Medical education… meet Michel Foucault

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CONTEXT There have been repeated calls for the greater use of conceptual frameworks and of theory in medical education. Although it is familiar to few medical educators, Michel Foucault's work is a helpful theoretical and methodological source.

METHODS This article explores what it means to use a 'Foucauldian approach', presents a sample of Foucault's historical-genealogical studies that are relevant to medical education, and introduces the work of four researchers currently undertaking Foucauldian-inspired medical education research.

RESULTS Although they are not without controversy, Foucauldian approaches are employed by an increasing number of scholars and are helpful in shedding light on what it is possible to think, say and be in medical education.

CONCLUSIONS Our hope in sharing this Foucauldian work and perspective is that we might stimulate a dialogue that is forward-looking and optimistic about the possibilities for change in medical education.

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INTRODUCTION

It has become a ritual at medical education conferences and in editorials to decry the lack of theory underpinning medical education and its research. The absence of a theoretical framework, the reasoning goes, means that much of what is presented and published is of circumscribed, local interest and contributes little to advancing knowledge in this new field. Because of medical education's interdisciplinary nature, it is subject to many relevant theoretical perspectives ranging from bioscience theories to learning theories and to social sciences theories.[1] Health and health education have preoccupied the thinking of many disciplines, including sociology, anthropology and history. However, medical educators have not accessed the knowledge derived from such research with regularity. A common reason is that medical educators are not exposed to social science research in their training.

Adapting ideas from one field to another is challenging because it requires their translation in a way that makes the theoretical concepts meaningful to a new context. On first encounter, the language and concepts of a new field often appear to rely on impenetrable jargon. The process of learning is greatly aided when familiar problems can be used to scaffold learning about new concepts. Thus, an individual familiar with sociological theories can help a doctor-educator apply social science concepts to the medical education field, just as the doctor can help the social scientist gain understanding about ways of thinking in biomedicine. Our view is that medical educators need not get too carried away by devoting themselves to the work of just one theorist. Nevertheless, delving into the thinking of a bright mind can be inspiring.

MEET MICHEL FOUCAULT

Foucault dealt directly with medical education. He wrote about the birth of clinical medicine and medical education, public health, psychiatry, schools and examinations, the body, physical and laboratory examination, sexuality and ethics. Yet Foucault has little place in current medical education research,[2] unlike in nursing education, in which researchers have made significant use of his ideas. In a special edition of the Journal of Medicine and Philosophy dedicated to Foucault, series editor Jeffrey Bishop wrote: '…for a man who had a lot to say about medicine and psychiatry, his name virtually never appears in major medical journals.[2]

There are, however, some important exceptions. For example, Alan Bleakley and colleagues have written a number of Foucauldian-inspired papers such as 'A common body of care: the ethics and politics of teamwork in the operating theatre are inseparable'[3] and books such as *Medical Education for the Future: Identity, Power and Location*.[4] Bishop has also written extensively about Foucault and medical education, including in the book *The Anticipatory Corpse: Medicine, Power and the Care of the Dying*,[5] in which he explores how medicine constructs death and dying individuals. Petersen *et al.*[6] used the Foucauldian notion of governmentality to examine the implications of an uncritical introduction of the medical humanities into medical education. Papadimos and Murray used Foucault's notion of fearless speech to examine the responsibility of medical schools to create doctors as 'able citizens who practise a fearless freedom of expression on behalf of their patients, the public, the medical profession, and themselves in the public and political arena'.[7] Razack *et al.*[8] conducted a Foucauldian analysis of Canadian policy documents relevant to student selection for medical school, and Jaye *et al.*[9,10] explored the Foucauldian notion of normalisation in 'learning to fit in on the surgical ward'[10] and in medical education more generally. Hodges explored embodiment and the 'pedagogy of self-reflection, self-assessment and self-regulation',[11] and MacLeod[12] used Foucauldian discourse analysis to problematise the way medical education focuses on competence while marginalising caring. Most recently, Haddara and Lingard[13] used a Foucauldian approach to understand discourses of interprofessional collaboration. Finally, Petersen and Bunton's reader Foucault, Health and Medicine[14] contains a number of thoughtful essays on using Foucauldian perspectives in health care research and education.

Foucault considered himself to be a scholar of the history of systems of thought. It is thus not inappropriate that although his own work is infrequently overtly discussed in medical education, his ideas are present in ghostlike fashion. Foucault had a term for individuals whose ideas become so important that it is difficult to talk about a given domain without referring back to them. To give an example, no matter what one thinks of his work, it is difficult to talk about psychology without making some recourse to the ideas introduced by Freud. The same could be said about political economy, a field in which Marx made an indelible and lasting impact. Foucault called these individuals founders of discursivity:

people who made it possible to talk and think in certain ways. We may not have studied Freud or Marx, but our everyday thinking and language about psychology or economy are filled with elements that can be traced back to their thinking. This is also the case with Foucault and medical education. Yet few are familiar enough with Foucault's own works to articulate the role his ideas played in rethinking the nature of science, education and medicine. Indeed some of his notions – discourse, problematisation, normalisation, bio-power, technologies of the self and the clinical gaze, to name just a few – have major implications in medical education today.

Our aim in writing this paper is three-fold: firstly, we wish to bring to light a set of ideas that may not be well known to medical educators; secondly, we want to begin a dialogue about a theorist whose work is relevant but infrequently referenced in medical education literature, and thirdly, we intend to illustrate examples of research in medical education that use Foucauldian ideas and approaches.

FOUCAULDIAN APPROACHES

Although it is beyond the scope of this paper to discuss Foucault the man, or his own academic trajectory and location, it is important to contextualise his work because it is the product of a particular time (the mid-20th century) and place (France, Europe). Of the hundreds of books available about Foucault, we recommend two: Clare O'Farrell[15] and Sarah Mills[16] have each penned an excellent introductory book entitled *Michel Foucault*. The former also maintains a blog (http://foucaultnews.com). It is also important to mention that Foucault's work has generated substantial controversy and debate, emanating from different perspectives. For example, because he decentred the place of the individual subject in his early work, materialists, phenomenologists, psychologists and others have critiqued him for ignoring agency (the ability of individuals to act autonomously), as well as for downplaying the actual lived, human experience. With regard to resistance to power, because Foucault placed resistance within discourse, the distinction between the oppressors and the oppressed is obfuscated. This shift has been problematic for Marxists, whose work rests on the construction of a dominant, oppressive class and a dominated, oppressed class. Similarly, feminist scholars have argued that Foucault's writing is androcentric and rarely focuses on issues related to women or patriarchy, and that the latter, when referred to, is constructed as discourse. Finally, some contest his approach to writing history because he focused on ideas and the relationships among ideas rather than on practices. Taken together, his often sweeping generalisations are sometimes cited rather superficially by those who are unfamiliar with the nuances of his actual writing to make dubious assertions.

Interesting works written by those who have wrestled with or challenged Foucault include Ramazanoglu's 1993 *Up Against Foucault: Explorations of Some Tensions Between Foucault and Feminism*,[17] and Baudrillard's 1977 provocative *Forget Foucault*.[18] More specifically in medical education, Bleakley and Bligh[19] have raised questions about the applicability of Foucault's work to understanding medicine's current drift towards simulation as a form of education.

Our goal here is rather more modest: we wish to introduce what might be called a 'Foucauldian approach'. Although Foucault's own research methodology was historical and archival (he spent years researching his topics in the libraries and archives of Europe), many of the elements generally associated with research are Foucauldian. These include the notion of writing a history of the present (the conditions of possibility for the emergence of current discourses and statements of truth); the relationships between power and knowledge; the notion that power is not 'held' by anyone but, rather, is 'capillary' and therefore flows through all interactions and relations; the idea that power is not only negative or necessarily dominant but also productive, and, finally, the practices of aesthetic and ethical self-formation that Foucault called technologies of self. These are just a few of the many valuable concepts to be found in Foucault's work. In this paper, we take up just three Foucauldian ideas that have proven invaluable in our research: discourse analysis, archaeology and genealogy.

Foucault's concept of discourse and discourse analysis

A recent publication introduced the notion of using social science theories to inform questions in medical education,[20] one approach to which is Foucauldian discourse analysis. Foucault himself described discourse as 'practices that systematically form the objects of which they speak'.[21] To undertake a Foucauldian discourse analysis is to study how particular discourses construct, systematically, different versions of the social world.[22] Discourses make it possible to say some things but not others, to act in certain ways but not others, and to have particular

roles in social worlds. Although all forms of discourse analysis involve studying language or text in some fashion, Foucauldian critical discourse analysis also involves examination of objectives, practices, and the roles of individuals and institutions that are made possible by particular ways of thinking and seeing the world.[23]

The goal of such an exercise is to study constructs that might be considered 'natural' in order to show, rather, how each is, in fact, a product of specific power/knowledge relationships founded on a series of repeated and legitimised statements. In Foucault's own work such constructs included madness, justice, normality, sexuality and so on. Thus statements of truth are a key element of what is encompassed by a discourse in the Foucauldian sense. It is often the historical or cross-cultural dimensions of discourse studies that make them powerful in illuminating, making strange or problematising taken-for-granted truths, practices and identities that have become normalised. For example, social objects of interest to North American medical educators that may come under scrutiny might include 'appropriate communication skills' and 'professional behaviour', as well as more overtly 'scientific' practices such as the physical examination technique, history taking, laboratory investigation and diagnostic classification.

Foucauldian archaeology

The most methodological of Foucault's writing is *The Archaeology of Knowledge and the Discourse on Language*.[21] This work provides a frame, albeit a rather loose one, for Foucauldian-inspired research. In *The Archaeology of Knowledge*, Foucault distinguished four components of discourse: discursive objects (material and conceptual things made possible by discourse); statements of truth (also called 'enunciative modalities'); discursive concepts (modes of classification, behaviour, transformation, etc. made possible by discourse), and theoretical choices (the theory or theories that are selected or made possible by engaging in particular discursive constructions of what is 'true').[21] The task of the researcher is thus to unearth some or all of these elements and identify how they bring into existence discursive constructions or formations. To extend the archaeological metaphor, Foucault suggested that the discourse analyst unearth and examine an archive of materials (in textual but also other forms) from the historical time and places of interest that will reveal traces of discourse. Further, he suggested that although examining discourse in textual form is important, text alone is not the sole starting place for research and nor is it a level of discourse that can be abandoned once the researcher moves to study discourses in play at the societal level. For example, competence in medicine is defined in written competence frameworks. An archaeological approach might explore how different discourses about what competence is are instantiated in texts and also in practices such as examinations. Foucault emphasised that social practices are inseparable from the power/knowledge nexus that makes possible and constrains the production and use of text and speech. Thus Foucauldian research moves back and forth between instances of discourse in text and its existence in social use.

Foucauldian genealogy

The third useful concept in Foucault's work is what he called genealogy. Foucault's approach was inspired by the earlier work of Nietzsche. Like Nietzsche, Foucault's genealogical approach was premised on theories of power focused on deconstructing official meanings and understandings to show how possibilities become realities.[24] Thus, Foucault not only wrote interesting historical accounts of the emergence of the human sciences, discipline, normalisation and sexuality, but he also used a genealogical approach to 'query the value of these phenomena'.[24] A genealogical approach adds considerations of power to discourse analysis and moves in the direction of critique. Whereas archaeology focuses on the structures and practices of discourse (in text, speech and language), genealogy takes as its focus the creation and legitimation of discourses through individual and institutional practices.[25] A Foucauldian genealogical approach helps us to see that many things are made possible by specific ways of talking, thinking and being, which are, in turn, shaped by the play of power. When we realise that such fundamental things as identity, normality and legitimate knowledge are constructed by discourses, which themselves are associated with power, we open possibilities for critical thinking, transformation, action and change.

A Foucauldian genealogy is not like most other histories. Rather than telling a classic history, Foucault said that he would 'accept the groupings that history suggests only to subject them at once to interrogation; to break them up and then to see whether they can be legitimately reformed'.[21] As Tamboukou writes, Foucault believed: '…truth cannot be separated from the procedures of its production. The

philosopher's task is to therefore criticise, diagnose and demythologise "truth phenomena"'[26] by exploring the conditions that made an event or practice possible. Table 1 lists several of Foucault's important genealogical studies. We have selected those that are relevant to and interesting in medical education. Foucault also had an interest in case studies, a genre familiar to doctors. His edited case studies of a 19th century hermaphrodite and a 19th century man who killed his family are far less known than his famous genealogical books, but they provide an interesting way of observing how Foucault draws attention to and critiques what is normalised in society.[27,28]

FOUR EXAMPLES OF FOUCAULDIAN-INSPIRED MEDICAL EDUCATION RESEARCH

We now turn to contemporary work undertaken by the four authors of this paper. We hope that these short descriptions illustrate how the complex, sometimes dense writing of Foucault has enriched our research. We will not broach the complex subject of what is and is not Foucauldian, but emphasise, after O'Farrell that 'most actual applications of Foucault's method really amount to the transfer, via a process of analogy' and therefore do not involve the imposition of a prescribed template but, rather, 'argument by analogy and comparison'.[15] Each of us has taken up Foucault's ideas in a slightly different way. What unites our work is the desire to study phenomena that, despite being taken for granted, vary significantly in different contexts, cultural settings or during different historical periods. We share a restlessness to break free from assumptions about what is said to be 'true' in medical education and a desire to see the world with fresh eyes.

A socio-history of the objective structured clinical examination

The objective structured clinical examination (OSCE) was invented in 1975 for the assessment of medical students in Scotland. This examination, which requires students to be observed while interacting with a series of patients in fixed-interval stations and to be scored by observers on standardised measures, represented a new direction in the examination of competence; it emphasises performance, standardisation and objectivity. In a remarkably

Table 1 Foucauldian works with relevance for medical education.

The Birth of the Clinic[35] This is Foucault's classic work: it established the rise of clinical medicine, diagnostic classification, clinical-pathological method and, most importantly, the clinical gaze. This work is important for understanding the construction of doctor–patient and student–patient relationships, as well as medical power, control and how knowledge is legitimised.
Discipline and Punish: The Birth of the Prison[36] In one of his most accessible books, Foucault shows how the 'humanitarian reforms' of prisons in the 19th and 20th centuries actually represented a shift from an externalised system of punishment and torture to an internalised system of self-monitoring. Foucault draws parallels between prisons, schools and hospitals and introduces concepts of surveillance, the examination and the panopticon. This work is important for understanding examinations, as well as technologies of reflection and self-assessment in medical education.
History of Madness[37] Originally published in a highly extracted (some consider distorted) form as 'Madness and Civilization', the full English-language translation of History of Madness only appeared in 2006. This genealogy traces madness as a discursive object in its various conceptualisations: as spiritual occupation of the body and an otherworldly knowledge; as deviation from behavioural and moral norms, and as medically diagnosable illness. Foucault shows how each discursive construction has prevailed at different times in history and in different cultures and that the 20th century Western discourse of 'madness-as-illness' would not have emerged without the intersecting discourses and practices of psychiatry, medicine and the law. Given the hot debate ongoing about what is and what is not 'real' illness, doctors and medical students will find here the original critique of illness as a construction and of normalisation.
The History of Sexuality: An Introduction[38] Volume 1 of a very readable three-part series, The History of Sexuality: An Introduction takes up the common conception of the Victorian era as sexually repressive and shows this to be an inverted formulation. In fact, the so-called mechanisms of 'repression' during the Victoria era actually produced the opposite effect; a plethora of sex laws, trials and prohibitions greatly expanded the societal preoccupation with sexuality, inciting a level of fervour not previously seen in modern history. As the medical profession has come to be regarded as an arbiter of what is 'normal' or 'healthy' about sexual practice and behaviour (e.g. its members provide drugs for sexual 'dysfunctions' and diagnose 'disorders of sexuality'), this work is highly relevant for medical practice and education. It is also a wonderful illustration of a hidden curriculum.

short time, medical schools and licensure bodies around the world adopted the OSCE for assessment, as did midwives, nurses, pharmacists, physiotherapists, police forces, veterinarians and massage therapists. Why did this examination spread so quickly into every aspect of health professional education and assessment? Undertaking a Foucauldian genealogy in The Objective Structured Clinical Examination: A Socio-History,[29] Hodges examined an archive of over 600 published articles, interviewed 25 key informants in Canada, the UK and the USA, and visited institutions that were central in promoting the use of OSCEs. His goal was to identify discourses that were linked to the legitimation and uptake of OSCE technology. Three emerged: a behaviourist performance discourse; a psychometric reliability or validity discourse, and a manufacturing-inspired production discourse. Each discourse is associated with characteristic statements, modes of expression and models of legitimation; each can be shown to have brought into existence specific roles for individuals to play; each augments the power of different institutions. This work also reveals strong similarities between OSCEs and the architecture that Foucault called a panopticon, a surveillance structure that came to characterise the design of hospitals and schools, and also prisons, in the 19th century. Hodges' research shows that OSCEs have very different effects according to how they are constructed and which elements are emphasised. Some, such as standardisation, anonymous observation and homogenisation, raise concerns about their effects on learners (e.g. the pseudo-empathy that can arise from overuse of simulation) and some may be linked to a hidden curriculum (e.g. gender or racial stereotypes in standardised patient cases). This research sheds light on the ethical dimensions of assessment.

Competence and the global doctor

'The effects of globalisation on health are the focus of administrators, educators, policy makers and researchers as they work to consider how best to train and regulate health professionals to practise in a globalised world,' write Martimianakis and Hafferty.[30] In this study, a Foucauldian discourse analysis was used to explore what happens to the construct of medical competence when it is expanded, at least discursively, to include the whole world. The authors studied an archive of 1100 textual items that articulated rationales for engaging in global education activities, that embedded a position on medical competencies in relation to practising medicine in international or in culturally diverse contexts, or that dealt with health issues and medical education as global concerns. Their analysis reveals three distinct (primarily Western) conceptions of what it means to be a competent doctor in a globalised world: the universal global doctor, representing someone who can be trained anywhere in the world using a set of universally applicable standards of competency; the culturally versed global doctor, representing someone who has acquired culturally specific knowledge and training through exposure and experience that can be applied in culturally specific contexts locally and internationally, and the global doctor-advocate, representing someone who is trained to be socially minded, who understands the economic, cultural and political determinants of health and uses his or her position of power to advocate for marginalised populations.[30]

In their paper, Martimianakis and Hafferty[30] trace the ways in which these three distinct discourses shape what it is possible for teachers and students in medical school today to do, think and be when they engage in international work. They show how contemporary medical education activity is linked to such phenomena as medical tourism, and the poaching or brain drain of health professionals from underserviced areas. Their work issues a challenge to better understand the socio-political effects of globalisation on medical education, and highlights important ethical, political, cultural and scientific issues and the choices that must be made when preparing students to practise competently in a globalised world.

Constructions of emotion in medical education

'Emotion in medical education rests between the idealised and the invisible, sitting uneasily at the intersection between objective fact and subjective values,' writes Nancy McNaughton.[31] In her research, McNaughton examines different ways in which emotion is conceptualised in medical education with the objective of showing that emotion can inform competency and professionalism in a broader way than is currently the case. Using a Foucauldian critical discourse analysis of keywords, phrases and metaphors in medical education literature, she articulates three discourses of emotion in medical education and the ways in which each creates professional expectations about emotion in practice. The archive consists of material collected from online sources such the ERIC, PsycINFO and MEDLINE databases, as well as published presentation abstracts from local and international medical education conferences, historical documents, policy

documents and the grey literature, and first-hand accounts from students and standardised patients. The three discourses are: a physiological discourse in which emotions are described as located inside the individual as bodily states that are universally experienced; a discourse that frames emotion as a form of competence related to skills and abilities, and a socio-cultural discourse that calls on conceptions from the humanities and social sciences and directs our attention to the function of emotion in social exchanges and its role as a social, political and cultural mediator.[31]

McNaughton argues that making these discourses visible can inform the way we talk about and practise emotion as teachers and health care professionals. She also draws attention to the ways in which using one discourse or another affects what we think of as competent and appropriate versus problematic professional behaviour.

Discourses of science in medicine

'The dominance of biomedical science in medical education has been contested throughout the past century, with recurring calls for more social science and humanities content,' writes Cynthia Whitehead.[32] Noting that the dominance of biomedicine is often attributed to Abraham Flexner's 1910 report *Medical Education in the United States and Canada*,[33] Whitehead disrupts the simplistic telling of history by showing the tension between the so-called scientist-doctor and the science-stuffed curriculum. Employing a Foucauldian study of discourses about science since Flexner, she identifies statements, keywords and metaphors and pays particular attention to recurring arguments and shifts in the meaning and use of terms. This approach reveals a changing role for various kinds of knowledge in medical education. Whereas Flexner's original description of a scientist-doctor referred to an 'incisive thinker who drew upon multiple forms of knowledge',[32] somehow, in the post-Flexner medical education reforms, greater focus was placed on scientific knowledge itself. As a discursive object of importance embedded in curriculum, science knowledge came to dominate over thinking like a scientist. The perception of science shifted from one of an approach to one of curricular content and at the same time science came to be framed discursively as impossibly vast. Whitehead's research traces how the construction of bioscience knowledge as vast and growing exponentially has resulted in the marginalisation of other forms of knowledge, such as those of the humanities and social sciences. Her analysis raises the possibility that, had the original Flexnerian scientific mind (way of thinking), rather than an endlessly exploding body of scientific fact, been the target of the curriculum, medical education today might look quite different. She notes a little-known quote from Flexner himself, written 15 years after his original report, in which he exclaimed that the 'positivist and scientific aspects' of medical education were overly dominant and that doctors were 'sadly deficient in cultural and philosophic background'.[34]

CONCLUSIONS

There are several commonalities to these examples. Firstly, each researcher chose Foucault's work to frame the study of an archive, understood in the broadest sense to include all traces of discourse, including but not limited to printed text. Secondly, each used the archive to map how particular statements of truths about medical education have come to dominate. Thirdly, each used various Foucauldian techniques such as the identifying of discursive shifts and discontinuities to characterise dominant and less dominant discourses. In doing so, each took up the challenge to free oneself of constraints that prevent new ways of approaching old problems in medical education.

Sometimes, however, becoming free can be uncomfortable. As Bishop wrote: '…medicine does not do well with its critics; medicine could never be accused of having insight into the social constitution of its ethos, or mores, its practices, or its objects of inquiry.'[2] Those of us who practise medicine or medical education do not 'intend to deploy a categorical gaze, to control people's behaviours, or to create large institutions that govern our health… [by] ruling it with an iron fist'.[2] This can lead in the face of criticism to what Bishop calls 'the meek, yet powerful claim, "I just want to help people"'.[2] He suggests that doctors (and, we would add, medical educators and researchers) do not 'recognise ourselves in the mirror of reflection that Foucault has placed before us'.[2]

The authors of this paper share the belief that averting our gaze from the mirror that Foucault put before us is a mistake and that it is possible to tackle some of medical education's greatest challenges by drawing on Foucauldian thought and approaches. These challenges include inequities in admission to medicine, the effects of the hidden curriculum, interprofessional power struggles,

debates about professionalism, loss of compassion and pseudo-empathy, to name just a few. As with the work of all theorists, there are challenges and limitations to be negotiated in working with Foucauld's ideas, as we have described. However, what taking a Foucauldian approach helps us to do is to rethink how we might change some of the 'truths' we have taken for granted, some of which impact mightily on what it is currently possible for a medical student or teacher to think, to do and to be. The four of us are engaged in what Tamboukou describes as 'tracing possible ways of thinking differently, instead of accepting and legitimating what are already "truths" of our world'.[26] Our hope in sharing this Foucauldian work and perspective is that we might stimulate a dialogue that is forward-looking and optimistic about the possibilities for change in medical education.

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