

Medicine's Militarization?

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No one, so far as I know, has ever proposed 'the militarization of medicine' as a general thesis. The phrase occasionally appears *en passant* in histories of medicine, but no such broad-sweep systematic analysis or application has ever been undertaken. The question is whether it should?

Although there is now an abundant literature on war and medicine, with modernity itself intimately woven into it, the idea of expressing this relationship (or, more generally, that between medicine and the military) in terms of medicine's 'militarization' has had no call. There are a few writings which bear directly on the subject, which I will refer to below, but on the whole the notion of 'militarization' is one that has been articulated only outside the history of medicine.

Most commonly 'militarization' features within discussions of the so-called 'military-industrial complex', especially post-World War II, and frequently with specific reference to the appropriation of science and technology. Thus alongside studies of the 'militarization of space' (referring to the cold war space-race and the 'star-wars' project), there are works such as David Noble's *Forces of Production: a social history of automation* (1985), which argues that military interests have dictated the direction of technological change. There are also volumes on the militarization of everyday life in the 1950s, referring to the building of bomb-shelters and the mindscape of domestic civil defence in Cold War America; books on the militarization and de-militarization of contemporary Japan (including backward glances at 'the militarization of aesthetics in Japanese history'); books on militarization dealing with the dynamics of the arms race in Latin America, on 'counter-narcotics and militarization in the Andes', to quote one title, or on *The Militarization of Mother India* (1990), to quote another; and vast volumes more on the militarization of the Middle East, South Africa, the rest of Africa, Indonesia and on and on, and in and through studies of global militarization and the spawning of the international 'garrison state'.

In all such works the term 'militarization' is deployed contemptuously; indeed, it's a virtual synonym for the exercise of evil power – whether manifested nakedly through the end of a nuclear warhead, or socially through excessive government spending on armaments, and/or oppressive forms of population surveillance and control. Directly or indirectly, militarization is held to be the opposite of democracy, the free expression of human rights, and the provision of welfare (as opposed to the allocation of resources to warfare). Thus, a recent work on Sri Lanka is sub-titled 'militarization vs. modernization'.¹ In a tradition running from Marx, through Lewis Mumford to Martin Shaw and Michael Mann, militarization is about how the military imperatives that make up 'world military order' connect with other characteristics of the capitalist world system. In particular, for the more historically minded authors in this tradition (such as David Noble), it is with the regimentation, routinization, standardization, and centralized command of efficiency-driven capitalist industrial production and the associated de-personalization or alienation and inter-changeability of those involved in that socio-economic process. In essence, this is what Marx and Engels called the 'militarization of economic relations', and what Mumford identified as the 'rift between mechanization and humanization' and the diminished regard for the sanctity of human life'.²

¹ J. Basil Fernando, *Sri Lank: militarization vs. modernization* (1991)

² Mumford, *Technics and Civilization* (1934), p.50 cited in Alex Roland, 'Science, technology, and war', *Technology and Culture*, 36 (suppl) (1995), p.S85.

It is hardly surprising, therefore, that historians of medicine have felt no great attraction to the notion. In general, medicine in history is regarded as a progressive force, whether or not it is cast positivistically, and whether or not it is written from the perspective of the humanitarian pretensions of the medical profession. There are of course historically contingent reasons why war and medicine and military medicine have not been high on the agenda of historians -- contingencies which include the tendency away from political and structuralist historiography. I have discussed some of these reasons elsewhere and there is no need for me to repeat them here,³ except to emphasise that one of those reasons is the implicit militarism within not only the history of medicine (where war is often portrayed as 'good' for medicine) but also in the historiography of medicine. The latter's implicit militarism stems from a tradition among social justice reformers who, from around the time of the First World War, associated war with sweeping economic reforms and social possibilities. The medical historians, Henry Sigerist and George Rosen were well within this 'warfare is good for welfare' tradition. Although they did not write on medicine and the military and (unlike Fielding Garrison) did not see war as a pathological phenomenon, they embraced the notion that would later be naturalized by the Fabian social policy analyst, Richard Titmuss, that war is 'normal' and peace abnormal.⁴ While the empirical basis for Titmuss's claim that 'war is good for welfare' has been challenged by the economic historian Alan Milward, among others,⁵ the implicit militarism in the social theory has not. Indeed, Milward begins his economic and social history of the Second World War with the statement that "Among the commonly accepted ideas about war which have little foundation in history is that war is an abnormality."⁶

Implicit militarism, then, together with the negative political connotations of the idea of militarization, go some way to explain why the militarization of medicine has not intrigued historians and why, in turn, in surveys such as John Gillis's *The militarization of the Western World* (1989) medicine finds so little mention. Medicine, we are led to believe, has nothing to do with the militarization of the western world, or that there is no affinity between the politics of the body and the politics of the garrison state.

Yet just about everywhere we turn in the history of modern western medicine the military exerts a powerful presence. It's there -- if we chose to look for it -- in the design and function of medicine's therapeutic and educational institutions; in the development of its professional structures, such as specialization; in the formation of most of its fields of endeavour, from anatomy and pathology through to psychiatry. The military is there powerfully in medicine's metaphors, persistently since the rise of bacteriology (the invasive paradigm of modern medicine). And it's there in its organizational structures and administrative thinking.⁷

All of this can be documented, as can the military's crucial place in research applicable to the exploitation and control of labouring bodies -- notably the research on nutrition, fatigue, ergonomics, and the science of walking,⁸ not to mention the 'science of work' (the *arbeitswissenschaft* that was so crucial to the artificial limbs industry for disabled German veterans of World War I.)⁹

³ Cooter, 'War and Modern Medicine', in W.F. Bynum and Roy Porter (eds), *Companion Encyclopedia of the History of Medicine* (Routledge, London/New York, 1993), 1536-73; idem, 'Medicine in War' in D. Brunton, et al (eds) *Medicine Transformed: Health, Disease and Society in Europe, 1800-1930*, vol. 2 (Open University/Manchester University Press, 2004), 349-81.

⁴ Richard Titmuss, 'War and Social Policy' in his *Essays on the Welfare State* (2nd edn; London: Allan and Unwin, 1963) p.77.

⁵ Alan S. Milward, *The Economic Effects of the Two World Wars on Britain* (London: Macmillan, 1972); see also, Harold Smith (ed.), *War and Social Change: British Society in the Second World War* (Manchester University Press, 1986); and Arthur Marwick (ed.), *Total War and Social Change* (London: Macmillan, 1988).

⁶ *War, Economy and Society, 1939-1945*, p.1.

⁷ See Cooter, *Surgery and Society in Peace and War: Orthopaedics and the Organization of Modern Medicine, 1880-1948* (London: Macmillan, 1993); idem, 'Teamwork', *Lancet*, ?? April, 2004, p.??

⁸ M. Flesher, 'Repetitive Order and the Human Walking Apparatus: Prussian Military Science versus the Weber's Locomotion Research', *Annals of Science*, 54 (19??), 463-87

⁹ See Heather Perry, PhD forthcoming.

And just as the military's role in human experimentation is vital to the contemporary study of that subject,¹⁰ so the history of the examination of military recruits is fundamental to the history of medical statistics, since at least as far back as the American Civil War when massive efforts were put into extracting from those bodies the 'laws of population.' What constituted a 'normal body' (including ultimately a 'normal mind') was also derived from those surveys. Similarly, the history of sexuality would not be much if it did not take cognizance of the military interest in the control of venereal disease.¹¹ The history of ventilation in the late eighteenth century and sanitation and public health from the late nineteenth simply cannot be written without military reference.¹² While the history of some subjects, such as nursing,¹³ colonial medicine,¹⁴ and disability,¹⁵ are almost meaningless without reference to the military, other subjects, such as epidemiology, have more complicated and in many ways more foundational relationships, bearing on the management of collective spaces and the military's role in the modelling and defining of nation states themselves through the identification of populations epidemical.¹⁶ The list goes on and on, and were we seriously to explore these topics we should surely end up saying for medicine, exactly as Shapin has said of the social institution of science, that it is 'difficult to imagine what [...] it] would look like divorced from its military ties.'¹⁷

That imagining becomes all the more potentially pervasive if we move beyond the medical profession and its concerns to embrace what we might call the militarization of the human body -- its standardization, normalization and regimentation as mediated through statistical surveys and the research on fatigue and so on that I've mentioned. And from there we might move to thinking about the whole somaticization of culture as a process tied up with military disciplining.

But merely staking a claim for the linkage or the widespread involvement of the military in the history of medicine and the body may not be sufficient to sustain a thesis on medicine's *militarization*. One needs to establish the exact relation between military interests and the practice of medicine generally, or how those interests, structures and values of the military might have become integral to the social relations of modern medicine. To put this otherwise, did military (administrative) ways of knowing penetrate medical ways of doing, if not also social ways of being?

The answer would seem to be a resounding 'yes', according to the few detailed historical studies we have that engage with the relations between medicine and the military. One of these is that by Hal Cook on medicine and the British armed forces after the 'Glorious Revolution' of 1688,¹⁸ an impressive article which concludes that "Military medicine [thus] combined just those aspects of medicine to which historians have often pointed when tracing

¹⁰ For a good recent example, see Gerald Kutcher, 'Cancer Therapy and Military Cold-War Research; Crossing Epistemological and Ethical Boundaries' *History Workshop Journal*, 56 (2003), 105-130.

¹¹ See Lutz Sauerteig, 'Sex, Medicine and Morality During the First World War' in Cooter et al *War, Medicine and Modernity* (Stroud: Sutton, 1998).

¹² Lion Murard and Patrick Zylberman, 'L'autre guerre (1914-1918), La sante publique en France sous l'oeil de l'Amerique', *Revue historique*, 276 (1986), 367-98.

¹³ Wonderfully ironic and revealing is the fact that in Britain in 1946 when it was found that recruitment to nursing was hampered by the perception of it as over-military-like in its discipline, the proposed reform, which was enthusiastically taken up by the General Nursing Council, included recruiting nurses according to personality tests which were in fact designed by military psychologists. Cited in Penny Starns, 'Military Influence on the British Civilian Nursing Profession, 1939-69', Ph.D. thesis, University of Bristol, May 1997, p.88.

¹⁴ See McLeod, Worboys, M Harrison, David Arnold and others;

¹⁵ From the vastly expanding literature on this subject, see, for example, David Gerber (ed.) *Disabled Veterans in History* (Ann Arbor: University of Michigan Press, 2000) and Deborah Cohen, *The War Come Home: disabled veterans in Britain and Germany, 1914-1939* (Berkeley: University of California Press, 2001).

¹⁶ See Cooter, 'Of Wars and Epidemics: Unnatural Couplings, Problematic Conceptions', *Social History of Medicine*, 16 (Aug. 2003), 283-302; Andrew Aisenberg, *Contagion: disease, government, and the 'social question' in nineteenth-century France* (Stanford: Stanford University Press, 1999), p.117; Michael A. Osborne, 'French Military Epidemiology and the Limits of the Laboratory' in Andrew Cunningham and Perry Williams (eds), *The Laboratory Revolution in Medicine* (Cambridge: Cambridge University Press, 1992), 189-208.

¹⁷ Shapin, 'Science and the Public' *Companion to the History of Modern Science, 1990*, p.1004./

¹⁸ Harold J Cook, 'Practical medicine and the British armed forces after the "Glorious Revolution"', *Medical History*, 34 (1979), 1-26.

the origins of modern medicine." Another wonderfully detailed source is the massive study of *The Medical World of Early Modern France* by Laurence Brockliss and Colin Jones. Yet another is Christopher Lawrence's essay on the role of medicine in the Royal Navy in the 18th century.¹⁹

None of these authors deals explicitly with the concept of militarization in relation to medicine. One historian who briefly has is Bertrand Taithe in his chapter on the siege of Paris of 1871.²⁰ Here, however, 'militarization' is construed mainly in terms of the quantification of the integration of civilian and military medical resources and the eventual dominance of the latter over the former. Thus Taithe's concern is less with the militarization of medical thought and the social relations of medicine, than with the agencies involved in the military mobilization of medical resources.

Taithe's study is important to me here, less for its detailed evidence of the militarization of medicine during the siege of Paris, than for two other reasons. First, for what it reveals about **the limits** of that phenomenon – that is, the limits to the blurring of the distinctions between military and civilian spheres, which is taken to be the quintessence of 'militarization'. Taithe finds these relations porous, with the recalcitrant civilian institutions forever reasserting their multifarious interests against those of the military.

My other reason for seizing upon Taithe's study is that it highlights two further features of the militarization of medicine that I think we should **resist**. The first is the implication that this process only takes place in war-time. But as Cynthia Enloe has argued, militarization can take place at any time any where in relation to any thing, be it "toys, marriage, scientific research, university curriculums, motherhood, fatherhood, AIDS, immigration, racism, shopping, or comic strips" – wherever society "becomes controlled by or dependent on the military or on military values".²¹

The second resistible feature of Taithe's work is that institutions of military medicine are necessarily imbued with, and must be the vehicles for, the militarization of civilian medicine. This dichotomized framing of the concept of militarization is restrictive because it suggests that militarization is to be understood only as the outcome of a **causal** interaction (or imposition) of the military **upon** the civilian sphere. Although this is precisely what occurred during the siege of Paris, it would be wrong to conclude that the process of militarization can **only** be understood in these terms. Against it, stands the fact that military medicine itself often had to be 'militarized', as in the case of British military medicine under William and Mary. Moreover, we can point to instances of **civilian** medical or para-medical bodies **self**-militarizing themselves, as it were. An example would be the St John Ambulance Brigade, the medical members of which in the 1890s divided London up into battle zones to deal with street accidents.²² Furthermore, we can instance the military resisting certain forms of militarized corporeal disciplines, as when the British Army in the 1880s refused to take up Ling's system of gymnastics.²³

Of course, the militarized social relations of medicine that Hal Cook and Brockliss and Jones refer to do not have to be seen as any more totalizing or determinist than the militarization of civilian medicine that Taithe refers to. Brockliss and Jones, for example, note that as a result of general reforms in nursing and para-medical care in certain civilian quarters in mid-18th century France, greater emphasis came to be placed on the *suffering* and *dignity* of the sick poor. Thus two versions of what was ethical in medicine emerged, with disputes between medical men and nursing communities running "in counterpoint to more classic confrontations between doctors and surgeons" and constituting "a tough and resilient check on the medicalization of the hospital" (p.713).

¹⁹ Christopher Lawrence, 'Disciplining Disease: scurvy, the navy and imperial expansion, 1750-1825' in David Miller and P. Reill (eds), *Visions of Empire* (Cambridge: CUP, 1996), pp.80-106.

²⁰ Bertrand Taithe, *Defeated Fresh: welfare, warfare and the making of modern France* (Manchester: Manchester University Press, 1999), chapter 4: 'Militarisation and war effort: Paris, the "giant hospital"', pp.71-98.

²¹ cf C. Enloe in Gillis, pp.139-40.

²² Cooter, 'The Moment of the Accident: Culture, Militarism and Modernity in Late-Victorian Britain' in Cooter and Bill Luckin (eds), *Accidents in History: Injuries, Fatalities and Social Relations* (Amsterdam: Rodopi, 1997), 107-57.

²³ J.C. Johnstone, 'Physical Training in the Army and its influence on British Schools', in David McNair and Nicholas A. Parry (eds), *Readings in the History of Physical Education*, Hamburg, 1981, pp.95-102 at p.97.

But this kind of evidence may not matter for the prosecution of the militarization of medicine thesis, insofar as the assessment of what may or may not be an outcome of militarization still keeps us within that narrative or paradigm, just as the study of the *de*-medicalization of contemporary medicine keeps us within the narrative of medicalization. Thus even the pursuit of the forces of what may turn out to be the *anti*-militarization of medicine in any context and/or the resistance to the military inculcation of systematized body training, need not undermine the pursuit of the thesis. Nor would the acknowledgement of, for example, the low status of military medicine in Britain for most of the 19th century. On the contrary, such counter-evidence should be an encouragement to the interpretative framework, or at least to testing its relative merits against potential alternative narratives in the history of medicine, such as romanticism, humanism, secularization, urbanization, colonialism, imperialism, degeneration or, more instrumental perhaps, the commercial market, to say nothing of gender and ethnicity. These are not necessarily competing tracks though the landscape of our discipline; at different times and places they are likely to have crisscrossed the military track, though the extent of the crisscrossing and the nature of the tracks themselves is something that needs to be determined. For example, it is clear that the much of the inspiration for the reorganization of Edwardian medicine stemmed, not from the military, but from the world of commerce and finance. Yet the divisions of labour introduced in clinics, the creation of surgical 'firms', and 'administrative ways of knowing' fitted neatly with the economic demands for medical efficiency during the First World War, and these features were furthered through that experience.²⁴ One might argue that such incorporations of modern business practice into medicine, which became fundamental to its way of organizing itself, as well as to conceptualizing its human 'material', were themselves military in origin. As it was on the Royal Navy dockyards that the efficiency driven Samuel Bentham dreamt up the idea of the panopticon (that his brother Jeremy was to memorialize in his scheme to discipline and self-discipline prisoners),²⁵ so it was in the military arsenals of pre-Revolutionary Paris that scientific management of the industrial production first transpired.²⁶ Here, then, we might ally with Max Weber that 'the discipline of the army gives birth to all discipline' -- a sociological insight that he probably had reinforced whilst serving in the administration of an army hospitals in Baden during the First World War. One can push this even further and say that prior to the 19th century the sinews of state economics were *all* largely military.

But perhaps this is to stretch 'militarization' to a ludicrously unprofitable degree for the history of medicine, taking us further and further away from its subject matters in their relation to the making of the modern world, and further away from the social genesis of the modern body and medicine's practices upon it.

Which, in a round about way, brings me back to the problem with which I began, namely, whether or not we actually need this concept. Couldn't we be just as happy historians utilizing the narrative of 'medicalization', or even just 'modernity'. The latter, as Weber deployed it to refer to the growth, differentiation and integration of managerial systems, the standardization and routinization of administrative action, and, above all, the calculative and evaluative thought that both legitimises and extends bureaucratic structures into ever-more intimate areas of social life – surely all of this captures the features, social relations, and outcomes that I am suggesting are conveyed by the term the 'militarization of medicine'. Might, then, the militarization of medicine be merely epiphenomenal to the more general process of modernity?²⁷

²⁴ On the role of the market in structuring modern medicine, see George Rosen, *The Structure of American Medical Practice, 1875-1941*, ed. Charles Rosenberg (Philadelphia: University of Pennsylvania Press, 1983), and for Britain, for the medical proletariat, Anne Digby, *The Evolution of British General Practice, 1850-1948* (Oxford: OUP, 1999).

²⁵ Will Ashworth, "'System of Terror": Samuel Bentham, Accountability and Dockyard Reform During the Napoleonic Wars', *Social History*, 23 (Jan. 1998), 65-79

²⁶ Ken Alder, *Engineering the Revolution: arms and enlightenment in France, 1763-1815* (Princeton University Press, 1997).

²⁷ 'Modernization', according to Jonathan Crary (*Techniques of the Observer: on vision and modernity in the nineteenth century* [Cambridge, MA: MIT Press, 1991], p.10, "is a process by which capitalism uproots and makes mobile that which is grounded, clears away or obliterates that which impedes circulation, and makes exchangeable what is singular. This applies as much to bodies, signs, images, languages, kinship relations, religious practice, and nationalities as it does to commodities, wealth, and labor power. Modernization becomes a ceaseless and self-perpetuating creation of new needs, new consumption, and new production."

I'm not sure I want go *quite* so far, for it seems to me that the term at least refers us to an identifiable agency in history. And given that we know so little about the actual role of medicine in the constitution of modernity,²⁸ this agency focus may be no bad thing. Yet, even so, we probably need to reign in the concept, for if we take the militarization of medicine to be the process behind the modern social relations of medicine, and regard these as in some way constitutive of the somaticization of culture, then nothing much is left off the canvass – the term becomes as ill-defining, non-explanatory and flabby as that of 'modernity itself. On the other hand, as I'm sure you will all be quick to point out, there are large areas in the history of medicine whose connections with the military are remote. The history of madness, at least before the C20, is one of those areas, I think, though it may be the exception to prove the rule, in that almost by definition patients could not be rationalized.

Where does this leave us, except with the certainty that, contrary to the history of Sri Lanka, the history of medicine does not permit the juxtaposition of 'militarization' to 'modernization'? The available evidence would seem to suggest that the militarization of medicine embodied modernity, and was part and parcel of the same process. It should of course be treated as a process and neither as a material force (as some authors have tended to use the term 'modernity') nor simply as a discursive realm. And it is a process of which we need not be contemptuous *a priori*, however much we might disapprove of the social relations of medicine that can be shown to have stemmed from it. Rather, the militarization of medicine might be better understood as a *creative* force (disassociated from 'good') in the production of the kind of managerial social relations and administrative way of thinking that we commonly associate with late 19th century industrial capitalism. But exactly how those social relations were mediated through medicine in the military remains to be explored, especially for the 19th and 20th centuries, Anglo Saxon world in which military medicine was relatively weak and anti-militarism sometimes strong.

I confess that at this point in my inquiry, I'm not entirely convinced of the 'militarization of medicine' thesis, so much as I am of the worthiness of pursuing the various ways in which we might continue to investigate the idea – the idea, perhaps, if we can get our heads around it, of *the militarization of medicine mediating medicalization*. Medicalization may be for the history of medicine what militarization is for the history of science and technology, with maybe this difference: that militarization does mostly from the outside what medicalization does mostly from the inside. If this is so, then the idea of the militarization of medicine is mainly a metaphor.

NOTES

²⁸ See Cooter and Sturdy, 'Introduction', *War, Medicine and Modernity*.