

AU LIT DES MALADES: A. F. CHOMEL'S CLINIC AT THE CHARITÉ, 1828–9

by

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INTRODUCTION

The predominance of France as a centre of medical instruction in Europe during the early decades of the nineteenth century is a phenomenon that has long attracted the attention of historians. Notably, Russell Maulitz has attempted to quantify the flow of British students to Paris during this period and to establish the motives that drew them there.¹ This study, along with Warner's discussions of the links between French and American medicine,² has focused attention upon what attracted students to particular schools, what they derived from their studies, and what use they made of this knowledge after returning to their own lands.

From these researches it is apparent that it was the clinical—or, rather, the clinico-pathological—instruction available in France that was the chief attraction for the foreign students who went there. The notion that the Parisian clinic was unique, or represented a revolutionary break with the past, has, however, been sufficiently exploded: Gelfand and Keel have traced its eighteenth-century antecedents.³ Moreover, the latter has shown the degree to which the Parisian clinic of the early nineteenth century resembled—in terms of size, aims, and organization—those of other European centres. Differences did exist between Paris and, say, Edinburgh or Vienna; but these were specific variations upon the same basic model.⁴

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¹ See Russell C. Maulitz, 'Channel crossing: the lure of French pathology for English medical students, 1816–36', *Bull. Hist. Med.*, 1981, 55: 475–96. The theme is expanded in *Morbid appearances: the anatomy of pathology in the early nineteenth century*, Cambridge University Press, 1987.

² John Harley Warner, 'The selective transport of medical knowledge: antebellum American physicians and Parisian medical therapeutics', *Bull. Hist. Med.*, 1985, 59: 213–31; *idem*, *The therapeutic perspective: medical practice, knowledge, and identity in America 1820–1885*, Cambridge, Mass., Harvard University Press, 1986, esp. pp. 185–96.

³ Toby Gelfand, *Professionalizing modern medicine: Paris surgeons and medical science and institutions in the 18th century*, Westport, Conn., Greenwood Press, 1980, especially chapter 8; *idem*, 'Gestation of the clinic', *Med. Hist.*, 1981, 25: 169–80; Othmar Keel, 'The politics of health and the institutionalisation of clinical practices in Europe in the second half of the eighteenth century', in W. F. Bynum and Roy Porter (eds.), *William Hunter and the eighteenth-century medical world*, Cambridge University Press, 1985, pp. 207–56.

⁴ Othmar Keel, 'La problématique institutionnelle de la clinique en France et à l'étranger de la fin du XVIII^e siècle à la période de la Restauration', *Bull. Can. d'Hist. Méd.*, 1985, 2: 183–204; 1986, 3: 1–30.

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Various strategies can be proposed for unravelling the complex problem of how these centres interacted as parts of a cosmopolitan system of medical education. One approach, which has been too little explored, is to reduce the problem to its elemental level and ask what a student might have seen and done in the Parisian clinic, and how this experience would have complemented or contrasted with what he might have learned elsewhere.

This is to adopt a “micro” rather than a “macro” perspective upon the exchanges between national medical cultures that were taking place in the early nineteenth century. It is a method that has its pitfalls and limitations: in particular, it is risky to attempt inferences for a community of students from the experience of a few. Efforts to achieve a larger sample are thwarted by the scarcity of surviving records of a student's experience. Even when such documents do exist, their interpretation is often problematic.

This line of research is, nonetheless, worth pursuing. It can supply, in a peculiarly vivid fashion, insights into how an individual trained in one context viewed another. Thereby our knowledge of both the student's native and the exotic environment is enhanced.

A recently discovered document provides a resource for approaching these questions. In his discussion of the exodus of Scottish students to France, Maulitz has singled out John Thomson as among the most influential in setting Scottish students upon that course, including his son William.⁵ Maulitz does not, however, mention that Thomson's younger son, Allen, also made the same pilgrimage, in 1828–9.

Upon his return to Britain, Allen Thomson (1809–84) became a successful academic. After teaching anatomy and physiology with William Sharpey in the Edinburgh extramural school, he held chairs in Aberdeen and Edinburgh, and finished his career as Professor of Anatomy in Glasgow. His papers are now held in the Special Collections Department of Glasgow University Library; among them are the notes he made as a student in Paris.⁶

These include notes of lectures by Magendie (physiology), Dulong (physics), Andral (hygiene), and Blainville (zoology). The great bulk of the notes are, however, composed of the clinical instruction Thomson underwent in Paris.⁷ This included attendance at Dupuytren's surgical clinic at the Hôtel Dieu. But while Thomson appears to have attended these lessons on only two days in February 1829, he spent several months following the medical clinic of Auguste-François Chomel (1788–1859) at the Charité.

The course appears to have begun on Thursday 13 November 1828; Thomson's last recorded attendance was on Wednesday 4 February 1829. Between these dates Thomson attended at least 56 of Chomel's clinics, keeping notes of the cases presented and of some of the lectures that Chomel delivered upon them.

Chomel had succeeded Laennec in the chair of *Clinique Médicale* in 1827; he had

⁵ Maulitz, 'Channel crossing', op. cit., note 1 above, pp. 486–8.

⁶ For Thomson's biography see: *DNB*; W. A., 'Obituary of Allen Thomson', *Proc. R. Soc. Lond.*, 1887, 42: xi–xxviii.

⁷ Allen Thomson, ['Notes of courses attended in Paris, 1828–9'], Thomson MSS, Glasgow University Library, MS Gen. 1476, Box 5.

been conducting a clinic at the Charité for at least a decade prior to that date. Triaire's remark, that Chomel's was "an honest, routine spirit, imbued with the medical doctrine of the year III and resistant to evolution",⁸ is a little unkind. Rather, Chomel did change, albeit sometimes reluctantly, with his times: he eventually came to accent Laennec's teachings on auscultation and Louis's concept of typhoid fever as a unitary clinical entity. An anecdote recounted by Paul Broca does, however, suggest that Chomel never altogether abandoned his essentialism and his abhorrence of anything reminiscent of the doctrines of Broussais.⁹

Even Chomel's detractors conceded that, whatever his shortcomings as a medical theorist, he was an outstanding clinical teacher. E.-F. Dubois d'Amiens, in what is at times a very condescending *Éloge*, conceded that Chomel possessed "the essential qualities of the clinical professor". These were not the

impassioned accents nor the vehement apostrophes of the professor of the Val-de-Grâce [Broussais]; no more was it the magisterial and disdainful elocution of the celebrated surgeon of the Hôtel-Dieu [Dupuytren], still less the brilliant and disordered inspirations of Récamier: it was a simple account of what is observed at the patients' bedside [*au lit des malades*]*—*a clear, exact, sage, and methodical account.¹⁰

F. S. Ratier, in his contemporary account of the clinical teaching available in Paris in the late 1820s, was less grudging in his praise, maintaining that Chomel's course was a model of how a *clinique médicale* should be conducted. A later commentator agreed that Chomel had set new standards during his tenure of the chair of *Clinique Médicale*. While the other clinical teachers of the period thought it sufficient to give a few "conferences" to their pupils at the patient's bedside, Chomel created a "true clinic":

Interrogating the patients in the greatest detail, he explored with care and by all possible means the state of their organs, gradually drawing attention to the most interesting phenomena, and establishing no diagnosis until the students were, so to speak, forced to draw similar conclusions for themselves. This manner of instruction, to which the old practitioners of the time were obliged to submit, and which the young ones adopted at once, is the only one followed today.¹¹

In Chomel's course, Thomson therefore encountered what can justly be regarded as the apogee of the Parisian method of clinical instruction. His record of the experience

⁸ P. Triaire, *Récamier et ses contemporains 1774–1852: étude d'histoire de la médecine aux xviii^e et xix^e siècles*, Paris, J.-B. Baillière, 1899, p. 335.

⁹ F. Schiller, *Paul Broca: founder of French anthropology, explorer of the brain*, Berkeley, University of California Press, 1979, p. 78.

¹⁰ E.-Frédéric Dubois (d'Amiens), 'Chomel', in *Éloges lus dans les séances de l'Académie de Médecine (1845–1863): Tableau du mouvement de la science et des progrès de l'art; Examen et appréciation des doctrines; Études de moeurs—Portraits*, 2 vols., Paris, Didier, 1864, vol. 2, pp. 383–436; on p. 424.

¹¹ Ratier, *op. cit.*, note 16 below, pp. 330–4; 'Chomel, Auguste-François', Pierre Larousse (ed.), *Grand dictionnaire du XIX^e siècle*, Paris, 1869, vol. 4, p. 183. See also: M. Wiriot, *L'enseignement clinique dans les hôpitaux de Paris entre 1794 et 1848 (d'après des documents de l'époque)*, Paris, Ch. Coury, 1970, pp. 175–6.

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provides some indication of what a foreign student would have derived from it. It also furnishes additional information on the materials and methods that constituted the French method of clinical instruction at its best.

THE OPENING LECTURE

Chomel began his course by emphasizing the advantages of clinical instruction as a means of studying disease. His arguments relied heavily upon the superiority of knowledge derived from the senses over that obtained from books: it was evident, he held, that "if one merely reads dogmatic descriptions of their symptoms and progress, one can never have exact ideas of diseases; it is necessary at the same time to see them in order that we may understand them and, as a consequence, treat well the patients in our care."¹² Such stress upon the superiority of immediate sensory input over scholastic learning is, indeed, strongly reminiscent of the "medicine of the year III". It was, however, also reminiscent of the standard discourse which Edinburgh clinical lecturers were wont to deliver at the outset of their courses. In terms of the conventional rhetoric, as with so much else, there were close affinities between the two schools; it is unlikely that Thomson found anything startling in what Chomel had to tell his class on these matters.

Chomel provided his students with a brief history of clinical instruction which is of some interest in the light of recent controversy about the novelty—or otherwise—of the Parisian clinic. Medicine had, according to Chomel, long been taught by means of clinical lessons; however, the establishment of the practice in France was only of recent date: "MM Corvisart and Laennec were the first to undertake it."¹³ The choice of these two as the sole inceptors of the clinical method in France may merely be a token of a desire to magnify the role of the professors of Chomel's own hospital. It is, nonetheless, remarkable that he should completely overlook not only the claims of such *surgical* precursors as Desault, upon whom Gelfand has laid such stress, but also the various forms of protean *medical* clinic that Keel had discerned in eighteenth-century France.¹⁴

The only early foreign clinic that Chomel considered deserving of mention was that of Stahl, in Halle. Again this choice is surprising; there is no reference to Leiden, Edinburgh, London, Vienna, or any of the other clinical schools that figure in modern-day accounts of the antecedents of the nineteenth-century clinic. This may be accounted for simply by alleging that Chomel was a very poor historian; and no doubt there is something in that view. But the historical perspective—however limited—of an important actor in the Parisian clinic of the early nineteenth century is itself of significance.

The remainder of the introductory lecture was mostly concerned with the organization of the clinic and the conduct of the course. Chomel's wards contained around 40 beds, a number that he thought his students might consider too small. He took the view, however, that it was of more benefit to them to make a detailed analysis of a small number of cases that to be exposed to a multiplicity of patients. He

¹² A.-F. Chomel, [Introductory lecture], Thomson, op. cit., note 7 above, p. 1.

¹³ *Ibid.*, p. 2.

¹⁴ Gelfand, op. cit., note 3 above; Keel, op. cit., note 3 above.

emphasized that these 40 patients were not a random sample, but “to some extent selected”, and would prove sufficient to the students’ needs. “Everything”, Chomel assured them, had been

arranged as well as possible to facilitate your studies, the beds are far enough apart from each other, there are in the wards instruments to measure the temperature and changes in air pressure[;] in effect all the conveniences that one could indeed call the luxury of the clinic.¹⁵

But not all in the organization of the Charité was to Chomel’s liking: in particular, there were serious problems with the “*régime*” of the patients. They were given “heavy” food, ill-suited to convalescents. Moreover, the patients’ relatives, who were permitted to visit twice a week, often brought with them food that had deleterious effects upon the patients.¹⁶

Even in the clinical wards, therefore, there were limits to the extent that “medicalization” had proceeded at the Charité by 1828. The physicians’ control over the patient was only partial; in matters of diet at least, medical opinion was overruled by the hospital administration and the nursing staff.¹⁷ Even the patient’s family was allowed to wreak havoc upon any regimen that the doctor might try to impose.

The course itself was divided into three components: the *Visite*, the *Leçon*, and the *Conférence*. The purpose of the first of these was to grasp “all that concerns the past and current condition of the patient and all that can be assigned to the visible symptoms of his illness”. In short, at the bedside they should seek “to apprehend all that can be appreciated by the senses”.¹⁸

There was some discussion within the French medical community following Laennec’s diagnostic innovations as to the relative worth of evidence to be obtained by the patient’s own testimony and from the physical signs that the physician could detect for himself. Some went as far as to claim that the former were of no value, and that the medical practitioner should base his diagnostic judgment solely upon the latter.¹⁹ Chomel, in contrast, put the patient’s own account of his symptoms first; for this reason, it was important that the trainee physician be taught *how* to question his patients.

Chomel’s advice to his students on this matter was, however, surprisingly restrictive: they should “only ask [the patient] questions that bear upon the symptoms of his maladies”.²⁰ There was no question of obtaining a complete history of the sufferer, or of establishing his “temperament” and mode of life in the

¹⁵ ‘Introductory lecture’, p. 2. On the significance of the relatively small size of Chomel’s ward see: Keel, *op. cit.*, note 4 above, pp. 2–4.

¹⁶ *Ibid.*, pp. 2–3. For other—more trenchant—criticisms of the organization of the Charité see: [F. S.] Ratier, ‘Coup d’oeil sur les cliniques médicales de la Faculté de Médecine et des hôpitaux civils de Paris’, *Archs gén. Méd.*, 1827–8, 13, 14: 321–34, 161–85, 559–86, on pp. 162–3.

¹⁷ On the limitations of medicalization in post-Revolutionary France see: Colin Jones, ‘Professionalizing modern medicine in French hospitals’, *Med. Hist.*, 1982, 26: pp. 348–9.

¹⁸ ‘Introductory lecture’, p. 3.

¹⁹ See Stanley Joel Reiser, *Medicine and the reign of technology*, Cambridge University Press, 1978, pp. 30–3.

²⁰ ‘Introductory lecture’, p. 3.

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eighteenth-century manner. A much more restrictive conception of what information was relevant in the operation of clinical judgment clearly applied.

Chomel also offered his class some old hand's advice on how best to get the information they wanted out of patients. He urged upon them the need to "treat and conduct yourselves well towards the patients". Such behaviour would bring immediate benefits. If the practitioner "seems to take an interest in [the patients'] condition, to make their acquaintance a little, and to enter, so to speak, into their hearts and obtain their confidence", it would not only be to the advantage of "these poor wretches, but to your own interest, for you can be sure that, in conducting yourselves in this manner, you will find them easier to question and you will obtain with far greater ease knowledge of the symptoms of their illness".²¹

Lest this give too cynical a view of Chomel's attitude towards his patients, he did impress other points upon his students that showed a genuine concern for the patient's feelings. "One should never", he insisted, "speak in front of the patient of what concerns the diagnosis and prognosis of the illness; for in discussing these matters we could determine upon very grave accidents."²² This may appear simple common sense; however, Robert Graves, who attended clinics in Paris only a few years earlier, criticized the professors for pronouncing grave prognoses in the vernacular within the earshot of patients, whose spirits were thereby dampened.²³

Such discussion of the patient's prospects was relegated to the second part of the course: the "*Leçon*" or clinical lecture. At these lectures, what had been learned at the bedside was supplemented by what could be discovered by opening the body after death. Such autopsies were conducted publicly and were an integral part of the clinical course. Chomel provided a succinct account of the place of these procedures within the rationale of the French clinico-pathological method. By this means the physician was provided with "the power to trace the malady still further and to explain, as far as is possible, the symptoms we have observed during life by the morbid appearances found after death". He added that portions of the body were preserved until the following day, for the benefit of those who had been unable to attend the autopsy. Ratier singled out Chomel's practice of displaying these "*pièces d'anatomie pathologique*" as one of the pedagogically most useful aspects of his teaching: the sight of a suitably prepared specimen, he claimed, gave the students "a clear, precise and indelible idea of this morbid alteration".²⁴

The "*Conférence*" formed the final component of the clinic, although Chomel's remarks show that not all the attending students elected to avail themselves of this facility. This aspect of the course can, however, be regarded as the most significant aspect of Chomel's clinical instruction. Although it was a commonplace among Parisian clinical professors that clinical teaching must be "practical" if it were to be effective, in fact the numbers of students attending the professor's rounds was often too great to permit more than a few students access to the patient. The *conférence* was a device that, to some extent, circumvented this obstacle.

²¹ *Ibid.*, p. 5.

²² *Ibid.*, p. 4.

²³ Robert J. Graves, *A system of clinical medicine*, Dublin, Fannin, 1843, pp. 7–8.

²⁴ 'Introductory lecture', p. 5; Ratier, *op. cit.*, note 16 above, p. 173.

Chomel nominated a number of senior pupils to have an immediate role in the diagnosis and treatment of patients. These were required to make notes on only two or three cases; this was, in Chomel's experience, by far the most advantageous practice, and the one upon which "indeed, depends the true value of clinical lessons".²⁵

In order to record their observations, the students were required to examine the patients themselves. These examinations were to be performed at least twice a day; Chomel warned the students, however, against tiring the patient. In an aside he revealed that they were expected to undertake physical examination as well as symptom-taking: percussion and auscultation, he cautioned, were especially likely to exhaust the sufferer.²⁶ The *conférence* afforded the opportunity for the students' findings and decisions to be criticized by the professor. Chomel, however, defined his own role in modest terms: he aimed to make himself useful to the students by "directing your attention at the patient's bedside towards the most important points and in giving you the lessons that follow the visit". His function was emphatically not to impose some dogmatic schema upon his students.

In his teaching, as in his practice, he eschewed all use of "hypotheses", declaring that,

the theories and systems that are imported into all practice appear to me to have no value to medicine. Science should be established upon facts; and from these collected facts we can derive some consequences[.] But one is led into error when one finds upon these facts, perhaps not numerous, theories or systems that influence and corrupt our judgement upon what we observe. In this way one has made medicine an art; but I prefer to reject them all and to preserve it as a science.²⁷

The unnamed target of this diatribe is undoubtedly the "physiological medicine" of Broussais. Chomel had, in 1821, incurred the wrath of the Broussaisites for publishing a treatise on fevers that retained Pinel's classification and preserved the essentialist doctrine.²⁸ He remained unrepentant, however, regarding Broussais's system as incompatible with the astringent empiricism of the Parisian school.

Chomel's assertion that a reliance upon theory and system made medicine into an "art", while their eschewal rendered it a "science", inverts the distinction, made a little later in the nineteenth century, between "scientific" and "empirical" medicine. Chomel's notion of science anticipates that expounded two years later by Jules Guérin in his manifesto for an anti-systematic, yet scientific medical eclecticism.²⁹

Chomel's remarks in this introductory lecture are the only vestige of any general outlook upon medicine to be found in the manuscript. In the clinic itself he seems to have remained true to his professed empiricism and concentration upon the individual case.

²⁵ 'Introductory lecture', p. 4.

²⁶ *Ibid.*, pp. 5–6. On the *conférence* system see: Wirirot, *op. cit.*, note 11 above, pp. 176–7; Ratier, *op. cit.*, note 16 above, pp. 333–4.

²⁷ *Ibid.*, pp. 7–8.

²⁸ A.-F. Chomel, *Des fièvres et des maladies pestilentielles*, Paris, Crochard, 1821. See Jean-François Braunstein, *Broussais et le matérialisme: médecine et philosophie au XIX^e siècle*, Paris, Meridiens Klincksieck, 1986, pp. 30–1.

²⁹ *Ibid.*, pp. 93–6.

THE NATURE OF THE THOMSON MANUSCRIPT

Since the notes that Thomson took are the only extant evidence of his experience of clinical instruction in Paris, it is worth considering their physical character before analysing their content. They are written in ink on loose sheets; Thomson did not keep a notebook as such. The handwriting is neat throughout, and this, together with the fact that some pages are duplicated, indicates that this manuscript is a transcription of an earlier version. The language of the manuscript is French, in which Thomson was clearly fluent.

The great bulk of the manuscript consists of case histories. These are sub-divided into "clinics", the dates of which Thomson recorded. The cases are often also sub-divided according to the sex of the patient—the students on the same day visiting both the "*Salle des Hommes*" and the "*Salle des Femmes*". Patients are identified only by the number of their bed—Thomson made no note of their names. Interspersed among these case histories are reports of the other aspects of the course that Thomson encountered: autopsies, "*pièces d'anatomie pathologique*", and notes of *conférences*.

It will be recalled that Chomel divided his course into the "*visite*", the "*leçon*", and the "*conférence*". The character of the notes makes it highly likely that, for the most part, they represent a record of what Thomson saw and heard at the first of these episodes. The case histories read very much like jottings taken at the bedside that have later been transcribed with little alteration. A typical entry, drawn from the first proper clinic that Thomson attended, reads:

[Bed] 7. A young man. Aged 17–18 years. frequency of pulse. skin hot. great weakness. a very distinct febrile movement. these symptoms make us fear that other more serious ones will soon show themselves . . .³⁰.

We know that Thomson also attended Chomel's clinical lectures and conferences quite frequently; it appears, however, that he did not keep detailed note of what he heard there. Sometimes he merely noted that a *conférence* took place; sometimes he lists the cases that were discussed. It is possible that Thomson kept separate notes of the lectures, and that these have not survived. This is unlikely: there are notes taken at some of Chomel's lectures and at conferences in the extant manuscript. But, with few exceptions, these are not of the clinical lectures as such: they comprise the discourses that Chomel occasionally gave on the pathology of particular diseases, rather than on individual cases.

There is a striking contrast between Thomson's notes and those of a French student, L. Vieillevigne, who attended Chomel's course in 1827. Vieillevigne recorded only five cases, but in far greater detail than Thomson. The notes are much more formal in style and layout, and almost certainly represent a record of Chomel's lectures on these cases rather than of the visit.³¹ For Thomson, on the other hand, it was what Chomel did and said at the *bedside* that appears to have been most important.

³⁰ M. Chomel *Clinique Médicale*. No. 2; Thomson, *op. cit.*, note 7 above.

³¹ L. Vieillevigne, 'Observations prises à la clinique interne de l'hôpital St. Éloi. Montpellier 16 Janvier 1825. Continué à Paris à l'hôtel-Dieu sous M^r Récamier. Le 5 Avril 1826. A l'hôpital des Enfants Malades sous M^r Guercet à la Charité sous M^r Chomel', Wellcome MSS, 4935.

THE CASES

Thomson's manuscript provides a good picture of the procedure Chomel followed on his visits. Generally, he visited the male ward first, then the female. Occasionally the order was reversed; rarely he would visit only one of the two. On average, he presented some five cases a day. In all, there are 281 records: 201 male, 79 female, and 1 unknown. However, since some patients were seen at more than one clinic, the total of cases, so far as can be made out, is 157: 105 male, 51 female, 1 unknown.

A breakdown of the diagnostic categories applied to these patients is given below.

NERVOUS OR MENTAL DISORDERS

Congestion towards head: 1
Chronic inflammation *or* tumour of the brain: 1
Cerebral affection: 1
Malady of brain—nature unknown: 1
Partial paralysis: 1
Sciatic neuralgia: 1
Maladie épidémique: 11
Hysteria: 1
Mental alienation: 3
Convulsion/alienation of spirit: 1
Epileptic hysteria: 1
Epileptoid attacks: 1

FEVERS

Mucous fever of M. Pinel: 1*
Gastro-enteric fever: 1
Intermittent fever: 5
Fever: 3
Typhoid fever: 9**
* Previously diagnosed as typhoid fever.
** Two of these cases were subsequently re-diagnosed.

INFLAMMATORY DISEASES

Rheumatism: 4
Metritis: 2
Inflammation of middle ear: 1
Inflammation of tooth: 1
Peritonitis: 2
Pericarditis: 1
Effusion in pericardium: 1
Phlagoses of stomach and intestines: 4*
Ulcers *or* inflammation of intestines (and tubercles in lungs?): 1
Ophthalmia: 1
* One case re-diagnosed.

TUMOURS

Ovarian: 1
Abdominal: 1
Organic disease of stomach: 1
Cancer of intestine: 1

ABDOMINAL COMPLAINTS

Ascites: 2
Colic: *Saturnine*: 2; painters' colic: 1;
Cholic: 1
Chronic affection of liver and spleen: 1
Affection of liver: 1
Tubercles of intestine: 1

SKIN DISEASES

Variole: 1
Erysipelas: 7
Zona herpes: 4
Dartrous affection of skin *or* rheumatism: 1

RESPIRATORY DISEASES

Asthma: 1
Disease of throat: 1
Angina: 1
Tonsilar angina: 1
Oedematous angina: 1
Pneumonia: 8
Pleuro-pneumonia: 11
Pulmonary catarrh: 2
Pleurisy: 10*
Emphysema: 2; Emphysema *or* oedema: 1
Pulmonary phthisis: 4
Tubercles of lungs: 3
* One re-diagnosed.

TRAUMA

Lesion of the spinal cord and kidneys: 1
Traffic casualty: 1
Inflamed leg wound: 1

MISCELLANEOUS

Diabetes: 1
"Simple" [non-organic] jaundice: 1

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The total number of diagnoses (138) is somewhat smaller than the total of cases because no formal diagnosis is attached to some cases.

TOTALS

1. Respiratory diseases: 46 (33.33%); 2. Nervous/mental disorders: 24 (17.39%); 3. Fevers: 19 (13.77%); 4. Inflammatory diseases: 18 (13.05%); 5. Skin diseases: 13 (9.42%); 6. Abdominal complaints: 9 (6.52%); 7. Tumours: 4 (2.89%); 8. Traumatic: 3 (2.17%); 9. Miscellaneous: 2 (1.44%).

These categories are somewhat arbitrary and open to variation. The case diagnosed as “cerebral inflammation *or* tumour of the brain” could, for example, be assigned to either the category of inflammations or tumours, as well as to that of nervous diseases. More importantly, it should not be assumed that they accurately represent the general pattern of diseases within the Charité. Chomel made it clear in his introductory lecture that he exercised some discretion over which patients were admitted to the clinical wards. He no doubt sought to provide his students with a sample of typical cases, and was constrained by the kinds of patients who normally presented themselves at the hospital; but at the same time he had some discretion to pick a number of unusual, but pedagogically instructive cases.

The striking preponderance of respiratory cases may reflect the pattern of morbidity during a Paris winter. It may, however, also represent a desire on Chomel's part to provide his class with plentiful opportunities to practise auscultation, a diagnostic technique upon which he laid much stress.

The high percentage of nervous and mental diseases must also be treated with caution. Almost half of the cases that make up this group suffered from the “*Maladie Épidémique*” that afflicted Paris and its environs in 1828–9. It may even be argued that these patients do not belong in this category at all. Although Chomel regarded sensorimotor dysfunction as the leading symptoms of this disease, it is clear that he was deeply puzzled as to its nature. The identification of the *maladie épidémique* as a form of peripheral polyneuritis is a twentieth-century effort at diagnosing a nineteenth-century affection. Patients suffering from the *maladie épidémique* make up no less than 7.91% of the total in the clinic, a fact which reflected both the prevalence of the disease and the special attention that Chomel devoted to its diagnosis and treatment.

The presence of four patients suffering from some form of “mental alienation” in the clinical ward of a general hospital also deserves attention. In one of these cases, there was some doubt in Chomel's mind as to whether he was dealing with true alienation or merely a delirium attendant on a fever. Although the acute delirium had passed before the patient's admission, the mental disturbance persisted; Chomel was, however, reluctant to send him “to a hospital for the insane because of the objection that these sufferers are kept there for some time” (clinic 42, bed no. 3).

In a second case there was also the suggestion that the mental symptoms were associated with somatic disease. The patient was a boy who

has experienced a suspension of mental faculties for a few days: for a month he has experienced what are called “absences”. For 15 days he has been entirely alienated. Has experienced a delirium. But at present talks rationally of his history, but with some hesitation.

Right leg more feeble than left and two toes partially paralysed. This makes us believe that this is more than a simple mental alienation [cl. 13, no. 8b].

The third case also presented a mixture of physical and mental symptoms: the patient manifested both convulsions and “alienation of the spirit”. But in this instance Chomel held that both proceeded from a “great fright” the patient had suffered. The final case of insanity was also ascribed a psychological cause. The mental alienation was seen as the “consequence of very laborious calculation. At present has the idea that others want to punish—even to kill him. These patients often kill themselves. They always fear being arrested and being accused of all sorts of crimes.” The account of this case is one of the few in the manuscript that appears to be derived from a conference, rather than from the visit or lecture (cl. 26, no. 11).

Another surprising group to find in records from a medical ward are a number of patients suffering various injuries. The presence of one of these, an orderly at the hospital who struck his leg against a chair with subsequent inflammation of the wound, can be explained in terms of the Charité looking after its own (cl. 20, no. 5). The second case in this category, a domestic at Versailles, had suffered from menstrual irregularity for three years prior to her admission and vomited blood at the time menstruation should occur. However, these symptoms passed until, falling off a chest, she struck her lower back on an iron bar occasioning muscular spasms, retention of urine, flatulence, and momentary loss of consciousness. This could, therefore, be seen as a medical condition that had been exacerbated by injury. Chomel’s initial opinion was that there was a lesion of the spinal cord; later, upon finding blood in the urine, he inferred an injury of the kidneys. The record of this patient is of special interest because at one stage Chomel referred his students to the ward-journal account of the case, which Thomson transcribed into his notes (cls. 13, 21, 48, no. 7).

The final case was that of a man knocked down in the street by a *charette*. Chomel noted the absence of fever and concluded that “the malady is entirely local”. Presumably this was an emergency admission that had by necessity found its way to the medical clinical ward (cl. 44, no. 15).

These, however, are mere oddities. The great bulk of the clinic comprised patients suffering from some form of inflammatory or febrile disease. The nature of fevers had been a particularly sensitive and contentious question since the publication of Broussais’s *Examen* in 1816. In this work the nosography of Pinel was denounced as fundamentally flawed. Broussais denied the existence of the various species of essential fevers that Pinel had discerned, and insisted that all fevers were in fact symptomatic of inflammation of the digestive tract.³²

As mentioned above, Chomel had in 1821 maintained a conservative stance in the face of this onslaught. He gave an account of the various theories of fevers—including

³² F.-V. Broussais, *Examen de la doctrine médicale généralement adoptée, et des systèmes modernes de nosologie, dans lesquels on détermine, par les faits et par le raisonnement, leur influence sur le traitement et la terminaison des maladies, suivi d’un plan d’études fondé sur l’anatomie et la physiologie, pour parvenir à la connaissance du siège et des symptômes des affections pathologiques et à la thérapeutique la plus rationnelle*, Paris, 1816.

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Broussais's—that had been proposed over time, and drew a stolidly empiricist moral from these fluctuations in medical fashion: theories might go and come, but the “facts” of disease abided.³³

Pinel was, in Chomel's view, a model of sound medical thought and practice. But while accepting the existence of “*fièvres idiopathiques*”, he did qualify this commitment to ontology. He maintained that “to consider fevers as diseases is not to make of them particular entities. Diseases are merely modifications of life, and the existence of fevers, like that of inflammations, can only be accepted in this sense.”³⁴

In 1828 Chomel remained an ontologist: he even invoked the master's name in diagnosing one case as “mucus fever of M. Pinel rather than a local irritation” (cl. 49, no. 12). In the course of a discussion of intermittent fever he similarly distinguished this ailment from “phthisical fever”, on the grounds that the former was independent of any organic lesion (cl. 2, no. 1).

However, Chomel was not altogether indifferent to recent developments in pathological thought. During the 1820s his junior colleague at the Charité, Pierre-Charles-Alexandre Louis (1787–1872), conducted an extensive series of investigations designed to prove that many of the species of fever distinguished by Pinel and others were, in fact, all manifestations of the same disease, which Louis called “typhoid” fever. The summation of this research was published in 1829.³⁵

In his *Leçons de clinique médicale*, published in 1834, Chomel at the outset acknowledged that the maladies he had in 1821 described under the categories of “putrid”, “adynamic”, and “ataxic” fevers—along with a multitude of other denominations—were no more than “varieties of the same affection”. He also recognized that this “typhoid” fever “will occupy . . . a rank of great importance in nosology since it replaces virtually . . . an entire class of maladies.”³⁶

Triaire remarked upon Chomel's “tardy conversion” to the notion that all these fevers could be subsumed by a single clinical entity, taking this as evidence of his “traditionalist spirit”.³⁷ The Thomson manuscript reveals, however, that no later than 1828—prior to the full publication of Louis's *Recherches*—Chomel had already become converted to this view, and was using typhoid fever as a diagnostic category in his clinic. At the same time, he had occasional resort to more traditional terms, such as “gastro-enteric” and “mucus” fever, showing that his old habits died hard.

The issues raised by Louis's researches evidently sparked a special interest in Thomson. His Paris manuscripts include a summary of a somewhat critical review by Dalmas of Louis's work.³⁸ Dalmas was sceptical of the claim, advanced by Louis, that a lesion of the Glands of Peyer was a constant feature of typhoid fevers: he cited

³³ Chomel, op. cit., note 28 above, p. 197.

³⁴ Ibid., p. 6n.

³⁵ Pierre-Charles-Alexandre Louis, *Recherches anatomiques, pathologiques et thérapeutiques sur la maladie connue sous les noms de gastro-entérite, fièvre putride, adynamique, ataxique, typhoïde, etc. etc.*, 2 vols., Paris, J. B. Baillière, 1829.

³⁶ A.-F. Chomel, *Leçons de clinique médicale, faites à l'Hôtel-Dieu de Paris*, 3 vols., Paris, Baillière, 1834, vol. 1, pp. 1–2.

³⁷ Triaire, op. cit., note 8 above, pp. 337–8.

³⁸ ‘Review of the work of Louis on the gastro-entérite fièvre. Adynamique ou ataxique par Dalmas. Journal hebdomadaire’, in Thomson, op. cit., note 7 above.

among other instances the fact that in cases reported in England and Ireland, these ulcerations occurred only occasionally, while “in Edinburgh they have not been found”.³⁹ A case discussed late in the clinic, described below, reveals that Chomel too was concerned with this question.

Thomson’s presence in Paris thus allowed him to observe the latest debates in medical science. On Chomel’s wards he had the opportunity to witness the application of new diagnostic categories at the bedside. But perhaps of more importance was the chance that attendance at the clinic of the Charité afforded of learning new *methods* of diagnosis.

DIAGNOSIS

Reiser has portrayed the eighteenth century as a time of transition between the era when diagnosis was made on the basis of the patient’s account of his symptoms and the later period when physical examination was the principal source of knowledge.⁴⁰ The methods of diagnosis employed in the Royal Infirmary of Edinburgh in the second half of the eighteenth century appear to confirm this assessment. There the term “examining the patient” was “applied primarily to what is now considered clinical history taking, not physical examination”.⁴¹

How far diagnostic practice in Edinburgh changed in the first third of the nineteenth century can be gauged by a comparison with the clinical teaching in the Infirmary in 1837. By that date percussion and auscultation were routinely practised by the professors. The terminology employed in association with these techniques gives unequivocal evidence of whence they came: when Scottish physicians listened to the chests of their patients the sounds they heard were French—albeit somewhat Latinized.⁴²

The high priest of auscultation was Laennec; and its temple was the Charité. It was there that Scottish students flocked to learn at the bedside what could not be conveyed by the printed word alone. In the 1826 edition of his work on mediate auscultation, Laennec singled out a number of his disciples from Edinburgh for special note.⁴³

Chomel, as Laennec’s immediate successor at the Charité, attempted to keep faith with both the spirit and the letter of his predecessor’s doctrines. It is even possible to indicate the moment when Chomel became a convert to the new method. The 1817 edition of Chomel’s *Éléments de pathologie générale* reveal him as fundamentally wedded to the diagnostic practices of the previous century, while not oblivious to new trends.

At the outset of his discussion of diagnosis, Chomel distinguished between the “symptom” and the “sign”. The difference he saw between them was not, however,

³⁹ *Ibid.*, p. 7.

⁴⁰ Reiser, *op. cit.*, note 19 above, p. 22.

⁴¹ Guenter B. Risse, *Hospital life in Enlightenment Scotland: care and teaching at the Royal Infirmary of Edinburgh*, Cambridge University Press, 1986, p. 258.

⁴² ‘Clinical medicine from lectures by Professor Christison. Alison. Graham, and Trail,’ Edinburgh University Library MSS, Dc. 3. 220, pp. 145–6.

⁴³ R.-T.-H. Laennec, *Traité de l’auscultation médiate et des maladies des poumons et du coeur*, 2nd ed., 2 vols., Paris, J.-S. Chaudé, 1826, vol. 1, pp. xvii–xix.

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the familiar one between the subjective account of the patient and the objective evidence available to the physician. The symptom was defined as “every change perceptible to the senses, in whatever organ or function, and connected with the existence of a disease”. The sign, on the other hand, was

a phenomenon perceptible to the senses, which leads to knowledge of more hidden facts; it is a conclusion that the mind [*l'esprit*] draws from the symptom, while the symptom is simply a perception. The one pertains more to the judgement, the other to the senses. The symptom is appreciable to all the world; the physician alone can discover the signs within the symptoms.⁴⁴

To recognize aright the signs of an illness the physician required a thorough grounding in pathological theory. No less important, in Chomel's view, was “the habit of seeing patients; he who possesses a thorough knowledge of the theory of disease, but who has not for a considerable period applied this knowledge at patients' bedsides will be incapable of a precise recognition of diseases”. There was an ineffable component to the diagnostic art that could only be transmitted to the acolyte by an “experienced physician” in the clinical context. Chomel quoted with approval the dictum of Gaspard-Laurent Bayle, that “there is in the art of diagnosis, as in prognosis, something that cannot be transmitted by words nor by writings”.⁴⁵

This may appear as evidence of a novel insistence upon the centrality of clinical instruction in medical education. But in the detailed discussion of diagnostic methods that follows, Chomel remained largely a traditionalist. He placed great stress upon what the physician could learn about the patient by the first “*coup d'oeil*”: often this was itself enough to provide the basis of a diagnosis, permitting the clinician to “dispense with a multitude of useless questions”.⁴⁶

The patient's physiognomy, posture, movements, and voice therefore supplied the diagnostician's primary data.⁴⁷ The medical gaze was not, however, always sufficient in itself to arrive at a satisfactory diagnosis. At the same time as his eyes devoured these phenomena, the physician should commence to ask questions. Chomel went into some detail as to how these should be framed so as to avoid leading the patient, and stated the order in which they ought to be asked. Professional prestige as well as clinical acuity appeared to depend upon the physician's proficiency in interrogation: “it is important to the doctor”, Chomel maintained, “for the sake of his own reputation, to introduce the greatest possible order into the manner in which he questions patients; for, in general, it is on that [*là*] that his colleagues will judge him.”⁴⁸

Despite this emphasis upon what could be learned at first glance and from the patient's own words, Chomel was not oblivious to the possibilities of physical examination. He mentioned the utility of measuring such physical signs as respiration and pulse to establish the amount of their deviation from the physiological norm.

⁴⁴ A.-F. Chomel, *Éléments de pathologie générale*, Paris, Crochard, 1817, pp. 127–8.

⁴⁵ *Ibid.*, p. 390.

⁴⁶ *Ibid.*, pp. 392–5.

⁴⁷ *Ibid.*, pp. 130–1.

⁴⁸ *Ibid.*, pp. 395–6.

Chomel provided the physician with a detailed description of how the pulse, in particular, should be taken.⁴⁹ He also gave some attention to the value of percussion in distinguishing between various affections of the chest; curiously, however, he did not mention in this context the “*son mat*”, the oft-cited sign of a pleural effusion.⁵⁰

When other body cavities were affected, direct investigation was also recommended. If

the local symptoms have their seat in the back of the mouth, in the nasal fossae, in the auditory meatus, in the rectum, in the vagina, etc., one should equally examine these parties by means of sight and touch; probes [*sondes*] and stylets should be employed in the exploration of organs where the finger cannot be introduced.⁵¹

The bodily secretions and excretions could also supply valuable evidence as to the nature of a disease. The sputum should be examined in cases of respiratory complaint. The quantity and quality of the urine offered numerous clues in a wide variety of ailments.⁵²

In this 1817 text Chomel appears more a physician of the eighteenth than of the nineteenth century. Despite his acknowledgement of the value of certain forms of physical examination, the essential bedside technique that he enjoined consisted of looking, talking, and listening. In many cases, he suggested, the first alone sufficed to reach a diagnosis, and the laying on of hands was otiose. In others, however, “a co-operation of the eyes and of the hand” was required.⁵³

By the date of the appearance of the second edition of Chomel’s *Éléments*, in 1824, a major shift had occurred. The introduction of auscultation caused Chomel to revise his views on diagnostics most.

He was fulsome in his praise of the “inventor” of the technique by whose efforts auscultation “seems to have been carried to the pinnacle of perfection of which it is susceptible: this circumstance is all the more remarkable as only a few years have elapsed between the discovery and the publication of this mode of exploration.”⁵⁴

Chomel distinguished between mediate and immediate auscultation, giving detailed accounts of both the design of the stethoscope and the manner in which it should be employed. He maintained, however, that the advantages of mediate over immediate auscultation were not as absolute as some of the enthusiasts for the stethoscope argued. For his own part, “I prefer in almost every case to place the ear on the patient’s chest.” He had followed this practice for two years, and, while he did not contend that the results it produced were superior to those obtained with the stethoscope, he did insist that he had “constantly recognized by means of immediate auscultation, in all the patients in my wards, the same phenomena heard by means of the stethoscope by persons most experienced in the use of this instrument. All the species of *râle*,

⁴⁹ *Ibid.*, pp. 216–7, 236–8.

⁵⁰ *Ibid.*, p. 153; see also pp. 399–401.

⁵¹ *Ibid.*, p. 402.

⁵² *Ibid.*, pp. 227–33, 286–9.

⁵³ *Ibid.*, p. 398.

⁵⁴ *Ibid.*, 2nd ed., 1824, p. 461.

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oegophony, pectoriloquy, are as manifest to the naked ear as they are with the aid of the stethoscope.”⁵⁵

The only instance when mediate auscultation was to be preferred was when the “walls of the chest are considerably infiltrated: the pressure exerted by the stethoscope displaces the serosity and permits a better appreciation of the phenomena occurring in the cavity of the chest.” In general, however, Chomel suggested that mediate should supplement immediate auscultation—and vice versa—only when there was some element of doubt as to what was heard.⁵⁶

There are 66 references to the use of auscultation in the Thomson manuscript. Unfortunately, there is nothing there to indicate whether this was of the mediate or immediate variety. Chomel's comments in 1824 would lead one to expect him to rely upon immediate auscultation in all but a few cases. There is, however, in Vieilleigne's account of Chomel's 1826 course, a reference to failure to “stethoscope” a patient on one occasion because of excessive moisture on the body,⁵⁷ which implies that mediate auscultation was sometimes employed on Chomel's wards by this date.

Percussion is stated to have been used in conjunction with auscultation in 18 of these 66 instances (27.32%). The percentage in which these two techniques were combined is, in fact, probably higher: when only one is specified, information derived from the other is often implied. The same inference is valid for the four instances when percussion of the chest without auscultation is recorded. By far the commonest sign elicited by percussion was the “*son mat*”, which in conjunction with respiratory râles served to establish the existence of a pleuro-pneumonia.

In addition, there are three allusions to percussion of the abdomen. In the first of these, in which the diagnosis was of peritonitis, a “considerable sound” was obtained (cl. 3, no. 4). In the second no final diagnosis is recorded. The symptoms seemed to indicate gastritis; but the patient's general condition suggested that there was “something more”. Percussion of the abdomen revealed the sound a “little clear” beside the liver. In this instance, auscultation of the chest was also performed (cl. 43, no. 22). The third case was one of typhoid. Here percussion of the abdomen was painful, and produced a dull sound which was ascribed to the presence of the liver at that point (cl. 54a, no. –). Auscultation of the abdomen was performed in one case of pneumonia accompanied by gastritis, but with no result (cl. 22, no. 23).

The terminology Chomel employed to classify and interpret the various sounds yielded by auscultation was that devised by Laennec. The “*râle crepitant*” or “*crepitation*”—a sign of pneumonia—appears 26 times. Occasionally, its quality is specified by means of a simile: the crepitation is like “the tearing of a taffeta”, (cl. 27, no. 20) or “exactly like the crepitation of salt” (cl. 54, no. 22). Terms such as *râle muqueux*, *râle sibilant*, bronchophony, oegophony, appear much less frequently. “*Tintement métallique*”, is mentioned on three occasions, all relating to the same case: it is regarded as a sure sign of tubercles in the lungs (cls. 17, 15, 20, no. 22). On one occasion, the *tintement* was “like a drop of water falling into a metallic vase”; another

⁵⁵ *Ibid.*, pp. 461–5. Chomel's preference for immediate auscultation in his clinic is confirmed by Ratier, *op. cit.*, note 16 above, pp. 169–70.

⁵⁶ Chomel, *op. cit.*, note 44 above, pp. 465–6.

⁵⁷ Vieilleigne, *op. cit.*, note 31 above, p. 98.

day it was more “like the plucking of a violin string”. “Whistling” (cl. 17, no. 3) and “gurgling” (cls. 24, 44, 51, 58, nos. 10, 14, 10, 18) were also taken as evidence of the same disease. A “*râle sibilant*”, on the other hand, Chomel told his students, was a sign of typhoid fever (cl. 37, *conférence* on typhoid fever; see also cl. 42, no. 12).

What emerges from Thomson’s account of the clinic is that, although Chomel made extensive use of auscultation in diagnosing respiratory complaints and had imbibed much of the jargon that accompanied this technique, he was relatively modest in the demands he made of the method and parsimonious in the terms he employed. This is all the more noticeable since some supporters of auscultation were engaged in an attempt to refine the technique to an extraordinary degree.⁵⁸

Moreover, while impressing the value of auscultation upon his students, Chomel also pointed out to them its limitations. Thus in one case of pneumonia he declared that “auscultation has alone demonstrated certainly the nature of this malady. Without it one could have suspected, but not affirmed it” (cl. 25, no. 20). In a case of phthisis, however, auscultation might reveal the presence of tubercles in the lung, but “these sounds do not allow us to distinguish the species of lesion that exists or [to establish] in what state the tubercles are at the moment and we also believe that this sign will be very useful” (cl. 15, no. 22). Auscultation was also fallible in cases of pneumonia where the inflammation was central or at an early stage (cls. 22, 53, nos. 20, 5c). In another case, which had terminated in death, auscultation had revealed nothing that could explain the dyspnoea exhibited by the patient (cl. 45, no. 22).

Chomel’s general conclusion was that auscultation could not be regarded as a certain nor as a self-sufficient technique; it must be employed in conjunction with more traditional methods. In phthisis, for instance, when blood was found in the sputum, “we can fear the existence of tubercles in the chest. However neither percussion nor auscultation makes us aware of any organic lesion of the lungs, but it is necessary to observe that often it occurs that auscultation and percussion show nothing a long time after the existence of tubercles has been established by general symptoms” (cl. 55, no. 8; see also cl. 41, no. 8). Nor could apparently favourable signs supplied by auscultation overturn a gloomy prognosis founded upon the other symptoms (cl. 31, no. 18).

Auscultation, together with percussion, thus loomed large in Chomel’s teaching. It is plausible to suggest that the opportunity of observing the practice of these techniques by Laennec’s immediate successor was one of the major attractions of the course for foreign students. However, it would be a mistake to maintain that Thomson and many other Scots of his generation went to Paris in order to learn how to auscultate or percuss the chests of patients.

Percussion had not been unknown to Edinburgh practitioners of the eighteenth century: Monro *secundus* had experimented with the technique.⁵⁹ The method did not, however, achieve widespread acceptance; there is no trace of its

⁵⁸ See Reiser, *op. cit.*, note 19 above, pp. 34–5.

⁵⁹ Christopher Lawrence, ‘Ornate physicians and learned artisans: Edinburgh medical men, 1726–1776’, in Bynum and Porter, *op. cit.*, note 3 above, pp. 153–76, on pp. 166–7.

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employment in clinical teaching at the Royal Infirmary in a set of notes dating from 1815–16.⁶⁰

In contrast, once auscultation had been introduced from the Continent it rapidly established itself among the élite practitioners of Edinburgh. A manuscript of 1825 shows that auscultation was practised—although perhaps was not yet routine—in the Royal Infirmary by that date.⁶¹ Moreover, the journal literature indicates that the technique was also employed in cases of respiratory disease presenting on the clinical wards. In one of these James Gregory—a Physician to the Infirmary—declared that: “There are few public hospitals in this country in which auscultation and percussion are not more or less employed; and I believe I may say, that there are very few among the intelligent students frequenting our hospitals who do not seek to make themselves acquainted with the principal indications which they afford.”⁶²

We know that Allen Thomson was one such “intelligent student” who was already versed in the arcana of auscultation before attending Chomel’s course. He came to Paris in the summer of 1828 and performed a number of autopsies at the Charité; and the case histories that accompany these reports include accounts of both auscultation and percussion. It is impossible to be certain whether Thomson performed these operations himself or merely copied the notes of others; his account does, however, reveal a pre-existing familiarity with the terminology and significance of the signs elicited by these techniques.⁶³ Thomson may have acquired this familiarity from his elder brother William, who had been in Paris in the early 1820s and employed auscultation in his own practice.⁶⁴

Chomel’s course cannot, therefore, be regarded as an initiation into the techniques of auscultation for Thomson. It is better regarded as an *école de perfectionnement*: an opportunity to refine skills acquired in his native land in the centre where the new methods had originated.

As noted above, Chomel had in 1817 maintained that the physician must explore the other cavities of the body with both hand and eye when he suspected them as the seats of disease. The Thomson manuscript shows that this rule was applied by Chomel on his clinic, especially in the case of gynaecological complaints. There are six descriptions of examination *per vaginam*. In the case of a woman whose periods had been suppressed for 15 days and who suffered from abdominal and febrile symptoms, peritonitis was excluded on the grounds that she was able to sit up without difficulty. “The finger introduced into the vagina occasions no pain until it touches the uterus, but the neck of the uterus is very sensitive and apparently inflamed.” Chomel evidently concluded that this was a case of metritis, and instituted an antiphlogistic treatment (cl. 10, no. 11).

⁶⁰ Robley Dunglison, ‘Clinical cases and dissections with remarks by Jas. Home MD Profr. of Clinical Medicine in the University of Edinburgh, 1815–16’, College of Physicians of Philadelphia MSS 10a 143. This document is discussed in Mary Jeanne A. Jones and Chalmers L. Gemmill, ‘The notebook of Robley Dunglison, student of clinical medicine in Edinburgh, 1815–1816’, *J. Hist. Med.*, 1967, 22: 261–73.

⁶¹ ‘Case book, 1819–1825’, Dept. of Anatomy, University of Edinburgh, p. [8].

⁶² J. C. Gregory, ‘On the diagnosis of the diseases of the lungs and pleura’, *Edinb. med. surg. J.*, 1830, 34: 24–56, on p. 27.

⁶³ ‘Dr Allen Thomson’s notes of his drawings’, Carswell Papers, Edinburgh University Library MSS, Gen. 591, No. 12.

⁶⁴ William Thomson’s Parisian experiences are recorded in the Carswell Papers, *ibid.*, vol. 1, pp. 100ff. See also *Edinb. med. surg. J.*, 1835, 43: 285–7.

On two occasions, vaginal examination was accompanied by examination *per rectum*. The first of these was also an inflammatory complaint, and the aim of the examination appears to have been primarily to establish the seat of the phlogosis (cl. 27, no. 3). In the second case haemorrhages made Chomel suspect a cancer of the uterus; however, "A finger introduced into the vagina has found the neck of the uterus entirely healthy; nor [is anything found] in the body of the same organ examined through the rectum. It could nevertheless be the case that an affection exists without touch giving the evidence of it." (cl. 52, no. 14).

There is, in contrast, only one record of Chomel looking down a patient's throat to make a diagnosis. As well as cephalgia and febrile symptoms, the patient suffered from "Much difficulty in speaking. Throat diseased. Swelling at the bottom of the mouth—the passage almost blocked . . . The tonsils are hard, thus there is pus within." (cl. 44, no. 1).

There is no indication in these accounts that any special instrument was used in making these examinations: Chomel appears to have relied solely upon his hand. Indeed, the only piece of medical technology described in the manuscript is an instrument for measuring the chests of patients to establish whether there was any lateral assymetry. Thomson made a line drawing of this device (cl. 53, no. 2).

As well as these attempts to probe the body's orifices, Chomel also sought to localize diseases by touching its surface; this method was resorted to, in particular, in affections of the abdomen. When a man was admitted with a distended abdomen and the symptoms of jaundice, Chomel found a

Tumour in the abdomen which descends as far as the antero-superior spine of the innominate bone rises by an arch and descends in the right hypochondrial region. What organ forms this tumour[?] the tumour on the left side appears to us to be formed by the spleen while that of the right side is the liver. Between the two there is a groove. The spleen appears to be in front of the liver. On pressing upon the abdomen equally one does not feel the border of the liver but one easily feels the angular border of the liver when one presses with the fingers. The left lobe appears to be the principal seat of the tumour. The inferior parts of the left abdomen giving a dull sound another sign of the augmentation of the volume of the spleen.

.....
Swelling of the wall of the shanks and a little of the thighs. And I believe that there is a little liquid in the abdomen. Sensation of undulation very faint. Obscure sound of the lower abdomen. Skin very yellow. Jaundiced.

Having demonstrated what could be established by means of palpation of the abdominal organs, Chomel proceeded to the interpretation of this data. The essential question in this case was whether the swelling was due simply to a hypertrophy or to a neoplasm in the abdomen:

Is there a simple augmentation of volume? Or an organic degeneration. Cancerous? Several circumstances lead me to believe that there is a simple augmentation of volume—at least there is not a cancerous or tuberculous affection. There is no unevenness in the surface of the two organs. The age of the man [27] is not that in which one sees cancers. Also the simultaneity of the affection of the liver and of the spleen. The man did not have fits of fever prior to his jaundice only afterwards.

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Chomel's verdict was that this was a "chronic affection of the liver and spleen" (cl. 38, no. 17; the diagnosis is recorded at cl. 43).

In the above case, the condition of the excretions was also noted: the urine was of a "morbid" black colour, while the faeces were ashy white. However, what is remarkable about the manuscript is how little weight is, in general, attached to evidence of this kind. The condition of the stools is mentioned on only two other occasions in the course of the clinic (cls. 30, 48, nos. 7, 22), while prolonged absence of defecation is referred to on three occasions (cls. 13, 41, 51, nos. 6, 22, 14).

The amount of urine is noted eight times; its character is described on seven occasions. These are small numbers; they are made still more remarkable by the fact that four of the eight quantitative statements and four of the qualitative refer to the same patient.

This was the sole case of diabetes in the clinic. Chomel devoted extraordinary attention to this patient, making of him a showpiece of the appliance of diagnostic and therapeutic principles. The first mention of the case was on 18 November 1828; the history is given in unusual detail. The 51-year-old patient had suffered from polyuria for two years, and had previously been treated unsuccessfully in Montpellier. He had lost much weight and was currently micturating 20 times a day, producing around 4 pints (cl. 6, no. 9).

Chomel held that, before any treatment could commence, it was necessary to establish the "quantity". What he meant by this was made clearer at the clinic on 21 November, when he declared "we are going to find in the first place the relation between the quantity of urine and what he drinks before commencing treatment." (cl. 8, no. 9). Five days later the results of this investigation were announced: the mean quantity of urine passed over a three day period was 3.25 litres; the amounts per day being 2.5, 3.5, and 4 litres. Despite the declared aim of the exercise, the amount of fluid intake is not recorded.

What does make this record remarkable is that, as well as measuring the urine produced by this patient, Chomel subjected it to chemical analysis. The first result of this was the startling fact that the urine contained "a certain amount of urea"; it also appeared acid after being kept for a time (cl. 12, no. 9). These researches continued in later clinics: on 2 December it was reported that sugar had not been found in the urine (an observation which, if accurate, would rule out diabetes mellitus)—"in effect, the urine offers nothing remarkable." (cl. 16, no. 9). The final reference to the case was on 9 December, when the urine was said to have decreased a little and to be somewhat ammoniacal (cl. 21, no. 9).

The relative neglect of the excretions in diagnosis is remarkable in view of the fact that so much attention was paid by clinicians of an early period to the faeces and urine. Uroscopy, in particular, had been developed into a fine art by medieval practitioners; and even in the eighteenth century great emphasis was placed upon inspection of the patient's urine.⁶⁵

Chomel had, in 1817, devoted considerable attention to the value of urine as a diagnostic indicator. By 1828, however, he seemed largely indifferent to its uses.

⁶⁵ Reiser, *op. cit.*, note 19 above, pp. 122–3.

While there are a few references to such traditional signs as the colour of the urine, he subjected it to special scrutiny in only one case. Moreover, the form that the scrutiny took in that instance was not the traditional one of uroscopy, but a more “modern” form of quantitative and chemical analysis. Such investigations of urine in diabetes had eighteenth-century antecedents.⁶⁶ A more immediate stimulus to Chomel’s efforts may have come from the publication of Bright’s investigations on albuminuria in 1827.⁶⁷ Whatever the source, Chomel’s procedure in this case looks forward to the clinical chemistry of the later nineteenth century rather than back to the practice of the eighteenth.

The state of the blood also figures as a diagnostic sign in the clinic. There is, however, no attempt to emulate the efforts of Hewson to specify the chemical and microscopical characteristics of this fluid in disease.⁶⁸ Instead, Chomel referred on seven occasions to the inflammatory “*couenne*”, or buffy coat, found on blood that had been drawn from patients. Occasionally, fine distinctions were drawn between “pleuritic” and “pneumatic” curds (cls. 25, 54, nos. 20, 22).

The sputum was examined 20 times in connection with respiratory diseases. Its quantity, colour, and effervescence were noted, as was the presence of blood. Chomel felt able to distinguish “phthisical”, “pleuritic”, and “pneumonic” forms of sputum (cls. 24, 22, 14, nos. 12, 20, 8).

The patient’s pulse was noted on 40 occasions. Chomel counted the pulsations rather than giving a qualitative account of it in the eighteenth-century manner. Respiratory rate was also occasionally measured: there are 12 records of it in the manuscript. While discussing a case of double pneumonia, Chomel advised his students that “To count the respiration of such a patient it is necessary never to permit him to see what we are doing for once the patient sees it his respiration changes.” (cl. 5, no. 19).

The overall impression of diagnosis on Chomel’s clinic given by the Thomson manuscript is one in which physical diagnosis played a predominant role at the expense of mere history-taking and reliance upon the *coup d’oeil*. It should be borne in mind, however, that this is merely one account of the experience of clinical instruction at the Charité in the 1820s—one that is selective in what it chooses to record. The Vieillevigne notebook gives exhaustive case histories and pays far more attention to such considerations as physiognomy than does Thomson’s.

These divergences may derive, in part, from the different stages of the course that the two manuscripts appear to record. Chomel may have expatiated at greater length on such matters as past history at the clinical lecture than at the visit. Such discrepancies in record-keeping are a salutary warning of the dangers involved in assuming that the “reality” of the clinical experience can be derived in an unproblematic way from surviving documents.

⁶⁶ *Ibid.*, p. 126.

⁶⁷ See Steven J. Peitzman, ‘Bright’s disease and Bright’s generation—toward exact medicine at Guy’s Hospital’, *Bull. Hist. Med.*, 1981, 55: 307–21.

⁶⁸ William Hewson, *An experimental inquiry into the properties of the blood. With remarks on some of its morbid appearances: and an appendix, relating to the discovery of the lymphatic system in birds, fish, and the animals called amphibians*, London, T. Cadell, 1771.

AUTOPSY

In his *Éléments de pathologie générale*, Chomel had expatiated upon the advantages to be derived from the pursuit of pathological anatomy. He went on to provide a detailed protocol to be followed in all autopsies.⁶⁹ The same stress upon the importance of autopsy is also found in Chomel's introductory lecture at the Charité in 1828; and the Thomson manuscript contains accounts of 14 post-mortem examinations performed during the 1828–9 session.

Thomson's descriptions are generally sketchy, apparently belying the elaborate ritual that Chomel had set down in 1817. However, the autopsy reports found in the Vieillevigne manuscript are much fuller and show that Chomel did perform these examinations with great attention and rigour.⁷⁰

The "*ouvertures*" described by Thomson can be divided into three categories: those whose aim was merely to establish the cause of death; those with a "clinico-anatomical" rationale; and those performed with a more pathological interest. The first autopsy reported is of a patient who had been diagnosed as suffering from pleurisy: the post-mortem examination merely gave evidence of a perforated intestine. This suggests a necroscopy undertaken merely to explain a sudden and unexpected death (cl. no. 2).

Other autopsies were undertaken to check the results of physical examination, especially of auscultation and percussion. Thus a patient who had been diagnosed as suffering from pleuro-pneumonia by this method was autopsied on 1 December for this purpose. It was noted that the inferences made at the bedside on the basis of percussing the chest, that the pneumonia was located in the posterior part of the lung and that pleural effusion had occurred, were corroborated by the post-mortem appearances (cl. 15, no. 8). The autopsy could also correct suppositions made at the bedside. At an examination performed on 15 December, it was noted that "*tintement métallique*" had been heard during life; but the autopsy forced Chomel to admit that he had been mistaken in his assessment of what caused this phenomenon (cl. 25, no. 22). Chomel also drew his students' attention to the way in which more obvious symptoms—such as diarrhoea and ascites—were to be explained by reference to organic lesions found after death (cl. 42, no. 14).

The strictly clinico-anatomical interest sometimes shaded into more purely pathological concerns. At one time there were two cases of jaundice in the clinic. Chomel distinguished between the two cases on the ground, that one was suffering from a "simple"—that is, non-organic—affection, while the other was afflicted by an abdominal tumour which impeded the flow of bile. When the latter patient died, autopsy showed that the biliary channels were indeed blocked; thereby both Chomel's clinical diagnosis and his pathological distinction seemed to be confirmed (cls. 45, 48, nos. 17, 24).

The pathological interest was more clearly uppermost in the examination of one of the victims of the mysterious *Maladie épidémique*. In this instance, nothing was found "in the brain or spinal cord that could explain the symptoms of the epidemic disease from which she suffered" (cl. 30, no. 1).

⁶⁹ Chomel, *op. cit.*, note 44 above, pp. 441–68.

⁷⁰ Vieillevigne, *op. cit.*, note 31 above, pp. 88–9.

Another autopsy appeared to challenge a recently-advanced pathological doctrine. When a boy suffering from “typhoid fever” died, his body was opened on 19 January. What was

quite remarkable in the autopsy is that the affection of the Glands of Peyer that M. Louis has described as the constant lesion in this malady was not found. The patches of glands are easily perceived, but also appear as healthy as the other parts of the intestine, which are a little red. And yet I cannot believe that M. Louis could call the malady with which this young man was afflicted a simulated typhoid affection, for his symptoms were very well marked. [Monday 19 January].

This apparent anomaly was only partially solved on 23 January, when Chomel announced that he had preserved this patient’s intestine and could now find traces of an affection of the Glands of Peyer (cl. 49, Pieces of Pathological Anatomy).

Clinical lecturers of this period were sometimes chided for delivering what were, in fact, pathological discourses.⁷¹ Chomel himself was open to this charge. These were signs of times in which the status of pathology and its relations with clinical medicine were still in the process of definition.⁷² The gamut of questions that Chomel attempted to answer by autopsy—which ranged from the establishment of one patient’s cause of death to the confirmation of claims concerning the lesions invariably associated with a particular disease—illustrate the diversity of concerns comprehended by the “clinic” in an era before firm inter-disciplinary boundaries had become established.

THERAPY

Therapeutics was a subject of fierce controversy throughout western Europe and America in the first third of the nineteenth century. Two universalist sects claimed to have grasped principles of treatment applicable to all forms of disease. Although Brunonians and Broussaisites differed in their pathological theories and therapeutic recommendations, they shared this fundamentalist and reductionist approach to treatment.⁷³ Superimposed upon the debates between these sects, and between their proponents and those who accepted neither group’s assertions, was a more general dispute about the efficacy of medical intervention. A rift emerged between advocates of “heroic” therapies and those who were pessimistic about the physician’s power to intervene to alter the course of disease. The latter group stressed the far greater significance of the *vis medicatrix naturae* in the resolution of disease.⁷⁴

⁷¹ Wiriot, *op. cit.*, note 11 above, p. 147.

⁷² See Maulitz, ‘Channel crossing’, *op. cit.*, note 1 above, pp. 477–9.

⁷³ On Brunonianism see: G. B. Risse, ‘The Brownian system of medicine: its theoretical and practical implications’, *Clio medica*, 1970, 5: 45–52; *idem*, ‘The quest for certainty in medicine: John Brown’s system of medicine in France’, *Bull. Hist. Med.*, 1971, 45: 1–12; *idem*, ‘Scottish medicine on the Continent: John Brown’s medical system in Germany, 1796–1806’, *Proceedings of the XXIII International Congress of the History of Medicine*, vol. 1, pp. 682–7; and W. F. Bynum and Roy Porter (eds.), *Brunonianism in Britain and Europe*, *Medical History Supplement* 8, London, Wellcome Institute, 1988. The best discussion of Broussais is in Braunstein, *op. cit.*, note 28 above.

⁷⁴ On this concept see: Max Neuburger, *Die Lehre von der Heilkraft des Natur im Wandel der Zeiten*, Stuttgart, Ferdinand Enke, 1926.

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John Harley Warner has recently described how, in the debates between therapeutic activists and moderates in the United States, Parisian medicine was identified as a source of therapeutic scepticism.⁷⁵ Ratier's account of Chomel's attitudes to therapy would appear to put him firmly in this sceptical tradition.⁷⁶ A closer examination reveals, however, much greater complexity in Chomel's theoretical position.

Chomel's stance in these controversies, as in so much else, was that of a medical eclectic: someone who sought to take what was, in his view, true and useful from each of the competing schools while rejecting all claims to exclusiveness. This attitude was evinced in his 1817 discussion of the relative role of the physician and of "nature" in the cure of disease. He adopted a Hippocratic posture which apparently conceded the major claims of therapeutic nihilists; most diseases, he agreed,

are susceptible of cure without active treatment, by the beneficence of nature alone: none can be cured by the sole means of art. Quinine and the mercurials, which have been rightly regarded as the most heroic means possessed by medicine, remain ineffective when nature does not respond to their action In surgery as in medicine therapeutics can do no more than modify the laws of life, to favour the action of nature that alone can return the inflamed organ to the state of health, cicatrize the edges of a wound, and unite a broken bone.

Therapy, properly understood, was therefore no more than "the art of modifying the intimate actions of organs, to obtain the cure or relief of maladies".⁷⁷

But this was not, Chomel insisted, to assert that therapeutic means had no role in the curative process. Neglect of these resources could allow mild ailments to develop into grave ones, while serious diseases left untreated could lead to death. Moreover, some illnesses, such as syphilis and the *choliqne des peintres*, could be cured only by the physician's efforts. What had to be understood was that remedies did not act directly upon a disease; they had their effect by modifying the bodily economy in a favourable manner. Chomel concluded by adopting a typically centrist position: he distanced himself as much those "who give the exclusive honour of curing either to art or to nature[;] we believe that the concurrence of both is always useful and sometimes indispensable."⁷⁸

Chomel's assessment of Brunonianism was similarly equivocal. He saw much value in a stimulant strategy in some cases of adynamic fever. He objected, however, to the assumption that stimulation was always the treatment to be adopted. Chomel claimed that even the Brunonian Razori had come to recognize the fatuity of this claim.⁷⁹

Chomel's attitude to Broussaisism might be expected to be more straightforward: the antagonism between him and Broussais has already been noted. But although Chomel rejected Broussais's medical absolutism along with all others, in practice the divergence of the two on therapeutic indications was not as wide as might be

⁷⁵ Warner, *Therapeutic perspective*, op. cit., note 2 above, pp. 24–31.

⁷⁶ Ratier, op. cit., note 16 above, pp. 331–2.

⁷⁷ Chomel, op. cit., note 44 above, pp. 470–1.

⁷⁸ *Ibid.*, pp. 471–2.

⁷⁹ Chomel, op. cit., note 36 above, pp. 453–4.

imagined. In his discussion of the treatment of typhoid fever, for example, Chomel distinguished a class of “inflammatory typhoid” in which “anti-phlogistic treatment should be employed with more or less energy”.⁸⁰ While he might reject the theoretical underpinning of Broussais’s therapies, in some cases Chomel’s practice was similar to that of his great enemy.

The difficulties of achieving an easy categorization of Chomel’s position on therapeutics are compounded when we pass from his published works to what he actually did to his patients, in so far as this can be gleaned from the Thomson manuscript. In Thomson’s account, Chomel emerges as a therapeutic activist. On only two occasions did he advocate an expectant policy (cls. 18, 28, nos. 4, 21). Nor is there much evidence of pessimism as to the value of the resources available to the physician. In the case of a man whose ileum appeared to have ruptured, Chomel conceded that “the resources of medicine are very limited in these cases and probably this man will be dead tomorrow.” (cl. 9, no. 21). He did admit, however, that some of the remedies he administered were no more than palliatives (e.g., cl. 12, no. 9).

By far the commonest remedy to which Chomel had resort was bleeding; this was his standard response to the large number of febrile and inflammatory disorders admitted into the clinical ward. The implicit rationale of this therapeutic strategy was the assumption that fever was symptomatic of a systemic over-excitation, which demanded an “antiphlogistic” therapy. Thus bleeding was “clearly indicated” in the case of a patient showing the signs of an early pneumonia (cl. 40, no. 5). A timely bleeding might have a prophylactic effect in an incipient typhoid (cl. 33, no. 14), whereas it might do little good in the late stages of the fever (cl. 4, no. 24). Nevertheless, Chomel on occasion persisted in this depletive treatment even when earlier bleedings had done no good and the patient was clearly sinking (cl. 54, no. 16).

The rationale of bleeding in cases of local inflammation was that the affection was the result of a plethora of blood at a given site. Erysipelas, for example, was due to a “congestion” of the head to be relieved by bleeding from the arm (cl. 3, No. 10). Cephalgia too was ascribed to such a congestion, and treated by bleeding from the foot (cl. 12, no. 26). Bleeding could also serve to supply the failure of a natural evacuation: in cases of suppression of the periods leeches were applied to draw off the excess blood. On one occasion, Chomel explicitly stipulated that their application should be frequent “as if to imitate the periods” (cl. 27, no. 11).

Bleeding could be accomplished either by venesection, by leeches, or by cupping. The first was Chomel’s preferred method: he employed it on fifty occasions. Leeching is mentioned sixteen times, while there were only two cuppings—and those of the same patient.

As a rule, venesection was resorted to in order to achieve a general depletion of the system, whereas leeches were used to attain a local effect. Thus, in a case of acute metritis, twenty leeches applied to the upper groin were held to have “done good” (cl. 12, no. 11). The two methods were, however, to some extent interchangeable: a patient suffering from inflammation of the stomach and intestines was bled of 12

⁸⁰ *Ibid.*, p. 469. At least one contemporary noticed that the practice of Chomel and Broussais differed far less than their theoretical disagreements would imply: Ratier, *op. cit.*, note 16 above, p. 165.

ounces "because of the inconvenience of leeches in this case" (cl. 19, no. 14). Venesection and leeching could also be employed together. When, in a case of kidney and genital injury, symptoms of an "inflammation of the spinal cord" appeared, they were combated by a bleeding of four palettes and the application of 50 leeches to the vertebral column (cl. 21, no. 7).

Despite his free use of the various forms of bleeding, Chomel maintained that it should sometimes be employed only in particular stages of a disease; and that, on occasion, it should be entirely eschewed. In a case of "tonsilar angina", he explained, "we have not applied leeches . . . because we fear that this remedy is only advantageous in inflammation of the mucous membrane and not in inflammation of the tonsils" (cl. 47, no. 1). On another occasion he deferred the application of leeches to a patient suffering from an intermittent fever until the evening, explaining that leeches should not be applied at the same time as the fit because they had the effect of augmenting it (cl. 49, no. 5).

Bleeding was the principal means of achieving depletion in sthenic complaints; other resources were, however, also available to the physician. Chomel took some pains in instructing his class in the proper way in which these devices should be combined. In general, the depletive effects of bleeding were to be augmented by the administration of emetics, purgatives, blisters, and enemas. But this principle needed to be qualified by particular circumstances. Emetics were not indicated in cases of erysipelas because they merely produced "new inflammation and congestion" (cl. 3, no. 10). Vomitives were also to be avoided when irritation of the intestines was among the symptoms of a malady (cls. 7, 25, nos. 7, 18).

In all the administration of emetics is mentioned seven times in the manuscript. "Tartras Antimoniae" is named as the agent employed on three occasions (cls. 30, 43, 53, nos. 18, 18, 18). This substance twice also served as a local application in order to produce a skin eruption (cls. 5, 8, nos. 19, 7). Purgatives were also prescribed seven times; but only one substance—castor oil—is specified, and that only once (cl. 49, no. 26). Diuretics were used in six cases, but, again, the agent used is specified only once. In this case, "Tartras Ammoniae" was used to obtain the effect (cl. 5, no. 19).

The application of blisters in cases both of local inflammation and of fever was also a favoured technique. This treatment is mentioned 18 times in the manuscript. Blisters were generally used in conjunction with systemic remedies such as bleeding and emetics.

Despite this emphasis on antiphlogistic treatment, tonics also had a place in Chomel's therapeutics. In general, he proceeded on the assumption that while fevers in their early stages were "sthenic" disorders requiring depletive measures, once the crisis of the disease was passed the patient was in a debilitated state and in need of stimulants. This was, in particular, Chomel's strategy in cases of typhoid fever in its late stages; he maintained that "Tonics are clearly indicated at this period, and it seems to me that their effect has been very advantageous in many cases (See M. Louis)." In this instance the tonics administered were syrup of redberries ("*groseilles*") and an enema of camomile (cl. 42, no. 12). Even in the late stages of typhoid, however, the prescription of tonics might be contraindicated by a symptom such as hot skin, which suggested that the patient was still in an overstimulated condition (cl. 47, no. 26).

In those cases of convalescence from typhoid fever where tonics were thought appropriate, Chomel usually also prescribed quinine, which was administered both by mouth and by enema (e.g., cl. 3, no. 28). Quinine was Chomel's favoured remedy in cases of intermittent fever, although he tended to allow a few days to elapse before resorting to it (cls. 2, 10, nos. 1, 5). Chomel specified that it was the sulphate of quinine that was to be employed. This form of the traditional febrifuge had only recently been devised by Pelletier and Caventou; Chomel was among those who conducted the first clinical trials that established its efficacy.⁸¹

Only two other drugs earn a specific mention. Opium was prescribed three times: in a case of the *maladie épidémique*, for dysentery, and locally for sciatic neuralgia (cls. 7, 36, 38, nos. 3, 8, 11). Digitalis was administered once in the form of "*pillules*" for a patient suffering from general oedema (cl. 55, no. 14b).

These resources constituted the greater part of Chomel's therapeutic armamentarium. A number of secondary devices were, however, also at his disposal. Baths of various kinds were employed on five occasions. In a case of typhoid fever, the aim was presumably to cool the patient (cl. 51, no. 8). The diabetic was given a vapour bath "to produce perspiration" (cl. 12, no. 11). In the other cases there is no clear indication of what end bathing was to attain. Soothing fomentations, plasters, and gargles can be classed together as means of obtaining local relief of symptoms.

The manuscript shows surprisingly little attention to patients' diet. Chomel had in his introductory lecture alluded to the difficulties of enforcing any regimen at the Charité; but on only two occasions did Thomson record him as specifying the food to be given to a patient (cls. 44, 55, nos. 15, 9). The Vieilleigne manuscript reveals, however, rather more concern with diet.⁸²

The drink of the patients is referred to far more frequently. In the early stages of fevers "soothing drinks" were prescribed: these included acidulated and soft drinks and decoctions. Wine is mentioned only twice, and one of these references is to a decoction of wine (cls. 23, 47, nos. 23, 5).

Most of these methods would have been perfectly familiar to a practitioner of the eighteenth century. But it would be wrong to regard Chomel as altogether indifferent to novelty. His role in the testing of quinine sulphate has already been mentioned. He referred during the course to two other "clinical trials" he had performed. The first of these related to the local application of various agents at the site of a blister as an alternative to giving drugs by mouth (cl. 38, no. 11). Chomel also tested the claims of certain "English physicians" that typhoid was due to a deficiency of carbonic acid in the blood, and could be treated by the administration of "*eau gaseuse*" (cl. 2, no. 23).⁸³

As well as teaching by example, Chomel provided his students with a number of general discourses on aspects of therapy. In the course of an extensive discussion of the pathology of typhoid fever, Chomel did sound a note of therapeutic scepticism. Too often, he claimed, changes observed in patients suffering from this disease were

⁸¹ J. E. Lesch, *Science and medicine in France: the emergence of experimental physiology, 1790–1855*, Cambridge, Mass., Harvard University Press, 1984, pp. 142–3, 253 n63.

⁸² Vieilleigne, *op. cit.*, note 31 above, pp. 86–7, 88, 92–3.

⁸³ Chomel, *op. cit.*, note 36 above, pp. 457–8.

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attributed to the remedies that had been administered; but it was “of great importance to observe that one cannot judge the effect of remedies in this malady except after the course of the fever and not as one too often does after every 24 hours[:] such examinations are useful to anticipate unforeseen circumstances but can never give us a correct idea of remedies in producing a cure.” (cl. 37, no. 9).

The discourse on the treatment of diabetes was more substantial. Chomel listed all the treatments that had been tried and gave his view of their efficacy. A diet of “muscular” meat and fat had been prescribed by some—“but these means of treating diabetes have never been continuously applied.” Astringents had been used only in a few cases. Purgatives, at least in this case, seemed beneficial, “since we have seen that whenever he had diarrhoea, his diabetes diminished. These medicaments do not have the drawbacks in this case that some have attributed to them.” Purgatives needed, however, to be supplemented by other treatments, such as “*bains de vapeur*”. As already noted, Chomel insisted that it was impossible to commence the treatment until the quantity of the urine passed had been established (cl. 6, no. 9).

The other extended discussion of therapy comes in Chomel's exposition of the nature of the *maladie épidémique*. Because of the mysterious and novel character of this ailment there were no precedents to which the physician could turn, nor even a generally accepted theory of the nature of the disease from which some therapeutic strategy could be devised. The understandable response of the medical profession had been to throw every weapon in their armoury at the condition in the hope that something might have an effect. Chomel reported, however, that all the means of treatment that had been so far employed had failed either in whole or in part. Because apparently inflammatory symptoms sometimes formed part of the disease, bleeding and blisters had been administered—but with no result. Because a disturbance of digestion also formed part of the syndrome, purgatives and vomitives had been employed. Not even the administration of the Charité's proven remedy for the *cholique des peintres* had produced a cure. But later in the course Chomel did record that a patient suffering from the *maladie épidémique* had undergone this treatment “with improvement” (cl. 43, no. 1). Most physicians also gave opium to help their patients sleep.

Sulphurous and shower baths seemed the most effective remedy available: Chomel claimed that most patients were able to walk 6–8 days after beginning this treatment. A change of location, from Paris to the countryside, was also probably beneficial.

In conclusion, Chomel offered his own synoptic method of treating patients with the epidemic disease. For those in such pain that sleep was impossible, “opium pills”; to prevent constipation, “enemas, etc.”; when inflammation was evident, bleeding from the arm; blisters were also to be applied to the back and loins (cl. 9).

The therapeutic portion of Chomel's course stands in sharp contrast to the diagnostic part. While methods of investigating disease processes in the body had undergone major changes since the turn of the nineteenth century, methods of treatment changed relatively little. Such therapies as the administration of the bark in fever cases had been refined with the help of the latest chemical techniques; but the basic tools with which Chomel sought to cure his patients were the same as those available to Cullen or Sydenham.

The early nineteenth century had seen some self-proclaimed therapeutic revolutions, notably that initiated by Broussais. However, Chomel attached little importance to these developments. If Broussais was the medical revolutionary, seeking to remake therapy upon *a priori* principles, Chomel was the Burkean conservative, convinced of the overwhelming importance of traditional wisdom over new doctrine and of the superiority of individual experience over universal precept. In 1821, in the course of a discussion of the various therapies that had been tried over the decades for “putrid” or “adynamic” fevers, Chomel expressed the classical conservative disdain for theory:

In the midst of the revolutions that physiological theories have undergone and the alterations they have entailed in the practice of the majority of physicians, the symptoms and the progress of the disease have not changed. The observations of physicians who have studied faithfully the process of nature have not aged, and the therapeutic precepts that they have postulated have not succumbed to the vicissitudes of systems. It is in the works, it is in the teaching of the most distinguished practitioners, it is above all at the bedside of patients that we have sought to appreciate the influence of diverse methods of treatment in serious fevers. Alien to all species of system, we have never entertained any opinion, at any time, either upon the special seat, or the intimate nature of the disease that occupies us. We have confined ourselves to following attentively the phenomena and the progress, and to examining the effect of the means that we have seen employed or that we have ourselves put into use. If this disposition does not protect against all error, it is at least fitted to distance us from that form of bias which makes it improper to observe.⁸⁴

CONCLUSION

The aim of this essay has been to try to reconstruct as far as possible the experience of clinical medicine in Paris in the late 1820s of one foreign student. Has this exercise supplied any new insights into either French or Scottish medicine of this epoch?

One conclusion that can be ventured is that Thomson would have found what was taking place at the Charité far more familiar than strange. By the time of his visit even such distinctively “French” innovations as auscultation had been assimilated by the medical institutions of his own country. Chomel’s course no doubt revealed differences of diagnostic approach and therapeutic strategy from what Thomson might have seen elsewhere; but these were no more than the divergences in opinion that might occur between two clinical professors in Edinburgh. Even the scale of the clinical ward at the Charité was comparable to that of Edinburgh.

The French experience appears therefore as an opportunity to augment and complement skills and knowledge acquired at home, rather than as an introduction to new domains of medical theory and practice.

In the organization of his clinic, however, Chomel offered an element which was missing not only in Edinburgh, but also from other Parisian clinics:⁸⁵ the opportunity for the student to learn by practice rather than merely by professorial precept. The

⁸⁴ Chomel, *op. cit.*, note 28 above, p. 197.

⁸⁵ Graves, *op. cit.*, note 23 above, pp. 7–8. See also: J. Cross, *Sketches of the medical schools of Paris. Including remarks on the hospital practice, lectures, anatomical schools, and museums, and exhibiting the actual state of medical instruction in the French metropolis*, London, J. Callow, 1815, p. 61.

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device of the *conférence* reduced the distance between the student and the patient, allowing him to take a far more direct part in examination and treatment. Thereby, it also reduced the distance between professor and student: instead of being a distant pedagogue, the professor became a senior practitioner whose role was to inculcate the pupil with his skills.

The increasing dependence upon techniques of physical examination may well have provided a stimulus to this development. Such skills could not be taught merely by ostentation as might history-taking; they had to be practised. The outstanding example of such a technique was auscultation; and it is probably no accident that Chomel introduced his novel form of clinical instruction in the hospital where Laennec had latterly developed this method.

It is important to recall, however, that Chomel's clinic formed only a fraction of Thomson's French experience, and even of the *clinical* experience that he gained during his time in Paris. We know that he spent the summer of 1828 in various hospitals, primarily for the purposes of finding interesting pathological cases, which would have given him the opportunity of observing everyday practice on the wards and of viewing a number and diversity of cases lacking in Edinburgh.

It is a minor irony that in his later career Thomson made singularly little use of the skills he might have acquired in any of these settings. Apart from a brief period as personal physician to the Duke of Bedford, he made his living as a teacher of anatomy and physiology and author, not as a clinician.⁸⁶ Moreover, although as Professor of the Institutes of Medicine in Edinburgh from 1842–8 he had the right to act as a clinical teacher in the Royal Infirmary, he does not appear to have exercised this prerogative, unlike both his predecessor and successor in the chair.⁸⁷ From the point of view of Thomson's future career, the most significant document to survive from his Paris visit is not his notes of Chomel's clinical course, but the description of some embryological investigations he undertook there.

⁸⁶ L. S. Jacyna (ed.), *A tale of three cities: the correspondence of William Sharpey and Allen Thomson*, *Medical History* Supplement 9, London, Wellcome Institute for the History of Medicine, 1989.

⁸⁷ A. Logan Turner, *Story of a great hospital: the Royal Infirmary of Edinburgh 1729–1929*, Edinburgh, Oliver and Boyd, 1937, p. 370.