Deconstructing the evidence-based discourse in health sciences: truth, power and fascism

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Abstract

Background Drawing on the work of the late French philosophers Deleuze and Guattari, the objective of this paper is to demonstrate that the evidence-based movement in the health sciences is outrageously exclusionary and dangerously normative with regards to scientific knowledge. As such, we assert that the evidence-based movement in health sciences constitutes a good example of microfascism at play in the contemporary scientific arena.

Objective The philosophical work of Deleuze and Guattari proves to be useful in showing how health sciences are colonised (territorialised) by an all-encompassing scientific research paradigm – that of post-positivism – but also and foremost in showing the process by which a dominant ideology comes to exclude alternative forms of knowledge, therefore acting as a fascist structure.

Conclusion The Cochrane Group, among others, has created a hierarchy that has been endorsed by many academic institutions, and that serves to (re)produce the exclusion of certain forms of research. Because ‘regimes of truth’ such as the evidence-based movement currently enjoy a privileged status, scholars have not only a scientific duty, but also an ethical obligation to deconstruct these regimes of power.

Key words: critique, deconstruction, evidence-based, fascism, health sciences, power.

Introduction

We can already hear the objections. The term fascism represents an emotionally charged concept in both the political and religious arenas; it is the ugliest expression of life in the 20th century. Although it is associated with specific political systems, this fascism of the masses, as was practised by Hitler and Mussolini, has today been replaced by a system of microfascisms – polymorphous intolerances that are revealed in more subtle ways. Consequently, although the majority of the current manifestations of fascism are less brutal, they are nevertheless more pernicious. We believe
that fascism is a concept that is not associated with any particular person or location. Therefore, we will use this term as defined by Deleuze and Guattari, and now used by a number of contemporary authors.

Within the healthcare disciplines, a powerful evidence-based discourse has produced a plethora of correlates, such as specialised journals and best practice guidelines. Obediently following this trend, many health sciences scholars have leapt onto the bandwagon, mimicking their medical colleagues by saturating health sciences discourses with concepts informed by this evidence-based movement. In the words of Michel Foucault, these discourses represent an awesome, but oftentimes cryptic, political power that ‘work[s] to incite, reinforce, control, monitor, optimize, and organize the forces under it’ (p. 136). Unmasking the hidden politics of evidence-based discourse is paramount, and it is this task that forms the basis of our critique.

Drawing in part on the work of the late French philosophers Deleuze and Guattari, the objective of this paper is to demonstrate that the evidence-based movement in the health sciences is outrageously exclusionary and dangerously normative with regards to scientific knowledge. As such, we assert that the evidence-based movement in health sciences constitutes a good example of microfascism at play in the contemporary scientific arena. The philosophical work of Deleuze and Guattari proves to be useful in showing how health sciences are colonised (territorialised) by an all-encompassing scientific research paradigm – that of post-positivism – but also and foremost in showing the process by which a dominant ideology comes to exclude alternative forms of knowledge, therefore acting as a fascist structure.

**Evidence-based health sciences: definition and deconstruction**

As a global term, EBHS (evidence-based health sciences) reflects clinical practice based on scientific inquiry. The premise is that if healthcare professionals perform an action, there should be evidence that the action will produce the desired outcomes. These outcomes are desirable because they are believed to be beneficial to patients. Evidence-based practice derives from the work of Archie Cochrane, who argued for randomised controlled trials (RCTs being the highest level of evidences) as a means of ensuring healthcare cost containment, among other reasons. In 1993, the Cochrane Collaboration, serving as an international research review board, was founded to provide clinicians with a resource aimed at increasing clinician–patient interaction time by facilitating clinicians’ access to valid research. The Cochrane database was established to provide this resource, and it comprises a collection of articles that have been selected according to specific criteria. For example, one of the requirements of the Cochrane database is that acceptable research must be based on the RCT design; all other research, which constitutes 98% of the literature, is deemed scientifically imperfect.

At first glance, EBHS seems beneficial for positive patient outcomes, which is a primary healthcare objective. As a consequence, it is easy for healthcare researchers and clinicians to assume that EBHS is the method to assure that patients receive optimal care. While EBHS does acknowledge that healthcare professionals possess discrete bodies of knowledge, EBHS advocates defend its rigid approach by rationalising that the process is not self-serving because improved healthcare and increased healthcare funding will improve patient outcomes.

Consequently, EBHS comes to be widely considered as the truth. When only one method of knowledge production is promoted and validated, the implication is that health sciences are gradually reduced to EBHS. Indeed, the legitimacy of health sciences knowledge that is not based on specific research designs comes to be questioned, if not dismissed altogether. In the starkest terms, we are currently witnessing the health sciences engaged in a strange process of eliminating some ways of knowing. EBHS becomes a ‘regime of truth’, as Foucault would say – a regimented and institutionalised version of ‘truth’.

The health sciences take their lead from institutional medicine, whose authority is rarely challenged or tested probably because it alone controls the terms by which any challenge or test would proceed. Once it was adopted by medicine, the health sciences accepted RCTs as the gold standard of evidence-based knowledge. It is deeply questionable whether EBHS, as a reflection of stratification and segmentation, promotes the multiple ways of knowing deemed important within most health disciplines. Moreover, we must ask whether EBHS serves a state or governmental function, where ready-made and convenient ‘goals-and-targets’ can be used to justify cuts to healthcare funding. We believe that health sciences ought to promote pluralism – the acceptance of multiple points of view. However, EBHS does not allow pluralism, unless that pluralism is engineered by the Cochrane hierarchy itself. Such a hegemony makes inevitable the further ‘segmentation’ of knowledge (i.e. disallowing multiple epistemologies), and further marginalise many forms of knowing/knowledge. Importantly, the evidence-based
movement is neither ‘progressive’ nor a ‘natural’ development in health sciences: it is a trend that is engineered. As a response to this, a vigilant resistance must arise from within the health disciplines themselves, and one way of deploying such resistance is by using a tool called ‘deconstruction’.

Drawing on the work of the late French philosopher, Jacques Derrida, deconstruction is notoriously difficult to define because it is a practice, and not a fixed concept based on abstract ‘facts’ or ‘evidence’. For our purposes, we might say that it is the critical practice of exposing the foundations that underpin the apparent truth-value of a certain concept or idea, challenging the way that it appears to us as self-evidently or ‘naturally’ so. In the words of one of Derrida’s early translators, the task of deconstruction is ‘to locate and “take apart” those concepts which serve as axioms or rules for a period of thought’. More precisely, deconstruction works to demonstrate how concepts or ideas are contingent upon historical, linguistic, social and political discourses, to name but a few. We deconstruct our taken-for-granted ‘truths’ by attending to how they came to be constructed in the first place. One method is to critically analyse the sets of binary oppositions that have informed the history of Western thought, for example, mind versus body. While each term is implicit in the definition of the other (suggesting they are not utterly discrete), Derrida argues that within such binaries, one term is always privileged at the expense of the other. Here, we might think of mind over body (matter), but to these we might add sets of correlative terms – essentially hierarchies – such as reason over emotion, male over female, logic over myth or even quantitative measure over qualitative measure. In the name of a justice-to-come, deconstruction looks towards the future by interrogating the hierarchical power that operates at the heart of these binaries.

Thus, implicit in deconstruction is a suspicion of the essentialist and hierarchical nature of institutional knowledge. In a deconstructive vein, we must ask not only, ‘What constitutes evidence?’ but also, what is the ‘regime of truth’ (Kuhn would call this a ‘paradigm’ and Foucault an ‘épistème’) that dictates when or how one piece of evidence shall count as evidence, while another is denigrated or excluded altogether? In other words, what makes one piece of evidence so ‘self-evidently’ meaningful for us at this precise historical moment, while another appears so ‘self-evidently’ meaningless or nonsensical? Attending to this internal logic of exclusion is both democratising and, arguably, it is just better science! It is not insignificant that the word ‘evidence’ contains the Latin root *videre*, which means ‘to see’. The etymology of the term itself suggests a visual bias that still holds sway in the ‘enlightened’ empirical sciences today. But we might ask: what is the fate of that evidence that is invisible to us – invisible, and yet still marginally felt and attested to?

**Unmapping health sciences**

It is becoming increasingly evident that an unvarying, uniform language – an ossifying discourse – is being mandated in a number of faculties of health sciences where the dominant paradigm of EBHS has achieved hegemony. This makes it difficult for scholars to express new and different ideas in an intellectual circle where normalisation and standardisation are privileged in the development of knowledge. The critical individual must then resort to resistance strategies in front of such hegemonic discourses within which there is little freedom for expressing unconventional thoughts.

Rather than risk being alienated from their colleagues, many scientists find themselves interpellated by hegemonic discourses and come to disregard all others. Unfortunately, privileging a single discourse (evidence-based medicine (EBM)) situated within a single scientific paradigm (post-positivism) confines the researcher to a yoke of exactly reproducing the established order. To a large degree, the dominant discourse represents the ladder of success in academic and research milieus where it establishes itself as a weapon used against those who praise the freedom of scientific inquiry and the free debate of ideas. When only one discursive formation (EBM) finds itself on the discursive terrain (health sciences), academics and researchers constitute a united community whose ways of speaking and thinking thwart both creativity and plurality in the name of efficiency and effectiveness.

We believe that EBM, which saturates health sciences discourses, constitutes an ossified language that maps the landscape of the professional disciplines as a whole. Accordingly, we believe that a postmodernist critique of this prevailing mode of thinking is indispensable. Those who are wedded to the idea of ‘evidence’ in the health sciences maintain what is essentially a Newtonian, mechanistic world view: they tend to believe that reality is objective, which is to say that it exists, ‘out there’, absolutely independent of the human observer, and of the observer’s intentions and observations. They fondly point to ‘facts’, while they are forced to dismiss ‘values’ as somehow unscientific. For them, this reality (an ensemble of facts) corresponds to an objectively
real and mechanical world. But this form of empiricism, we would argue, fetishises the object at the expense of the human subject, for whom this world has a vital significance and meaning in the first place. An evidence-based, empirical world view is dangerously reductive insofar as it negates the personal and interpersonal significance and meaning of a world that is first and foremost a relational world, and not a fixed set of objects, partes extra partes.

Of course, we do not wish to deny the material and objective existence of the world, but would suggest, rather, that our relation to the world and to others is always mediated, never direct or wholly transparent. Indeed, the socio-cultural forms of this mediation would play a large part in the way the world appears as full of significance. Empirical facts alone are quantities that eclipse our qualitative and vital being-in-the-world. For example, how should a woman assign meaning to the diagnosis she just received that, genetically, she has a 40% probability of developing breast cancer in her lifetime? What will this number mean in real terms, when she is asked to evaluate the meaning of such cancer in her lifetime? What will this number mean in real geneti- 

From a variety of perspectives, those we label as ‘postmodern authors’ offer a robust critique of evidence-based health sciences and their objectivist world view. The French philosopher Jean-François Lyotard sees postmodernism as the end of universal or ‘meta-narratives [grands récits]’ that characterise the totalising Reason of Modernity. In broad strokes, postmodern authors provide a critique of the knowing subject, who is alleged to be a contextless, abstract and autonomous ego, implicitly male, white, Western and heterosexual. The clinician can often be considered such an institutional subject who is presumed both to know the truth of disease and to have the moral and intellectual authority to prescribe treatment. Foucault, for one, is critical of this power, which he describes with the metaphor of the ‘clinical gaze’ – a panoptic kind of ‘expert seeing’ that both determines in advance what will appear, and, more ominously, what will be silently internalised by the patient, and will govern his or her own inner experience and significant values. ‘That which is not on the scale of the gaze’, Foucault writes, ‘falls outside the domain of possible knowledge’ (p. 166). Thus, the authority of the clinician must be understood as a discursive power that shapes the realm of the possible and, in doing so, often ignores certain symptoms that would allow a more appropriate diagnosis. At the same time, the absolute authority of the gaze becomes the manner in which the patient will see him- or herself. Obvious examples here are the hysterisation of the female body and the pathologisation of homosexuality within medical discourse. In the face of such phenomena being now widely regarded as social/medical constructions, we might have hoped that health sciences would become more critical of its authority and the process through which it re/produces modern binaries (e.g. normal/pathological, male/female).

A starting point for health sciences would be to promote the multiplicity of what Foucault describes as subjugated forms of knowledge (savoirs assujettis): these forms of knowledge are ways of understanding the world that are ‘disqual- ified as non-conceptual knowledges, as insufficiently elaborated knowledges: naïve knowledges, hierarchically inferior knowledges, [and] knowledges that are below the required level of erudition or scientificity’ (p. 7). These forms of knowledge arise from below, as it were, in contra-distinction to the top-down approach that characterises the hegemonic thrust of EBHS. For Foucault, a subjugated knowledge is not the same thing as ‘common sense’. Instead, it is ‘a particular knowledge, a knowledge that is local, regional, or differential’ (pp. 7–8).

In our view, this positive process begins with a critique of EBHS and its hegemonic norms. As we have argued, according to postmodern authors, these norms institute a hidden political agenda through the very language and technolo- gies deployed in the name of ‘truth’. Again, Foucault sums up this position in his critique of modern medicine: ‘Medicine, as a general technique of health even more than as a service to the sick or an art of cures, assumes an increasingly important place in the administrative system and the machinery of power’ (p. 176). Here, in such an ‘adminis- trative system’ and a ‘machinery of power’, we find a classic allusion to what Hannah Arendt defines as totalitarianism or fascism, as we defined it earlier. For her, somewhat optimistically, totalitarian regimes are not the simple result of an innate evil in humankind; rather, totalitarianism is a political phenomenon that emerges from a confluence of socio-his- torical forces. She writes that 20th century totalitarianism is essentially an ideology that arose to fill a political vacuum in post-World War I Europe, when positive laws increasingly came to be replaced by terror.

Arendt herself draws the link between totalitarian ideology and the modern sciences, and so we are justified to turn to her, among others, to find a trenchant critique of EBHS. The ‘regime of truth’ that has emerged from the EBHM is an ideology that is supported by a number of contingent fac- tors – contingencies that EBHS would mistakenly classify as ‘truths’. An ideology is monolithic: those who adhere to
the ideology believe it ‘can explain everything and every occurrence [sic] by deducing it from a single premise’ (p. 468). She warns that totalitarianism ‘is quite prepared to sacrifice everybody’s vital immediate interests to the execution of what it assume[s] to be the law of History or the law of Nature’ (pp. 461–462). But, as we have remarked, History and Nature are made; these forms therefore call for an ever-renewed critique.

Fascism and the fall of thought

The ossifying discourse that supports EBM is the result of an ideology that has been promoted to the rank of an immutable truth and is considered, in learned circles, as essential to real science. We could add here that its ossified language is a method of communicating in coded form, in stereotyped and dogmatic phraseology – an ideological message that will not be contradicted or challenged by its authors, but will always be understood by initiates. In this way, in its capacity as an ossifying discourse, the term ‘evidence-based movement’ (including concepts associated with it) sustains itself with its lexicon of acceptable ideas and forms.

In his famous novel 1984, George Orwell coined the term Newspeak to describe a revised language purged from any affective tone. Newspeak, the ‘official language’ of the fictional Oceania, is extraordinary in that its lexicon decreases every year – ostensibly in the name of efficiency and effectiveness. As the character Syme puts it:

> Of course the great wastage is in the verbs and adjectives, but there are hundreds of nouns that can be got rid of as well. . . . If you have a word like ‘good’, what need is there for a word like ‘bad’? ‘Ungood’ will do just as well. . . . Or again, if you want a stronger version of ‘good’, what sense is there in having a whole string of vague useless words like ‘excellent’ and ‘splendid’? And all the rest of them? ‘Plusgood’ covers the meaning, or ‘double-plusgood’ if you want something stronger still. . . . In the end the whole notion of goodness and badness will be covered by only six words – in reality, only one word. (pp. 45–46)

Newspeak may be efficient, but in the ‘destruction of words’ it also operates to radically restrict the ways in which humans are mediated with their world and with others. The totalitarian regime governing Oceania understands that complex – or pluralistic – languages would pose a threat to its security, and so the true goal of Newspeak is to take away the ability to conceptualise revolution adequately, or even to conceive of the terms by which such a resistance might emerge. According to Oceania’s state manual, available only to elite Party members and entitled ‘The Theory and Practice of Oligarchical Collectivism’:

> The masses never revolt of their own accord, and they never revolt merely because they are oppressed. Indeed, so long as they are not permitted to have standards of comparison they never even become aware that they are oppressed. (p. 171)

We argued above in terms that resonate immediately with Orwell’s totalitarian vision: The EBHS seldom question the authority of their own discourses, but deploy them unknowingly – they risk becoming the servo-mechanism of their own technology, unable to conceptualise the terms that would lead them to think outside this narrow world view. And indeed, why should they, when they can enjoy institutional promotions and accolades, public recognition and state contracts of all kinds? EBM and its related concepts are highly promoted in academic spheres, so much so that a research article free from these taken-for-granted concepts risks being labelled as scientifically unsound. Applying the work of Orwell in a critique of EBM in health sciences might surprise the reader; however, after an in-depth reading of 1984, we feel that Orwell’s vision is gradually becoming a reality. Currently, a large number of scholars in the health sciences follow their colleagues in medicine down a narrow path leading to uniformity and intolerance. There is therefore in our opinion, the creation and advancement of a new ‘language’ that is supplanting all others, attempting to discredit or to eliminate them from the discursive terrain of health. This is scientific Newspeak. It is a highly normative and recalcitrant scientific language that stands in opposition to that sense of hope that sustains every freedom-loving individual.

The mastery of scientific Newspeak is, for the most part, a regurgitation of prefabricated formulas (buzz words or catch words) that is informed by a single, powerful lexicon. This new guide book of scientific vocabulary, including terms connected with EBM (e.g. systematic literature review, knowledge transfer, best practices, champions, etc.), is taken seriously in the realm of health sciences, so much so that it is considered vital as a reflection of ‘real science’. The classification of scientific evidence as proposed by the Cochrane Group thus constitutes not only a powerful mechanism of exclusion for some types of knowledge, it also acts as an organising structure for knowledge and a mechanism of ideological reinforcement for the dominant scientific paradigm. In that sense, it obeys a fascist logic.

Along with Deleuze and Guattari, we understand such fascist logic as a desire to order, hierarchise, control, repress, direct and impose limits. Fascism is one of the many faces of totalitarianism – the total subjection of humanity to the political imperatives of systems whose concerns are of their own production. In light of our argument, fascism is not too strong a word because the exclusion of knowledge ensembles relies on a process that is saturated by ideology.
and intolerance regarding other ways of knowing. The process at play here is one that operates hand-in-hand with powerful political or ‘power’ structures and that gears and sustains scientific assertions in the same direction: that of the dominant ideology. Unfortunately, the nature of this scientific fascism makes it attractive to all of us – the subject. In Foucault’s words:

> the major enemy, the strategic adversary is fascism. . . . And not only historical fascism, the fascism of Hitler and Mussolini – which was able to mobilize and use the desire of the masses so effectively – but also the fascism in us all, in our heads and in our everyday behavior, the fascism that causes us to love power, to desire the very thing that dominates and exploits us. (p. xiii)\(^7\)

Fascism does not originate solely from the outside; it is a will within us to desire, although often unwittingly, a life of domination.\(^1\) Such a ‘lovable’ fascism requires little more than the promise of success (grants, publications, awards, recognition, etc.) within its system to get us to participate wholeheartedly.\(^2^5\) Perhaps it is time to think about governing structures that impose their imperatives (academic, scientific, political, economic) on academics and researchers, and to ask ourselves what drives us to love fascist and exclusionary structures.

The Cochrane Group has created a hierarchy that has been endorsed by many academic institutions, and that serves to (re)produce the exclusion of certain forms of knowledge production. Because EBM, as a ‘regime of truth’, currently enjoys a privileged status, there exists a scientific and ethical obligation to deconstruct such regime. Given the privileged relation to knowledge defining the intellectual mission, intellectuals are well located to deconstruct the ‘truth’ and to ‘speak truth to power’, to use Foucault’s expression. Unfortunately, most would prefer not to hear alternative, marginalised discourses because the latter tend to expose the very power relations that create our current situation and prop up those academics/scientists with a vested interest in the status quo.\(^2^6\) However, we believe that one of the roles of the intellectual is to decolonise, to de-territorialise the vast field of health sciences as it is currently mapped out by the EBM.

**Final remarks**

Critical/intellectuals should work towards the creation of a space of freedom (of thought), and as such, they constitute a concrete threat to the current scientific order in EBHS and the health sciences as a whole. It is fair to assert that the critical/intellectuals are at ‘war’ with those who have no regard other than for an evidence-based logic. The war metaphor speaks to the ‘critical and theoretical revolt’ that is needed to disrupt and resist the fascist order of scientific knowledge development.

The evidence-based enterprise invented by the Cochrane Group has captivated our thinking for too long, creating for itself an enchanting image that reaches out to researchers and scholars. However, in the name of efficiency, effectiveness and convenience, it simplistically supplants all heterogeneous thinking with a singular and totalising ideology. The all-embracing economy of such ideology lends the Cochrane Group’s disciples a profound sense of entitlement, what they take as a universal right to control the scientific agenda. By a so-called scientific consensus, this ‘regime of truth’ ostracises those with ‘deviant’ forms of knowledge, labelling them as rebels and rejecting their work as scientifically unsound. This reminds us of a famous statement by President George W Bush in light of the September 11 events: ‘Either you are with us, or you are with the terrorists’. In the context of the EBM, this absolutely polarising world view resonates vividly: embrace the EBHS or else be condemned as recklessly non-scientific.

In conclusion, in *The Human Condition*, Hannah Arendt points to one way to combat totalitarianism. For Arendt, the opposite of totalitarianism is politics, by which she means, politics guided by free speech and a plurality of views:

> speech is what makes man a political being. If we would follow the advice, so frequently urged upon us, to adjust our cultural attitudes to the present status of scientific achievement, we would in all earnest adopt a way of life in which speech is no longer meaningful. (pp. 3–4)\(^2^7\)

When the pluralism of free speech is extinguished, speech as such is no longer meaningful; what follows is terror, a totalitarian violence. We must resist the totalitarian program – a program that collapses words and things, a program that thwarts all invention, a program that robs us of justice, of our meaningful place in the world, and of the future that is ours to forge together. Paradoxically, perhaps, an honest plurality of voices will open up a space of freedom for the radical singularity of individual and disparate knowledge(s).

The endeavour is always a risk, but such a risk is part of the human condition, and it is that without which there could be no human action and no science worthy of the name.

Plurality is the condition of human action because we are all the same, that is, human, in such a way that nobody is ever the same as anyone else who ever lived, lives, or will live. (p. 8)\(^2^7\)

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References