

Neurology and Literature

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ABSTRACT

This brief personal view explores some of the interrelationships between the study of neurology and of literature, and the possibilities for cross-fertilization between these disciplines, despite their initially seeming poles apart. Emphasis is given to the narrative structure of both patient/author and neurological accounts. Literary accounts of neurological disease may inform understanding of the patient experience of disease, and the description of neurological disorders may stimulate creative writers. The exchange of ideas in this interdisciplinary subject area may therefore be productive.

KEYWORDS

Neurology, literature, history, patient, neurological disease, neurological account

Introduction

In the introduction to her edited volume entitled *Neurology and literature, 1860-1920*,¹ Anne Stiles commences by stating that “Neurology and literature are disciplines that initially appear to have little, if anything, to do with one another”.¹ She points out the dichotomy between neurology-as-science and literature-as-art, and contrasts the (ostensibly) objective nature of the former with the subjective nature of the latter, and hence the limited accessibility of neurology to a trained faculty whilst literature is (theoretically) available to any literate individual. Whereas in the time period Stiles considers the rhetorical strategies and cultural assumptions of neurology and literature were largely shared, there has certainly been an increasing divergence since then (the “two cultures” of CP Snow), as reflected in the highly specialised and increasingly technical jargon of neurology which renders such texts difficult to access by lay readers unfamiliar with the language of the discipline.

However, there clearly are points of contact and interchange between neurology and literature. Both

are cultural artefacts, whose practitioners may share similar rhetorical strategies. This brief article seeks to explore some of the interrelationships between the two disciplines.

Development

The patient as text

Clinical practice, as exemplified by the codified processes of taking a history from the patient (anamnesis) and physical examination, is mostly centred around interpretation. Perhaps in no other sphere of medicine is this interpretative process, this focus on pattern recognition, more crucial than in neurology, with its wealth of neurological signs with semiotic value, both in terms of the localization of disease processes within the nervous system and the diagnosis of specific neurological disorders.² However, many neurological conditions (e.g. headache disorders, sensory complaints), and all psychiatric disorders, are only discernible through the patient narrative of subjective experience, upon which the clinician is therefore entirely reliant.

Daniel proposed a hermeneutical model of clinical decision making in which the patient may be viewed as a text,³ and this idea has been taken up by other authors.⁴ Although some might see this type of conceptualisation as dangerously reductive, potentially objectifying or ignoring the individuality of the patient and his or her experience of illness (in T.S. Eliot's play *The Cocktail Party*, Sir Henry Harcourt-Reilly suggests: "All cases are unique, and very similar to others"^{5(p402)}), it does nevertheless have some interesting implications. A text ill-attended to is liable to be misread and misunderstood. Misreading and misunderstanding of a patient as text could have unfortunate, or even disastrous, consequences for diagnosis and treatment.

However, the old adage to the effect that all one needs to do in clinical practice is listen and the patient will tell you the diagnosis does not ring true, certainly for this neurologist. Whilst initial, unconditional, listening, a suspension of disbelief, is an appropriate consultation style to ensure that the patient feels he or she is being listened to, the patient narrative thus rendered may be seen as a text which, like all literary texts, needs to be decoded, even deconstructed, since narratives may be elaborated, and narrators may be unreliable (the playwright John Osborne, in his autobiography, suggests that "What we remember is what we become.... We become resemblances of our past"^{6(p525)}). The patient with no narrative (because, for example, unconscious, amnesic, or aphasic) presents a particular challenge, requiring the search for collateral or witness history. Hence focused questioning, or interrogation, of the history is required to elucidate those elements key to pattern recognition.

In this respect a distinction must be drawn between literary texts, which are essentially passive, and patients as texts, essentially active and susceptible of disclosing more information. The shortcoming of all literary accounts has been characterised as the "problem of the frame", since they vouchsafe only a limited view over the reality of the past.⁷ For example, for want of further, more definitive, information, such as a clinician might be able to obtain through history, examination and investigation, the causes of the inability of children to walk in four fictional cases remain obscure, even to the extent of knowing whether the children described have paraplegia, understood to mean damage to or pathology of the spinal cord.⁸ Discussing the same four fictional

cases, Lois Keith points out that "drama rather than medical plausibility is the business of the sentimental novelist" who will "ignore medical accuracy in order to allow their characters to walk again".⁹ In these books, as elsewhere,¹⁰ illness and recovery may be used as metaphors for transformation and renewal, and inability to walk may be symbolic of psychological distress.

Patient narrative is largely episodic or autobiographical. Although lay explanation of patient symptoms is sometimes attempted, the semantic evaluation of the history is the prerogative of the clinician, based on the assessment and its interpretation, informed by specialised knowledge, training and previous experience. The clinician's "careful return of the story"^{11(pXXIII)} is an "interpretive retelling that points towards the story's ending"^{11(p5)}, be that definitive diagnosis or plan for future action (observation, investigation, treatment). Literary texts, on the other hand, may contain both episodic and semantic elements, as befits the role of the omniscient narrator.

The doctor as reader

The ineluctable corollary of the formulation of "the patient as text" is "the doctor as reader".¹¹ This position may encompass not only engagement with the clinical practice of patients as texts but also with literary texts; these two possibilities will be considered in turn.

The clinician's task as a reader of patients as texts is to interpret and shape the autobiographical history: "The patient's story of illness... is interpreted and shaped into a medically plotted version... and then compared not only with standardized, textbook plots... but also with plots of comparable cases in the physician's experience".^{11(p45)} Hence, the gap between individual case and general principle is bridged. Hunter has characterised this as the "metastory of the illness"^{11(p13)}, which facilitates understanding and, hopefully, treatment. Clinical judgement is "the ability to discern a plot"^{11(p45)}, the production of a narrative by the clinician based on a reinterpretation of the patient narrative.

Perhaps the key questions when decoding or deconstructing (any) text are: what is the context? And, who is framing the narrative? Informed by a spirit of healthy scepticism, and acknowledging that uncertainty lies at the heart of the medical endeavour, these questions aim to challenge any apparently omniscient narrator

(patient or literary text). We are readily familiar with this type of approach when dealing with the statements of self-appointed, self-declared, or self-selected “leaders”, generally of the political and managerial (bureaucratic) classes, with their acknowledged tendency to over-valued (non evidence-based) ideas which risk descent into (or may even emanate from) deluding and self-deluding ideology. In other words, in these narratives context is ignored, wilfully or not, so that one particular narrative may be privileged above other narratives which may in fact be more plausible. This is the rhetoric of failure, of epistemological closure, which is anathema to medical scepticism. The management of patients who attend neurology clinics with multiple symptoms for which no neurological explanation is forthcoming despite careful (and sometimes repeated) examination and investigation may be unwilling to accept the clinician’s narrative of health anxiety or somatisation, believing against the evidence that there is a serious underlying disorder.

Coming now to literary texts, outside of academic circles the reading of such works is a pastime generally undertaken for pleasure, to inform, instruct, and entertain. Nevertheless, as a neurologist, trained in the diagnostic skills of pattern recognition, it is not always possible to switch off and remove ones workaday “neurological spectacles” when reading such texts. Hence there is a propensity to find examples of (what seem to be) descriptions of neurological disorders. For example, my initial experience of this type of involuntary diagnosis came when reading the description of a character written by Charles Dickens in *The Lazy Tour of Two Idle Apprentices*, published in 1857, who seemed to have features of parkinsonism with an accompanying eye movement disorder, which seemed highly suggestive of a diagnosis of progressive supranuclear palsy,¹² a condition not formally described in the medical literature until the 1960s.

This approach may be criticised as anachronistic, since it imposes modern concepts of diagnosis or diagnostic criteria on earlier time periods. There is, I think, a tension here between the truism that concepts are historically produced, and that medical discourse should be seen in relation to the ambient culture, and the possibility that diseases of the nervous system are timeless and transcendent categories. Do we, as neurologists, believe that diseases of the brain and nervous system did not exist before the emergence of neurology as a word

(1660s-1670s) or as a clinical discipline (1860s-1870s)? I think most neurologists would answer this question: Clearly not.

Dickens’ account also indicates that a lay person possessed of acute powers of observation and adequate descriptive ability may be able to narrate clinical phenomena with sufficient precision to facilitate clinical diagnosis, without the benefit of specific medical training. To a certain extent this is what we rely on in taking a clinical history, in the acknowledgement that some patients are better historians than others.

The more one looks, as a neurologist, the more one sees textual descriptions of (possible) neurological disorders. For example, the occasional “Neurological Literature” series of articles published in the journal *Advances in Clinical Neuroscience & Rehabilitation* (see www.acnr.co.uk) has included contributions on literary accounts of headache, epilepsy, cognitive disorders, and sleep-related disorders. These neurological conditions are common denominators of human experience, likely to be encountered at either first or second hand by many within the population, so it is not surprising that novelists have on occasion used such conditions as source material for elaboration in their narratives. Increasing moves in recent years to include some study of the humanities in medical curricula reflects the way such studies may mutually inform one another.

Neurology as narrative

Patient narratives, as well as being of intrinsic interest, give a patient, as opposed to faculty, perspective on disorders of the nervous system and hence broaden our medical sensibility to, and perception of, the experiential aspects of disease, contributing to what Kathleen Montgomery Hunter has termed the narrative structure of medical knowledge.¹¹ The epistemological importance of narrative in clinical medicine is undisputed, as illustrated by the importance of case reports and case series as pedagogical and heuristic devices.

It is well-recognised that the narrative description of disease in individual patients, the medical case, evolved at about the same time in the nineteenth century as detective fiction, both being examples of case-based inquiry.^{11,13} The medical case has been elegantly described as “the retrospective construction of a hypothetical

narrative in order to work out the relation of the clues to one another within an acceptable chronology".¹¹

These principles continue to inform the production of heuristic texts today. Most case reports by convention follow a fairly standardised linear structure, a fixed regularity which befits this narrative genre, but which may be at odds with lived experience, the sometimes piecemeal haphazard way in which patient diagnosis and management evolves.¹⁴

The doctor as writer

Since clinical practice is built around the production of narratives by clinicians, it is not surprising that this should sometimes extend to the production of the written word, not only in medical text but also in literary works.

Doctors who were also authors of literary texts are readily familiar,¹⁵ such as Anton Chekhov, Sir Arthur Conan Doyle, Oliver Wendell Holmes, Arthur Schnitzler, A.J. Cronin, and W. Somerset Maugham, to name but a few. Conan Doyle's approach in the characterization of the methods of Sherlock Holmes might be seen as particularly "neurological", based as it is on the diagnostic methods of Doyle's teacher at Edinburgh, Joseph Bell;¹⁶ numerous examples of neurological reference may be found in the Holmes' oeuvre.¹⁷ Holmesian methods of deduction have been cited as analogous to the narrative structure of medical knowledge: "clinical reasoning, like Sherlock Holmes ratiocination, is a... dialectical process of discovery and understanding... well suited to narrative representation".^{11(p68)}

In addition to these examples, giants of neurological and neuroanatomical investigation such as Silas Weir Mitchell and Santiago Ramon y Cajal also wrote works of fiction. In this context, Weir Mitchell's work has attracted particular attention.^{18,19} His first publication on what he subsequently chose to call "phantom limbs" (the sensations of the presence of an arm or leg following its amputation) appeared in a literary magazine, some five years before an academic publication describing the same.

Literary responses to neurology

Doctors are familiar as characters or subjects within

literary texts; many examples may be referenced,²⁰⁻²³ although few may be specified as neurologists. Medics and medical ideas have long been a stimulus or subject for creative writers, indicating a cultural interplay between medicine and creative literature. H.G. Wells, Robert Louis Stevenson, and Wilkie Collins have been cited as authors who produced works dramatizing neurological hypotheses.^{1(p2)}

An example of this interplay may be afforded by the literary possibilities presented by neurophysiological investigations of the brain. It is perhaps unsurprising that authors within the genre broadly described as "science fiction" have been attracted by the technological implications of electroencephalography (EEG) for recording and/or monitoring the human nervous system. Both Philip K. Dick and Ursula K. Le Guin, giants in the field of science fiction writing, have explored some of the implications of EEG.²⁴ The "Penfield mood organ", described in Dick's (1968) novel *Do androids dream of electric sheep?* (on which the 1982 film *Blade Runner* was based), which permits the user to select their mood state through artificial brain stimulation, is surely a reference to Wilder Penfield (1891-1976), whose work (with Herbert Jasper) stimulating the cortex of awake epilepsy patients undergoing surgery allowed him to map the functions of various regions of the brain.

Conclusions

Both neurology and literature are concerned with narrative, and hence are kindred disciplines which may be subject to the (fruitful) exchange of ideas. This may be seen as an interdisciplinary subject area, transcending the boundaries of professional categories. Neurological practice involves the construction of narratives based upon patient accounts which inform not only patient diagnosis but also the understanding of neurological disease. Literary texts may be seen as "an index of cultural reactions to scientific concepts".^{25(p165)} To return to Anne Stiles,¹ with whom we began, the relationship between neurology and literature is not merely reflective, but may best be described as dialogic or circular.^{1(p2)}

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Conflicts of interest

The author has no conflict of interest to declare.

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