

underscored in the illustrations contained in the third photo gallery. Unfortunately, these are mostly of banal, formless buildings, bearing very little intrinsic architectural merit. This is precisely where the authors' de-emphasis on architectural design *per se* comes back to haunt them, for the buildings shown are architecturally uninspiring, and, ultimately, somewhat undermine the core thesis. This facet of their argument would have been greatly fortified had genuinely clever, architecturally innovative clinics been included. They are not impossible to find (particularly outside the US) if one looks hard enough.

Regardless, in sum, this book fills an important void with respect to our understanding of recent developments in the milieu of the American everyday suburban healthcare landscape, and helps the reader understand how the current hub (mothership hospital) and spoke (spatially dispersed network of outpatient clinics) system became ubiquitous. Above all else, this book holds the potential to fuel much-needed further research and debate.

Stephen Verderber,
Tulane University

Deborah Hayden, *Pox: genius, madness, and the mystery of syphilis*, New York, Basic Books, 2003, pp. xx, 379, illus., £20.00, US\$27.50 (hardback 0-465-02881-0).

In her pathography, Deborah Hayden, an independent American scholar, proposes an intriguing thesis, that syphilis, a disease known as the "Great Imitator" of diseases and thus frequently misdiagnosed, is a secret, unacknowledged subtext in history. Employing retrospective diagnosis, Hayden suggests that many prominent nineteenth- and twentieth-century historical figures suffered from syphilis. She then suggests that this disease might have accentuated existing abilities, talents or predilections, and so might help to explain the productions or actions of a number of composers, writers, artists, philosophers, politicians and dictators.

Beginning with an overview of the impact of the disease on Western Europe from the period of Columbus' adventures in the New World, the discussion centres on biographical analyses of fifteen possible syphilitics: famous, or infamous, nineteenth- and twentieth-century figures.

According to Hayden, among the possible contenders are Ludwig van Beethoven, Robert Schumann, Charles Baudelaire, Abraham Lincoln and his wife Mary Todd (one of only two women discussed in the book), Gustave Flaubert, Friedrich Nietzsche, Vincent van Gogh, Oscar Wilde, James Joyce and Adolf Hitler.

Hayden draws the parallel between the effects on the brain of the later stages of syphilis and the condition of manic-depression, which has been linked in some quarters with artistic creativity. In doing so, Hayden displays an engaging writing style and a flair for rendering complex symptoms intelligible to the lay (non-medical) reader. She explains that as late-stage neurosyphilis develops, periods of depression and pain can be replaced with episodes of creative euphoria and heightened perception, which, she insists, must surely have had some influence on people's work or actions. The reader is left to infer from Hayden's description that the syphilis bacterium, affecting the central nervous system and inducing the illusion of great light, is an important factor to be considered in the circumstances surrounding Beethoven's composition of 'Ode to joy', or van Gogh's paintings such as 'Crows over the wheatfield'. In her final case study, Hayden provides an interesting analysis of the possible role syphilis might have played in Hitler's life. Hayden proposes that Hitler's anti-semitism was possibly heightened by his personal experience of syphilis, being a disease that, as she points out, Hitler closely identified with the Jews in *Mein Kampf*.

Yet for the medical historian the book throws into sharp relief the problem of evidence, and raises questions over the validity of retrospective diagnosis in historical inquiry. Her description of how stigmatizing the disease has been during the five hundred years it has been prevalent in Europe, and the difficulties surrounding its accurate diagnosis, ultimately serve to

Book Reviews

undermine her thesis. As she admits, “The reader looking for proof in the contentious cases will find none.” In some cases, for instance in her chapter on Beethoven, Hayden is forced to acknowledge that “As much as we might like proof for a diagnosis of syphilis, there is none”. Yet, as subsequent chapters show, Hayden does not allow a lack of evidence to spoil a good story. Concluding her fifty-page chapter on Hitler, Hayden states, “There is no definitive proof that Adolf Hitler had syphilis, any more than there is undeniable evidence that he did not.”

The thesis is an interesting one, but the foundations of proof that Hayden provides are shaky. The argument is built on a structure of circumstantial evidence and conjecture that historians will find flimsy. In order to be a helpful addition to medical history such a discussion requires much more evidence than Hayden is able to provide. Without this evidence we are in danger of proving Cecil Graham’s charge, in Wilde’s *Lady Windermere’s Fan*, that “history is merely gossip”.

Caroline Essex,
Institute of Psychiatry, London

Thomas Söderqvist, *Science as autobiography: the troubled life of Niels Jerne*, translated by David Mel Paul, New Haven and London, Yale University Press, 2003, pp. xxvi, 359, illus., £27.50 (hardback 0-300-09441-8).

This is a remarkable book about a remarkable man. Söderqvist describes and analyses the life of the immunologist Niels Jerne (1911–1994), who was awarded the Nobel Prize in 1984 and certainly belongs to the most prominent medical researchers and especially immunologists of the twentieth century. Jerne contributed decisively to the understanding of immunology with two theoretical approaches, namely the selection theory of antibodies and the network theory. Both theories were intended to be free of the cautious idea that the immune system would work only in response to antigens or toxins. The selection theory postulated that the organism would produce a range of different antibodies

spontaneously. The network theory saw the immune system of the human body as a kind of cybernetic system where all parts worked consistently. Söderqvist’s book relies on archival studies as well as over 150 hours of oral history interviews with Jerne himself and on talks with over 90 relatives, friends and colleagues.

These core data sound attractive but most outstanding is the life of Jerne himself. It does not correspond to the platonic idea of a Nobel-Prize winning professor in medicine with a straightforward career, who is married to his lab and produces marvellous scientific knowledge about the world. On the contrary, Jerne first of all slipped into the shoes of his father and worked as a sort of tradesman and inventor. His favourite pastime was reading philosophy and art books and discussing related problems and politics in cafés and bars. Although bound to the bourgeois world of his times, he was attracted by the bohemian life-style and disliked the idea of living an ordinary life. Jerne was a kind of “womaniser”, who tried to realize his erotic sado-masochistic fantasies when aiming to subordinate women to his own will. He was torn between anxious insecurity, watching and analysing himself and his environment from a distance, and a strong belief in his mastermind, which manifested itself in clear-cut and straightforward ideas and statements. Söderqvist describes Jerne as a sensible, fragile genius, who desperately tried to control his life and who found his way to medicine only after a period of successive stabilization. His Nobel Prize winning theories were moulded by and were an expression of his inner life, and they were rooted in his efforts to organize a chaotic world with the help of the arts and sciences.

As interesting as Jerne himself, is Söderqvist’s methodological approach. He tries to deliver an “existential biography”, which focuses on the life of the researcher and not primarily on the scientific achievements, as Jerne’s work “was an inseparable part of his life”. Söderqvist contrasts his own approach with that of “most biographies of scientists, which inevitably focus on scientific work and public achievements and leave the rest of life (if treated at all) at the periphery” (p. xxiii). Although the approach is interesting,