

Energy, Aging, and Neurasthenia

A Historical Perspective

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Abstract

That there is an association between energy and aging may seem commonsensical in modern society. Nonetheless, the question of how aging came to be associated with energy is less well known. This article explores how the 19th century disease of neurasthenia became related to aging through contemporaneous ideas about productivity, energy surplus and energy dissipation based on an analysis of how a lack of energy was featured as a symptom of the disease. It examines the specific historical intersection where a lack of energy was related to a diagnosis, illustrates how aging and energy have become intrinsically tied to each other and how the focus on the productive uses of energy has antecedents in religion as well as moral economics. As aging continues to be considered a problem in modern society—in large part due to the inherent unproductivity associated with old age caused by a lack of energy—the discourses surrounding neurasthenia demonstrate how the concept of energy manifested itself in contemporaneous consciousness.

Keywords: aging; disease; neurasthenia; energy

Anthropology & Aging, Vol 40, No 2 (2019), pp. 48-59 ISSN 2374-2267 (online) DOI 10.5195/aa.2019.170



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Introduction

An old story often told is that the human body is a phenomenon that inevitably ages. From Plato to Cicero and Hippocrates to Galen, the process of aging is presented as a significant characteristic of life. Yet, what causes the process of aging and thus what aging has been associated with is a multilayered story. In this article, I present one of these layers by analyzing the association of aging with the disease of neurasthenia. I explore how the representation of *energy* in this disease of the 19th century--an era marked by heavy industrialization and a focus on productivity--equated a lack of energy with disease, and hence illustrate how aging became part of the discourse on disease.

As exemplified in the famous early modern and late modern illustrations of "the ages of man" (Burrow 1986), the human body continues to develop physically until it at some point ceases to – this is where the body "as old" enters the picture. That this point of recession will occur at some point is well established in science, ranging from the Cartesian view of the body as a machine (Descartes 2002 [1619]) to contemporary studies relating old age to mitochondrial function (Payne and Chinnery 2015). What is common to these approaches is that the recession of the body is demonstrated in terms of available energy. In other words, old age limits energy expenditure. However, defining *when* old age begins to make itself felt is one of the more debatable questions in science, popular science and in society. Although it may seem to be a banal point that old age and energy are closely related, I argue that the specificities of this relationship have not been explored sufficiently. By looking at how energy became an important tool in the classification of a disease (nosology), such as neurasthenia, we get a better sense of what foreshadowed the current discourse on energy in aging.

Energy, Life Force, and the Disease Neurasthenia

The term *force* – or more specifically, *life force*, crops up continuously when the concept of energy is discussed from a cultural historical point of view. Some of the earliest known descriptions of life force present this intangible notion as something that closely corresponds to the air we breathe (Taylor 1979). When we are conceived, we begin breathing, and we end our lives when we stop breathing; hence, life force is an element that gives and sustains life. Referencing Genesis 2:7, "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul," the physician and psychiatrist Frederick Kräupl Taylor demonstrates the relationship between life, soul, breath and mind. He also notes how this association appeared in Greek and Roman cultures: *psyche* was originally a Greek word for breath; spirit came from Latin *spirare* (expire), and *anima* was the original Latin word for wind and air (*ibid*.).

When life force is tied to notions of spirit or soul, it is something one can lose, as in the phrase "to lose spirit," or something one could show, as in the phrase to "show spirit." Hence, we find the opposites of possessing life force and losing life force. However, possessing life force was not always considered a

good thing if it was associated with a wrongful deployment, e.g., an evil spirit in possession of one's life force, the sapping one's life force, or quite often, both at the same time. Essentially, life force was seen as multifaceted. It maintained a certain ambiguity in society as both a destructive as well as a productive entity, an approach that is parallel to our contemporary conception of electricity and force in physics. The concept of energy was used interchangeably with life force, which led in part to the sudden appearance of the diagnosis of a nervous disease characterized by a lack of energy—a disease that came to be known as neurasthenia in 1869.

In his work *The Journey of Life*, Thomas R. Cole (1992) argues that the prevailing discourses on old age in the 18th century were based on two competing ways that one could become old. One way was, generally speaking, good: becoming old virtuously and experiencing a natural death. The other way was bad: becoming old full of sin and disease and ultimately experiencing premature death. However, Cole suggests that these two different ways of approaching old age gradually shifted from the 1870s onward toward looking at old age in the bad way: old age began to be seen as an obstacle to industrial progress. Aging in the *good* thus dissipated, and the recognition of old age as a distinct period of life did not do much to change this. Publications by health professionals and physicians at the time primarily represented aging as bodily decay. One of these physicians was neurologist George Miller Beard, who framed "the disease" of the 18th century as American Nervousness or neurasthenia. In his 1869 paper "Neurasthenia, or Nervous Exhaustion" (Beard 1869), Beard argues that neurasthenia was becoming increasingly prevalent as a disease in modern American society. He later expanded upon this idea in his highly influential book (at the time), American Nervousness (Beard 1881). According to historian Roy Porter, Beard's conceptualization of neurasthenia owed something to the Brunonian system of medicine developed by Scottish physician John Brown (Brown 2012 [1780], which suggested that diseases could be split into categories of -sthenia and asthenia. The latter were diseases caused by an inability to react to stimulus, and the former by an overreaction to stimulus (Porter 2001).

Neurasthenia was presented as an overreaction to stimulus, and encompassed a range of symptoms that were before then contained in other diagnoses. Symptoms of neurasthenia could be: despair, phobia, insomnia, nightmares, inattention, migraine, palpitations, indigestion, impotence, neuralgia, extreme fatigue, and many more. In effect, neurasthenia was something of an umbrella diagnosis that encapsulated many of the symptoms that were being reported by the upper class of American society. But for Beard, neurasthenia was not merely a regular stigmatic disease. Instead, he believed that neurasthenia, being particular to American society, was caused by the innovations of American industrialization. Innovations included: steam power, the periodical press, the telegraph, the sciences and participation of more women in society, among others (Lutz 1991). Neurasthenia was seen as a condition related to overuse of nerve force; in that sense, it complemented certain contemporaneous physical theories about the limited amount of energy within systems.

Historian Anson Rabinbach (1992) argues that German physicist Hermann Von Helmholtz's "discovery" of thermodynamics in 1847 contributed to a certain degree to this idea of a universal law regarding the conservation of energy in the human body. In his first thermodynamic law, Helmholtz proposed that energy is cosmological; as such, it is a universal force that cannot be added to or destroyed because the cosmos must continuously contain the same amount of energy—an energy that cannot dissipate beyond the cosmos. This thermodynamic law would eventually align the human body with the machine in the sense that the productivity of both was regulated by energy output. However, Helmholtz's second thermodynamic law describes how the transition of energy from one state to another (e.g., from cold to warm) in a closed system always entails the loss of energy. Thus, Rabinbach argues,

The great discoveries of nineteenth-century physics led, therefore, not only to the

assumption of a universal energy, but also to the inevitability of decline, dissolution, and exhaustion. Accompanying the discovery of energy conservation and entropy was the endemic disorder of fatigue – the most evident and persistent reminder of the body's intractable resistance to unlimited progress and productivity. Fatigue became the permanent nemesis of an industrializing Europe (1992, 3-4).

But as Porter shows, what could be considered a forerunner to neurasthenia had already been established before Helmholtz's and Beard's thermodynamic and neurasthenic theories (Porter 2001). As noted above, the Brunonian idea had touched upon dissipation and excess stimulation to a certain extent, but the idea of overusing nerves and its possible connection to society came to the fore during the Georgian era with George Cheyne and his diagnosis of the "English malady" (1991 [1733]). Cheyne coined the term in the 1730s at a time when an increasingly important question was whether the wealth of nations also gave way for the health of nations (Porter 2001). Cheyne argues that both the Enlightenment and growing wealth among the upper-classes had created a deterioration of health; he proposed (without noting the irony) that those in society who were suffering the most were, in truth, people with the highest education and living standards. Unlike laborers, the elite had to constantly use their nerves and would do so for noble purposes that enhanced society-for instance, business, pleasure, ease and fashion (Porter 2001). However, this disease of civilization did not mean that Cheyne proposed to prevent the progress of civilization that he believed caused the English malady; rather, he wanted to refine civilization to aid the suffering upper classes. A review of various accounts of the English malady indicates that the ailment carried with it something of a mark of honor that was very similar to what was later seen with neurasthenia. Yet, compared to neurasthenia and the idea of limiting energy output, the approach to the English malady focused much more on limiting the use of nerves. It was not the substance (i.e., energy) passing through the nerves that was the problem, but rather, the use, and specifically overuse, of the nerves. It was believed that strain on the nerves themselves would eventually render them sluggish.

Balancing a Nervous Economy

The notion of a "proper" use of one's nerves went hand-in-hand with the development of the economic metaphor of "nervous economy" (Porter 2001). Naturally, people in possession of such an economy would have to balance their expenditure of nervous energy while simultaneously ensuring societal progress—in short, it was a question of investment and a strict nervous economy (Lutz 1991). Hence, to have a proper nervous economy was to use one's nervous energy for the "right" purposes. This nervous economy was essentially extremely moral. Beard argued that masturbation, gambling, and illicit sexual or financial activity were a waste of nervous energy, while productive work and procreation were valuable reinvestments of energy (*ibid.*). In Beard's construction of a moral incentive for work, one can hear echoes of the Protestant work ethic described later by Max Weber in *The Protestant Ethic and the Spirit of Capitalism* (2002 [1905]). But as seen in several other reviews of diseases, morality and disease were not, and still are not, two separate logics, as they are intertwined. Beard's Protestant moral perspective extended so far that he portrayed Catholicism and neurasthenia as incompatible due to the lack of individual religious responsibility in the Catholic religious persuasion.

When we review the metaphor of a nervous economy, we can see how neurasthenia could offer a medical explanation for the changes that were regularly occurring among individuals in 19th century Western society. But the economic perspective by which it was necessary to invest one's resources wisely was certainly not exclusive to the expenditure of nervous energies. Instead, discussions about how to utilise energy and avoid energy dissipation in relation to manual labor became of greater importance. Ever since Descartes introduced the now-infamous divide between mind and body—the mind being a metaphysical

substance with its primary location in the pineal gland and the body playing the role of an automaton—the body was increasingly seen as a machine, with the mind as the defining feature that separated man from animals. However, the growth of industrialization and the construction of machinery recognized the body's mechanical function and also emphasised the human body as a productive force—as labor power. In this way, the actions of the body were not to be seen so much as governed by the mind as by their interrelationship with the machine. According to Marx (1976 [1867]), this interrelationship was so skewed that in factory work, the machine makes use of the human worker—something he would later examine in more depth through his concept of alienation. However, Marx suggests another understanding of the use of nervous energy when he says: "Factory work exhausts the nervous system to the uttermost" (1976 [1867], 548).

Marx incorporated the idea of nervous energy in his theory of historical materialism. The worker was seen as possessing this energy. Whether Marx would have called the worker "neurasthenic" is an unanswered question, but the idea of nervous energy—and the management of nervous energy—had become increasingly consolidated in society at the time. And, energy remained Janus-faced, becoming a point of fascination for several ideological factions of society, from Bolshevism, Fascism and Liberalism to Taylorist capitalism, all of which proposed making progress through the productive use of energy (Rabinbach 1992). The physical symptom of the potential depletion of nervous energy was fatigue. However, among the workers in these ideologically diverse factions, a lack of energy could, for instance, in Bolshevist terms, also be seen as a product of false consciousness. In the productivity of Taylorist capitalism, it might be the processes that were not utilised to their maximum, and so on.

As a concept, neurasthenia developed in a number of different directions, often depending on the cultural appropriation of the concept. It moved beyond the borders of American society and became widely known throughout Europe (Sengoopta 2001). In the preface to the second edition of *A Practical Treaty on Nervous Exhaustion (Neurasthenia)*, Beard writes, "This observation is of value as showing that this malady is not confined to the United States, where it was first systematically described, and where it is certainly far more common than in all the world besides, and that the symptoms, behaviour, and clinical history are the same in both countries" (1971 [1880], 9-10).

Work conducted on neurasthenia in Europe by scholars such as Wilhelm Erb (Beard 1971 [1880]), William Playfair (Sengoopta 2001) and the pioneer of research in hysterics, Jean-Martin Charcot (Goetz 2001), may have convinced Beard of the likelihood that the diagnosis could exist in other countries, although he maintained that the diagnosis was primarily applicable to the US. In Europe, neurasthenia also came to the attention of Sigmund Freud, the father of psychoanalysis. In Freud's paper "Über die Berechtigung, von der Neurasthenie einen bestimmten Symptomenkomplex als 'Angstneurose' abzutrennen" ("On the grounds for detaching a particular syndrome from neurasthenia under the description 'anxiety neuroses'") (1953 [1895]), he paved the way for the disease to be recognised as a psychoneurosis that could possibly be cured through psychoanalytic treatment. But as Tom Lutz rightly points out, neurasthenia as a psychoneurosis existed in parallel with the actual organic neuroses in Freud's paper. However, historian Edward Shorter (1992) argues that this alternative change in cause, from somatic to mental, affected the general status of neurasthenia, absolving it of individual responsibility. In effect, with the introduction of psychoanalysis, neurasthenia—previously the disease of modern civilization—became a different disease. Freud later claimed (perhaps in light of events in Germany at the time) in his Civilization and its Discontents in 1929,

We are threatened with suffering from three directions: from our own body, which is doomed to decay and dissolution and which cannot even do without pain and anxiety as warning signals; from the external world, which may rage against us with overwhelming and merciless forces of destruction; and finally from our relations to other men. The suffering which comes from this last source is perhaps more painful to us than any other (1962 [1929], 24).

Like Beard, Freud argued that advancements in civilization put critical demands on the human psychic condition. He claimed that the constant demand for higher and higher rates of production caused severe mental illnesses—not only among the elite, but also among workers (*ibid.*). But as the above statement suggests, mental illnesses could also be caused by certain kinds of social interactions and (sexual) repressions, whereby the expressions of an individual were manifested in both mental and somatic diseases. As Friedrich Nietzsche (2006 [1906]) apocalyptically argued, stopping the train of progress was unlikely, and thus the dissipation of energy would continue and accelerate. To a large extent, this dissipation was seen by these scholars and medical professionals as an epidemic caused by progress itself, which threatened, even promised, a social deformation of society.

Aging and Neurasthenia

The threat of social deformation through the loss of energy also applied to the concept of aging, which was becoming an increasingly prevalent issue in Western society in the late 19th century. Beard was of the firm conviction that old age was "an inevitable casualty in the great race of life" (Cole 1992, 164). In a graph explaining the relation of age to producing original works that appeared in American Nervousness, Its Causes and Consequences (1881), Beard argued that mental and physical power declines after the age of 40. In many ways this argument foreshadowed the alliance between American medicine and industrial capitalist efficiency (Cole 1992). In effect, Beard completely repudiated the features of good old age, which had hitherto been moral courage and happiness, and replaced them with traits such as being conservative and cowardly. He argued that happiness was a feature of middle age, not old age. To that extent, aging was a specific neural decline from age forty onward, and so happiness was not to be found in old age. This corresponded well with the ideas about conserving one's energy that were current at the time. According to Beard, one had to maintain a certain amount of nerve force after the age of 40 to slow the decline. Old age was therefore the advent of an inevitable cerebral disease. That the disease was confined to the nerves was an important factor for Beard, who noted that very few of his patients suffering from neurasthenia exhibited any outer signs of depleted nerves. Thus, Cole writes, "Beard deserves the dubious distinction of being the first to scientifically legitimate the reduction of human beings to their productive capacities" (1992, 168). Adding to Beard's rather unflattering description of old age, the physician William Osler contributed to the establishment of a scientific and unsentimental view of the body whereby human value was measured by productivity.

Even the few who dared to criticize this conception of old age did not argue against the decline of productivity associated with old age. Instead, they argued that one came to higher spiritual insights when reaching old age. Thus Felix Adler (1906), the leader of the New York Ethical Culture Society, took an existentialist approach to aging, arguing that while youth and middle age was a time of "doing," old age was a time of "being," which seems to accept the economic worthlessness of old age. While Adler's ideas had little popular appeal, they demonstrated how a lack of energy that causes less productivity had become a central concern in an increasingly industrialized world. Thus, aging as ultimately resulting in old age presented not only a threat to one's own body, but also to the modern dream of limitless accumulation of wealth for individuals (Cole 1993) and for nations.

The overarching element in the descriptions by these 19th and early 20th century physicians is how aging would ultimately result in a decrease of energy, which was set in the context of a decrease in

productivity. With the increased focus on energy in industrialized societies, several authors suggested that human productivity was one of the essential features of mankind—a productivity that essentially necessitated energy. Hence, the body was a vessel facilitating the creative productions of the mind. While this Cartesian dualism aligned the human body to that of a vessel, the industrialist-need for rational, calculated and homogenous production focused less on the creative uniqueness of each "vessel" and more on the energy spent on the production of pre-specified products. As for time, the industrial linear time structuring a workday made it possible to measure productivity. Industrialization and ideas about the rationalization of the body's energies moved the possibility of energy expenditure in production from being a question relating to the work ethic of the working man, to a question of a rationalization of possible energies (Rabinbach 1992).

In other words, because industrialization placed the human body alongside machines, whose efficiency and productivity were directly measurable, measuring overall productivity in relation to supply and demand necessitated certain standardized norms of human labor. This, it can be argued, created a body that was in a constant relation to a quantitative norm of production, which facilitated the increase of pathological conditions, of which lack of energy became central. As Georges Canguilhem (2008) noted, the normative had and continues to have a tendency in positivist sciences to become the definition of the normal, which creates new conditions of abnormality (2008). Yet, one might argue that the mind was not completely eradicated from this rationalization of energy, which could be seen in the prevalence of discourses concerning the moral imperative to use one's energy in a manner which would add to productivity, or at least, not hurt one's productive capabilities. In this way, the ultimate responsibility for one's level of energy for production was not solely related to the industrialist use of energy, but also to the way one chooses to discipline the body.

Ranging from rationalization of energy in work to individualized disciplinary notions of how to preserve energy, aging was seen as unproductive because it ultimately limited energy output. While Beard argued that aging happened with the use of nerve force, others argued that sexual or cellular energy that depleted with age caused the overall loss of energy. Among the followers of the latter conviction was Charles Asbury Stephens (1892), who tried to demonstrate how the aging process was found at a cellular level, and that the perfection of cellular nutrition and utilization of vital energy for cellular restoration could possibly be used to ensure endless rejuvenation, or immortality.

In relation to sexual energy, masturbation was portrayed in numerous descriptions at this time as draining the body of energy. The development of Brown Sequard's *Elixir of Life* in the mid-19th century in the wake of this speculation prompted the hope for a rejuvenation of this sexual energy. The elixir was widely sold and although it proved to be to be quackery (Cole 1992), the idea that energy could be located in the sex glands continued to be widely believed from the mid-19th century through the beginning of the 20th century. In some cases, this belief that energy is located in the sex glands meant that some went to the extent of surgically redirecting the sexual hormone from the genitalia back into the body (*ibid.*).

In any case, a new disciplinarian regime seemed to gain impetus in the late 19th century with regard to preventing "unnecessary" loss of energy. Disciplining one's eating habits through diet and controlling sleep patterns also provided new methods to foster energy conservation. So, when the Kellogg and Post cereal companies introduced their cornflakes in 1901, declaring that they would prevent aging, they were part of a larger trend of disciplining the body through consumption.

It was in light of "disciplining energy" that microbiologist Elie Metchnikoff, the 1908 Nobel Prize winner (with Paul Ehrlich) for Physiology or Medicine, suggested that bacteriology could eliminate infectious disease, and thus most causes of death. Metchnikoff's 2004[1908] theory prompted him to

promulgate a discipline of "civilized morality," which focused on a rational hygiene that included a strict dietary prescription highlighting sour milk besides regular exercise. According to Metchnikoff, the lactic bacilli in sour milk and other products were able to neutralize the toxins produced by harmful bacteria. In this way, applying the dietary measures in combination with exercise would prevent disease and ensure a high energy level throughout one's life. Following Metchnikoff's ideals meant that there would be a difference between dying a natural death and dying a death caused by infectious bacteria, with natural death being the end of "healthy old age." In light of this, it is noteworthy that Metchnikoff was the first person to frame gerontology as a science that was created to specifically address inhibiting the process of aging.

Some gerontologists have argued that a significant predecessor to geriatrics was the physician Carl Friedrich Canstatt, who on the basis of Friedrich Wilhelm Joseph Schelling's *Naturphilosophie* argued for the existence of a vitality that sustained bodily existence (Kirk 1995). Canstatt's (1979[1839]) ideas on aging implied that age was defined by one's life force, not by one's age. Thus, the question remained: How to maintain this life force? Although Canstatt was discredited by some of the better-known physicians, such as Jean-Martin Charcot, the idea of life force, and specifically questions about how to maintain this metaphysical presence, was evident in some of the early geriatric works (Kirk 1992).

In the early 20th century, Dr. Ignatz Nascher (1914), who is commonly known as the father of the discipline of geriatrics, argued that the body contained a vital energy. Although he disclaimed theories of the body as a machine that could wear out, he argued that intense psychological and physical energy expenditure could accelerate the aging process.

Two general discourses concerning aging and energy emerge from this brief review of late 19th-early 20th century research on aging. One discourse outlined the use of energy as facilitating a decrease in overall energy, while the other discourse outlined an expenditure of energy as being beneficial in preventing the process of aging. How one could optimize or preserve this energy or what to do when the lack of energy occurs was a widely debated question at the time; in many cases the discourses were intermingled. However, a common feature in all descriptions was that aging meant a decline in overall energy, which would entail a loss of productivity.

As previously noted, with the shift in medical discourse during the 19th century—attributable in part to Charcot—the definition of the pathological became juxtaposed with the definition of the normal, and signs and symptoms of disease and health were dependent on these definitions (Tiles 1993). This, in turn, would make old age inherently pathological. However, when Nascher coined the term "geriatrics," he presented it as the study of old age as a distinct period of life in which different definitions of the normal and the pathological applied (Cohen 2006). By doing so, he attempted to separate old age from disease, but struggled to provide a clear definition of what old age is if it is not solely defined by gradual decline (Kaufman 2006). To that extent, old age continues to be defined in the fields of geriatrics, gerontology and the life sciences as biological decline (Katz 2011), and concurrently, old age was and is presented as "a problem of the limit" (Cohen 2006, 5).

Popular slogans such as "healthy aging" (Fries 1980), "successful aging" (Kahn & Fries 1987) and "productive aging" (Butler and Gleason 1985) all express the concern with old age as an unproductive burden on society (Lamb 2018). Consequently, they promote a compression of morbidity, effectively arguing that morbidity in old age should be as limited as possible (Moody 1995). This also means that there are right and wrong ways to age, and to ensure that one ages the right way has been discursively put forth as a life-long endeavor. When considering how neurasthenia was, and aging is, characterized by energy depletion, it is not difficult to see the connection between the contemporaneous concerns around

neurasthenia and contemporary notions on aging.

The cause of the spread of neurasthenia also became its downfall. In addition to being a diagnosis that gradually become more widely used in less-elite circles, neurasthenia had always had the problem of being an umbrella diagnosis that sought to explain nearly everything that could not otherwise be measured. As Beard argues in *A Practical Treaty on Nervous Exhaustion (Neurasthenia)*,

First of all, the symptoms of neurasthenia are largely of a subjective character, and to one who does not suffer them, appear trifling and unreal; many of them do not appeal directly to the senses of the scientific observer: the physician can only know of their existence through the statements of the patient, or through his conduct. Unlike the existence of surgical and acute inflammatory diseases, the phenomena of which the physician can see and feel, and for the study of which he is little, if at all, dependent on the patient's intelligence or honesty, they do not appeal directly to the eye or ear or touch, and are in fact quite out of the range of all modern appliances to supplement the defect of the senses, as the ophthalmoscope and laryngoscope, or even the spectroscope (1971 [1880], 26-27).

This statement demonstrates that neurasthenia exhibited symptoms that seemed inexplicable to medical professionals at the time. It also provided the elite with a diagnosis that confirmed their positions in society as well as the sacrifice of their nervous energy for the sake of social progress. However, the eventual disappearance of neurasthenia in Western medicine is not necessarily related solely to neurasthenia becoming a *gesunkenes kulturgut* (sunken cultural treasure) that lost favor among the elite medical practitioners, or to its becoming a psychoneurosis with its hypothetical somatic foundation removed (Sengoopta 2001). Rather, neurasthenia's "disappearance" should be connected to a change in doctor–patient relations. According to historian Mathew Thomson (2001), the diagnosis offered medical recognition of the immeasurable ailments that patients experienced as somatic, and this satisfied the elite patients who were paying for a medical consultation. However, when neurasthenia spread down to the lower levels of society, neurasthenia's former mark of honor was at risk. The diagnosis became especially contested after the First World War, when many of the returning soldiers opting to receive state pensions were suddenly diagnosed with neurasthenia (*ibid.*).

In light of the range of symptoms credited to neurasthenia, it is logical that a number of ailments can be traced back to it. The disease is a prominent feature in the history of diagnoses such as shell-shock and its later version, post-traumatic stress disorder (PTSD) (Shephard 2003). Another frequently occurring contemporary diagnosis that neurasthenia has become associated with is Chronic Fatigue Syndrome (CFS). The term was first coined in 1988; since then, CFS has undergone something of a baptism of fire. On the one hand, it has been accused of being just another diagnosis invented by medical companies. On the other hand, it has been the battleground for a range of patients who have sought medical recognition for their ailments (Straus 1991).

In Social Origins of Stress and Disease: Depression, Neurasthenia, and Pain in Modern China, anthropologist and physician Arthur Kleinman (1988) notes that neurasthenia is still recognised in China. According to Lutz (1991), neurasthenia has been widely accepted in Asian countries because it is not associated with any stigma, while Kleinman argues that a stigma is inherently present in the diagnosis in China. Social anthropologist Vieda Skultans (1997) presents a very different analysis of neurasthenia in Latvia, a post-Soviet country. According to Skultans, neurasthenia came to denote difficulties related to succumbing to political submission, and was thus an issue of false consciousness. From a psychiatric point of view, history could not provide any consolation because by creating a true consciousness, the timelessness of Socialism was ubiquitous. However, neurasthenia became a tool for Socialism to translate

a political threat into a psychiatric language that was dichotomous—the disease exhibited both false and true consciousness (*ibid.*).

The diagnosis of neurasthenia as a matter of dialectics should be obvious. On the one hand, it represented an explanation for paying patients who had symptoms that were hard to integrate into a medical discourse without stigmatization. On the other hand, it allowed doctors to provide a somewhat satisfying diagnosis that was grounded in the energy discourse of the day. In other words, neurasthenia as a disease made sense: it was created through the vocabulary and praxis of the time, and it gave an individual much-desired status in society. But because neurasthenia involved the field of energy, it also became a sign of the limits of progress and the great human costs made in the name of progress that saw energy dissipation and consequently aging as its largest obstacle. A diagnosis of neurasthenia thus highlighted both the moral and pathological nature of energy and aging.

Conclusion

The old dictum that diseases are social is obvious when reviewing the disease of neurasthenia. In general, as medical historian Charles Rosenberg (1992) argues, nosology facilitates the rationalization, mediation and legitimization of relationships between individuals and institutions. The creation of a diagnosis constitutes a disease as a social phenomenon, which means that while a disease may seem to have a somatic individuality, it is always experienced in a cultural and historical setting (Rosenberg 2003). To this extent, neurasthenia as a diagnosis played out in societies where continual increases in production had become tantamount to progress, and where aging as "unproductive" was presented as a limitation.

Focusing on the diagnosis of neurasthenia, this article demonstrates how energy became closely associated with production during the industrialization of Western countries. I argue that this both caused an increased rationalization of bodily energy as well as a disciplining of the body, which ultimately resulted in old age being seen as an unproductive state of depleted energy and hence an obstacle to modern progress. How to renew this energy and ultimately create the conditions under which one could be productive for as long as possible thus became the question of intense discussion, which still continues to this day.

Thus, aging is presented as a systemic problem in contemporary society—due in part to its threat of creating unproductive and unenergetic bodies that are a burden to society. This is exemplified by numerous socio-economic formulas of which the "dependency ratio" (Calasanti 1986, 1229) represents the prime example of the link between productivity and aging. As the dependency ratio presents how productivity in contemporary society is coupled with economy, the decline in productivity with aging has caused aging to become associated with economic dependency. Consequently, healthy and active aging continues to be discursively promoted and encouraged in western society, promising the added benefit of a compression of morbidity (Lassen and Andersen 2016). Thus, numerous financial as well as governmental institutions frame aging as an unproductive factor that threatens to cause many of the same societal ills as the diagnosis of neurasthenia was thought to cause when it was initially introduced in 19th century societies.

Notes

¹ A contemporary example could be HIV or certain types of cancer, where the disease has become associated with a lifestyle that is portrayed as morally corrupt (e.g., promiscuity, obesity, smoking, etc.).

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