**David Wright**, *Downs: the History of a Disability* (Oxford, Oxford University Press, 2011), pp. xiii, 239: ill, £14.99, hardback, ISBN: 978-0-19-956793-5.

In the age of prenatal screening and early intervention even at the molecular level, much has been said about the politics of geneticisation, yet relatively little remains known about how this politics actually shapes people's experiences. In this exquisite book about the history of Downs syndrome, which won the 2013 Dingle Prize by the British Society for the History of Science, Wright shows us how people influenced by genetic self-knowledge and their families have come to creatively reshape their identities, and in the process, transform popular and scientific assumptions about the boundaries of human nature.

Wright's account makes it clear that one can re-read the history of psychiatry with a refreshingly new perspective through the lens of Downs. Downs seem to have always been there whenever a new crucial social/scientific debate arose in psychiatry, as in the case of medico-legal disputes over individual responsibility in property laws, the Enlightenment project of civilising the *les enfants sauvage* as a means of exploring human potentials, and the racial politics of Social Darwinism that gave rise to the notorious term 'Mongolism'. By unveiling the complex and sometimes tragic family history of John Langdon Down and his descendants and the Catholic crusade of Jérôme Lejeune (whose status as the discoverer of trisomy 21 is now in dispute), Wright fully explores the moral ambiguities of science, with which heroic attempts to help the disabled have at times unwittingly inflicted suffering on those who were meant to be saved. Indeed, the most striking aspect of the history of Downs is the bitter fruit of genetic science: the discovery of trisomy 21 has made the public more sympathetic and accepting of those born with this disability, yet this very technology has made it almost possible to eradicate them through prenatal screening.

Wright's account also demonstrates that, despite the seeming universality of Downs, the images and actual experiences of it have been diverse, shaped as much by local politics of difference as by scientific knowledge. While the initial genetic discovery helped de-stigmatise Downs, it also gave rise to debates in bioethics about whether to withdraw life-saving measures for babies born with this disability. Documenting the era of institutionalisation and subsequent patient activism, Wright shows how people with Downs have been at the forefront of questioning cerebral subjectivity. Today, people with Downs are more visible than ever in the community; they go to college, get married, get a job, even attain fame in Hollywood and live (semi)independently, thereby changing the very public face of Downs itself. Concretely demonstrating the feedback loop of nature and culture, Wright's analysis provides the best case for how mental disability is not about genetic determinism but is about interactions between genetics and society, which cannot be easily resolved by the biomedical insistence on the body as biological universal.

Meticulously researched and beautifully written (with a thorough literature review at the end), this is an exemplary work of social history and undoubtedly the definitive book on the history of this disability. Weaving together objective analyses and subjective experiences of what it means to be a scientific object, Wright achieves what both historians and anthropologists often wish to accomplish but rarely do; that is, to allow us to have a glimpse into what it must have been like to live in a particular time and place with radically different notions of personhood from our own. A *tour-de-force*, *Downs* should be read by

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anyone interested in the history of genetics, bioethics the popular representation of illness, and disability, as well as changing forms of identity politics in medicine today.

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**Alexander R. Bay**, *Beriberi in Modern Japan: The Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012), pp. III, x + 230, \$95.00, hardback, ISBN: 978-1-58046-427-7.

In an article published in the journal *Science* on 18 November 1892, Doctor Ashmead of New York wrote

We have a wet trip, the very weather in which beriberi, or kakke, flourishes in Japan . . . I have elsewhere affirmed my belief in the operation of carbonic compounds in the production of kakke in Japan . . . That Europeans in Japan rarely contract beriberi is partly explained by the fact that they are not exposed to charcoal fumes in their houses (p. 282). <sup>1</sup>

The debate over causes of beirberi or *kakke* in Japanese had puzzled medical doctors for years. Compared with the international acceptance of Umetaro Suzuki's discovery of beriberi aetiology, Kanehiro Takagi's dietary experiment in the late nineteenth century has been commonly seen as the pioneer of Suzuki's discovery in Japan. Therefore, as Suzuki officially identified beriberi as a disease caused by the deficiency of vitamin B1 (thiamine) in the 1910s, the controversy within the Japanese medical circle shifted to who should be credited with discovering it first. To some in Japan, Takagi in fact should be treated as a pioneer sharing the glory with Suzuki. As far as the medical community was concerned, Japanese *kakke* and modern beriberi are undoubtedly the same disease, the only historical problem is who really discovered the aetiology.

While the interests of the medical community were focused on understanding the real cause of beriberi and identifying its discoverer, historians have addressed the issue from a different angle. Unlike the previous focus on aetiology, contemporary historians of disease pay much more attention to distinguishing the fundamental differences between beriberi in modern western medicine and kakke of Sino–Japanese traditional medicine ( $kamp\bar{o}$ ). The modern definition to Japanese kakke through western medicine does not satisfy all of the descriptions of kakke symptoms in the past. Shoshin kakke was a common illness throughout the Tokugawa period (1603–1867), the cause of which remains debatable nowadays. Historians such as Liao Yuqun therefore suggest that traditional kakke cannot and should not be translated as beriberi, because they are actually two distinct sicknesses. For Liao, the translation of kakke as beriberi is too simplistic.

Alexander R. Bay follows a different approach to previous medical professionals and historians alike. Instead, he treats beriberi as a symbol revealing 'the connection between medicine and power in modern Japan'. Without engaging with the Foucauldian definition

<sup>&</sup>lt;sup>1</sup> A. Ashmead, 'Contribution to the Etiology of Beriberi', *Science*, 20, 511 (1892), 281–2.

<sup>&</sup>lt;sup>2</sup> L. Yuqun, 'Records and Interpretations: Reinvestigation on the History of Kakke in Japan', *New History*, 12, 4 (2001), 121–54 [in Chinese].