

THE PLACE OF THE GREAT WAR IN THE MAKING OF MODERN ORTHOPAEDICS*Roger Cooter

It is generally accepted that the making of modern orthopaedics owes much to the First World War. The British Orthopaedic Association (BOA) was an end-of-the-war formation largely dependent on the fact that during the war Sir Robert Jones and his orthopaedic colleagues had laid claim to the treatment of some 65 per cent of all the injuries. Largely erased, thereby, was the view of the specialism as a backwater for medical mechanics concerned only with applying buckles and straps to crippled children. By the BOA's first annual meeting in February 1918, seventeen special military orthopaedic centres had been established in Britain, commanding some 25,000 beds for the treatment, not only of all cases of fractures, foot and joint derangement and disability, but also of cases of plastic surgery of the face, neck and jaw, all cases requiring a special surgical appliance and all cases requiring treatment of nerve lesion. The headquarters of Jones's military orthopaedic empire, at the Infirmary at Shepherds Bush, Hammersmith, which opened in March 1916, became a national showpiece of military medicine, as well as a beacon of rehabilitation and hope in an otherwise darkened world. Thus, by the end of the war, few were unaware that orthopaedics was a crucially important branch of surgery concerned with 'the treatment by manipulation, operation, re-education, and rehabilitation, of the injuries and diseases of the locomotory system', as Jones then defined the specialism. Through the 'halo cast on trauma' by the war, orthopaedists popularly and medically acquired much of the professional glory that formerly had gone mostly to abdominal surgeons.

But none of this explains how it was that a relatively obscure specialism that was focused for the most part on chronic deformities in children was enabled by the war to be so transformed. Retrospective accounts of the achievement tend to stand independent of the historical context in which the process of the specialism's transformation took place. Moreover, because of this, the actual nature of the transformation itself is

obscured in certain fundamental respects, and in other ways is distorted. In what follows, by turning to the war-time context for orthopaedics, I want to point to at least three reasons why it is in fact mistaken to attribute too instrumental a role to the war in the making of modern orthopaedics. At the same time, in order to have my cake and eat it, I'll indicate further why the historical focus on the war is nonetheless valid.

To begin with, it has to be understood that the orthopaedics that came to be popularly celebrated after the war and which came to be professionally embodied in the BOA was not simply a radically modified version of the orthopaedics that had existed before the war. Robert Jones's 'modern orthopaedics' was a distinctly new brand of orthopaedics. From the turn of the century, Jones, along with other notable British surgeons, had been a member of Sir Berkley Moynihan's Provincial Surgeons' Association, a visibly modernist group deeply influenced by American Surgery and the so-called 'scientific' hospital organisation that had emerged in America during the Progressive Era. It was those within or identifying this reformist elite, most of whom (including Jones) had close personal and professional links with leading American medical entrepreneurs such as the Mayo brothers, who established the British Journal of Surgery in 1913. Several of the more politically active in the group, almost all of whom were from the provinces, came to be directly involved in the war-time organisation of orthopaedics, as indeed, did several leading American orthopaedists (one of whom - Robert Osgood of Boston - was in fact the person responsible for organising the BOA).

In referring to the transformation of orthopaedics during the war, then, we are not talking simply about a 'natural' growth accelerated under the greenhouse conditions of war, but rather, to the operation of those same greenhouse conditions upon an insurgent professionalising cohort who embraced a distinct medico-political outlook. Properly, we should conceptualise Jones's orthopaedics as we would any other social or ideological movement, for he deliberately recruited only certain types of persons, elaborated particular sets of ideas against the reigning orthodoxy, and proselytised to bring others into the movement. Self-consciously, Jones and 'his men' distinguished themselves from a hitherto

predominantly metropolitan 'traditional' orthopaedics, as mainly centred at the Royal National Orthopaedic Hospital. Suffice to say here, that, unlike 'traditional' orthopaedics in London, Jones's was additionally preoccupied with the treatment of trauma cases, especially as incurred through industrial accidents.

Thus, both from the point of view of the types of cases Jones was to treat during the war, and from the point of view of his long-standing identification with the 'new guard' in British surgery, it could be argued that the war was less important for the establishment of modern orthopaedics than it was, as indeed was claimed in 1920, merely 'the last factor in a series of events' leading to professional fulfillment. Such is the first reason for not according the war an instrumental role in the making of modern orthopaedics.

The second reason hinges on the fact that it was not military need per se that facilitated the professional fulfillment. The point here is that there was nothing inevitable either in the event of the war itself or in orthopaedics itself to compel any broad seizure of clinical territory for the specialism during the war. One has only to recall how few orthopaedists there were at the outbreak of war who were at all qualified to handle the types of cases that eventually were to come into the special military orthopaedic hospitals to appreciate how non-inevitable was this seizure of clinical territory for orthopaedics.

So how did Jones effect his coup for his particular brand of orthopaedics? Partly, but only partly, the answer lies in his strategic cunning. From early on in the war he had conducted a campaign which involved the mustering of support from powerful patrons within the financially important Red Cross. Further, in addition to providing an experimental demonstration of his competence in the restoration of the war wounded at the commandeered Alder Hey Hospital, he was involved with exploiting propaganda about what the German orthopaedists were up to, about what the aristocratically-backed bonesetter Herbert Barker was attempting to get up to, and about what the war wounded troops might well get up to if it was not made apparent to them that every effort was being made to provide the

best specialist services. To say the least, Jones's ambitions of empire were driven by an astute political and practical sense, a further reflection of which is to be seen in the private negotiations he undertook before America entered the war to recruit young malleable American orthopaedic surgeons for his future empire.

But Jones's strategic cunning only partly accounts for his success. Equally important, indeed, inextricable, was the fact that by 1916 the structure of military medicine was breaking down as a result, on the one hand, of the devastation of military manpower and, on the other, the inability of military medicine to cope with the restoration of the war wounded in order to get them back to the trenches. Thus was created the medico-political context of opportunity in which Jones's dreams of empire could materialise. The context enabled Jones and his reform-minded colleagues to exert a much greater influence within the Army Medical Advisory Council. Again, this was not an inevitable occurrence, but a negotiated political one, which, in relation to orthopaedics in particular, was seen as highly controversial at the time.

What was negotiated during war time was not so easily sustained in peace time, however. The third reason why it is difficult to argue simply that the war 'made' modern orthopaedics is that the war was no sooner over than the political and economic forces of reaction set in, and modern orthopaedics was, to a degree, 'unmade'. Unlike in America, where the expansion of teaching in orthopaedics during the war was linked and became fastened to the universities and their connected teaching hospitals, in Britain the war-time institutional structure for orthopaedics was wholly vulnerable to post-war marginalisation and eclipse. Physically housed in schools, workhouses, asylums and mansions-on-loan, Jones's empire was only as lasting as the war itself, and with one exception - the Wingfield Hospital in Oxford - the whole of the temporary edifice fell to the axe of post-war austerity. Because the recruits into orthopaedics during the war were overwhelmingly from the colonies and from America, the war did not result either in any growth in the numbers of trained-up British orthopaedic surgeons. Furthermore, the specialism now suffered from the political and economic revenge of the general surgeons. Well aware of the

expansionist nature of Jones's orthopaedics, general surgeons were fearful for their hospital beds and even more fearful for their private practices, a large and lucrative part of which involved the treatment of non-traumatic orthopaedic cases. Thus shortly before the war was over a committee of the Council of the Royal College of Surgeons was formed with the specific intention of circumscribing orthopaedics. Jones, fearful that orthopaedics might again be 'reduced to a side show', conceded by changing the name of the military orthopaedic centres to 'Special Military Surgical Hospitals' in order to avoid what the committee of the College claimed was the 'implication that only specialists are capable of carrying on the surgery practiced in them [centres]', and to avoid 'the recognition of a class of practitioners who may, or may not, be competent general surgeons'.

Three other factors further served to circumscribe the movement Jones had built up. One ironically, was the success with which some of the orthopaedic experience of the war was incorporated into general surgical practice, especially in fracture treatment by younger surgeons in provincial hospitals. However, few of these surgeons had any particular interest in joining the ideologues in the BOA or even in becoming orthopaedic specialists. Most were content to remain general surgeons with a particular interest in orthopaedic cases.

The second factor was the revenge of the unorthodox manipulative practitioners. The third was the new competition emerging from muscle-flexing physiotherapists and advocates of physical and rehabilitation medicine, who were themselves now seeking independent specialty status.

Thus, however prepared were Jones and his disciples after the war to treat all cases of locomotory disfunction, their lack of control over hospital beds and over medical education and, hence, over enforcing and maintaining professional boundaries, plus opposition on the one hand, and competition to and co-option of their practices on the other, meant that they had little option but to retreat the marginal territory that had been theirs before the war i.e., primarily, the treatment of the chronic and acquired deformities of children in rural open-air hospitals. Lamentably, the

argument used rhetorically to legitimate the expansion of orthopaedics during the war - that military conditions were necessarily 'entirely different' from those of civilian life - proved only too effective when peace was restored.

Along with other considerations, the above lead to two rather imprecise conclusions on the role of the Great War in the making of modern orthopaedics. The first is that the war was vitally important, but that its importance was greatest at intellectual levels. What seems most impressive historically is not the generation of new surgical techniques during the war, so much as the generation of administrative skills and the heightened awareness of professional needs, aspirations and directives. Secondly, purely on empirical grounds, it is difficult to maintain that the orthopaedic specialism was either made or consolidated by the war. Neither the First nor the Second World War were historical end points or termini in the speciality's development. Indeed, we have only to compare the state of orthopaedics today with that of 1945 to realise not only that the process of its 'making' was by no means ended with the Second World War, but also, that the post-Second World War making was of a quite different order. The present focus of the specialism on the elderly, and its close identification with the highly skilled and radically invasive surgical technique for hip replacement, readily permits that the greater part of the development of orthopaedic surgery took place only after the Second World War. As with the Second, so with the First, we need to see it mostly as a watershed or as a cathartic moment which intersected and contributed to a longer term historical dynamic. Revelatory, the Great War magnified the potentials and possibilities for orthopaedic specialisation, as well as highlighting the constraints upon it. In the final analysis, then, the war did less to 'make' modern orthopaedics than to stimulate its further re-making. The problem here, however, becomes semantic, for it is precisely the idea of process, movement, negotiation and renegotiation that is central to the whole idea of '*a making*'.

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* For an extended and fully referenced discussion of the rôle of the First and Second World wars in the making of modern orthopaedics, see my forthcoming Medical Specialisation in Peace and War: A Social History of the Making of Modern Orthopaedics, 1880-1945 (Manchester University Press). For a foretaste, see my 'The Meaning of Fractures: Orthopaedics and the Reform of British Hospitals in the Inter-War Period'. Medical History, 31 (1987): 306-32.

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