

is better understood as a verb rather than a noun, with discourse serving not as evidence of what is generally believed, but as competing and dynamic efforts to create general beliefs. In light of the recent ‘transnational turn’, this is especially important to recognise in nationalist discourses, which should be understood not as pre-existing characteristics but contested cultural projects. This suggests a slightly different question: why did drugs play such a prominent role in the project of establishing national identities in Britain and France? This is obviously not the question Padwa set out to answer, and while cultural historians might wish he had, its absence in no way detracts from the many valuable contributions of this excellent book.

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doi:10.1017/mdh.2013.60

**Mark Jackson**, *The Age of Stress: Science and the Search for Stability* (Oxford: Oxford University Press, 2013), pp. 311, £35, hardback, ISBN: 978-0-19-958862-6.

Stress is a paradoxical business. As the popularity of self-help books promising to help us ‘manage’ and ‘master’ stress attest, stress is widely regarded as the cause of a host of social and medical ills. Yet at the same time as we worry about stress, we also thrive on it – hence the popularity of competitive games and the compensating demand for books with titles like ‘The Joy of Stress’.

How we came to be living in ‘the age of stress’, and what we actually mean when we talk about being ‘stressed-out’, are the central themes of Mark Jackson’s new book. Although Jackson begins by acknowledging the central role of stress in his own life (alongside the usual difficulties of writing a book, Jackson also had to contend with his study being flooded in the middle of his sabbatical), this is definitely not a self-help manual. On the contrary, Jackson’s aim is trace the history of scientific concepts of stress and what he refers to in his subtitle as ‘the search for stability’.

Both a medical condition and a cultural metaphor, stress – like depression and anxiety – appears to be ubiquitous in modern society, yet, Jackson writes, we ‘know little about its historical trajectory’ (p. 2). As a term, stress is also somewhat elusive, encompassing both environmental and socio-economic conditions and psychological and emotional concepts.

Jackson argues that the modern obsession with stress can be traced to around 1983 when *Time* magazine ran an article entitled, ‘Stress: can we cope’. Then, as now, stress was regarded as an endemic disease of post-industrial capitalist societies, a condition that owed its prevalence to the ‘chronic strains of life’. But as medical historians well know, there is nothing new about this supposed link between stress and the pressures of industrial lifestyles: in the 1880s Victorian medical commentators also sought to blame epidemics of fatigue and nervous conditions like neurasthenia on ‘overwork’ and ‘overstrain’.

The difference, Jackson suggests, is that in the 1880s stress was a vague, mechanistic concept – ‘an algebraic product’ (p. 53) of heredity and external forces acting on the nervous system. It was not until the 1930s that stress became an object of medical research in its own right and began to be seen as a pathophysiological process that could be elucidated with the tools of modern science.

So when and how did stress move from being a metaphor to a medical condition? The answer, according to Jackson, is to be found primarily in the investigations by twentieth-century physiologists into the mechanisms governing the responses of organisms to physical and emotional disturbance. Through concepts like 'homeostasis', coined by the Harvard physiologist Walter B. Cannon in 1932, and 'the general adaptation syndrome', coined by the Hungarian clinical scientist, Hans Selye, mid-century stress researchers increasingly sought to understand stress in Darwinian terms as an internal failure of the organism to adapt to changing environmental conditions.

The mechanisms involved in regulating these adaptive responses and maintaining stability could be either neurological or hormonal, and one of the rewards of Jackson's study is seeing how Cannon, Selye and the American surgeon George Crile, shifted their focus from the thyroid to the adrenal medulla, and from the autonomic nervous system to the endocrine system. At the same time, Jackson shows how stress moved from being conceived as an external force acting on bodies to a problem of internal regulation.

The key thinker here was Selye. In particular, Jackson shows how it was Selye's seminal 1936 paper in *Nature* on the general adaptation syndrome that inaugurated modern research on the biology of stress and how, at McGill and later the University of Montreal, he was able to leverage substantial grants through the buzz generated by his stress studies. For all that Selye owed his fame to stress, however, he was curiously reluctant to employ the term, perhaps fearing that its association with older notions of 'stress and strain' would undermine his scientific standing.

However, by the 1950s, as stress became central to Selye's pathologisation of these adaptive processes, he embraced the term, going so far as to declare, in language reminiscent of the 1880s, that stress was 'essentially the rate of all the wear and tear caused by life' (p. 151). Selye was also the first to introduce a distinction between positive and negative stress – what he called 'eustress' and 'distress' – thereby paving the way for the growth of a \$11 billion industry predicated on the harnessing of 'good' stress. 'Stress is not necessarily bad for you', he wrote in 1956, 'it is also the spice of life' (p. 221).

Jackson has great fun following the twists and turns in Selye's ideas on the biology of stress, even going so far as to suggest that his willingness to see stress's benefits may have had more than a little to do with his own prodigious work ethic. These shifts are neatly signalled in successive chapters entitled, 'The Biochemistry of Life', 'The Cathedral of Stress' and 'Coping with Stress'. Jackson is also good at providing succinct summaries at the end of each chapter, which will come as a relief to students who may not share Jackson's fascination with the minutiae of Selye's research but who are sure to find this book a valuable addition to the burgeoning literature on psychosomatic medicine.

While Selye made the study of stress respectable, Jackson argues it was Cannon who, more than any other scientist, highlighted the aetiological significance of stress by describing and measuring the impact of environmental factors on emotional and physical health. In particular, it was Cannon who lay the foundation for stress's migration to psychosomatic medicine by arguing that stress, in the form of a traumatic shock or intense emotional strain, could so upset the sympatho-adrenal system as to interfere with homeostasis. Jackson argues that this aetiological flexibility is nowhere better illustrated than by the way that stress moves from being seen as an external force that can trigger neurasthenia and other fatigue states at the close of the nineteenth century, to being

implicated in range of anxiety disorders in the 1950s and 1960s – hence *Time* magazine's claim in 1961 that anxiety was nothing more than 'the stress of effort in a land of ambition, competition and challenge'.

One of Jackson's worries is that, in times of economic prosperity, as during the Thatcher–Reagan years, anxiety over the competitive stresses of modern society gives way to something like admiration for 'executive stress' and the financial rewards of working competitively under pressure. The risk is that we may forget the importance of socio-economic factors ('stressors' in Seyle's terminology) in the incidence of stress-related diseases, such as obesity and heart disease, and the very real health challenges it presents, particularly for the poor and underprivileged. In other words, while many of us may be addicted to stress and take pride in our ability to cope with life at high pressure, we should recognise that, ultimately, the search for stability is an illusion and that life is inherently unstable, uncertain and stressful.

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doi:10.1017/mdh.2013.61

**Katharine A. Craik and Tanya Pollard** (eds), *Shakespearean Sensations: Experiencing Literature in Early Modern England* (Cambridge: Cambridge University Press, 2013), pp. x + 244, £50.88, hardback, ISBN: 978-1-107-02800-5.

It was in the British Sign Language (BSL) production of *Love's Labour's Lost* by Deafinitely Theatre in May 2012 at the Globe that this reviewer faced the problem of 'Shakespearean sensations'. The performers did not utter a single word; they signed all the lines in BSL, demonstrating that 'spoken' language is inseparable from bodily expressions in Shakespearean drama. When the performance ended, some of the audience cheered and clapped, while others used a 'deaf applause' sign by waving their hands. Those different audience responses formed a distinctive sort of 'visual' soundscape. These multiple sensations are often created by both performers and an audience, and can seize theatre-goers, whether in striking or much subtler ways.

*Shakespearean Sensations: Experiencing Literature in Early Modern England* is a collection of essays that may help articulate the multi-sensorial enjoyment of dramatic or literary texts many theatre lovers have encountered. Since Caroline F.E. Spurgeon's *Shakespeare's Imagery and What it Tells Us* was published in 1935, Shakespeare's imagery has posed challenging questions, and this book offers a new insight into these questions by placing sensations, or 'feelings (in body or in consciousness) caused by the operations of the senses as they perceive objects in the world' in historical contexts (Craik and Pollard, p. 8). As the editors state in the Introduction, this book considers the enjoyment of Shakespeare's plays and poems as a material and physiological experience that caused a great impact on the recipients' bodies, minds and feelings, noting the interdependence of bodily responses and reasoning prompted by them. Therefore, the mindsets of playgoers and readers in Shakespeare's time are highlighted in extensive accounts of his contemporaries' works on medicine and literature, which indicate what the early modern notion of sensations was like. Some essays also contribute to further