The problem is that this argument is wrong. The shock was monumental, but instead of impelling the twentieth century forward into our new modernist and later post-modernist poses, it put millions of people in a position where they grasped at the past in order to ascribe some meaning to the catastrophe. For every man or woman who saluted non-sense in the Dada movement, there were millions who clung to every kind of reinforcement of meaning in their reactions to the war. For this very reason, there was a flowering of religious, classical and romantic languages of commemoration, in poetry, in prose, in film, in the graphic arts, or in the architecture and ritual surrounding war memorials.

Joanna Bourke captures this moment brilliantly in her book, since she shows how central imagery of the male body is to all three traditions: the classical, from Greek and Roman sculpture to millions of vulgarizations; the romantic, with visions of the knight errant, the man who lays down his life for his mates, and achieves immortality in their masculine devotion (and revenge); and the religious, through a myriad of permutations of the Pietà and the pity of dismemberment and annihilation.

Could it have been otherwise? After all, the logic of industrial war is the deepening and reiteration of gender difference, precisely because so many men are torn to pieces. Families needed to be restored, and they needed men—fully-formed men—to do so. There are terrible stories of horribly mutilated men unable to start their lives again for a host of reasons, not least of which is the tendency for their wounds to scare the living daylights out of their own children. Little boys and girls remembered a father; what they welcomed home was something else.

In this context, masculine was everything these men were not. Of course, the opposite was the case. The men mutilated in the war faced things people shouldn't see and feel. But millions saw and felt for the rest of their lives. And were seen too. Here Bourke's book breaks new ground in linking the visual, the social, and the spiritual, albeit in some unusual forms. The rumour that Lord Kitchener was not dead, drowned with everyone else aboard *HMS Hampshire* in 1916, was a denial that this symbol of manhood could be destroyed. Of course symbols cannot be destroyed just like that. They needed rehabilitation too, and people found a host of channels to do this. One was the Tomb of the Unknown Soldier, the most famous body in England. Others stand on market squares and in villages. War memorials are about masculinity, but in Britain, this masculinity is not aggressive, Olympian or vindictive. It is tired, weary and crest-fallen, full of the bitter taste as of ashes—the ashes of millions of men whose bodies had been smashed or simply obliterated. Here too Bourke breaks new ground. She shows deeply and movingly how closely linked notions of masculinity in the period surrounding the war were to two levels of understanding: on the political and industrial level, fitness and good physique were essential; on the social and existential level, it was their very fitness which cost the lives of about one million soldiers in the British and Dominion forces in the Great War. What price fitness indeed?

This is social and cultural history at its best, full of material from arcane and out of the way sources, analysed by a powerful and (at times) bemused intelligence. It is a work anyone interested in early twentieth-century British cultural history needs to ponder.

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Pauline M H Mazumdar, *Species and specificity: an interpretation of the history of immunology*, Cambridge University Press, 1995, pp. xiii, 457, illus., £40.00, $64.95 (0-521-43172-7).

Pauline Mazumdar's epic interpretation of the history of immunology might best be compared with a symphony. Its theme lies in the epistemological war waged between "lumpers" and "splitters"—or, in Mazumdar's more eloquent terms, "unitarians" and "pluralists"—as it defined classificatory and

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explanatory models posited by over a century of biologists. Variations on this theme are explored through four sections, arranged chronologically as well as thematically, from botany in the 1840s to blood group genetics in the 1950s. Indeed, the book might have been titled: "Immunology: Generations". Read as a whole, it underscores the continuity of the two different approaches to knowledge that informed the interpretation of ever-changing bodies of evidence. In so doing, it emphasizes how scientists, concerned as much with professional disputes as with correctness, have used nature to prove previously-held convictions. Or, in Mazumdar's words, how scientists frequently "turn to nature as a witness that truth is on their side" (p. 381).

"Specificity" is the lens through which the two conflicting species of biologists are viewed. Espousing the notion that biological species differ qualitatively from one another, the pluralists followed in the intellectual tradition of Linnaeus. Advocates of this world-view were linked together geographically as well as intellectually, and Mazumdar follows the chain of their being, from Ferdinand Cohn, to bacteriologist Robert Koch, to immunologist Paul Ehrlich. The unitarians, on the other hand, believed in continuous connections—*quantitative Abstufung*—that undermined any ontological conception of species. Here, we find botanist Matthias Schleiden passing his unitarian inclinations on to Carl von Nageli, who in turn influenced the bacteriological and immunological thinking of Max von Gruber. The two groups met in frequent disputes, which took place in the public spaces of journals and meetings. The unitarians frequently levelled the charge that the pluralists' ideas were teleological and lacked economy. The pluralists' position had practical applications—such as serotherapeutic institutes—of advantage to governments, that tended to assure the dominance of their collective voice.

Karl Landsteiner entered this discourse in Vienna, 1896, where he became Gruber's collaborator at the Institute for Hygiene. Besides providing a thematic connection, Landsteiner serves as the biographical focus of Mazumdar's narrative. Through his training and investigations we see back into nineteenth-century organic chemistry and forward to post-war genetics. We move from his seminal turn-of-the-century interpretation of human blood groups (challenging the accepted immunological dogma that antibodies were exclusively the product of pathology) to his efforts to overturn Ehrlich's dominant, and specific, side-chain theory of immunity. A final chapter presents another variation on this theme. A S Wiener, who had worked with Landsteiner, fights statistician R A Fisher, serologist Robert R Race, and the practically-oriented blood transfusion community, over the proper interpretation of Rhesus blood groups. The dispute was never "decided". Genetics simply moved away from its blood-group ties.

The book's structure—following variations on the theme of a particular discourse through time, disciplines, and individuals—allows Mazumdar to emphasize the ongoing dialogue between the unitarians and the pluralists. It provides tangible connections between institutional power, ideological commitment and personal loyalties. Moreover, it emphasizes how frequently scientific controversies are not logically resolved, but abandoned in favour of new topics and/or approaches. Most effectively, it allows the "losers' side" to be integrated into history, which the author does explicitly for the history of bacteriology (chapter 4). Indeed, this symphonic approach is itself unitarian. It reveals the continuous voice of interpretive conflict as it guided the historical unfolding of immunology.

Still, there are limitations inherent in such a unified account. Breadth of vision is achieved at the cost of depth of causal explanation. In discussing Koch's rise to institutional power, for example, Mazumdar points to his 1880 appointment to the Imperial Bureau of Health. It is clear that this position would have given specific bacteriology power over the continuity-minded hygienists who had been guiding policies until then. What she does not clarify is how and why Koch attained this position—answers to which might have

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pointed in the direction of social and cultural concerns informing the government's scientific appointments. Instead, she treats governmental acceptance, and hygienists' rejection, of Koch's bacteriology as a self-evident example of practical benefit (on the government's side) versus ideological commitment (the hygienists). Yet a very different account has been given of the relations of hygiene, bacteriology and government in France by Bruno Latour in his *Pasteurization of France*. Both French and German bacteriology are conferred with institutional power, but in strikingly different ways. Yet no contrasts are drawn, let alone explanations offered.

Not only does Mazumdar's approach obscure the social and cultural specificities of historical explanation; it also over-simplifies an explanatory framework. Two philosophical interludes—one, a heuristically-effective opening on Kant; the other, a narrative-halting exposition of Mach's ideas of scientific understanding (the whole of chapter 8)—seem to be grafted onto the text. The author relies primarily on direct transmission of scientific styles to explain her subject's continuity: "it is almost impossible to exaggerate the determining effect of this mixture of technology and intellectual patterning that is passed from teacher to student" (p. 380). Her thematic exposition itself serves as proof of this claim. Still, does not such an explanation beg important questions? Why, for instance, was Landsteiner drawn to Gruber's unitarian perspective? Is there evidence, either in personal archives or in published work, that Landsteiner had some position of general philosophical inclination *before* he studied with Gruber (or even with Emil Fisher)? What of the numerous students who passed through the laboratories of Schleiden, Nageli, Landsteiner, etc., *without* being converted to the unitarian doctrine? Is not Mazumdar herself following the "successful progress" of an idea—even if it has been a "losing" idea? To demonstrate the persistence of thematic continuity, the author narrows her focus to exclude the multi-levelled historical complexities that might distract from her narrative's coherence.

This does not mean that the narrative is simple. Sometimes, perhaps carried away by the internal complexities of her theme, Mazumdar plunges head-first into the scientific details of variations. Unfortunately, she often does this without providing the reader with insight into why such detail is significant. To take one example, she describes Landsteiner's chemical training in a style reminiscent of an organic chemistry text. Additionally, several pages are devoted to the ideas of the physical chemists who, by Mazumdar's admission, had no influence on Landsteiner at that time. Only later do we discover that the chemists' ideas link not to the eight previous chapters, but to several subsequent chapters. Without a clear statement of their relevance, these details can quickly overwhelm the narrative. The book could use a few more maps to guide the reader.

Overall, Mazumdar has composed a fine piece that, despite some methodological limitations, will raise numerous questions for historians of science and medicine. Perhaps even for those of the next generation.

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Allan Young, *The harmony of illusions: inventing post-traumatic stress disorder*, Princeton University Press, 1995, pp. x, 327, $35.00 (0-691-03352-8).

In explicit opposition to the growing body of literature on the historical origins of Post-Traumatic Stress Disorder (PTSD), Alan Young, a professor of anthropology at McGill University, sets out to deny the timelessness of traumatic memory. While a number of recent works have purported to demonstrate the existence of PTSD-like conditions decades or centuries before the American Psychiatric Association accepted PTSD in its 1980 diagnostic manual (DSMIII), Young offers, in contrast, a self-consciously historicist approach to trauma. Revealing major sources of discontinuity in the history of traumatic memory, he argues that the condition we know

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