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Neurobiographies: Writing Lives in the History of Neurology and the Neurosciences

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ABSTRACT

This essay surveys the present state of biographical writing in the history of neurology and neuroscience. Individual lives play a significant role in practitioner-historians' narratives, whereas academic historians tend to be more nonindividualistic and a-biographical. Autobiographies by neurologists and neuroscientists, and particularly autobiographical collections, are problematic as an historical genre. Neurobiographies proper are published with several aims in mind: some are written as literary entertainment, others as contributions to a cultural and social history of the neurosciences. Eulogy, panegyrics and commemoration play a great role in neurobiographical writing. Some biographies, finally, are written to provide role-models for young neuroscientists, thus reviving the classical, Plutarchian biographical tradition. Finally, a recent cooperative biography of Charcot is mentioned as an example of how the biographical genre can help overcome the alleged dichotomy between the historiographies of practitioner-historians and academic historians.

Keywords: Biography, Autobiography, Neurology, Neuroscience, History of Science, History of Medicine, Historiography.

INTRODUCTION

Biographies of neurologists and neuroscientists constitute an infinitesimal part of the immense literature of life writing. The few entries under the headings of ''neurologists'', ''neuroscientists'', and ''neurosurgeons'' in the quarterly issues of the *Biography Index* are easily overlooked among the plethora of articles and books devoted to ''cartoonists'', ''fashion designers'', ''golfers'', ''murder victims'', ''wives of prominent men'', and other, probably more interesting, walks of lives. Within the more limited confines of the historiography of neurology and the neurosciences, however, the life stories of neurologists and neuroscientists play a significant role alongside other genres of historical writing. The life and work of individual doctors and scientists have traditionally been an important constituent of neurohistorical narratives, and biographical/autobiographical collections of neurologists and neuroscientists are still an important source for all kinds of historical work. Furthermore, a number of leading neurologists and neuroscientists have composed their autobiographies, and finally some biographical monographs of neurologists and neuroscientists are among the best scholarly contributions to the historiography of neurology and the neurosciences.

In spite of its prominent place in the literature of the history of neurology and the neurosciences, the genre of biographies of neurologists and neuro-

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scientists (neurobiography in short) has so far not received much theoretical and methodological attention.[1] The purpose of this paper is therefore to make a survey of the state of the art of biographical writing in the history of neurology and neuroscience. I will first consider the place of individual lives in historical works sensu stricto, then shortly discuss autobiographies and autobiographical collections, and finally concentrate on the flagship of neurobiographical writing, i.e., biographical monographs of neurologists and neuroscientists. I hasten to add that this is a preliminary analysis composed in the format of an essay review of some, mainly recent, examples of neurobiographical writing. I will refrain both from a more general analysis of the role of biography in the historiography of medicine and from references to the general development of the historiography of the neurosciences.[2]

THE PLACE OF THE INDIVIDUAL IN THE HISTORY OF NEUROLOGY AND THE NEUROSCIENCES

Throughout the twentieth century, the individual clinician or scientist has been given ample space in general neurohistorical narratives, particularly in texts written by practicing neurologists and neuroscientists – ''practitioner-historians'' in Rosner's (1999) terminology, as opposed to ''academic historians'' [3] – thereby sustaining the general impression among recent historians that the history of medicine has, traditionally, been written from the perspective of the ''Great Doctors'' (Reverby & Rosner, 1979). The ''Great Doctors'' perspective does not necessarily take the form of collections of biographies of great doctors and scientists, however, like Henry E. Sigerist's famous biographical approach to the history of medicine in *Grosse Ärzte* (1932; *Great Doctors*, 1933).[4] The individual neurologist or neuroscientist is generally integrated into the historical narrative. For example, Lawrence McHenry's enlarged version (1969) of Fielding H. Garrison's *History of Neurology*, a standard, classical reference work in the field, is divided into chapters according to time-periods and major neurological subdisciplines – at a lower level of textual organization, however, it is composed as a chronological succession of individual neuroscientists and their works, as in the chapter on nineteenth-century neuroanatomy where the reader is presented with a long row of great names: Johann Christian Reil, Luigi Rolando, Franz Joseph Gall, Johann Caspar Spurzheim, and so forth, even highlighted in bold type-face.

McHenry's method of weaving individual neuroscientists and their achievements into the disciplinary warp and timeframe is by no means unique. In Russel DeJong's *A History of American Neurology* (1982), the individualistic accent is strengthened by a few lines of biographical details after each (still bold type-faced) name has been introduced in the narrative. Neurophysiologist Mary Brazier's two books on the history of neurophysiology, *A History of Neurophysiology in the 17th and 18th Centuries* (1984) and *A History of Neurophysiology in the 19th Century* (1988), are organized in a similar fashion: Thematic chapters (''The vitalists'', ''Meeting the challenge of Galvani'', and ''The triumph of electrophysiology'', and so forth) are subdivided into sections devoted to individual scientists and each individual is then allowed a few lines of biographical introduction before their work is discussed in more detail.

[1] For a summary of the place of biography in the history of science, see Shortland & Yeo (1996); for some recent discussions of the place of biography in medical history, see the symposium in the *Canadian Bulletin of Medical History*, vol. 13, no 1 (1996). Biographies of neuroscientists have been mentioned in passing only, for example, by Gelfand (1996).

[2] The literature on the relation between biography and historiography is huge; for an overview, see the annual bibliographies published in the journal *Biography: An Interdisciplinary Quarterly*. The historiography of the neurosciences is an underdeveloped field of inquiry; the papers in this thematic issue of the *Journal of the History of the Neurosciences* are a first attempt to approach the field.

[3] For a discussion of the two kinds of history of the neurosciences – the practitioner-historian's and the academic historian's – see Rosner (1999).

[4] For another classical 'Great Doctors' collection, see Hale-White (1935).

The biographical element is even more pronounced in *Foundations of Modern Neurology: A Century of Progress* (1994) by neurologist Robert Burns Aird. The author's explicit purpose is "to give recognition to that generation of neurologists and neuroscientists who firmly established modern neurology and its related fields as independent disciplines" (Aird, 1994, p. xi). Although the chapters are organized according to subdisciplines ("Advances in clinical neurological diagnosis", "Neuroimaging", "Neurogenetics", and so forth), each chapter is composed of a series of minibiographies. Many of Aird's chapters are based on his long, intimate knowledge of the people portrayed and are often tainted by his subjective opinions (somewhat reminiscent of John Aubrey's anecdotal *Brief Lives* 300 years earlier). For example, Aird writes, "I have always thought of [Edward Graeme] Robertson [1902–1975] as the absent-minded professor of neurology, but this is a cliché that touches on only one unique facet of the man and does not do him justice" (Aird, 1994, p. 214). These opinions are a somewhat idiosyncratic luxury that the author can probably allow himself after having met and worked with all these people for seven decades, but which does not necessarily add to the historical quality of the text. Aird's individualistic approach to the history of the neurosciences is deliberate; the illustration of the "flowering" and "exciting era" of twentieth-century neurology "by means of biographical sketches" seems to him to have advantages over the usual scholarly methods of history. "After all", Aird explains, "this revolution was accomplished by people who were very extraordinary and intensely interesting as individuals", and therefore his objective is "to portray my *personae dramatiques* as vividly as possible" (Aird, 1994, p. 283).[5]

Not all historical treatises written by practitioner-historians focus on the individual neurologist or neuroscientist, though. For example, Stanley Finger's *Origins of Neuroscience* (1994) is organized, like a textbook, around specific functions of the neural system – "Theories of brain function", "Olfaction", "The nature of the memory trace", etc. – where each neural function is treated chronologically, with little attention to the individual contributors. But Finger's is rather the exception: most a-biographical approaches to the history of the neurosciences in the last decades have been made by academic historians. Edwin Clarke's and Stephen Jacyna's *Nineteenth-Century Origins of Neuroscientific Concepts* (1987) is a conceptual analysis of "the genesis of the revolutionary ideas" (p. 1) that led to modern neuroscience, and an attempt to show that the changing ideas of the function and structure of the nervous system must be set against the background of nineteenth-century science and philosophy, particularly "the romantic philosophy of nature" (p. 1). Biographical information is almost entirely absent from the text; even the ideas and actions of such "a central actor in the revolution of concepts" (p. 33) as Gall is presented without any biographical detail, as if he were a mere internode of pure ideas and concepts.

Another seminal work that avoids biographical intrusions in favour of pure "conceptual history" is Anne Harrington's *Medicine, Mind, and the Double Brain* (1987), a study of nineteenth-century ideas about the implications of the duality of the human brain for human consciousness and personality. Harrington does indeed attach the names of the orginators of the neurological concepts treated in the book, but otherwise all ideas, concepts and theories are thoroughly decontextualized; not only does she argue against a "currently [early 1980s] fashionable" (p. 4) sociologically informed, contextual history of science, but she also de-contextualizes the ideas with respect to their individual promulgators, thereby adding to the impression that, in contrast to the often heavily individualized and biographically infused narratives written by practitioner-historians, academic historians' historiography of neurology and neuroscience today is predominantly nonindividualistic and a-biographical.[6]

[5] Aird realizes, however, that a biographical approach has "its pitfalls", namely that "the unifying theme" of the essays that concerns "the great progress achieved" in neurology in the twentieth century tends to get lost, and therefore he adds summaries to each chapter, and even a summary of the summaries.

[6] In spite of the recent renaissance of scientific biography (Shortland & Yeo, 1996), academic history of science and medicine is largely a non - and even anti-individualistic enterprise (Morus, 1990).

Mark Micale's excellent and historiographically extraordinary conscious study of hysteria as a disease and a metaphor makes the point. *Approaching Hysteria: Disease and Its Interpretations* (1995) is replete with references to the major historical and cultural interpretive strategies of the 1990s, such as narrative intellectual history, social and cultural history, women's history and literary criticism. However, it is altogether silent about the possibility of biography as a research strategy for understanding the phenomenon at hand.

AUTOBIOGRAPHIES OF NEUROLOGISTS AND NEUROSCIENTISTS

One of the past presidents of the Society for Neuroscience, Larry R. Squire, recently claimed (Squire, 1996) that scientific autobiography was a largely unfamiliar genre before the Alfred P. Sloan Foundation launched its series of contemporary autobiographies of renowned scientists in 1979. This is far from true, of course. The tradition of writing scientific autobiographies goes back at least to Hieronymus Cardano's celebrated Renaissance reminiscences, *De vita propria liber*, first published in 1643, and autobiographies by scientists, engineers, and medical men flourished in the nineteenth and twentieth centuries. Neurologists and neuroscientists are no exception: Santiago Ramón y Cajal's *Recollections of My Life* was published in 1937.[7]

Ramón y Cajal set a standard, as it were, for thickness of neurological autobiographies. Frank Schmitt's *The Never-Ceasing Search* (1990) fills more than 400 pages, and *The Spice of Life* (1993) by the former President of the World Federation of Neurology, John Walton, is well over 600 pages. Apart from size, however, autobiographies of neurologists and neuroscientists are a mixed genre. Lord Walton seems to be more interested in relating the details of his national responsibilities and international travel (not to mention military records and sporting activities), than his scientific and medical work. But as a testimony of what the world of scientific medicine looks like from perspective of a coal-miner's son in Durham County who made it to the top of the British medical establishment, *The Spice of Life* is refreshing.

In contrast, Alan Hodgkin's *Chance and Design* (1992) is a totally different autobiographical matter. Not only does the former President of the Royal Society restrict himself to around 160,000 words (in contrast with Lord Walton's 350,000 words), he also goes into considerable detail with the content of his scientific work and has the good taste to end his main story with his Nobel Prize in 1963, leaving subsequent international travel and banquets to the fantasy of the reader. Whereas Walton's reads like a day-to-day diary, Hodgkin's is a continuous reflection about his life and achievements – not necessarily to the benefit of the reader who wants to learn about scientific practice, however. One reviewer noticed that ''[h]istorians of science who regard science as a socially constructed and culturally contingent activity will find Hodgkin's conclusion trite and unimpressive'', and also thought that *Chance and Design* ''lacks the drama of'' James Watson's legendary *Double Helix* (1968) and ''the introspection of'' François Jacob's equally famous *La Statue Intérieure* (1987). The reviewer added that Hodgkin ''does not explicitly dwell enough on the philosophical and emotional foundations that drove [him]'' (Joseph, 1998, p. 86). The evaluation of neurological autobiographies is certainly a most personal affair.

A related genre which has grown increasingly popular throughout the twentieth century is the collection of autobiographical articles. The first volume of *A History of Psychology in Autobiography* was launched by 1930, and other similar volumes have followed in a number of medical and scientific disciplines. The neurosciences too have had their share of collections. The 1975 festschrift to Francis O. Schmitt was a collection of autobiographical articles written by his colleagues (Worden et al., 1975), as was its sequel (Samson & Adelman, 1992). The most ambitious undertaking to this date is Squire's two-volume *The History of Neuroscience in Autobiography* (1996–1998), which contains thirty extensive autobiographical essays by a number of leading

[7] As Squire, in fact, notices.

workers in the field. These two volumes also illustrate a problem with many scientists' autobiographies – they display some of the worst examples of self-congratulatory excesses, lack of historical distance, and myth-making. Scientists' (short) autobiographies is a notoriously problematic genre (Abir-Am, 1991), both from the point of view of historical accuracy and from the point of view of literary standards.

BIOGRAPHIES OF NEUROLOGISTS AND NEUROSCIENTISTS

Biographies of neuroscientists come in all sizes, from obituaries in newspapers and short biographical articles in scholarly journals or biographical collections to well-researched monographs. The obituary is a genre in its own right, with its own rhetorical rules and codes, and will not be considered further here. Short biographies come in many forms, including biographical collections, an old genre which has developed from biographical dictionaries of the seventeenth and eighteenth centuries (Yeo, 1996). Compared with other scientific and medical specialties, neuroscience has been well endowed with such collections. In 1948, U.S. Army neuropathologist Webb Haymaker made an exhibit of great predecessors (Haymaker, 1948). The exhibition was shown at the Fourth International Neurological Congress in Paris a year later and eventually expanded into a volume of 133 biographical sketches, *The Founders of Neurology* (Haymaker & Baer, 1953; a second, somewhat enlarged, edition appeared in 1970). A few years later the initiative was taken a step further when Münich neurologist Kurt Kolle collected 65 ''Lebensbilder'' of internationally renowned neurologists and psychiatrists in three volumes, *Grosse Nervenärzte* (1956–1963), undoubtedly with Sigerist's *Grosse Ärzte* (1932) as its inspirational source. A generation later Hans Schliack and Hanns Hippius edited *Nervenärzte: Biographien* (1998), a series of twenty, mainly twentieth-century, biographical articles on German psychiatrists and neurologists. Other collections read like extended ''Who's Whos'', for example *The Founders of Child Neurology* (Ashwal, 1990) which contains short biographical sketches of 124 leading neurologists from the seventeenth century to the present. Since many neurologists at some point in their career have dealt with the child's nervous system, the collection almost equals a general ''Who's Who'' in neurology.

The 50 or so major biographical monographs of neurologists and neuroscientists published during the last century, and which together constitute the flagship of the genre of life writing, cannot possibly be dealt with exhaustively within the limits of a preliminary survey. A few examples may suffice.

The biographical genre constitutes a delicate balance between literature and history, between style, composition and factual accuracy. Biographies in general are supposed to be good literature, written not only to inform but also to entertain the reader and to present him or her with new and interesting personalities and events. The ''multinational neurologist'' Charles-Édouard Brown-Séquard (Dubb, 1995) has been the topic of biographies (Olmsted, 1946; Aminoff, 1993) that place him aside the two other great French nineteenth-century experimental physiologists, François Magendie and Claude Bernard. But he is without doubt also the perfect subject for a romantic story about a wandering life, as his soulmate, the French physician André Role, attempted to convey in *La vie étrange d'un grand savant: le professeur Brown-Séquard* (1977). But such literary aims are rare among neurobiographers – lives of neurologists and neuroscentists are generally written for other, allegedly more serious, purposes than entertainment.

Historians of science and medicine today generally agree that the major function of the biographical monograph is to contribute to an understanding of science and medicine in its cultural and social context. A paradigmatic example is Bonnie Ellen Blustein's study of William Alexander Hammond. Blustein chose Hammond as the subject of her PhD dissertation in the Department of History and Sociology of Science, University of Pennsylvania, because he was one of the best-known American medical men in the second half of the nineteenth century, and also because he ''became a symbol of a new medical type, the consulting specialist whose practical

skill was underwritten by scientific expertise'' (Blustein, 1979, p. 2). Hammond's career, adds Blustein, therefore ''helps to illustrate the transition from the traditional medicine which he learned as a student in the mid-nineteenth century, to the dramatic achievements of medical science in which he believed devotedly but only barely lived to see''. In the book-of-the-thesis, *Preserve Your Love for Science: Life of William A. Hammond, American Neurologist* (1991), she concludes that the biography ''is thus the story, not just of one man's life and work, but of the medical world that first supported his ascent to the height of his profession, and later consigned him to an undeserved obscurity'' (Blustein 1991, p. 17). This is biography as *ancilla historiae*, i.e., for the sake of historiography, an understanding of the genre which was, and to some extent still is, typical of Blustein's Philadelphia alma mater – one of the leading institutions behind the turn to a social and cultural historiography of science and medicine in the 1970s.[8]

This view of biography as an ancilla historiae more or less explicitly dominates today's academic history of science and medicine discourse, whereas eulogy (''good-speak'') and panegyrics (praise) indeed do not. Eulogistic and panegyrical practices have permeated life writing since the dawn of the genre in the classical period (Momigliano, 1993), but is considered terribly outdated by today's academic historians of medicine. Nevertheless, the genre is still widely cultivated among practitioner-historians, although few would perhaps admit it openly. The metaphors and the phrasing is often revealing, however. In their Preface to *John Hughlings Jackson: Father of English Neurology* (1998), Macdonald and Eileen Critchley state that ''[w]hen discussing men of the calibre of John Hughlings Jackson, it is all to easy to slip into hagiolatry''. But, while ''recognizing his genius'', they ''realise that Jackson was not omniscient'' (well, who is?), ''[t]here were gaps in his knowledge'' (really?), and ''his assessment of others ... was not always shrewd'' (we're shocked!). ''Even so'', their conception of Jackson is that of ''a giant'' (p. x). Peter H. Schurr in his otherwise well-written story of British neurosurgeon Geoffrey Jefferson, *So That Was Life* (1997), reassures the reader that he has tried ''to get the 'dosage of good and imperfect right', avoiding 'too much adulation' '' (p. v). Despite this claim for balance, however, *So That Was Life* is a good example of a modern panegyrical biography – as unwittingly reflected in the enumeration of Jefferson's (undoubtedly well-deserved) titles and awards in the subtitle, *A biography of Sir Geoffrey Jefferson Kt CBE FRS MS FRCS* – and therefore, in my humble opinion, not ''worthy of a place beside Cushing's life of Osler and Fulton's life of Cushing'' as the publisher suggests on the cover.[9]

Another ancient, and still common, motive for writing biography is commemoration, the wish to rescue someone from oblivion. Usually, the commemorative aim is implicit and taken for granted, for example when neurologist-turned-historian Francis Schiller, in his introduction to *Paul Broca: Founder of French Anthropology, Explorer of the Brain* (1979), an otherwise well-written, integrated account of the life, the work, and the social context of the eighteenth-century anthropologist, surgeon, and brain anatomist, writes at length about why his subject was such an important scientist without spelling out the commemorative purpose of the project. But others are more explicit: U.J. McMahan, editor of *Steve: Remembrances of Stephen W. Kuffler* (1990), maintains that he was spurred on to the task when, during an interview with a Harvard neurobiology graduate, he realized that the applicant had heard the famous Steve Kuffler's name mentioned in passing in the hallways of the department, but never run across it in textbooks or scientific papers in her classes. ''Was he really as important as they say?'', the interviewee responded, making McMahan complain that ''less than ten years after his [i.e., Kuffler's] death, the most dominant figure in neuroscience for more than two decades is known only to those who lived through that

[8] In Söderqvist (1996), I called this type of life writing ''social biography''.

[9] John F. Fulton's *Harvey Cushing: a biography* (1946) was, besides being a somewhat late-comer of the Victorian Life-and-Letters genre, certainly also eulogistic – but such was the fashion in scientific and medical biography half a century ago.

period'' (McMahan, 1990, p. ix). McMahan is very explicit about the commemorative aim, but nevertheless he does not discuss the deeper reason why his chosen subject should be remembered – like most other writers of commemorative biographies nowadays he leaves it to the reader to guess why it is so important to remember the predecessors of neurology and neuroscience at all. Commemoration is a topic rarely reflected upon (Jordanova, 2000).

Sometimes commemoration is carried by a sense of nationalistic or professional pride. Georges Guillain's *J.-M. Charcot 1825–1893: sa vie, son uvre* (1955) is not only eulogistic, but also carried by a strong nationalistic sentiment, not at all uncommon among French scientific and medical biographers. Guillain freely admits his nationalistic bent:

> My mission in writing these pages is to show that J.-M. Charcot should not be forgotten, because he was a man of very high intellectual and moral fiber, a teacher of exceptional quality, and a creative scientist. The glory that Charcot brought to French medicine in the nineteenth century should survive; our country should derive from it a genuine pride. (p. xvi)

Nationalistic pride aside, Guillain's use of the phrase ''intellectual and moral fibre'' points to yet another use of biographical subjects, i.e., as role-models for young scientists. ''Why write a book about Stanley Cobb?'', asks the author of his biography, Benjamin White. A quarter of a century after his death in 1968, Cobb is ''an almost forgotten figure'', and few outside the field of neurology know him; he made no great discovery such as insulin, and there is no 'Cobb's syndrome'. Yet, maintains White, Stanley Cobb was ''a seminal figure'' in neurology and psychiatry; he had a ''breadth of knowledge and uncommon vision ... which transcends the limited parochialism that characterizes the medical specialties of the present day''. Thus he not only deserves to be remembered as such, but to be remembered as a model ''to be strived after in the future''. Hence ''there is need to know about the life and work of this man'', so ''a book on Stanley Cobb ... may prove the value of the occasional Renaissance medical man'' (White, 1984, p. xii). Neurobiography thus can apparently function as a source for professional role models.

The notion of biography as a vehicle for role-models is taken a step further in *Sherrington: His Life and Thoughts* (1979) by John Eccles, himself an acclaimed neuroscientist (and a proclaimed Catholic by faith, a fact which probably is not unimportant in this context) and historian of neurology William C. Gibson. So much has already been written about Sherrington's (only in passing, by the way, do we learn that he has a first name, too!) scientific contributions that ''the man himself, and his thoughts, have been overshadowed''. But ''[m]ore and more, students of history are calling for creative writing on the whole man, particularly when he is a genius''; for example, ''[t]hose interested in the genesis of ideas want to know the settings for discoveries and the relevant circumstances which ushered in new truths and new insights'' (p. vii). So far, the authors' argument sounds like an attempt to write a manual for scientific methodology, but it soon becomes clear that Eccles and Gibson have an ethical, rather than methodological, manual in mind. The famous neurophysiologist's work ''was accomplished without the competitiveness that threatens the scientific community today'', and his life story can therefore be used, they claim, as an ethical guideline in today's hard scientific climate, where success is ''too often measured by the size of grant support'' – ''a grotesque inversion of values'', they add – and where a young scientist is easily tempted ''to devote his life to the competitive climb of a predaceous man and not to the dedicated and imaginative search for truth'' (pp. 184–185). The authors thus hope that their story of Sherrington's life ''will be an inspiration and a guide to those searching for the way'' (p. 185).

Eccles's and Gibson's pledge for an inspirational and ethically guiding life narrative calls to mind the great Victorian edifying biographical tradition, especially Samuel Smiles' immensely popular lives of engineers and naturalists (Smiles, 1857, 1876). Smiles, in turn, says that he borrowed his notion of biography from the Hellenistic philosopher and writer L. Mestrius Plutarch,

who thought that the description of the personalities and characters of his subjects were far more important than praising or remembering their historical achievements. His biographies of Greek and Roman statesmen, *Bioi paralleloi (parallel lives*; ca. 100 CE), were written to present the readers (usually young men who aspired to posts in the Roman imperial administration) with moral exemplars of conduct. By reading biographies, Plutarch thought, the moral character of the reader might be cultivated and moulded in the direction of virtue. Likewise, Smile's nineteenth-century biographies were written not only to praise and commemorate the great men of industrialisation, but, above all, to edify the reader and build up his virtues. And virtue could best be learned by observing the small events of everyday life. Therefore, says Plutarch in the beginning of the life of Alexander: ''it is not so much histories we are writing but lives [... and] often a little matter like a saying or a joke hints at a character more than ... the sieges of cities''.

From a Plutarchian point of view, some lives are indeed more interesting than others. As Sir Francis Walshe points out, with implicit reference to Plutarch, great neurological or neuroscientific achievements ''do not make up the whole of a full life fully lived, do not give the measure of a rich personality, nor convey his impact upon his fellows as he walked through life'' (Walshe, 1967, p. v). Take Hughlings Jackson, for example: ''To write a vivid life of Jackson would be virtually impossible'' because, says Walshe, ''he touched life at relatively few points. Literature and the arts, including the art of living, passed him by''. The neurosurgeon and neuroanatomist Victor Horsley, perhaps best known for his studies of the effect of alcohol upon the human brain, on the other hand, was different: he had ''a fine presence'', everybody ''felt the force and magnetism of his personality'' and in addition ''[h]is life and death made up a stirring tale and he found a biographer worthy of him''. For Walshe, neurobiography is about character and personality, and a good biography cannot but be the expression of ''a labour of love'' (Walshe, 1967, p. v).

The Plutarchian approach to neurobiography is not without its dangers, of course. The balance between ethical guidance and eulogy-panegyrics is a very narrow one, which only few biographers master. Unfortunately *Sherrington* ends in pure panegyrics: He was ''a scholar and a scientist, an adventurer questing for truth and beauty, and so human a person that his pupils' admiration was transmuted into love'' (Eccles & Gibson, 1979, p. 185). In a late modern skeptical culture – who will believe that? And, in addition, this was probably not what old Plutarch meant after all. In classical philologist Tim Duff's (1999) recent reading of Plutarch, the ''moralism'' of these ancient portraits is not a simple exposition of advices or injunctions to be put into effect, but a ''challenging moralism'', a food for reflection and ''a kind of gentle exploration of the realities of human life and the moral dilemmas'' (p. 68). The *Parallel Lives* were rather ''designed to make the reader ask new and rather challenging moral questions'' (p. 243). So Smiles' bombastic moralist reading is not necessarily either Plutarch's or ours. Instead of looking upon men like Sherrington as ''a guide to those searching for the way'' (Eccles & Gibson, 1979, p. 185), a late modern Plutarch would rather write the life of Sherrington and other neurologists or neuroscientists in order to provoke the reader (perhaps a young, budding neuroscientist) to ask his or her own questions about the ethical dimensions of science: how can I learn what is good and what is bad conduct in science? What constitutes, for me, a flourishing life in the scientific laboratory?[10]

CONCLUDING REMARKS

I opened this paper with a reference to Rachel Rosner's (1999) somewhat pessimistic picture of a dichotomy between histories of neurology and neuroscience written by ''practitioner-historians'' versus those written by ''academic historians'' – a potential source of conflict that has pestered certain areas of the history of science and medicine for decades (Söderqvist, 1997a). I will end with pointing to a biographical project which seems to have been able to build a bridge between the two historiographies. Biographies are almost

[10] For a virtue-ethical approach to the history of science and medicine, see Söderqvist (1997b, 2001).

always written by single authors, rarely by two, and then the two authors often divide the book between them. In contrast, *Charcot: Constructing Neurology* (1995) is the result of a truly tripartite cooperation between an experienced neurologist and coauthor of a widely used textbook of clinical neurology (Christopher C. Goetz), a neurologist-turned-historian (Michel Bonduelle), and an academic historian specializing in eighteenth and nineteenth-century French medicine (Toby Gelfand).

Goetz, Bonduelle and Gelfand divided the chapters between them – Goetz wrote the sections on Charcot's practice and his relations with patients, Bonduelle dealt with the French neurological literature, and Gelfand concentrated on the Paris medical institutions and the cultural context of Charcot – but they were very much concerned about producing a book which would read "as smoothly as a single authored biography" and therefore also abstained from mentioning their division of work in the Preface to the book.[11] As a consequence, the biography succeeds to combine a close analysis of "Charcot's work, his personality, his methodology, his successes and failures" with a contextual analysis of the French scene into an integrated story with a seminal point: The authors highlight Charcot's role as "a unique organizer in the history of a new discipline", a role "which has largly escaped the attention of hagiographers and debunkers alike" (Goetz et al., 1995, p. viii).

Having read most of the biographies of neurologists and neuroscientists that have been published throughout the twentieth century, I am fascinated by the variety and richness of the neurobiographical flora. Some volumes certainly belong to the better end of the quality spectrum of scientific and medical biography. *Charcot: Constructing Neurology* is probably among the few that will be remembered not only by neurologists and neuroscientists but also by historians of medicine and medical biographers in general; its quality seems to a large extent to be a result of an intimate cooperation between historians and neurologists drawing on each others' field of expertise.

[11] Personal correspondence with Toby Gelfand, University of Ottawa, Ontario, Canada.

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