

N.B. This is a final draft only and is not identical to the published version.

- John Sutton (1997) Review of Georges Canguilhem, *A Vital Rationalist: selected writings of Georges Canguilhem*, F. Delaporte (ed.) (New York: Zone Books, 1994), *British Journal for the History of Science* 30, 101-3.

Please do send comments: [email](mailto:johnsutton.net) me.

Back to my [home page](#).

GEORGES CANGUILHEM, *A Vital Rationalist: selected writings from Georges Canguilhem*, edited by Francois Delaporte, trans. by Arthur Goldhammer.

New York: Zone Books, 1994.

Pp.481. ISBN 0-942299-72-8. 24.25. \$36.25.

Canguilhem has, across the century, carefully spied out how, in the history of science, "obsessional constraints" take hold of "the curious yet docile mind" (p.72): yet he never argues that acknowledgement of such obstacles to understanding entails the levelling of all knowledge-claims, the restoration of myth in the face of modernity (pp.367-9). This selection, covering his philosophy of biology and medicine, is graced by another gorgeous Zone Books production and Paul Rabinow's brief, substantial introduction, but Canguilhem himself doesn't seem to have had a hand in its compilation. Goldhammer's translation finds easily both a crisp historian's style, for work on baroque physiology or Comte, and surprising literary power for psychoanalytic speculation by Canguilhem as cultural critic. Some, caught up by recent interest in Canguilhem, might wish for full translations of his work on the reflex concept and of *Etudes d'histoire et de philosophie des sciences*, enormously influential in France. Here, instead, selections from these books are amalgamated with chunks of those already translated, *The Normal and the Pathological* [NP] and *Ideology and Rationality*. But this format allows the juxtaposition of material from the books with translations of scattered papers from a 50-year span. Those pained at the omission of notable untranslated writings, like early 1960s essays on Bachelard and Darwin, can trace them, thanks to Camille Limoges' 70-page critical bibliography, an outstanding resource on twentieth century French intellectual life.

Delaporte divides the material into five parts. They cover methodology, epistemology of biomedical sciences, the history of concepts (cell, reflex, biological object), textual interpretations (Descartes, Comte, Bernard), and positive problems about life and normality. It is, admittedly, hard to produce what Rabinow calls "a kind of coherent 'book'" from Canguilhem's overlapping, distributed output of essays: but some editorial strategies are frustrating. Although a survey essay 'Vie' of 1973, from the French Encyclopaedia Universalis, is translated in sequence with only brief omissions, Delaporte has fragmented and levelled other texts oddly to fit his conceptual categories. This creative editing lacks a sense of development in Canguilhem's methods or interpretations. Extracts are undated, and it is difficult and time-consuming to calibrate passages across bibliography and source list. Chapters include material from different periods of Canguilhem's career, with entries for encyclopaedias and general history of science texts beside papers of quite different status written for specialist collections.

While the collection falls short of an easy access introduction, much of value here extends the texts already available in English. Essays on the epistemology of medicine written after NP are well represented. Canguilhem develops his historicized distinction between active interventionist medicine, aligned for him with mechanism, and a watchful patience which he applauds, since "a dynamic body deserves an expectant medicine" (p.129). Pursuing the thought from NP that all human physiology is applied physiology, Canguilhem argues that there is no loss of epistemological status in the conversion of theory into therapy (p.153). Canguilhem also aligns information theory further with his stress on the contextual nature of adaptive body-environment relations or "discussions". Happy, like cognitive scientists, to apply the concept of information at subintentional levels of explanation, he views organisms as temporary pockets of biological stability, where improbable organization permits brief resistance to inevitable thermal equilibrium. Though noise might be productive (p.88), Canguilhem defends the integrity of "an organic order firm in its orientation if precarious in its incarnations".

Without further context, it is hard to judge how Canguilhem's views, such as his battery of arguments against mechanism in the life sciences, might have shifted in response to other historians of science, or to wider cultural changes. He construes mechanism narrowly, as incompatible with information theory, incompatible with a notion of biological function, and as applicable primarily to geometric and quantitative approaches to the discontinuous motions of neuromuscular systems. It's less plausible now to think (as Canguilhem did in 1937, comparing Aristotle on slaves) that the Cartesian beast-machine doctrine was linked, in intention or consequence, to a programme for justifying vivisection: and more plausible now, in a cyborg age which requires what Canguilhem called an "organology" to explain machines, to find active matter within historical mechanisms.

The relation of mechanism & authoritarianism in Canguilhem poses sharper problems, and this is one area in which Limoges' hope for links between Canguilhem's oeuvre and the traces of his career (p.386) is realized. Canguilhem's early topics included pacifism, Pirandello, colonialism, and suicide as well as Leibniz, Kant, and Bergson: the full dedication to medical studies which gave his mature philosophy such power occurred only when, in 1940 Toulouse, he refused to teach according to the Vichy regime's orders. Canguilhem's active engagement in the Auvergne Resistance was not long over when he pointed out interrelations, in cell theory, between totalitarian politics, with individuals sacrificed to higher organic society, and the vitalistic biology of German Romantic nature philosophers, in which organisms are continuous wholes conceptually prior to their components. It's not that alternative "French" pictures of discontinuous organic molecules were any less ideological, being

interdependent in turn with Enlightenment politics of atomic individuals in contractual association. The overdetermination of theoretical concepts is no bar to their efficacy or epistemological dignity. But the historian of science, not a scientist but a maker of judgements, in this context had clear values to apply. The emphasis here later shifted, for "the analytic method in conjunction with the discontinuous imagination" (p.167) came more strongly under fire through Canguilhem's attention to a biological specificity which he thought mechanists miss, since life and death are not problems for physics and chemistry. But the role of national differences in the history of physiology continued to exercise him, conflict between French and German schools cropping up in various domains, from bacteriology to energy utilization in industrialized bodies.

Canguilhem remained confident that psychoanalysis of knowledge is compatible with scientific realism, where the latter opens space for the normative criticism and judgements of hierarchy essential to philosophy (p.384). This reminds us that Foucault's celebrated alignment of himself with Canguilhem, against phenomenologists and existentialists, as investigators of knowledge, rationality, and concepts rather than of meaning, experience, and the subject, should not encourage neglect of their differences. As Foucault noted, Canguilhem's polemical realism required the retention of a true/false dichotomy as a judgemental, rather than simply descriptive or conversational, tool. Canguilhem often uses evidence from present sciences, refusing to collapse them into mere vehicles of normalization. Indeed, the category of the normal is not, for Canguilhem, necessarily linked to surveillance, that of the pathological not wholly disciplinary. Like Foucault, he stresses the priority of infraction over regularity, infringement over law, for there are no (normative) norms without something to regulate. But since, for Canguilhem, we cannot step back from current norms, we must inevitably be militant, intolerant, in their expression or defence (p.364). This need not be the individual's complicity in an imposed regulatory apparatus, for biological (unlike social) norms are intrinsically resistant. There is no diatribe against the subject in Canguilhem, as in many influenced by him: indeed he insists on the phenomenological, qualitative nature of the health/disease opposition, tempted occasionally to posit something like "no disease without awareness". But Rabinow's suggestion (p.18) of an idiosyncratic "not-so-latent existentialism" underestimates the extent to which Canguilhem bypasses consciousness: awareness is corporeal, the wisdom of the body testing the adaptability of the internal environment to an inconstant external environment of "leaks, holes, escapes and unexpected resistances" (p.356). Pathology as negativity does involve error, the risk of catastrophe being inevitable in maintaining normativity: but Canguilhem sees no existentialist responsibility here, only (as NP has it) traces of anguish.

Thinking of subjectivity in Canguilhem reveals the difficulty of extending his deeply biological view of norms to the cognitive domain. Leriche's picture of health as "life lived in the silence of the organs" doesn't easily apply to psychology, an area Canguilhem has rarely approached directly, beyond the deconstructive history of his 1958 paper "What is Psychology?" (not included here despite the claim to the contrary on p.411). There are hints, about psychology and politics, in three manuscripts on norms and normativity from which Delaporte includes selections (undated and arranged out of Canguilhem's order). After reworking themes from NP, they examine the problematic equation of earlier with inferior mentalities which followed Piaget and Levy-Bruhl. But while historicizing over-optimistic rationalism, Canguilhem defends the possibility of comparing and evaluating mentalities. We should see "the modern mentality" not as definitively superior, but as normative in its ideals of openness to testing in new conditions. The disastrous, conservative impulse to revert, impossibly, to a wholesale tolerance of childhood fantasy and puerile myth (p.362) in over-reaction to positivism ignores the painful awareness of the desire/reality gulf for which adults and moderns have struggled. Resolution of reason's crises lies only in future invention and adaptation, not in deceptively reviving past norms as if on equal footing: "try as one will, a plurality of norms is comprehensible only as a hierarchy" (p.364). The tension here runs deep between democratic faith in a rational fallibilism, and Nietzschean joy in the risky aggression of expansionist normativity.

[TOP OF PAGE](#)

Last updated 31 August 2004.