they persisted for well over a decade after the war's end. Medical texts and images, scientific experiments, and government studies focused on the male body to produce models of ideal and degenerate manhood: the perceived weaknesses of men had to be transformed for the sake of the nation. Standards of masculinity were disseminated through newspaper articles, popular phrenological studies, and collected photographs, as well as statues and books that commemorated France's *grands hommes*.

As a paradigm of ideal manhood, the masculinity of the Parisian medical elite was regarded as heterosexual, intelligent, normative, courageous, virile, and rational. In his 1902 book, *La Profession de médecine*, Peinard (Dr Noël Raynauld) claimed, 'the attributes of virility inspire, in general, respect in the weak, confidence in women, and the public will have only pity and suspicion of a limp and frail doctor not in the most flourishing and robust health!'²⁰ Nye,

in his detailed account of male honour codes in nineteenth-century French medical culture, shows how personal integrity and professional ability were not only desirable characteristics for physicians, but intricately linked to their abilities: a doctor's personal honour and morals were benchmarks of his professional reliability.²¹

Objectivity was of particular concern in art, science, and medicine of the period.²² These fields shared a desire to study the visible world undistorted by emotional or personal bias. Objectivity was an essential virtue of ideal masculinity, especially for men in scientific and medical spheres whose education, intellectual skills, and class position contributed to their status as detached observers. As Lorraine Daston and Peter Galison argue, objectivity was a key facet of the scientific self – although this concept and the specificities of its understanding changed as the century progressed.²³ It was increasingly understood as a defining quality of the man (not woman) of scientific medicine.²⁴ Debates on the acceptance of women into medical schools in France combined a new ethos of scientific detachment with popular beliefs about the relationship between biological sex and intellectual competence; it was widely argued that women had neither the mental ability, nor the emotional distance for medical vocations.²⁵

The concept of objectivity has long been the focus of feminist critiques of scientific culture. Nancy Chodorow, Donna Harraway, Lorraine Daston, and Catharine MacKinnon, amongst many others, have explored how the ideal of scientific objectivity is gendered since it was formed in opposition to the supposedly feminine characteristics of sensitivity and irrationality. Many argue that the perceived inability to be objective restricted women's success in scientific fields. However, medical objectivity was not always praised or accepted at face value in the late nineteenth century, despite the celebratory tone of medical literature. The efficacy of medicine, the truthfulness of its claims and the neutrality of physicians were often questioned. Doctors faced a paradox: their occupation centred on curing, but their livelihoods depended on suffering. Public mistrust of medical practice erupted when a physician's personal finances and ambitions appeared to overshadow his patient's well-being.

From the public's viewpoint, medical men's professionally sanctioned ability to observe and touch naked bodies threatened their assumed neutrality, as did their fascination with what was popularly perceived as grotesque. As *The Face of Medicine* argues, a sense of desire existed behind the rational veneer of medical practices and personae. The unrelenting drive to be purely objective – itself an impossible goal – is an example of this madness. Numerous contemporary French caricatures and critiques portrayed physicians as lascivious men who preyed on innocent women, or as dishonest crooks who capitalised on sickness and death. Honoré Daumier's mid-century illustration, *To Operate or Not to Operate: Medicine Has to Bring in the Money*, shows a doctor charging

a patient for both the medical procedure and the patient's misery. Similarly, a 1905 cartoon from *L'Assiette au beurre* depicts a husband exclaiming, 'I hope he's not going to charge me for this operation!', while watching his wife in a physician's embrace (Figure 8). The conflicting conceptions of medical men illuminate anxieties about medical occupations at the time. Medical objectivity, like masculinity, was always vulnerable to critique and thus needed constant reassertion. For this reason, the ideal of masculine trustworthiness was of the utmost importance: professional and personal identity and integrity, as well as economic stability, were at stake.



Culiale, 'J'espère qu'il ne va pas me faire payer cette opération là!', from *L'Assiette au Beurre* (c.1905), colour lithograph, 25.8 x 20.8cm.

Portraiture in the 1880s

Changes in the creation and reception of portraiture during the second half of the nineteenth century have been amply documented.²⁸ The 1876 essay by Edmond Duranty, champion of the Impressionists, which called for modern portraits to show people in contemporary surroundings, in everyday dress, and in the midst of social habits, is the most cited of many reviews that demanded a change in portraiture in light of the increase of cheap photographs and the decline of the official Salon system.²⁹ Thirteen years later, in 1889, the Salon critic Maurice Hamel was still following Duranty's lead in his critique of the artifice of official portraiture: 'Although it follows different stylistic tendencies, portraiture nowadays is more and more concerned with intimate truth, disdainful of flattering approximations and official lies. People want to see the whole man and his inner thoughts.'30 As Duranty's and Hamel's texts suggest, many critics wanted portraiture to provide depictions of modern people that were sincere and accurate, rather than contrived. The desire to document the present realistically was a key characteristic of the culture; portraiture and modern history paintings provided a perfect means to do so. 'The nineteenth century, as it was ending, was beginning to draw attention to this period in our history, the artist of Péan's portrait, Henri Gervex, reminisced in his memoirs. 'We were recollecting its important dates, reviewing its important facts, portraying its important men.'31

It is challenging to categorise the 1886 and 1887 paintings of Pasteur, Péan, and Charcot, since some are quite clearly portraits (Bonnat and Gervex were commissioned to make portraits), while others blur the boundaries between portraiture and history painting. They are all aligned with portraiture because they are concerned with likeness, identity, and status, but, with the exception of Bonnat's work, they are also modern history paintings: they provide narratives of contemporary scenes focused on important people and events. The performative element of scientific personae is exemplified by these paintings: life-sized images filled with the hustle of modern Paris provided ideal stages for showcasing celebrity and invention. These paintings demonstrate how, to borrow Robert Rosemblum's phrase, 'the facts of portraiture turn into the artifice of theatre'.32 In this respect, they are linked to the portrait historié, a term coined in eighteenth-century France to refer to portraits that showed known individuals as historical, biblical, literary, or mythological notables. However, while the 1886 and 1887 paintings do contain historical references, the men portrayed do not assume the identities of other personages, nor are they placed in a past time. These works clearly concern the identities and contemporaneity of the men portrayed. In fact, they are historically significant because they are the first French portraits to show recognisable contemporary doctors and scientists at work in specific contemporary spaces.³³ They differ

from earlier precedents that depict scientists and physicians as learned men in library-like settings or as historical protagonists in genre scenes or as figures against nondescript backgrounds. While the paintings can be understood as products of the major shifts in popular understandings of scientific medicine, they also demonstrate art historical changes: these images, and the accompanying art criticism, show the breakdown of boundaries between portrait, genre, and history painting that began in earlier periods in French art (particularly in the eighteenth century) and continued in the 1880s. Significantly, Salon critics spent little time discussing the specific genre of each painting; official categories were no longer as important. Rather, critics focused on which work would provide the most truthful and sincere historical document for future viewers.

Salon criticism, particularly that surrounding the 1886 portraits of Pasteur, provides a crucial introduction to concerns about how men of science and medicine were rendered in the late nineteenth century. For this reason, I have drawn upon it extensively in this book. Criticism has its own conventions and problems, but nonetheless provides accounts that are vital to our understanding of artworks and the popular perceptions of the people and events portrayed. Crucially, the language used in Salon criticism is often similar to that of medical books and atlases, particularly the introductions to illustrated volumes, which describe the works within using a descriptive and flattering vocabulary while stressing veracity. Both relied on the rhetoric of objectivity to instil their visual representations with verisimilitude. Furthermore, understandings of what constituted healthy bodies, admirable morals, and proper sexualities were often analogous in medical and artistic texts and images, and thus became mutually reinforcing.

Scientific medicine

The terms science and medicine encompass a wide range of practices, theories, approaches, histories, and objects of study. While certain components of science were – and continue to be – quite separate and disparate from medicine, *The Face of Medicine* focuses on a historical moment and on historical figures that embody complex intersections.³⁴ The advances of laboratory science, exemplified by Pasteur's work, had a huge effect on medical practice and thought. The term 'scientific medicine' has its roots in germ theory and the discoveries of laboratory practice.³⁵ For example, Pasteur's research on microbes influenced surgical methods (though Péan disputed many of the chemist's claims), Charcot spoke publicly in support of Pasteur's rabies vaccination, and Pasteur was familiar with Charcot's studies on hysteria. Furthermore, as the present study shows, many doctors, including Péan and Charcot, were followers of scientific medicine, while Pasteur was considered a medical scientist because his work also focused on human beings and viruses. All of their work, although

very different, was informed by (or, in Pasteur's case, contributed to) scientific advances in chemistry, hygiene, and microbiology, as well as modern clinical practices. Medical identities were increasingly tied to scientific ones, and vice versa. As Chapter 1 argues, the portraits of Pasteur became prominent models for depicting chemists and other laboratory scientists, and were integral to future representations of physicians, surgeons, and other medical men.

A shared focus: imaging the body

Medical discourse, as an authoritative force of the nineteenth century, formed and influenced conceptions of bodies, sexualities, and diseases. However, precise medical and scientific understandings intended for educated audiences often took on different assumptions and meanings when filtered through lay minds and outside motivations. Artistic circles were familiar with many of the emerging theories of modern medicine, and medical and scientific communities were aware of the power of artistic conventions. Both artistic and medical training focused on visual examination of the human body.³⁶ As Anthea Callen argues, art, and its pictorial customs and idealising traditions, enabled medicine to visualise normal and pathological bodies, while medical ideas became equally embodied in artists' depictions.³⁷ Artists often appropriated and imitated the medical model to create representations of bodies that were considered real and truthful; they partook in scientific culture to elevate art's status to that of science. By drawing on medical discourse, they rendered bodies as deviant or normal, and contributed to discourses on regulation that permeated the public sphere through popular novels, advertising, magazines, newspapers, and artworks. Conversely, medicine worked with cultural and commercial interests to communicate standards about bodies. The increased surveillance of bodies was institutionally implemented through state programmes in medicine, hygiene, law, education, and military training. The classification of bodies was also socially executed by the public who, armed with popularised medical knowledge and a sophisticated awareness of its visual codes, participated in defining normative bodies and behaviours.

Pasteur, Péan, and Charcot contributed to the circulation of representations of bodies, not only through the portrayals of their own bodies in portraits, but also through the many depictions they commissioned for their homes, workplaces, and publications. Like other doctors and scientists, they collaborated with artists to create lifelike models of bodies, diseases, and sexualities. In this book, I engage in debates on the visualisation of these bodies – male and female, healthy and sick, clothed and unclothed, sentient and unconscious – to consider how sex, health, race, gender, and class were inscribed onto images in medical and artistic spheres. This approach, which is built upon theoretical work in art history, gender studies, discourse theory, and the history of medicine,

as well as history and visual culture, expands from and engages with the now widely explored understanding of the body as a socially constructed category, and sex, gender, and identity as performative. The human body is a biophysical entity, but nonetheless formed and shaped by society, history, and power.³⁸

Rethinking the visual culture of medicine

The Face of Medicine rethinks art's histories through its consideration of the history and visual culture of medicine and its analysis of previously unexamined archival medical sources. It departs from 'traditional' art history through a study of 'non-art' images and texts. By rethinking disciplinary categories and conventions, this book provides a new account of a scrupulously researched period. Yet, it draws on art historical models through a focus on Salon criticism and oil paintings, and a concentration on conventional artistic categories such as realism, portraiture, and history painting. By investigating basic components of nineteenth-century art, I propose novel ways of looking at these oft-studied years. Furthermore, my focus on artists – Gervex, Brouillet, Gsell, and Bonnat – who were popular in their period, but who have since been overshadowed by the scholarly focus on Impressionism, allows us to reconsider the Impressionists by putting their work in dialogue with their contemporaries.³⁹ This approach demonstrates how our understandings of modern art have privileged too narrow a base of artists and practices.

While the topic of this book requires a cross-disciplinary approach to account for the multiple ways that medicine infiltrated and shaped visual culture, it also necessitates close readings of specific images and objects in order to analyse the relationship between medicine and art in this historical period and location. By broadening the objects of study beyond traditional art historical categories, my approach initiates new ways to explore these issues. It engages with a visual culture approach, since it examines 'high' and 'low' forms of art, treats medical objects with the same attention as Salon paintings, considers representations in varying media, and examines both texts and images. It does not see these images and objects as having equal social, cultural, or economic value. Rather, the differences between them, their modes of production, cultural status, theoretical make-up, materiality, audiences, and historical standing are understood as essential to their meaning. These differences are crucial factors in the fabrication and performance of identities, histories, and realities, as each object, medium, style, theme, and narrative is embedded in a socially and culturally produced system of meaning and value. 40 The current study does not exist outside of these parameters: I do not presume to write an objective history, though my approach is entangled in the historian's desire to do so through the use of archival material and critical modes of analysis.⁴¹ By exploring the ways in which medical men competed with one another and used visual culture to

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secure personal and occupational interests, *The Face of Medicine* argues that these men, their actions, and their collections were far from apolitical. The men actively engaged in shaping the public's understanding of their identities as they provided the public face of modern medicine.

Rethinking realisms

This book is concerned with the competing claims to truth and objectivity made by mediums, narratives, genres, and styles, particularly those that were considered realist in nineteenth-century art and medicine.⁴² Rethinking definitions of realism is necessary if we are to account for the variety of realisms, and understand it as a pluralistic and diverse category. Reconsidering realism encourages us to question the naturalised association of nineteenth-century French realism (particularly that associated with Gustave Courbet, Édouard Manet, and the impressionist circle) with modernism in the history of art and with truth and 'mechanical objectivity' in the history of science (like realism and objectivity, truth is a complex and changing concept). Generally, paintings, prints, and sculptures were described as realist or naturalist when they imitated the visible world accurately, despite differences in formal and technological strategies.

Portraying the world realistically was a central concern for artists, scientists, and physicians in the second half of the nineteenth century, although what that meant and how it manifested visually varied greatly. Realism as an artistic style or category was variable and difficult to define. To this day its definition is notoriously problematic, its omnipresence, contradictions, and paradoxes are, at times, downright bothersome. 'Like a garden weed', Abigail Solomon-Godeau wrote, 'realism would seem to stubbornly resist elimination; ... even the newest technologies of image production are generally assimilated to realist codes, particularly if we loosely define them as systems of representation that efface their own material production, the signifier treated as identical to a (preexistent) signified'. 43 In 1875, Pierre Larousse's Grand dictionnaire universel du XIX^e siècle explained that réalisme eludes a precise definition: 'We do not pretend to define exactly what might fittingly be called realism, from the point of view of art. The supposed inventor of the system of painting that has been named realism, Courbet, ingenuously declared, in a manifesto published in 1855, that he did not understand the meaning of the word.'44 The lengthy entry that follows discusses the multiple styles, subject matters, theories, and permutations of realist projects: realism indicated the sincere, the ugly, the immoral, and the truth in art. Larousse named Carolus-Duran, Ernest Ange Duez, Jean-Jacques Henner, and Henri Fantin-Latour (amongst other artists whose styles vary greatly) as realists. Although his name was included in the list, Édouard Manet

was described as an 'eccentric realist'. The adjectives and personal names used to describe the different forms, modes, and types of realism attest to its diversity.

Like realism, the term naturalism was – and continues to be – defined in many ways. The two are often regarded as different in many art historical and literary debates: naturalism is regularly associated with detailed representations and the rejection of the idealisation of experience, whereas realism is defined as the rejection of the beautiful in favour of unidealised depictions of contemporary life. The ease with which many nineteenth-century Salon critics used them interchangeably in the 1880s demonstrates that they were both ascribed to images that were believed to picture visual reality accurately. Larousse's *Grand dictionnaire* explained that *naturalisme* was often simply another word for *réalisme*.⁴⁶

Realism's association with modernism is paramount, as is shown in the influential yet diverse work of Linda Nochlin, Michael Fried, Klaus Herding, Stephen Eisenman, and Gabriel Weisberg, amongst others.⁴⁷ Michael Fried demonstrates in *Courbet's Realism*, *Menzel's Realism*, and *Manet's Modernism* how different artists had their own realisms; realistic styles and theories were part of an artist's subjective and idiosyncratic practice even though they were related to wider representational systems and debates.⁴⁸ Richard Thomson's recent book, *The Art of the Actual*, examines an assortment of work beyond the 'modernist masters' and aptly explores the ties between naturalism and the mentality of exactitude, consensual collectivism, and objectivity that were central to republican ideology during the early Third Republic.⁴⁹ For Thomson, such work is always politically charged.

Although some critics and artists believed that images could make greater claims to reality by being filtered through an artist's subjective experience, others thought art should strive to be purely objective and detached. Many from both camps turned to the sciences for a language with which to produce 'the real'. As we well know, many mid-century theorists and artists admired and imitated the scientific model, which, they believed, was often based on direct and documented visual observation and experience. This empiricist approach to truth was supported by the conviction that scientific theories were verified or disproven by their relationship to an independently existing reality. Artists used science as a model for truth, though their understandings of truth often varied. The Goncourt brothers wrote in 1860, 'The true is the basis of all art; it is its foundation and its conscience, 50 Jules Castagnary claimed in 1863 that naturalist art was 'truth bringing itself into equilibrium with science,51 and Pierre-Joseph Proudhon argued in 1865 that 'art cannot subsist apart from truth and justice; science and morality are its leading lights'.52 For these authors, science held a moral superiority and access to truth that artistic practice needed to follow to achieve a similar status.⁵³ Although scientific study was not as obviously concerned with morality as philosophy and religion, its intellectual advances

and guiding principles were increasingly understood as part of France's moral progress. Scientific reasoning and objectivity carried the possibility of moral benefit, and were considered part of a scientist's moral character.⁵⁴

The success of contemporary scientific endeavours, such as Pasteur's work on germ theory and the rabies vaccine, and the authority granted to scientific models, was desired and appropriated by many in the art world as the century progressed.⁵⁵ Paul Lenoir wrote in his 1889 book on the history of realism and naturalism that 'Truth, reality, and nature are the common ground where different expressions of human feeling must coexist. Out of their alliance, masterpieces are composed.'56 He also wrote, 'Science – such is the last word of our current aspirations. Science carries within it fact, reality, truth and the immensity of the infinite.'57 For many artists and writers, such an alliance provided art with its greatest successes. Science furnished art with an authoritative model by which to claim mastery over the realm of the truthful, while art increasingly gave science a visual language and aesthetic conventions. In turn, the positive moral virtues attributed to science – honesty, sincerity, and authenticity – took visual form in the aesthetics of realist practice. Realist formal strategies (i.e., the learned artistic techniques and strategies used to produce images and objects that resembled visual reality) were subtly imbued with an understood neutrality and objectivity for some art critics, while other styles were consigned to the realm of the imaginary, fantastical, and unreal. Realist painterly techniques were applied to scientific subject matter because nineteenth-century artists, scientists, and viewers thought such themes required the most 'impartial' of styles.

Although realism was often used as a metaphor for neutrality and visual accuracy, especially in Salon criticism about medically themed paintings, realist strategies were no more objective than any other artistic practice; all styles are intricately bound to professional, institutional, cultural, political, and personal imperatives.⁵⁸ In her now canonical text, *Realism*, Nochlin discusses the myth of realism as the 'styleless style'.59 By simply assuming that representations are true because of art's mimetic capacity to reflect reality, the powerful influences of convention and history, as well as conscious and unconscious intentions and aspirations (be they institutional, individual, or societal), are ignored. Such assumptions also disregard how artists' perceptions, and subsequent artworks, were conditioned by media's properties and abilities. Despite claims to reality made by the optical details of certain materials and procedures, and the cultural associations drawn between the assumed sincerity of modern science and realist works during the nineteenth century, the 'reality effect' was forged by strokes of paint, coloured pigments, photographic chemicals, malleable wax, and other media and techniques. Formal conventions and particular materialities produced this effect. For example, perspectival norms created by painterly lines and marks were regarded as neutral visions of the world, and black-and-white

photography was praised for its all-encompassing details despite its two-dimensionality and lack of colour. The *mise-en-scènes* of realist paintings evince representational conventions, particularly since the scenes depicted were often staged in studios. As Peter Brooks claims, realism is a 'form of play that uses carefully wrought and detailed toys' in order to reproduce 'the look and feel of the real thing.'

The juxtaposition of different brushwork, the use of shadows and highlights, the application of perspective, and the mixing of pigments to form lifelike colours allowed artists to produce convincing pictures of the world. Yet, as Roland Barthes argues, these elements all signify the real but are not reality; a realist sign attempts to efface itself in order to create an illusion of the real but it can never *be* reality.⁶¹ James Elkins also questions the claims to reality made by painterly marks by arguing that we should not consider these realist techniques as a simple 'alphabet of realism' but must recognise that pictorial elements are both semiotic and non-semiotic.⁶² Furthermore, in our current global age, we know that an image's degree of realism and claim to truth are not historically or geographically secure since people from different cultures and historical periods read and produce reality in different ways. 'Realism is relative', Nelson Goodman argues; it is dependent upon the representational systems of particular places, societies, and times.⁶³

I have chosen to use the word realist, as opposed to naturalist, *juste-milieu*, or pompier to analyse the works by Bonnat, Edelfelt, Gsell, Gervex, and Brouillet because that was the term most used by the 1886 and 1887 Salon critics to describe these artists and their diverse works.⁶⁴ It was also the term most used to describe photographs, drawings, and sculptures in medical contexts. Although other art historians may prefer to keep the word realist for 'modernist heroes', like Courbet and Manet, such an approach does not account for the wideranging definitions of and approaches to realism in the last decades of the nineteenth century, nor does it recognise the flexibility of the term and its different conceptions in specific historical periods and fields. Thomson argues that 'naturalism' is the most apt term because it was the most commonly used over the twenty-year period of his study (he claims that 'realism' was declining in its use in artistic discussions).⁶⁵ Yet Thomson does not examine medical or scientific images produced outside of the art world – this is not his book's aim - nor does he focus exclusively on the late 1880s. He does, however, draw upon Gabriel Monod's notion of réalisme scientifique to explore how the academic coined the term to show the ties between art and literature, and between art and science. As Monod suggested, the desire for truth and scientific realism was found in all facets of intellectual culture.⁶⁶ Although his notion was not conceived until 1894, it evidences how a contemporary thinker conceptualised the intermingling between artistic and scientific spheres in the preceding years.

Revisiting realism via portraits of Pasteur, Péan, and Charcot, as well their collections, promises a radical rethinking of its theorisation. By taking into account artistic, scientific, and medical understandings and manifestations of realism, it is evident that realisms were flexible and multifarious. Even within the confines of nineteenth-century French painting, realism was not a static term: by the end of the nineteenth century, the realisms of Courbet and Manet (which were primarily understood as revolutionary and avant-garde during the mid-century) came to symbolise the semi-official style of the early Third Republic.⁶⁷ Certainly the realism of Courbet's 1855 *Atelier du peintre. Allégorie* réelle déterminant une phase de sept années de ma vie artistique et morale ('The painter's studio: a real allegory summing up seven years of my artistic and moral life') – an allegorical painting that shows both recognisable portrayals of known figures along with symbolic characters - differs greatly from the works discussed here. For the artists of the 1886 and 1887 paintings of medical men, legibility and easily recognisable people, settings, and identities were more important than pushing the boundaries of the art world, critiquing the Salon system, or exposing human suffering. The realisms of Bonnat, Gervex, Brouillet, Gsell, and Edelfelt were contingent upon the commercial art market, the Salon system, new views of science and medicine, and republican politics and policies.

Art and science, objectivity and subjectivity

The fields of art, medicine, and science overlapped, but were distinct. The scientific self was, generally, diametrically opposed to the artistic self, as Daston and Galison posit: objectivity was most often aligned with science and subjectivity with the arts. ⁶⁸ This divide, however, was not always clear, particularly when one considers how so many artists and critics utilised the rhetoric of scientific objectivity to promote their work, and how often doctors and scientists relied on visual practices borrowed from art. Natasha Ruiz-Gómez explores these blurred boundaries in her analysis of the images and objects made by Dr Paul Richer for the Hôpital de la Salpêtrière. They were products of a deliberate 'dialogue between scientific and artistic selves', she argues; they are 'scientific artworks' that purposely collapse the binary between subjective and objective to produce a 'hybrid of the indexical and the artistic.' ⁶⁹ The Face of Medicine takes a similar approach by examining the instances where artists, physicians, scientists, and patrons worked together to produce a variety of works that merged the fields of art, medicine, and science.

The medium most discussed in terms of its status as art or science was photography. In the nineteenth century, it utilised fine art's conventions to legitimate its status as art. However, as a seemingly indexical medium tied to its referent and thus reality, photography was invested with the authority of science (the camera's technological properties and chemical processes contributed to

this as well).⁷⁰ The mechanics of cameras appealed to scientists, since they offered visual representations with ostensibly little human involvement. Photographs conceived as objective evidence were perfect for empiricist projects. This ideal of 'mechanical objectivity' (a term coined by Daston and Galison) promised images untainted by subjectivity and mediation, and fitted with scientists' and physicians' aspirations of impartiality.

Recent studies on the history of photography, influenced by the pioneering work of John Tagg and Allan Sekula, have critiqued the alleged 'mechanical objectivity' of photography to analyse how a photograph's ability to signify the real was based on specific historical and cultural belief systems. Jennifer Tucker argues that there was great scepticism about photography's truth claims during the nineteenth century: a photograph's indexicality alone did not produce its authoritative power as social and material circumstances related to photographic production and consumption shaped perceptions of it as a medium of truth and reality. Human agency, technique, skill, and judgement, as well as the gendered and class dynamics of photographic labour, informed understandings of photography's evidentiary status. As she argues, we need to 'combine the study of the ideal of mechanical objectivity in photography with analysis of the actual process through which people mobilized and used photographic evidence. 71 Tanya Sheehan also suggests that photography's authority was not solely based on its purported objectivity and the 'disembodied gaze' of the camera. Rather, a photographer's bodily involvement in the studio laboratory was not only definite, but in some cases desirable.72

While 'mechanical objectivity' and the distancing effects of a camera were often sought, this was not always the case in artistic and medical realms. Collaborating with artists, touching up photographs, applying hair to wax models, and drawing from life did not always fall easily into the categories of objectivity or subjectivity, or artistic or scientific. Often, subjectivity was needed to make an object appear real and objective; an expert's mark could evince reality and stand for truth as equally as it could point to the fictional and idiosyncratic.

New technologies of vision – microscopes, stereoscopes, cameras, and telescopes – further altered the ways in which the real was understood and imaged.⁷³ Studies on the history of theories of vision show how anatomical examinations of the microstructure of the retina proposed that vision was a physiological process.⁷⁴ Conceptions of vision, along with novel visual experiences, formed modern observers, including physicians, scientists, and artists. 'Ways of scientific seeing are where body and mind, pedagogy and research, knower and known intersect', Daston and Galison have argued. 'Yet historized, collective ways of seeing undeniably produce knowledge, and therefore qualify as the stuff of epistemology.'⁷⁵

Realisms: overlaps and intersections

The Face of Medicine provides neither a historiography of realism, nor an in-depth critique of its numerous philosophical musings, but rather explores the permutations and modifications of a variety of realist projects. Realism – in its various forms – was a site of overlap between artistic and medical spheres. By drawing on diverse conceptions of realism in nineteenth-century French medical and artistic discourses, I explore the characteristics, intricacies, and troubles of realist representations, procedures, and methods. I examine how realisms competed and converged in the construction of reality as an image's or object's degree of realism was dependent on cultural, historical, literary, artistic, and scientific notions of what constituted 'reality'. Terry Eagleton shows that simply describing 'something as realist is to acknowledge that it is not the real thing.⁷⁶ However, Nicholas Green argues that there is a problem not only with the belief that 'some modes of discourse can approximate the "real", but that there is a real – out there – to be approximated.'77 Nonetheless, visual and textual conventions, such as descriptive prose, detailed brushwork, and professional affiliations – particularly modern scientific medicine's cultural association with truth - produced and performed 'reality' through historically specific codes that signified reality to nineteenth-century audiences. Yet, the manufacturing of what Roland Barthes calls the 'reality effect' was often covert, as codes were naturalised, and often invisible.⁷⁸

Theories of mimesis are useful for studying imitations of the visible world. They alert us to the codified representational systems through which the world is filtered and open up the possibilities of interdisciplinary analysis. We become aware of the complex roles that notions of resemblance, imitation, similarity, and mimicry play in the formation of realisms: how they work to produce the belief that an image, text, performance, or object is an accurate simulation of a thing, person, or event. By studying the changing conceptions of realism in artistic, medical, and scientific works, The Face of Medicine considers how realism came to signify social reality in nineteenth-century culture.⁷⁹ It demonstrates how ideologies of realisms – far from being neutral and descriptive - are inflected by social processes and attitudes, including professional cultures and beliefs. Mimesis is 'a history of disputes over the power to make symbolic worlds; that is, the power to represent the self and others and interpret the world', Gunter Gebauer and Christoph Wulf claim. 80 By focusing on mimesis in terms of power, they provide a model that is not concerned with the traditional boundaries between art and science. Rather, they explore those that allow for the entanglement of art, science, literature, philosophy, and aesthetics, seeing these links as the productive side of mimesis. In this book, I take advantage of the flexibility of the concept, and draw on what Christopher Prendergast refers to as the 'inherent conceptual ambiguity' of mimesis. 81 By focusing on

realism's correspondence with other discourses of verisimilitude, particularly those of scientific medicine, I explore the processes of inclusion and exclusion that are integral to this correspondence and, subsequently, to the ways in which this process creates meaning. As Lawrence R. Schehr argues, interruptions in realism's ability to represent should not be regarded as realism's failure, but as integral to the realist project. Explored Mimesis should never be understood as a homogeneous term, for although it is linked to similarity, it is always open to the opposite. It is, as Arne Melberg points out, a 'meeting-place' for opposing forces: proximity and distance, presence and absence, similarity and difference. This more flexible approach accounts for the changing views and forms of realism across disciplines.

Collections and displays

How medical professionals sought to make sense of the world by creating, collecting, and cataloguing lifelike depictions of bodies and illnesses is central to *The Face of Medicine*. Hese images and objects were thought to attest to the truthfulness of their discoveries and inventions, as well as strengthen their claims to the reality of diseases and diagnoses. They were crucial to the performance of individual and collective identities, and were products of collective and individual methods of scientific observation. Men of science, art, and medicine often shared these items, and gave them as gifts to one another. These exchanges were vital to the homosocial circles of artistic, medical, and scientific culture – they provided a means of sharing knowledge, skills, and sociability, established professional ties, and facilitated self-promotion and male collectivity. So

The Face of Medicine investigates how the medical and scientific elite used images and objects both publicly and privately – be it through exhibiting sculptures in medical museums, exchanging personal photographic portraits, or commissioning paintings for the Salon or the home. Certainly Charcot's and Péan's medical collections, and the photographic studios in their respective hospitals, owe much to the support of republican policies. Intended for medical education, these medical displays were considered modern, objective, and truthful even though they were informed by individual taste, personal ambition, and professional rivalries.

Georges Didi-Huberman argues that the assembling and cataloguing of collections is a form of fabricating reality as the knowledge generated by collecting practices becomes aligned with truth. 86 The medical establishment's production and authentication of reality through the creation and collection of renderings of bodies – as well as the subjective fantasies involved in amassing objects for personal ownership – at times manifested a desire for the real that undermined the claims to objectivity assigned to these collected medical objects.

This book concentrates on these troubled moments. While these images and objects served to portray personal and professional identities as rational and reasonable, they also fulfilled desires that exceeded the necessities of scientific duty, particularly when a naked female patient was the focus of male attention.⁸⁷

Gender was always implicated in collecting practices, particularly when sexual stereotypes inflected the collected images and objects. As Jonathan Crary suggests in his discussion of the overlapping figure of collector, detective, consumer, and fetishist, there is a perversion at the core of the search for fact and truth. Michel Foucault has also pointed out this link between the production of knowledge and pleasure in his account of the history of sexuality. He argued that the nineteenth-century construction of a *scientia sexualis* – a Western practice for finding the truth about sex based in forms of knowledge-power, such as a physician's interrogation of a patient – has always functioned as a type of *ars erotica* (what he argued was the manifestation of Eastern approaches that elicit sexual knowledge through pleasure) despite its seeming contradistinction. Behind the ostensibly neutral naming, ordering, and cataloguing of bodies and behaviours in nineteenth-century medicine, exists an intensified pleasure intrinsic to that very practice. 90

Three case studies

Each chapter of *The Face of Medicine* centres on a painting that portrays a celebrated man associated with the Parisian medical elite that was exhibited at the 1886 or 1887 Salon, and then expands to consider the representations of bodies that these men collected, commissioned, and/or created. Like medical case studies, they focus on the individual and then expand to situate these men, their popular personae, and their collections in wider debates.

Chapter 1 investigates portraits of Pasteur, including the 1886 Salon paintings by Bonnat, Edelfelt, and Gsell, as well as portrayals of scientists in the popular press and the images and objects on display in Pasteur's home, laboratory, and the Pasteur Institute. Through an examination of Pasteur's various personae, it analyses modern male professionalism and masculinity in scientific spheres, and considers how the 1886 and 1887 Salon portraits of the chemist served as templates for future representations of medical men. It illuminates what was at stake in these images, particularly as they pertained to promoting Pasteur's identity as a humanitarian leader and global scientific saviour.

Chapter 2 centres on Gervex's portrait of Péan, Avant l'opération: le Docteur Péan enseignant à l'hôpital Saint-Louis sa découverte du pincement des vaisseaux (Before the operation: Dr Péan at the Hôpital Saint-Louis presenting his new technique of clamping blood vessels) and investigates the ties between portraiture, republicanism, masculinity, and the genre of the female nude. It examines how the surgeon was a collector of different forms of realism in paint

and in wax. Péan's medical *moulages* of female genitalia are studied in relation to artworks, photographs, and medical models of unconscious and unclothed female bodies in nineteenth-century visual culture in order to explore moments when the assumed objectivity of realist practice is ruptured. Arguing that the oddities of Péan's collection reveal a desire that belies the objective veneer of realist projects, this chapter explores the irrational and fantastical side of realism and the troubles of its truth claims.

Chapter 3 focuses on *Une leçon clinique à la Salpêtrière*, André Brouillet's painting of Jean-Martin Charcot expounding on the hypnotised state of his hysterical female patient. By examining the multiple visualisations of hysteria that Charcot commissioned in wax, plaster, photography, and print, along with the visual and textual works that were influenced by his views, this investigation moves beyond conventional art historical analysis to consider electrotherapy, hypnosis, and other medical procedures and performances used at the Salpêtrière as modern forms of realistic representation. I argue that *Une leçon clinique* – a painting that portrays these modes of visualisation – is ultimately a realist depiction of realist modes of representing hysteria. The painting foregrounds the essential role of visual representations in hysteria studies because they were key to public understanding of the disease and crucial to building Charcot's medical persona. By situating these realist methods in a wider cultural context, I contend that the hysterical female body was a site on which realism 'went mad'.

Conclusion: shared dreams

Chamillac's Salon review, which opened this introduction, exemplifies the intersecting spheres of art and medicine. In his text, paintings become microbes, Salon viewers morph into patients, and viewing art becomes a modern medical procedure. This example demonstrates how art critics, like artists, wished to take part in the emerging culture of scientific medicine, but it also indicates that Chamillac perceived medical men to be equally drawn to the art world. As Chamillac notes, the 'princes of science' were hooked on the 'terrible vaccine' of painting.

Doctors and artists had much in common despite the great differences in their occupations. Both believed that one could know the world through acute observation and meticulous documentation, and that knowledge was produced and skills perfected by examining the human body. Both occupations used powers of observation and relied on the ocular. Artists took on the role of men of scientific medicine: they studied their sitters, examined the environment in which they lived, and portrayed their every inch with microscopic detail. Similarly, many doctors and scientists turned to the visual arts in order to create and commission realistic representations of bodies for their own personal

and professional gain, knowledge, and delight – even when such images and objects threatened to fall into the realm of fantasy, madness, and pleasure. The social limitations placed on examining bodies affected both medical and artistic practice.

The close links drawn between art and scientific medicine are not surprising, particularly within the context of 1880s Paris. After all, Pasteur, Péan, and Charcot all expressed with certainty in the popular press that if they had not become men of science, they would have become artists.

Notes

- 1 Chamillac, 'Le Virus pictural', *La Revue illustrée*, 1 (1887), 337. 'Des jeunes hommes, des vieillards, des femmes blondes ou rouges, brunes ou vertes, des gens décorés, des poètes et des négociants affolés, anémiés, donnant tous les signes du plus profond accablement sortent du Palais de l'Industrie. Courbés et atones, flageoleant sur leurs jambes veules, ils portent à grand'peine un livret rouge, signe distinctif de leur état actuel, destiné à prévenir les personnes saines d'avoir à s'éloigner d'eux au plus vite. Ces malheureux, en effet, viennent de se faire inoculer le microbe de la peinture. Cette vaccine terrible, que certains princes de la science considèrent comme funeste, est à ce point entrée dans leurs mœurs et les moelles de nos plus fiers lapins, qu'ils ne sauraient s'en passer, et que, chaque année, ils en redemandent. Cela et la morphine! Notre race y résistera-t-elle? L'avenir répondra.' All translations from the French are by the author, unless stated otherwise.
- 2 Nineteenth-century science encompassed various branches of study, including medicine, engineering, and chemistry, but there were great differences between categories. As Ludmilla Jordanova argues, the concept of 'scientist' is a nineteenth-century construction that came into use when laboratory research was just a small activity of those who examined the natural world. Jordanova, *Defining Features: Scientific and Medical Portraits* 1660–2000 (London: Reaktion Books, 2000), pp. 13, 61–66.
- 3 For an overview of portraiture's association with social and economic status, see Joanna Woodall (ed.), *Portraiture: Facing the Subject* (Manchester: Manchester University Press, 1997).
- 4 Lorraine Daston and H. Otto Sibum, 'Scientific Personae', *Science in Context*, 16:1–2 (2003), 2–3. As they argue, 'Intermediate between individual biography and the social institution lies the persona: a cultural identity that simultaneously shapes the individual in body and mind and creates a collective with a shared and recognizable physiognomy ... Personae are creatures of historical circumstance; they emerge and disappear within specific contexts.'
- 5 For diverse analyses of the influence of medical discourse on French culture, see Douglas P. Mackaman, *Leisure Settings: Bourgeois Culture, Medicine, and the Spa in Modern France* (Chicago: University of Chicago Press, 1998); Anthea Callen, *The Spectacular Body: Science, Method and Meaning in the Work of Degas* (New Haven: Yale University Press, 1995); and Lawrence Rothfield, *Vital Signs: Medical*

- Realism in Late Nineteenth-Century Fiction (Princeton: Princeton University Press, 1992).
- 6 For examinations of the political role of art in the early Third Republic, see Richard Thomson, The Troubled Republic. Visual Culture and Social Debate in France, 1889–1900 (New Haven: Yale University Press, 2004); Miriam Levin, Republican Art and Ideology in Late Nineteenth-Century France (Ann Arbor: UMI Research Press, 1986); Michael Orwicz (ed.), Art Criticism and its Institutions in Nineteenth-Century France (Manchester: Manchester University Press, 1994); June Hargrove and Neil McWilliam (eds), Nationalism and French Visual Culture, 1870–1914 (New Haven: Yale University Press, 2005); and Patricia Mainardi, The End of the Salon: Art and the State in the Early Third Republic (Cambridge: Cambridge University Press, 1993).
- 7 Jack D. Ellis, The Physician-Legislators of France: Medicine and Politics in the early Third Republic 1870–1914 (Cambridge: Cambridge University Press, 1990); and Philip Nord, The Republican Moment: Struggles for Democracy in Nineteenth-Century France (Cambridge, MA: Harvard University Press, 1995).
- 8 Ellis, The Physician-Legislators of France, p. 2.
- 9 Nord, The Republican Moment, pp. 32, 47.
- Horace Bianchon, *Nos grands médecins d'aujourd'hui* (Paris: Société d'éditions scientifiques, 1891), p. II.
- For a history of French physicians and medical culture, see: George Weisz, *The Medical Mandarins: the French Academy of Medicine in the Nineteenth and Early Twentieth Centuries* (New York: Oxford University Press, 1995); Ann La Berge and Mordechai Feingold (eds), *French Medical Culture in the Nineteenth Century* (Amsterdam and Atlanta: Rodopi, 1994); and Caroline Hannaway and Ann La Berge (eds), *Constructing Paris Medicine* (Amsterdam and Atlanta: Rodopi, 1998).
- 12 Key texts on nineteenth-century masculinity include Tamar Garb, Bodies of Modernity: Figure and Flesh in Fin-de-Siècle France (New York: Thames and Hudson, 1998), pp. 33–38; Robert Nye, Masculinity and Male Codes of Honor in Modern France (New York: Oxford University Press, 1993); Anthea Callen, 'Masculinity and Muscularity: Dr. Paul Richer and Modern Manhood', Paragraph, 16:1 (2003), 17–41; Judith Surkis, Sexing the Citizen: Morality and Masculinity in France, 1870–1920 (Ithaca: Cornell University Press, 2006); Temma Balducci, Heather Belnap Jensen, and Pamela Warner (eds), Interior Portraiture and Masculine Identity in France, 1789–1914 (Aldershot: Ashgate, 2011).
- 13 Robert Nye, 'Afterword', in Christopher E. Forth and Bertrand Taithe (eds), *French Masculinities: History, Culture, and Politics* (Basingstoke: Palgrave Macmillan, 2007), p. 239.
- 14 R.W. Connell and James W. Messerschmidt, 'Hegemonic Masculinity: Rethinking the Concept', *Gender and Society*, 19:6 (2005), 829–859.
- 15 R.W. Connell, *Masculinities* (Berkeley: University of California Press, 1995).
- Bridget Alsdorf argues that the notion of collectivity was a contentious idea, particularly as bourgeois society came to terms with the problematic relationship between the individual and the group. Bridget Alsdorf, *Fellow Men: Fantin-Latour*

- and the Problem of the Group in Nineteenth-Century French Painting (Princeton: Princeton University Press, 2012), p. 5.
- 17 Elisabeth Bronfen, The Knotted Subject: Hysteria and its Discontents (Princeton: Princeton University Press, 1998); George Didi-Huberman, Invention of Hysteria: Charcot and the Photographic Iconography of the Salpêtrière, trans. Alisa Hartz (Cambridge, MA: MIT Press, 2003); Jann Matlock, Scenes of Seduction: Prostitution, Hysteria, and Reading Difference in Nineteenth-Century France (New York: Columbia University Press, 1994); Sander Gilman, Helen King, Roy Porter et al., Hysteria beyond Freud (Berkeley: University of California Press, 1993); and Janet Beizer, Ventriloquized Bodies: Narratives of Hysteria in Nineteenth-Century France (Ithaca: Cornell University Press, 1994).
- 18 For medical accounts, see Robert Nye, *Crime, Madness and Politics in Modern France: The Medical Concept of National Decline* (Princeton: Princeton University Press, 1984); and Bertrand Taithe, *Defeated Flesh: Welfare, Warfare and the Making of Modern France* (Manchester: Manchester University Press, 1999), pp. 46–96, 130–150.
- 19 For investigations of the impact of theories of degeneration on late nineteenth-century French art and visual culture, see Fae Brauer and Barbara Larson, *The Art of Evolution: Darwin, Darwinism, and Visual Culture* (Hanover: Dartmouth College Press, 2009); and Barbara Larson, 'Evolution and Degeneration in the Early World of Odilon Redon', *Nineteenth-Century Art Worldwide*, 2 (2003), www.19thc-artworldwide.org, accessed 28 April 2015.
- 20 Peinard, *La Profession de médecine* (Paris, 1902), p. 138 as cited by Robert Nye, 'Medicine and Science as Masculine "Fields of Honor", *Osiris*, 2:12 (1997), 60–79.
- 21 Nye, 'Medicine and Science as Masculine "Fields of Honor", pp. 60–79.
- The various conceptions of objectivity within the wide field of science have been examined by Lorraine Daston, who argues that scientific objectivity is not 'monolythic nor immutable' because it is comprised of metaphysical, methodological and moral meanings that are historically specific. Daston, 'Objectivity and the Escape from Perspective', Social Studies of Medicine, 22 (1992), 597.
- 23 See Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), particularly chapter 4 on 'The Scientific Self', pp. 191–251.
- 24 For a history of women's acceptance in medical schools in France, see Yvonne Knibiehler and Catherine Fouquet, *La femme et les médecins: analyse historique* (Paris: Hachette, 1983), pp. 193–200; Joy Harvey, 'La Visite: Mary Putnam Jacobi and the Paris Medical Clinics', in La Berge and Feingold (eds), *French Medical Culture in the Nineteenth Century*, pp. 350–371.
- 25 Knibiehler and Fouquet, *La femme et les médecins*, p. 193. For an account of the debates regarding women artists' access to anatomy and life study during the late eighteenth and early nineteenth centuries in France, see Margaret Oppenheimer, 'The Charming Spectacle of the Cadaver: Anatomical and Life Study by Women Artists in Paris', *Nineteenth-Century Art Worldwide*, 6:1 (2007), www.19thc-artworldwide.org, accessed 28 April 2015.

- 26 See Nancy Chodorow, Femininities, Masculinities, Sexualities: Freud and Beyond (Cambridge: Cambridge University Press, 1991); Donna Harraway, Simians, Cyborgs, and Women: The Reinvention of Nature (New York: Routledge, 1991); Catharine MacKinnon, Women's Lives, Men's Laws (Cambridge, MA: Belknap Press of Harvard University Press, 2004); Evelyn Fox Keller, Reflections on Gender and Science (New Haven: Yale University Press, 1985); Londa Schiebinger, The Mind Has No Sex? Women and the Origins of Modern Science (Cambridge, MA: Harvard University Press, 1989).
- 27 For a more critical historiography of French medicine, see the introduction to Hannaway and La Berge (eds), *Constructing Paris Medicine*.
- 28 Sarah Betzer, *Ingres and the Studio: Women, Painting, History* (University Park: Pennsylvania State University Press, 2012); Tamar Garb, *The Painted Face: Portraits of Women in France, 1814–1914* (New Haven: Yale University Press, 2007); Melissa McQuillan, *Impressionist Portraits* (London: Thames and Hudson, 1986); Meyer Schapiro, *Impressionism: Reflections and Perceptions* (New York: George Braziller, 1997), pp. 154–178; Roger Cardinal, 'Nadar and the Photographic Portrait in Nineteenth-Century France', in Graham Clarke (ed.), *The Portrait in Photography* (London: Reaktion Books, 1992), pp. 6–24; and Heather McPherson, *The Modern Portrait in Nineteenth-Century France* (Cambridge: Cambridge University Press, 2001), pp. 14–37.
- 29 Edmond Duranty, *La Nouvelle Peinture*, à propos du groupe d'artistes qui exposent dans les Galeries Durand-Ruel (Paris: E. Dentu, 1876).
- Maurice Hamel, 'Le Portrait', in Antonin Proust (ed.), *L'art français 1789–1889* (Paris, c.1889), p. 63. 'Tout en obéissant à des tendances diverses, le portrait de nos jours se fait de plus en plus soucieux de vérité intime, dédaigneux des à peu près flatteurs et des mensonges officiels. On veut voir tout l'homme et sa pensée de derrière la tête'.
- Henri Gervex, *Souvenirs recueillis par Jules Bertaut* (Paris: E. Flammarion, 1924), p. 198: 'le XIX^e siècle qui finissait commençait d'appeler l'attention sur cette période de notre histoire. On en remémorait les grandes dates, on en repassait les grands faits, on en peignait les grand hommes.'
- Robert Rosenblum, 'Portraiture: Fact versus Fiction', in Sébastien Allard and Robert Rosenblum, *Citizens and Kings: Portraits in the Age of Revolution 1760–1830*, exhibition catalogue (London: Royal Academy of Arts, 2007), p. 19.
- Richard Weisberg, 'The Representation of Doctors at Work in Salon Art of the Early Third Republic in France' (PhD dissertation, New York University, 1995), pp. 57–58. Weisberg argues that scientific advances cannot explain the major shifts in medical portraiture because they had been occurring previously. Rather, he contends that medical portraits changed alongside popular images and understandings of medicine, and that this transformation occurred with the acceptance of Pasteur's theories. Weisberg does not, however, address the major alterations in portraiture that were occurring from the mid-century, such as the fashion for a sense of immediacy and informal portrayals of sitters in everyday environments.

- 34 Historians of medicine have addressed the complex ties between science and medicine. For a historiographical account of these debates, see John Harley Warner, 'The History of Science and the Sciences of Medicine', *Osiris*, 10:1 (1995), 164–193; and Michael Worboys, 'Practice and the Science of Medicine in the Nineteenth Century', *Isis*, 102:1 (2011), 109–115.
- William F. Bynum, Science and the Practice of Medicine in the Nineteenth Century (Cambridge: Cambridge University Press, 1994); and Anne Marie Moulin, 'Bacteriological Research and Medical Practice in and out of the Pasteurian School', in Hannaway and La Berge (eds), Constructing Paris Medicine, pp. 327–349.
- 36 Philippe Comar (ed.), *Figures du corps: une leçon d'anatomie à l'école des Beaux-Arts* (Paris: Beaux-Arts de Paris les éditions, 2008); and Jean-François Debord, 'De l'anatomie artistique à la morphologie', in Jean Clair (ed.), *L'âme au corps: arts et sciences, 1793–1993* (Paris: Réunions des musées nationaux, Gallimard; Paris: Galeries nationales du Grand Palais, 1993), pp. 102–117.
- 37 Anthea Callen, 'The Body and Difference: Anatomy Training at the École des Beaux-Arts in the Later Nineteenth Century', *Art History*, 20:1 (1997), 23.
- 38 The literature on 'the body' and medical culture is extensive. See Michel Foucault, Naissance de la clinique (Paris: Presses universitaires de France, 1963) and History of Sexuality (New York: Pantheon, 1978); Judith Butler, Gender Trouble: Feminism and the Subversion of Identity (New York: Routledge, 1989) and Bodies that Matter: On the Discursive Limits of 'Sex' (New York: Routledge, 1993); James Elkins, Pictures of the Body: Pain and Metamorphosis (Stanford: Stanford University Press, 1999); Deborah Lupton, Medicine as Culture: Illness, Disease and the Body in Western Societies (London: Sage, 1994); Kathleen Adler and Marcia Pointon (eds), The Body Imagined: The Human Form and Visual Culture Since the Renaissance (Cambridge: Cambridge University Press, 1993); and Thomas Laqueur, Making Sex: Body and Gender from the Greeks to Freud (Cambridge, MA: Harvard University Press, 1990).
- 39 For investigations of other currently disregarded artists, see Richard Thomson, Art of the Actual: Naturalism and Style in Early Third Republic France, 1880–1900 (New Haven: Yale University Press, 2012); and Natalie Adamson and Toby Norris (eds), Academics, Pompiers, Official Artists and the Arrière-garde: Defining Modern and Traditional in France, 1900–1960 (Newcastle-upon-Tyne: Cambridge Scholars Publishing, 2009).
- 40 For views on visual culture from different disciplinary perspectives, see Svetlana Alpers, Emily Apter, Carol Armstrong *et al.*, Visual Culture Questionnaire, *October*, 77 (1996), 25–70.
- 41 For a historiographical account of the methodological problems related to writing about realism in art history, see Richard Shiff, 'Art History and the Nineteenth Century: Realism and Resistance', *The Art Bulletin*, 70:1 (1988), 25–48.
- 42 For a discussion of realism in relation to other discourses of verisimilitude, such as science, philosophy, and history, see Lawrence Schehr, *Rendering French Realism* (Stanford: Stanford University Press, 1997), pp. 17–18.

- 43 Abigail Solomon-Godeau, 'Realism Revisited', in Aruna D'Souza (ed.), *Self and History: A Tribute to Linda Nochlin* (London: Thames and Hudson, 2001), p. 71.
- 44 Pierre Larousse, *Grand dictionnaire universel du XIXe siècle*, vol. 13 (Paris, 1875), p. 755. 'Nous ne saurions avoir la prétention de définir exactement ce qu'il convient d'appeler réalisme, au point de vue de l'art. Le prétendu inventeur du système de peinture auquel on a donné le nom, Courbet, a déclaré ingénument, dans un manifeste publié en 1855, qu'il ne comprenait pas la signification du mot.'
- 45 Larousse, *Grand dictionnaire universel du XIXe siècle*, vol. 13, p. 757: 'réaliste excentrique'.
- 46 Pierre Larousse, *Grand dictionnaire universelle du XIX^e siècle*, vol. 13, pp. 755–757.
- 47 Linda Nochlin, Realism (Harmondsworth: Penguin Books, 1971); Michael Fried, Courbet's Realism (Chicago: University of Chicago Press, 1990); Klaus Herding, Courbet: To Venture Independence, trans. John William Gabriel (New Haven: Yale University Press, 1991); Gabriel Weisberg, The Realist Tradition: French Painting and Drawing 1830–1900 (Cleveland: Cleveland Museum of Art, 1980); Stephen Eisenman, 'The Rhetoric of Realism: Courbet and the Origins of the Avant-Garde', in Stephen Eisenman, Thomas Crow, Brian Lukacher et al. (eds), Nineteenth Century Art, pp. 212–220 (London: Thames and Hudson, 1994); and Gabriel Weisberg, The European Realist Tradition (Bloomington: Indiana University Press, 1982).
- 48 Fried, Courbet's Realism; Menzel's Realism: Art and Embodiment in Nineteenth-Century Berlin (New Haven: Yale University Press, 2002); and Manet's Modernism, or, the Face of Painting in the 1860s (Chicago: University of Chicago Press, 1996).
- 49 Thomson, Art of the Actual.
- 50 Edmond and Jules de Goncourt, 'Journal, 10 December 1860', in Charles Harrison and Paul Wood (eds), *Art in Theory, 1815–1900: An Anthology of Changing Ideas* (Oxford: Blackwell, 1998), p. 417.
- Jules Castagnary, 'Salon review of 1863', in Jules Castagnary, Salons (1857–1870), avec une préface de Eugène Spuller (Paris: G. Charpentier et E. Fasquelle, 1892), pp. 104–105. 'L'école naturaliste affirme que l'art est l'expression de la vie sous tous ses modes et à tous ses degrés, et que son unique but est de reproduire la nature en l'amenant à son maximum de puissance et d'intensité: c'est la vérité s'équilibrant avec la science'.
- 52 Pierre-Joseph Proudon, 'Du Principe de l'art et sa destination sociale', in Harrison and Wood (eds), *Art in Theory*, p. 405.
- 53 For alternative accounts of the moral status of science in the nineteenth century, see Anne De Witt, *Moral Authority: Men of Science, and the Victorian Novel* (Cambridge: Cambridge University Press, 2013).
- 54 Daston and Galison, Objectivity, pp. 122-124, 185.
- 55 For examinations of nineteenth-century conceptions of medical progress, see La Berge and Feingold (eds), French Medical Cultures in the Nineteenth Century; Andrew Aisenberg, Contagion: Disease, Government and the 'Social Question' in Nineteenth-Century France (Stanford: Stanford University Press, 1999); and Robert Fox and George Weisz (eds), The Organization of Science and Technology in France 1808–1914 (Cambridge: Cambridge University Press, 1980).

- 56 Paul Lenoir, *Histoire du Réalisme et du Naturalisme dans la poésie et dans l'art depuis l'antiquité jusqu'à nos jours* (Paris: Quantin, 1889), p. I. 'La vérité, la réalité, la nature, sont le terrain commun où ces expressions diverses du sentiment humain doivent coexister. De leur alliance se composent les chefs-d'œuvre.'
- 57 Lenoir, *Histoire du Réalisme et du Naturalisme*, p. 759. 'La Science, tel est le dernier mot de nos aspirations actuelles. La Science porte en elle le fait, la réalité, la vérité et l'immensité de l'infini.'
- 58 T.J. Clark, *The Absolute Bourgeois: Artists and Politics in France*, 1848–1851 (London: Thames and Hudson, 1973) and *Image of the People: Gustave Courbet and the 1848 Revolution* (London: Thames and Hudson, 1973).
- 59 Nochlin, Realism, pp. 14-17.
- 60 Peter Brooks, Realist Vision (New Haven: Yale University Press, 2005), p. 3.
- 61 Roland Barthes, *The Rustle of Language*, trans. Richard Howard (Oxford: Basil Blackwell, 1986).
- 62 James Elkins, *On Pictures and the Words That Fail Them* (Cambridge: Cambridge University Press, 1998), p. 58.
- 63 Nelson Goodman, Languages of Art: An Approach to a Theory of Symbols (Indianapolis: Hackett Publishing Company, 1976), p. 37.
- 64 Although naturalism was also used to describe these works, the difference between realism and naturalism was dependent upon the critic. While naturalism is understood as a more positivist and scientific form of realism, most current discussions consider them the same thing. As James Elkins states, both should be understood 'indifferently as the practice of making pictures that are said to resemble what they denote'. Elkins, *On Pictures and the Words that Fail Them*, p. 48.
- 65 Thomson, Art of the Actual, p. 9.
- 66 Gabriel Monod, *Renan, Taine, Michelet: les maîtres de l'histoire* (Paris: Librairie d'art Ludovic Baschet, 1894).
- 67 Linda Nochlin, 'The Depoliticisation of Gustave Courbet: Transformation and Rehabilitation under the Third Republic', pp. 109–121 and Michael Orwicz, 'Reinventing Édouard Manet: Rewriting the Face of National Art in the early Third Republic', pp. 122–145 in Orwicz (ed.), *Art Criticism and its Institutions in Nineteenth-Century France*.
- 68 Daston and Galison, Objectivity, pp. 37, 135, 246.
- 69 Natasha Ruiz-Gómez, 'The "Scientific Artworks" of Doctor Paul Richer', *Medical Humanities*, 39:1 (2013), 4–10.
- 70 For investigation of the troubled ties between photography and science, see Jennifer Tucker, *Nature Exposed: Photography as Eye Witness in Victorian Science* (Baltimore: Johns Hopkins University Press, 2005); and Joel Snyder, 'Visualization and Visibility', in Peter Galison and Caroline Jones (eds), *Picturing Science, Producing Art* (New York: Routledge, 1998), pp. 379–397.
- 71 Tucker, Nature Exposed, p. 4.
- 72 Tanya Sheehan, *Doctored: The Medicine of Photography in Nineteenth-Century America* (University Park: Pennsylvania University Press, 2011), p. 124.

- 73 Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1990), and 'Géricault, the Panorama, and Sites of Reality in the Early Nineteenth Century', *Grey Room*, 9 (2002), 5–25.
- 74 Kelly Wilder, *Photography and Science* (London: Reaktion Books, 2009); Elizabeth Lunbeck and Lorraine Daston (eds), *Histories of Scientific Observation* (Chicago: University of Chicago Press, 2010); and Jutta Schickore, *The Microscope and the Eye: A History of Reflections*, 1740–1870 (Chicago: University of Chicago Press, 2007).
- 75 Daston and Galison, Objectivity, p. 369.
- 76 Terry Eagleton, 'Pork Chops and Pineapples', London Review of Books, 25:20 (2003), p. 17.
- 77 Nicholas Green, *The Spectacle of Nature: Landscape and Bourgeois Culture in Nineteenth-Century France* (Manchester: Manchester University Press, 1990), p. 2.
- 78 Barthes, The Rustle of Language.
- 79 Erich Auerbach, *Mimesis: The Representation of Reality in Western Literature* (Princeton: Princeton University Press, 1953).
- 80 Gunter Gebauer and Christoph Wulf, *Mimesis: Culture, Art, Society*, trans. Don Reneau (Berkeley: University of California Press, 1992), p. 3.
- 81 Christopher Prendergast, *The Order of Mimesis: Balzac, Stendhal, Nerval, Flaubert* (Cambridge: Cambridge University Press, 1986), p. 5.
- 82 Schehr, Rendering French Realism, pp. 17–18.
- 83 Arne Melberg, *Theories of Mimesis* (Cambridge: Cambridge University Press, 1995), p. 2.
- For examinations of collecting practices within medical museums, see Samuel J.M.M. Alberti and Elizabeth Hallam (eds), *Medical Museums: Past, Present, Future* (London: Royal College of Surgeons, 2013).
- 85 Crucial investigations of the homosocial include Eve Kosofsky Sedgwick, Between Men: English Literature and Male Homosocial Desire (New York: Columbia University Press, 1985); Abigail Solomon-Godeau, Male Trouble: A Crisis in Representation (New York: Thames and Hudson, 1997); Anthea Callen, 'Doubles and Desires: Anatomies of Masculinity in the Later Nineteenth Century', Art History, 26:5 (2003), 669–699.
- 86 Georges Didi-Huberman, *Confronting Images: Questioning the Ends of a Certain History of Art*, trans. John Goodman (University Park: Pennsylvania State University Press, 2005), pp. 71–72.
- For various discussions of the irrational and hidden motives of collecting practices, see Michael Camille and Adrian Rifkin (eds), *Other Objects of Desire: Collectors and Collecting Queerly* (Oxford: Blackwell, 2001).
- 88 See Jonathan Crary's discussion of Max Klinger's glove cycle in *Suspensions of Perception: Attention, Spectacle and Modern Culture* (Cambridge, MA: MIT Press, 1999), pp. 90–134.
- 89 Michel Foucault, *The History of Sexuality: The Will to Knowledge*, 1 (London: Penguin Books, 1990), pp. 70–71.

90 As Foucault suggests, 'Perhaps this production of truth, intimidated though it was by the scientific model, multiplied, intensified, and even created its own intrinsic pleasures.' Foucault, *The History of Sexuality*, p. 71.