Commentary: The appearance of new medical cosmologies and the re-appearance of sick and healthy men and women: a comment on the merits of social theorizing

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Cosmology, 1770–1870\(^1\) is something of a classic. A search using the Thomson ISI Web of Knowledge Service reveals that, within this database, the article has some 133 citations and rate of citations have remained consistent over time. Furthermore, the impact is not limited to sociology; the top six subject...
areas that return the highest citation scores are ‘history and philosophy of science’ (29.3%); ‘social sciences, biomedical’ (23.3%); ‘public, environmental and occupational health’ (21.1%); ‘sociology’ (20.3%); ‘health care sciences and services’ (12.8%); and ‘medicine, general and internal’ (6.0%).

It is intriguing that this conceptual paper should have such an enduring and broad significance. But herein lies its merit; as the sociologist Bryan Turner notes: ‘Ultimately sociology can better serve the practical problems and needs of patients by formulating sociological rather than medical questions.’ This statement reflects Strauss’s well-known distinction between ‘sociology in medicine’ and ‘sociology of medicine’. The former refers to research agendas that are professionally and institutionally driven, whereas the latter implies a more critical approach, wherein the philosophical and epistemological underpinnings of medical knowledge and medical practice are open to scrutiny. Jewson’s analysis certainly scrutinises the content of medical knowledge and reveals how it is contingent upon socio-economic relations between the patrons and producers. At a time when health and social researchers are increasingly encouraged to undertake empirically-based and policy-orientated research it is useful to reflect on the value of this theoretical piece.

Judging by the guidelines and resource allocation of some of the main funding councils who support health, medically related and even social research in the UK, there seems to be an imperative to support applied and policy relevant empirical research that can generate clear outcomes. There is no doubt that such research can make an important contribution to patient well being, but in a world steeped in the evidence-based culture this could mean that larger and possibly more important questions and insights may be overlooked. Indeed, Jewson’s historical materialist analytic strategy of ‘modelling’ different historical periods may well be considered to be abstruse by many working in public health, epidemiology or health service research today.

But Jewson’s modelling of historical forms of medical knowledge and practices are both descriptive and explanatory. To be sure the broad brush approach is invariably at the cost of historical detail. The medical cosmologies are what the sociologist Weber would call ‘ideal types’; idealized versions or abstractions that aim to capture the quintessence of social realities. Arguably these abstractions enable us to see beyond the messy veracity of day-to-day life; to use a well-worn metaphor they allow us to ‘see the wood for the trees’. Such distancing can contribute at a societal level to an appreciation of why decisions are made, why certain forms of knowledge or practices are prioritized and how social change comes about.

And, in fact, Jewson’s paper reveals a correspondence between broader socio-material changes, technological innovations and a privileging of particular forms of knowledge. The value of this revelation is the confirmation that medical knowledge, practices and technologies are socially contingent. They are shaped, constructed, influenced, prioritized and mediated by ‘the social’, be that social interests, cultural preferences, economics or social hierarchies. Salutatory reflections today in the context of health and medical care where we see claims and counter-claims relating the merits and demerits of, on the one hand, highly technical and hitherto unprecedentedly expensive, therapeutic interventions and, on the other hand, a diversity of complementary and alternative therapies.

The central argument of the paper reveals how three medical cosmologies—‘bedside medicine’, ‘hospital medicine’ and ‘laboratory medicine’—were differentially privileged in distinct historical periods and were conditional upon the sources of patronage; crudely who influenced the mode of production of medical knowledge. This strand of the argument is articulated more fully in an earlier (though less cited) paper ‘Medical Knowledge and the Patronage System in 18th Century England’. In the era of bedside medicine the doctor had a close interpersonal relationship with his client who, being the doctor’s patron, exerted considerable influence over medical knowledge, which in turn tended to be heterogeneous and biographical not least because doctors developed their own styles and theories to suit their paying clients.

The historical importance of the Parisian hospital schools in post-revolutionary France was critical to the formation of the next cosmology. The prime site of investigation shifted from the patients’ bedside to the hospital ward. Thus the ‘sick man’ was displaced by the ‘sick body’—the latter was an object of investigation and what s/he had to say was of little consequence because the goal of the Parisian clinician was to impress his colleagues with his diagnostic skills. Prognosis was of secondary interest and therapeutic interventions positively shunned. The gold standard of medicine was to investigate the inner reaches of the anatomy unsullied by the patients’ interpretation of their symptoms in order to identify accurately any pathological abnormality.

Tensions, however, were manifest; protagonists of the physical diagnosis advocated the cultivation of an objective, proven body of knowledge that could be applied to all patients rather than individuals with all their idiosyncrasies. Sceptics of these new schools, most notably those working predominantly in private practice, remained keen to offer their patients prognoses and therapies. Thus the socio-economic relations between practitioner and patient were crucial; working in the hospital the patients of the protagonists were poor, conditions often wretched, and in fact, in such circumstances any therapeutic interventions would have limited chance of success. However, in post-revolutionary France it
was state support that transformed this pivotal institution; as the historian Ackerknecht (who was closely read by Jewson) put it: ‘The Paris hospital of our period was, in its conception and organisation, no longer a medieval receptacle of all miseries. It had eventually become a medical institution and thus served as the cradle of a new medicine’.5

Sounds familiar? Well when discussing this paper with students at the start of an undergraduate module I teach on the sociology of health and illness earlier this year, one student wondered if in the contemporary context doctors working in general practice might find it difficult sometimes to implement the findings of research. Treatments of ‘proven’ benefit might be at odds with the biography of the patient that becomes evident at the bedside. Spot on. Such tensions are of course increasingly apparent in the context of the informatization of medicine wherein guidelines derived from ‘gold standard’ RCTs may be at odds with clinicians preferred approach to disease management for given patients in the light of their personalized needs.6 As Stephen Harrison explains there are epistemological (cosmological perhaps?) differences underpinning EBM and clinical work which, we might add, mirror those between the protagonists and the sceptics in Paris centuries ago. As we know the proponents of EBM maintain that ‘evidence’ is based on an authoritative probabilistic model of science in contrast with the ‘traditional model’, wherein clinicians seek to understand the natural history of the disease by observing how ‘disease processes develop over time and impact upon normal physiological processes’.7 Today, however, doctors’ recourse to the ‘clinical gaze’8 forged in the era of hospital medicine is being marginalized; clinicians are encouraged to heed the advice based on ‘the publication of meta-analyses of large numbers of cases’.6 Consequently, commentators are expressing concerns that experiential and intuitive knowledge—the ‘art of medicine’—may be in jeopardy.9–11

In Jewson’s terms, what we see here is a shift in the influence of the control over the production of medical knowledge—no longer purely in the hands of the clinician (as in hospital medicine) or the scientist (as in laboratory medicine) but in a new hybrid fashioned through the combined expertise of epidemiologists and information scientists. These specialists are supported by the state and, more significantly, in some settings deployed by well-resourced biotechnology and pharmaceutical industries—who are keen to generate convincing knowledge about the effectiveness or cost-effectiveness of interventions.

The medicalization thesis that dominated sociological debates in the 1970s drew on Jewson’s account to explain the rise and dominance of the biomedical model in Western medicine. In the 1970s, sociologists’ criticized medicine for medicalizing aspects of everyday life from birth to death. However, it is now suggested that the medical practitioners are merely ‘bit players’, and it is the globalized and hugely powerful biotechnology and pharmaceutical enterprises that are more effective in creating and sustaining knowledge about the presence of disease and need for treatments.12 A well-known example is David Healey’s work on the ways in which the psycho-pharmaceutical industry effectively markets and thereby constructs mental health disorders.13 As Nikolas Rose has put it today: ‘Depression: not so much fluoxetine hydrochloride as Prozac. Generalized Anxiety Disorder: not so much paroxetine as Paxil. ADHD: not methylphenidate or amphetamine/dextroamphetamine but Ritalin and Adderall. Premenstrual dysphoric disorder: not so much fluoxetine hydrochloride (again) but Sarafem. And some more names: Prozac and Sarafem: Eli Lilley. Paxil: GlaxoSmithKline. Ritalin: Novartis (CibaGeigy). Adderall: Shire-Richmond’.14

Jewson was neither the first nor the last analyst to identify a series of medical paradigms. Indeed, as noted above he is indebted to Ackerknecht for both historical detail and the naming of the historical perspectives. Ackerknecht used similar labels such as ‘Library Medicine’ (wherein a classical education was a pre-requisite of medical work), ‘Bedside Medicine’ and ‘Hospital Medicine’. David Armstrong, adopting a Foucauldian orientation, suggests a further form of medicine emerged during the early 20th century—what he calls surveillance medicine.15 Within this configuration of medical discourse, medical scientists not only study the bio-physical anatomy and physiology but also analyse the distribution of disease, illness and health amongst populations. Furthermore, patients are recruited to monitor their own health risks and encouraged to maintain their own health. Whilst Jewson had argued that the patient as a person had all but ‘disappeared’ from medical discourse, within surveillance medicine, the patient—and indeed ‘potential’ patients—reappear with a new (risk) identity. Responsibility, and increasingly culpability for health status, lies with the ‘person’ who is impelled to become aware of, and act upon, the wealth of health information and advice to be found not only in the health clinic, but also throughout various forms of popular media, on supermarket shelves, the internet and so on.

Armstrong, however, talks not of a new form of medical cosmology (and he certainly does not use the language of Marxism) but rather, after Foucault,7 he uses the language of ‘spatialisation’. But, fundamentally, both Jewson and Armstrong are describing shifts in the way medical knowledge is configured and sustained—they describe transformations in the ways medicine conceives, constructs and describes its objects of study. The moves from bedside to hospital, from hospital to laboratory; and from the micro-analyses of bodily components to the analyses of epidemiological data derived from the community, are associated with differential technological forms and materials. The stethoscope, the microscope and
statistical technologies are differentially privileged. Perhaps today, networked computer systems comprise the dominant technological form; since they impact not simply on the capacity to process data but also influence our ways of thinking and arguably give rise to a new medical cosmology namely, ‘e-scaped medicine’. Knowledge is increasingly informatized and has ‘escaped’ from the formal institutions of the medical establishment. Furthermore, knowledge now takes the form of an e-scape in the sense that the spaces, sites and locations of the production of medical knowledge are now more diffuse and are invariably mediated by means of digital technologies.

We see a greater variation of sick men and women today (Marxist sociologists made little mention of women in the 1970s!). These include the sick person, the passive patient, the expert patient, the inert body, the responsible and the culpable individual and the health care consumer and, more recently the ‘prosumer’ (those who both produce and consume knowledge and information—perhaps most saliently within web 2.0 applications). New medical cosmologies emerge whilst others recede, but each leaves an enduring residue. The sick men who disappeared from view in the 19th century have reappeared in a multiplicity of guises. Patients, health conscious (or not) men and women, are concurrently both more influential in the production of medical knowledge (e.g. they contribute to knowledge and information on the web) and are constructed by as consumers through the sophisticated marketing techniques deployed by the pharmaceutical, biotechnology and health care industries.

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References

16 Nettleton S. The emergence of e-scaped medicine? Sociology 2004;38:661–79.