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Tracking the Impact of Healthcare Technology

Webster, A. *Health, Technology and Society: A Sociological Critique*. Hampshire: Palgrave MacMillan, 2007. Pp. 213. ISBN: 1403995257. UK£20.99 PB.

The degree to which medicine has come to alter and shape our live-course, quite literally in terms of mortality rates and life expectancy, cannot be underestimated. The medical sciences are, in healthcare terms, sciences of application and so must be considered inherently technological. Technology has always been attendant on medical practice, whether it is considered scientific or not, yet the achievements of the modern medical sciences exemplify that of a technoscience and so go beyond what has gone before. The technological evolutions, if not revolutions, prompted by the medical sciences and the modern contexts of healthcare delivery continue to accelerate. Starobinski, in his *History of Medicine*, noted that the science of medicine was still young and suggested that it might be reaching maturity.[1] The recent ‘growth spurt’ of medicine and its associated technologies would indicate that medicine has, in fact, only reached adolescence. Para-medical research in this area, such as the science and technologies of health, illness and medicine in their various forms, has also accelerated and diversified. Although like bioethics, another recently conceived para-medical field of study, they can only be considered to have reached adolescence and not maturity.

Webster’s ‘Health, Technology and Society: A Sociological Critique’ is a relatively short volume which covers a lot of ground. As the editor (with Sally Wyatt) of a Palgrave series which bears the same name and as the director of the ESRC/ MRC Innovative Health

Technologies programme he clearly has the broad view necessary to make such a book informative and useful in an increasingly diverse area. There are five chapters which address substantive topics and these are preceded by an introduction to the area of health science and technology studies and are followed by a chapter which draws some general conclusions and points the way for further research in the area.

In ‘The Dynamics of Biomedical Innovation’ Webster first considers social engineering which has been accomplished to facilitate tissue engineering (TE). This thin end of the wedge, the social and political scaffold required to facilitate stem cell research in an age of the American culture wars, is gradually driven deeper throughout the chapter until the conclusion is reached that ‘the relationship between health, technology and society is neither uniform across different societies, nor stable within any one society.’ [page 49] Of course the conclusion that ‘technology’ is itself un- or under- determined is a conclusion that studying an honours course in the philosophy of technology course will enable anyone to make. Yet in between the consideration of TE and drawing this conclusion Webster has travelled via Health Technology Assessment, Quality of Life Measures, Randomised Clinical Trials, Evidence Based Medicine and the assumption that medical innovations make a positive contribution to overall health of a population, Pickstone’s *Ways of Knowing*[2] and the Foucauldian Gaze, as well as the socio-political environments of medical research and healthcare in a variety of countries. This sprint through a variety of topics provides an adequate view and the title of the next chapter, ‘Corporate Health, Markets and Regulation’, indicates the deeper conclusion driving the analysis; that social, political and professional arrangements must themselves be considered as technologies as well as producers or conditioners of technologies.

The Medical Industrial Complex (MIC) is the focus of chapter two and Webster quickly moves beyond the production of particular drugs or medical treatments by corporations involved in medical research. He notes that two other types of corporation are highly active in the MIC. First are those who provide or manage healthcare services and second are those which provide infrastructure support for those which provide healthcare services. The rise of Information Communication Technology (ICT) presents particular challenges but also opportunities. Webster's assertion that the 'possibility of patients opting out of state provision through Web-based private means compromises regulatory control and the public health intelligence for effective epidemiology'[page 65] is already a reality. Infamously the 1967 Abortion Act (UK) does not apply to Northern Ireland and women who reside there who wish to access abortion services must travel to Great Britain and pay for private treatment. They cannot access NHS abortion services. For many women this can be onerous both in terms of the financial costs and the time needed. However the internet makes abortion pills, suitable for use up to the ninth week of pregnancy, widely available.[3] This has a number of risks and potential adverse consequences for women in Northern Ireland but also presents a number of challenges to regulation and epidemiological agencies of Northern Ireland, as it did to UK agencies in the 1950's and 1960.

Having discussed the relationship between academic research, pharmaceutical companies, regulation, healthcare delivery and the discourses it produces, the priorities it sets and the conflicts these produce with patients' interests', chapter six continues by considering the future of IT in the healthcare setting. Many countries have IT programs in place which are seeking to construct methods of managing patient data which maintain the confidentiality and trust of the patient yet bring the benefits of 21st century IT to the healthcare setting. Anyone who has ever seen the filing department of a hospital will realise the importance of these

projects. Similarly anyone who is even vaguely aware of the difference between how IT is designed to be used and how it is actually used will realise the challenges these systems will face in the future. Webster then moves on to discuss the governance arrangements of modern healthcare systems usefully distinguishing three types: jurisdictional; moral; and administrative. What governance is and its distinction from and relation to the relevant varieties of 'ethics' (i.e. medical, nursing, healthcare, bio etc.) is a confused and confusing area both in academia and within the practices of healthcare and healthcare management. In a short space Webster provides some clarity to an area which, like many of the topics discussed in this book, deserves further attention.

The penultimate chapter considers the 'contested sick role.' Webster shows how the modern 'patient' moulds, shapes and contributes to the sick role in a variety of ways. Patient groups and patient experts are stakeholders in the social contexts of a particular illness or disease and its treatments. As such they make a direct contribution to this social context and, as Webster discusses in the case of the 'pro-ana' movement, can reject or completely re-configure the sick role altogether. Similarly the epistemic assumptions Complimentary and Alternative Medicine (CAM) have also challenge the sick role as it has been seen in the past. To dismiss CAM as not living up to the scientific standard of Evidence Based Medicine (EBM) is simply to miss the point. Many patients seek out CAM outside of the 'normal' healthcare ambit and some areas of CAM are increasingly being brought into the arena of standard healthcare.

This book is a short but reasonably comprehensive overview of an area of research which is gaining ground in a number of directions. The connections made with the broader currents of sociological thought, particularly Bauman's analysis of modernity and Beck's work on risk, links the field to the wider contexts of sociology. For those working outside of the area of

health science and technology studies but in related disciplines, i.e. the broader topics of history of science and medicine, medical sociology or the increasingly diverse bioethics for example, this book can serve as a introduction to an area of research which might seem to require a certain level of detailed knowledge to make engagement with the area worthwhile. It could also serve as an introductory text for students although, as is a general problem with this area, the philosophical and sociological requirements for proper engagement with the field mean that the book must be considered additional reading rather than having the potential to form a central text for a course. However, as additional reading it would certainly contribute to the breadth of knowledge which a health science and technology course offered and would provide the student reader with plenty of signposts with its referencing in each chapter. This book has much to recommend it and it would make a good addition to a university library or to the peripheral reading of those approaching the field of health science and technology studies.

Nathan Emmerich

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1. Starobinski, J. *History of Medicine*. Hawthorn Books, 1968.
2. Pickstone, J. V. *Ways of Knowing: A New History of Science, Technology, and Medicine*. University Of Chicago Press, 2001.
3. <http://www.guardian.co.uk/uk/2009/feb/01/diy-abortion-pills-northern-ireland> accessed 6/3/09.