

ted disorders that leave a mark on the genital system (AIDS does not, but gonorrhea, genital herpes, and syphilis do) tend to have no such advocacy, but dwell in shame, denial, or antipathy. Gilman explores the historical reasons why we favor funding or lack sympathy for diseases.

In the third chapter, the author studies Nietzsche's initial admiration for Wagner and his music, and his vitriolic treatment of Wagner later in life. He attributes it to Nietzsche's obsession with masturbation and Wagner's disapproval of his behavior. In Chapter 4, Gilman discusses Moslem and Jewish ritual slaughter of animals and the ways immigrants bringing such dietary traditions have run into problems with animal rights groups in Europe and the United States over the past two hundred years. At issue is what constitutes cruelty to animals, and whether there is any hygienic basis to such blood draining of unstunned butchered animals. Gilman is doubtful. Chapter 5 explores plastic surgery, especially its aesthetic uses for nose jobs, tummy tucks, and breast enlargement (or reduction), and how this varies ethnically with cultural standards for ideal female or male looks in Brazil, China, Jewish communities, and the Middle East where facial or body appearance make young people vulnerable to seeking surgical reshaping of their faces and bodies.

Chapter 6 discusses the history of electrotherapy (from amber sparking for migraine headaches in Galen's Rome to treatment of the larynx for singers and those who show trauma responses by losing their voices). Along the way, pacemakers, defibrillators, and electroshock psychiatric treatment emerged. For most of the psychological or behavioral responses to electrotherapy, Gilman raises doubts about its lasting effectiveness. Chapter 7 goes into Freud's development of psychotherapy with a very nice account of the rise of the German University in about 1810 with Wilhelm von Humboldt's novel advice to use the university to challenge received knowledge with research and teach the new knowledge as the major role of the university in German society. Freud was a product of that tradition. Chapter 8 examines bilingualism and health. The author uses his own travel experiences of being ghastly ill in a hospital in a former Soviet Asian republic and no one was able to understand any of his languages (he is fluent in several). It can be a difficult process to diagnose an illness when a patient cannot speak a language any of the staff knows. It can also be traumatic to the patient if the information conveyed is poorly translated (e.g., asking about "do not resuscitate" and the translator's "the doctor wants you to die").

Gilman uses his scholarship well. He is witty, has a good memory for anecdotes, and takes a historical view of truisms that turn out to be quite different over the generations. He also reminds us that human cultures are diverse and it is difficult to relate to others without a sensitivity to those differences.

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THE EVOLUTIONARY BIOLOGY OF HUMAN BODY FATNESS: THRIFT AND CONTROL. *Cambridge Studies in Biological and Evolutionary Anthropology*, Volume 58.

By Jonathan C. K. Wells. Cambridge and New York: Cambridge University Press. \$105.00. xi + 382 p.; ill.; index. ISBN: 978-0-521-88420-4. 2010.

As the published literature on obesity has ballooned over the past several decades—rivaling the rate of obesity's spread around the world—it is hard to imagine a vacant niche for a new book on the topic. However, *The Evolutionary Biology of Human Body Fatness* accomplishes this feat. Even though its author, Jonathan Wells, argues that his book is not about obesity, it is an exceptionally far-reaching volume (hence, not just about obesity) that makes a major contribution to the literature. The book's scope is simply immense, but its focal point is human adipose tissue biology viewed through an adaptive lens.

The volume is organized around the application of Nikolaas Tinbergen's classic approach to understanding biological traits. Through this framework, Wells provides readers with an up-to-date review of the proximate mechanisms that regulate fat deposition, a discussion of the developmental pattern of body composition, a comparative perspective on mammalian fat biology that details the myriad functions of adipose tissue, and a reconstruction of the history of adiposity in human evolution.

There are several key threads that run through the book that illustrate why it is a unique contribution. First, adiposity is not treated in isolation, but is considered using a perspective that appreciates the complex interplay between fat and lean tissue; this approach is particularly important in understanding the contribution of early life experience in shaping adult body composition and disease risk. Second, Wells moves beyond the perspective of fat as inert energy storage receptacle to detail its multidimensional adaptive role, including in metabolic regulation, immune signaling, and sexual attractiveness. Finally, the author emphasizes how human adipose tissue biology—although essential for allowing our species its global success—now makes us acutely vul-

nerable to obesity within the context of the novel environment that is today's global society. This important volume will be a tremendous asset to graduate students and professionals because it provides an accessible, extensively cited introduction to a com-

plex topic, and seamlessly integrates information from fields as diverse as molecular biology, zoology, and paleontology.

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