

## 1 Introduction

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In 1941, in the teeth of a second unprecedented and devastating global conflict, George Orwell published an essay, ‘The Art of Donald McGill’, which included a critical commentary on the saucy British seaside postcard.<sup>1</sup> He used these ubiquitous features of costal visits as a window into British social relations. Orwell considered the postcards to be highly revealing, even if they were possessed of ‘an utter low-ness of mental atmosphere’, as they inspired a feeling of ‘indefinable familiarity’ through reliance on the conventions of sex, marriage and politics, with the humour of drunkenness and ‘inter-working-class snobbery’ featuring heavily in the genre. Sex, marriage, drunkenness, home life and ‘inter-working-class snobbery’ were mainstays of the genre.<sup>2</sup>

Amongst his witty and irreverent critique of these postcards, which led a ‘barely legal existence in cheap stationers’ windows’, Orwell also reflected on the appearance of signs of ageing, made visible in themes explored by McGill, which it is important to quote at length:

One of the few authentic class-differences . . . still existing in England is that the working classes age very much earlier. They do not live less long, provided that they survive their childhood, nor do they lose their physical activity earlier, but they do lose very early their youthful appearance . . . It is usual to attribute this to the harder lives that the working classes have to live, but it is doubtful whether any such difference now exists as would account for it. More probably the truth is that the working classes reach middle age earlier because they accept it earlier. For to look young after, say, thirty is largely a matter of wanting to do so. This generalization is less true of the better-paid workers . . . they are more traditional, more in accord with the Christian past than the well-to-do women who try to stay young at forty by means of physical-jerks, cosmetics and avoidance of child-bearing. *The impulse to cling to youth at all costs, to attempt to preserve your sexual attraction, to see even in middle age a future for yourself and not merely for your children, is a thing of recent growth and has only precariously established itself.*<sup>3</sup>

<sup>1</sup> The piece appeared in *Horizon*, a short-lived but influential periodical which during its run from 1940 to 1949 included contributions from W. H. Auden, T. S. Eliot and Barbara Hepworth. See Orwell, *The Art of Donald McGill*.

<sup>2</sup> Orwell, *The Art of Donald McGill*. <sup>3</sup> *Ibid.*, emphasis added.

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At the heart of this remarkable reflection on the social conventions surrounding ageing and the life course is Orwell's characterisation of defying ageing as a relatively recent phenomenon, which encompassed exercise, skin care and – at least for women – remaining child-free. Implicit in his commentary is a division of rejuvenation practices on grounds of both gender and class; men are discussed in the context of military service, where of those registering 'the middle- and upper-class members look, on average, ten years younger than the others'. Meanwhile, women were seemingly concerned with actively warding off the onset of signs associated with ageing, at least in part, to maintain their attractiveness; relatedly, '[s]ex-appeal vanishes at about the age of twenty-five. Well-preserved and good-looking people beyond their first youth are never represented [in postcards].'<sup>4</sup> Finally, for Orwell, the ability of someone over the age of thirty to achieve continued youthfulness was mostly dependent on their motivation – the implication here was that the products, procedures and habits necessary to preserve youthful appearance were available, accessible and effective in bringing about the desired effects.

Orwell's perspective on rejuvenation in Britain was linked to its emergence as a major social phenomenon over the preceding decades. In 1937, for example, the famous Blackpool illuminations featured "The Rejuvenator" (see Figures 1.1 and 1.2) – a magical device, created from lights, by which the elderly, infirm and disabled were transformed to become lithe, agile and youthful. Pamphlets, books, magazine articles, skin care products, surgical procedures and electrical appliances dedicated to the pursuit of agelessness came to prominence in interwar Britain in a way that was unforeseeable at the outset of the twentieth century. In an increasingly visual climate populated by photographs and film, the need to maintain markers of youthfulness gained greater social and cultural significance. The fantastical possibilities of rejuvenation also found expression in various forms of fiction, from novels to Hollywood films. This trend also manifested at a local level. For example, the 1935 film 'Quest for Youth', produced by members of the Tees-side Cine Club, highlighted a particularly middle-class anxiety associated with being unable to keep up with the 'young crowd'. In the film, an ageing woman's attempt to recapture her youth with the aid of a new chemical anti-ageing substance – known only as '596' – proves unsuccessful, although ultimately she is able to reconcile herself to having only one period of "true" youthfulness, having found the supposed miracle of modern science to be wanting.<sup>5</sup>

<sup>4</sup> Ibid.

<sup>5</sup> 'Quest for Youth', dir. C. Roeder, Tees-Side Cine Club, 1935. The nomenclature of '596' was undoubtedly a conscious mirroring of the hyperbolic curative expectations associated with Salvarsan – a new drug brought to market in the early 1910s as the first effective treatment for syphilis, and which medical practitioners hailed widely as the harbinger of a therapeutic revolution, and which was also known simply as compound '606'.



Figure 1.1 ‘The Rejuvenator’, as presented in the 1937 Blackpool Illuminations.

Source: Bolton Council Records, 1993.83.04.35

The visibility of rejuvenation and the myriad strategies for achieving it was not unique to Britain, yet it has been uniquely neglected. *The Cult of Youth* focusses on the British case in a period characterised by major social shifts elsewhere in Europe and the United States, where the significance of health and efficiency movements and their connection to ageing has long been recognised. For interwar Germany, for example, Geoffrey Cocks and Michael Hau have implicated the rise of youth culture and the impact of political upheaval in the emergence of a highly racialised aesthetic which determined desirable qualities of health and beauty in both men and women.<sup>6</sup> Against the backdrop of what Carsten Timmermann identified as a ‘crisis of medicine’ in the Weimar era, this was realised through the popularisation of mass physical culture and dietary changes and underpinned gendered understandings of the ideal functionality of male and female bodies.<sup>7</sup> In part, the significant move

<sup>6</sup> Cocks, *The State of Health*; Hau, *The Cult of Health and Beauty in Germany*; Osborne, *The Politics of the Body in Weimar Germany*. For more on the emergence of physical prowess and youthfulness in interwar Germany, see Jensen, *Body by Weimar*.

<sup>7</sup> Timmermann, ‘Rationalizing “Folk Medicine” in Interwar Germany’, 459–82. For a comprehensive account of how female bodies came under the gaze of the medical profession in a new way in the first half of the twentieth century, see Mitchinson, *Body Failure*.

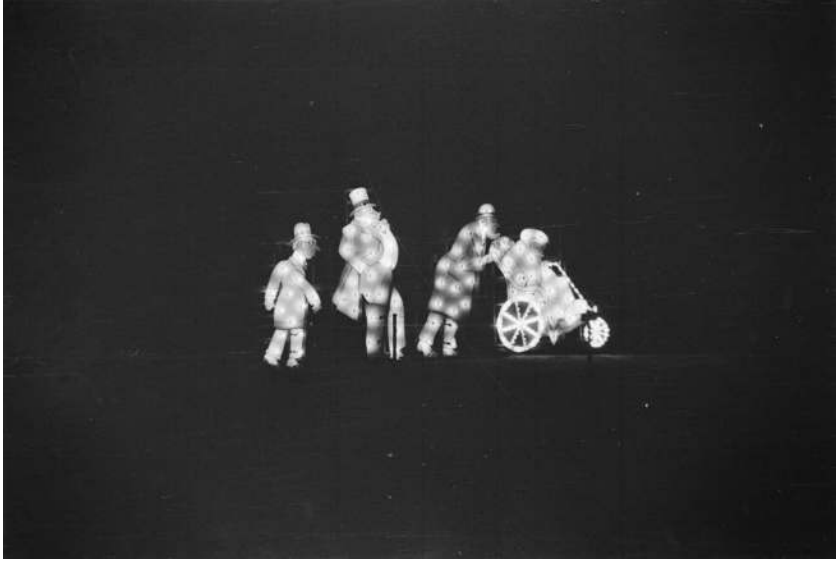


Figure 1.2 Elderly, infirm and disabled figures awaiting rejuvenation in the 1937 Blackpool Illuminations.  
 Source: Bolton Council Records, 1993.83.04.36

away from adherence to mainstream medicine in interwar Germany can be seen as a wider rejection of mechanism, accompanied by a concurrent reengagement with holistic concepts of mind, body and self.<sup>8</sup> Simultaneously, as Chad Ross has noted, the increasingly popular concept of *Nacktkultur* ‘offered every German . . . the possibility of establishing and regulating her or his own health; no doctors or other medical professionals were necessary’.<sup>9</sup> Whilst the interwar context of the Weimar Republic and subsequent National Socialism of Germany has therefore been the subject of a number of studies highlighting its supposed exceptional focus on rejuvenation at the level of the society, these ideas also gained considerable currency elsewhere.<sup>10</sup>

<sup>8</sup> Timmermann, ‘Constitutional Medicine’, 717–39. For a more general account of holism in German science during the Weimar period, see: Harrington, *Reenchanted Science*; Ash, *Gestalt Psychology*.

<sup>9</sup> Ross, *Naked Germany*, 83.

<sup>10</sup> Jensen, *Body by Weimar*; Ross, *Naked Germany*. Similar movements also gained traction elsewhere in Continental Europe and, to a lesser extent, in Britain. See: Tumblety, *Remaking the Male Body*; Jobs, *Riding the New Wave*; McDevitt, *May the Best Man Win*. A roughly analogous study for Britain, though concentrating more on the female body, is Zweiniger-Bargielowska, *Managing the Body*.

Meanwhile, the United States has been characterised as the cradle of commerce, where marketing and advertising campaigns for skin care products and fringe electrotherapy devices were pioneered and where dietary and exercise regimes became part of national culture, with other countries eventually following suit.<sup>11</sup> Work by Jessica M. Jahiel and Julia Rechter has revealed how the American Medical Association mounted a concerted campaign to discredit those peddling fringe rejuvenation practices, products and procedures, whilst also highlighting the extensive influence of rejuvenation-driven endocrinology on popular discourse about bodies, gender and sex.<sup>12</sup> Although the British Medical Association was far more cautious about publicly denouncing rejuvenation practitioners, major figures in the United States such as the physical culture advocate Bernarr Macfadden and the high-profile, fraudulent gland-grafter John R. Brinkley had almost exact analogues in Britain in exercise guru Eugene Sandow and controversial aesthetic surgeon Charles E. Willi. Debates about the authenticity of rejuvenation treatments and the credentials of their purveyors lay at the heart of public discourse; publications promoting these therapies sat at the intersection between medical textbooks, popular scientific tracts and unashamed self-promotion and advertising.

Spanning national boundaries yet understood and practised in an almost impossible variety of ways, rejuvenation was inescapably associated with the scientific possibilities and social anxieties of the interwar period. Around the turn of the twentieth century the mainstream scientific ideas of August Weismann, Jacques Loeb and Alexis Carrel had provided complementary reasons to suppose that mortality and senescence were not necessarily an essential consequence of life.<sup>13</sup> In an era scarred by conflict and financial depression the prospect of enhancing youthfulness for economic, social and military security was appealing from the level of the individual to the state. Although the goal for some in seeking rejuvenation was a prolongation of life, arguably a more pressing imperative was to preserve youthfulness for as long as possible, overcoming senescence and enabling citizens to lead active, productive lives into older age.<sup>14</sup> The desire to retain physical and mental acuity had inspired Mrs Theodore Parsons – Matilda I. Cruice Parsons – to

<sup>11</sup> Verbrugge, *Active Bodies*.

<sup>12</sup> Jahiel, 'Rejuvenation Research'; Rechter, 'The Glands of Destiny'.

<sup>13</sup> Weismann's 1893 theory of heredity had emphasised the continuity of the germplasm. Weismann, *The Germ-Plasm*. In the early 1900s, Carrel was certainly part of mainstream science, and although his work on cellular immortality would later be widely discredited, we should resist the temptation to label him as anything other than a part of the established scientific community in the period in question.

<sup>14</sup> In this respect, parallels with the far more recent phenomenon of active ageing are striking. The World Health Organisation defines active ageing as 'the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age . . . [enabling] people to realize their potential for physical, social, and mental well-being throughout the

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publish a wide-ranging popular book on the subject in 1912, *Brain Culture through Scientific Body Building*. Parsons was Physical Director of Schools in Chicago at the time, and she advocated the expansion of routinised physical education, whilst deriding existing programmes of competitive sport.<sup>15</sup> Her ideas were not taken up widely at the time, but her message of the virtues of movement for women had greater resonance following the US declaration of war on Germany on 6 April 1917. As reported in the *Pittsburgh Press* just four days later, in a speech in New York Parsons argued that '[t]he best part of a woman's life begins at forty', exhorting women to 'train for the special duties which may devolve upon them in war time'.<sup>16</sup> This, the first use of the phrase 'life begins at forty', later popularised by Walter Pitkin in his seminal 1932 manual *Life Begins at Forty*, exemplified a pressing and new need for older women and men, and returning soldiers, to extract the maximum possible value from their bodies for the benefit of their families and wider society.

In the case of Britain, we know already from the work of Kay Heath that the later Victorian period saw the emergence of middle age as a genuine time of anxiety. Rather than heralding maturity and experience, by the end of the nineteenth century the onset of middle age was accompanied by new fears of degeneration.<sup>17</sup> Similarly, across a large body of work, Margaret Gullette has revealed through analysis of literary sources the depth of concerns about ageing and the construction of a 'decline narrative' that dominated discussions of midlife and old age throughout the twentieth century on both sides of the Atlantic.<sup>18</sup> In *Declining to Decline*, Gullette identifies a deeply engrained master narrative of bodily decline across the life course, not actual loss of physical and mental capacities, as being responsible for our negative experiences and perceptions of ageing.<sup>19</sup> Set against this backdrop, *The Cult of Youth* uncovers a key role for commercial strategies which both responded to and reshaped experiences of ageing and our efforts to combat it during the turbulent socio-economic events of the first half of the twentieth century.

It is a near-fruitless task to determine whether any of the numerous different methods of rejuvenation which are contained in these pages had any perceptible effect on health or longevity, even though some of the ideas which I explore – such as caloric restriction, fasting and regular exercise – are

lifecourse and to participate in society'. World Health Organisation, 'What Is Active Ageing?', 2019, [www.who.int/ageing/active\\_ageing/en/](http://www.who.int/ageing/active_ageing/en/).

<sup>15</sup> Parsons, *Brain Culture*.

<sup>16</sup> 'Now Is the Time for All Women to Train for the Duties that War Time May Bring', *The Pittsburgh Press*, 10 April 1917, 20.

<sup>17</sup> Heath, *Aging by the Book*.

<sup>18</sup> Gullette, *Safe at Last in the Middle Years*; Gullette, *Aged by Culture*.

<sup>19</sup> Gullette, *Declining to Decline*, 4.

currently held up as effective methods for the prolongation of life.<sup>20</sup> Rather, my focus is on the motivations of would-be rejuvenators, how they attempted to persuade consumers to both literally and figuratively buy into their ideas, and what this can tell us about our changing relationship with ageing and old age. This is an account of how and why anxious agers tried a range of ways to slow, stop or reverse the ageing process, focussing on transformations during and around the interwar period.<sup>21</sup> Such efforts were a conscious attempt to subvert the established, intractable, linear life course of the Western tradition, which codified specific features of childhood, adolescence, adulthood and old age, as outlined by Steven Mintz in *The Prime of Life*.

Mintz argues that late nineteenth-century America witnessed the concretisation of old age as a definite life stage, marked by cognitive decline and social isolation.<sup>22</sup> We might, then, be tempted to read the popularity of attempts to rejuvenate ageing and ailing bodies in the first half of the twentieth century as indicators of a societal response to concerns about the social burden of under-productive human units. However, the events explored in *The Cult of Youth* also took place in a biomedical paradigm informed by Alexis Carrel's claim in 1912 that he had been able to keep tissues derived from a chicken alive, under laboratory conditions, far beyond the natural life span of the animal, and before the Hayflick limit – first mooted in 1961 and coined as a term in 1974 – seemed to confirm the inescapability of mortality.<sup>23</sup> Allied to the work of Carrel, would-be rejuvenators of the interwar period were able to draw on a range of emerging and highly fashionable scientific ideas about bodily function, including the vying physiological control mechanisms of the endocrine and nervous systems, and the seemingly extraordinary power of tiny quantities of vitamins to govern metabolic processes. As Hyung Wook Park has recently noted, a new and supposed scientific mastery of both early and later life in the decades around 1900 promised to make biological ageing a contingent phenomenon rather than a necessary feature of life. This represented a concerted attempt to understand the conditions of ageing as a distinct set of physiological, pathological and social circumstances, and was professionalised in the

<sup>20</sup> Omodei and Fontana, 'Calorie Restriction and Prevention', 1537–42; Spindler, 'Biological Effects of Calorie Restriction', 367–438.

<sup>21</sup> Chandak Sengoopta has characterised the 1920s as 'the decade of rejuvenation', not just in Britain but throughout the Western world. Sengoopta, 'Dr Steinach Coming to Make Old Young', 122–6.

<sup>22</sup> Mintz, *The Prime of Life*.

<sup>23</sup> For Carrel's original publication, see: Carrel, 'On the Permanent Life', 516–28; Hayflick and Moorhead, 'The Serial Cultivation of Human Diploid Cell Strains', 585–612. Historical treatments of rejuvenation in its myriad forms in this transformative period have been notably lacking. Eric J. Trimmer – himself a proponent of rejuvenation, as exemplified by his 1965 book, *Live Long and Stay Young* – stands as one of the only contributors to consider multiple forms of rejuvenation. See: Trimmer, *Rejuvenation*; Trimmer, *Live Long and Stay Young*.



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emergence of the scientific and medical specialties of gerontology and geriatric medicine respectively.<sup>24</sup>

Such efforts came against an increasing awareness of, and resistance to, the concept of senescence and the natural ageing process. As Thomas Cole has explored, focussing on middle-class culture in Europe and North America, the two centuries preceding World War One saw the life course undergo gradual but profound changes as a result of increasing secularisation, scientific developments and a focus on the individual.<sup>25</sup> Here I trace how the effects of these shifts associated with ageing impacted on the ways in which social groups attempted to mitigate its effects and show how scientific claims about rejuvenation were presented by manufacturers and figures of supposed expertise both within and beyond the mainstream medical and scientific communities.

As well as the optimistic biomedical atmosphere cultivated by apparent breakthroughs, such as those associated with Carrel, intergenerational anxieties, including the powerful worry in *fin-de-siècle* Britain that young boys had been failed by their fathers, contributed to the sense of moral panic around lost youth and youthfulness in the early twentieth century.<sup>26</sup> ‘Contra-ventions of the moral law’ were for many as much a source of concern as the biological ageing process.<sup>27</sup> The increasing life span in North America and Western Europe, though also visible in other parts of the world, brought with it admiration for public health reforms of the nineteenth century, whilst also increasing concerns about the potential social and cultural upheaval engendered by radical demographic changes. Following World War One, with many of the supposedly healthiest and fittest young men killed during a destructive and heavily technologised conflict, gaze turned quickly to various levels of society – the race, family and individual – as a possible source of social, economic and biological regeneration. As Ina Zweiniger-Bargielowska has noted, the decline in family size in Britain during the first decades of the twentieth century provided a critical backdrop to a so-called depopulation panic. This translated into more generalised worries about the changing role of women in society, a decline of fertility and virility in men, and the future economic productivity of the nation.<sup>28</sup> Meanwhile the call from David Lloyd George to both restore the physical fitness of the nation and to ‘give elderly folk a pension and a snug home’ spoke to concerns about the extent to which younger men and women could both remain economically productive into later life and expect a secure, healthy retirement.<sup>29</sup>

The craze for rejuvenation did not, however, emerge solely in response to social anxieties, although concerns about the fitness of society, its fertility and

<sup>24</sup> Park, *Old Age, New Science*, especially 36–41. <sup>25</sup> Cole, *The Journey of Life*.

<sup>26</sup> Olsen, *Juvenile Nation*. <sup>27</sup> Bodley Scott, *The Road to a Healthy Old Age*, 7.

<sup>28</sup> Zweiniger-Bargielowska, *Managing the Body*, 257. <sup>29</sup> Lloyd George, ‘Foreword’, 5.



productivity were important motivating factors. These concerns were coupled with critical changes in scientific understanding of humans and animals from the first decade of the twentieth century, as well as the publication of a wide range of manuals designed to improve everyday health and ward off the onset of old age. There was also a strong continuation of late nineteenth-century traditions, such as domestic electrotherapy, vegetarianism and the emerging therapeutic approach termed organotherapy which depended on the work of Charles Brown-Séquard, modified during the early decades of the twentieth century.<sup>30</sup> The financial crash and Great Depression which followed were also fundamental, transforming the economic and social conditions within which rejuvenation operated. The resulting proliferation of self-help and domestic health manuals, in both the United States and Britain, provided fertile ground for manufacturers to promote new products and reconfigure existing therapies.<sup>31</sup>

Internationally, the proliferation of ideas about rejuvenation and how it might be achieved was uneven. Major centres of rejuvenation research, such as Paris and Vienna, which hosted figureheads in the field – Serge Voronoff and Eugen Steinach, respectively – acquired a reputation which stretched far beyond medical science; they became associated elsewhere with youthfulness, vigour and a reconfiguring of social norms. Both were places of scientific research where new procedures were rejuvenating the aged, but also sites of societal flourishing which promised to banish lassitude, old age and infirmity.

Chandak Sengoopta has argued that ‘the history of rejuvenation research, like the history of science in general, reveals a complex interplay of rationality, gullibility and sheer folly.’<sup>32</sup> Focussing primarily on the work of medical practitioners and biologists – especially Elié Metchnikoff, Eugen Steinach and Serge Voronoff – Sengoopta’s sphere of interest covers professional and public life of scientific rejuvenation, almost exclusively hormone treatments which came to prominence in the interwar period. On this basis he asserts that

<sup>30</sup> Organotherapy, for example, was a source of great inspiration for the hormone rejuvenators of the early twentieth century and the subject of the 1902 Hunterian Oration at the Hunterian Society in London, delivered by Arthur T. Davies, the son of noted English physician Herbert Davies. See Davies, ‘The Hunterian Oration on Organo-Therapy’, 1089–96. For more on Brown-Séquard, including his own account of the physiological effects of injecting fluids extracted from the testicles of animals (Brown-Séquard himself never claimed to have produced rejuvenating effects from his procedures), see: Brown-Séquard, ‘The Effects Produced on Man’, 105–7; Celestin, *Charles-Edouard Brown-Séquard*. As Jessica Jahiel has argued, organotherapy gained far greater traction in Europe than in the United States, although the situation in Britain is arguably different again, with less commitment to the ideas behind and practice of this brand of therapy. Jahiel, ‘Rejuvenation Research’, 86.

<sup>31</sup> Currell, ‘Depression and Recovery’, 131–44.

<sup>32</sup> Sengoopta, ‘Rejuvenation and the Prolongation of Life’, 55.

the 1920s was ‘the decade of rejuvenation’, a period dominated by public fascination with the quest to live longer, healthier and more youthful lives.<sup>33</sup> Angus McLaren’s wide-ranging study, *Reproduction by Design*, likewise focusses closely on interwar Britain as a site where concern about the relationship between reproduction, fertility and modernisation combined to produce new forms of professional and public fascination with the human body and its longevity.<sup>34</sup> Sources from the period, however, suggest that attempts to restore or preserve youthfulness were far more wide-ranging, cutting across a swathe of lifestyle factors, medical interventions and devices. For example, in *Life Begins at Forty*, published at the outset of the self-help boom in 1932, Pitkin argued that the clear boundaries ‘between youth and age’ were fading in consequence of ‘the Machine Age’, citing changing habits in diet, employment, leisure, exercise and family life amongst numerous factors and motivations for remaining young and vigorous.<sup>35</sup>

The significance of this historical moment for rejuvenation in the United States has been recognised by Julia Rechter who argues that ‘[w]hile there were few entirely negative assessments of rejuvenation experiments published in the teens and twenties, by the 1930s, more skeptical reports began to proliferate. . . . It was a collection of factors, cultural and scientific, which caused a dampening of popular enthusiasm for the hormones in the 1930s.’<sup>36</sup> However the story is even more complex than the varied and subtle landscape of hormone treatments and their impacts painted by Sengoopta, Rechter and other scholars, including Nelly Oudshoorn; hormones were just one aspect of a diverse range of strategies claimed to slow, stop or even reverse various aspects of the ageing process, from the appearance of wrinkles to a loss of sexual potency.<sup>37</sup> Only when we expand our view to consider how endocrinology intersected with and inspired other forms of rejuvenation can we get a more complete picture of the significance of hormones and their social and biological significance. Indeed, as McLaren has suggested, it was a period during which ‘discussions of sexuality, reproduction, endocrinology, eugenics and environmentalism were hopelessly entangled’, to which we must add a range of other factors, including commercialism, economic productivity, the invisible electrical forces at work in matter, and demographic stability.<sup>38</sup>

Meanwhile, other scholarly accounts, such as Helen Small’s consideration of the relationship between ageing and philosophical thought, have

<sup>33</sup> Sengoopta, ‘Dr Steinach’, 122.

<sup>34</sup> McLaren, *Reproduction by Design*, 2.

<sup>35</sup> Pitkin, *Life Begins at Forty*, 4.

<sup>36</sup> Rechter, ‘The Glands of Destiny’, 214.

<sup>37</sup> Sengoopta, *The Most Secret Quintessence*; Oudshoorn, *Beyond the Natural Body*.

<sup>38</sup> McLaren, *Reproduction by Design*, 2.