## Book Reviews/Comptes rendus

BARBARA ADAM, *Time*. Cambridge (U.K) and Malden (MA). (2004). Polity Press. 184 pp. Index

The United Nations in its recent study linking global climate change to conditions of global poverty, the Millenial Ecosytem Assessment Report, stated that one of the greatest intellectual issues of the 21st century will be the task of re-conceptualizing human senses of time from the linear temporality of the industrial age towards incorporating human endeavour within the cyclical temporality of ecosystems. The report draws the obvious, but compelling conclusion, that the global energy-pollution balance has been subjected to accelerated speeds of transport during the industrial era but that the faster we speed up processes of production, and the more we accept fast throughput as the norm, the faster we degrade ecosystems.

Time is not simply 'there;' it is a component part of cultural communication through which we structure our experiences in order to relate to others and our own sensibilities of past, present and future. Coming to some understanding of the conjoint relationship between human activity and many thousands of eco-cycles is, therefore, as much a matter of cultural understanding as it is of political negotiation and economic rationale. Adam's earlier writing on time expresses these themes, from which she derives a key term *timescape*, close in meaning to the better known term, *dromosphere*, coined by Paul Virilio, the French political theorist and technology critic. Both terms delineate the sphere of human beings in motion, and the 'human-technology-science-economy-equity - environment constellation' that Adam and Virilio feel should be at the centre of current social theory but which is often by-passed, especially the environmental connection.

Here *timescape* is introduced in the final two or three chapters on the contemporary situation in industrial society. The rest of the book treats the subject of time through a more-or-less chronological presentation, with the first chapters briefly examining how time was embodied in social relations according to ancient myths and religious texts. Subsequent chapters give precedence to western thinking on the notion of time.

The opening discussion notes an author's predicament in writing about choosing time as a topic. Because of the pervasiveness of the concept of time in the history of human cultures, any selection of discourse about time is bound to be 'highly arbitrary.' In order to offset the inevitable arbitrariness in her presentation, Adam introduces short 'interludes' between chapters which "present in compressed form the diversity of temporalities addressed in and across the chapters." Adam's 'interludes' are distinctive, and are presented in different typography with each given its own poetic shape. One 'interlude' gives poetic expression to how on the one hand time is embodied materiality; an ordering principle, and is unchangeable, but on the other hand, is also ephemeral, immanent, and illusory. As Adam explains, the contraries and ambiguities that arise there from depend on one's perspective - yet a shift of perspective from one to the other may not involve a reflexive observer of time in untruth nor contradiction. They are merely alternatives arising from a shift of multiple contexts. Differing contexts can be evoked as quickly as the proverbial 'walk through the woods' - sometimes a feature of political change - or, where the shift of context involves a whole society, it can take a whole historical epoch. The epoch making shift towards clock time in the nineteenth century is a telling example and is referenced in several chapters. Currently, as another 'interlude' expresses, clock time has become merged with 'body time' and embedded in an undifferentiated 'social time' despite the contraries characteristic of each temporal sequencing: time "is process, product and measure / is finite and transcendent/is exchange value/is negotiated."

The middle chapters discuss time theories in western philosophy and their relation to rationalism. The final part focuses on cultural practices and temporal relations in industrial society, a type of society in which the clock and clock-time practices with its many metaphors define the contours of social order and social responsibility. As Adam states there is a cluster of "five C's" surrounding the notion of time in industrial society - creation, commodification, compression, colonization and control - and these characterize the distinctiveness of western industrial societies vis-a-vis temporal relations in other societies and at other times. The point is elaborated through references to Virilio, to discussion of Giddens and Harvey's notions of space-time compression, and through references to Ulrich Beck's 'reflexive modernization'.

The sheer chronology of her survey, from collective representation of time in archaic knowledge to how time is conceptualized today, results in compression of very large topics into very small chapters. If the attempt of the editors of the series in which Adam's book appears, entitled "Key Concepts," is to provide a type of Coles' Notes or a brief introduction to a very large topic, then Adam's choice of approach is justified. Otherwise her ingenious and engaging attempt to offset her own arbitrariness in selection of topic only partly succeeds. Dealing with the subject matter of time in a chronological perspective, while good for note taking, defeats some of its purpose, which is to present a discourse about the co-eval (c.f. Johannes Fabian) multiplicity of understandings of time. References to the modern in the chapters devoted to archaic knowledge and references to archaic knowledge in chapters on the current era are almost inevitable. A better approach would have been to choose central topics in order to carry the narrative of multiple temporal understanding in both eras. From a 'central topics' perspective, one surprise is the total absence in this book of any discussion of evolution or of Darwin, whose contributions to the notion of immanent origins and movement towards a future have been profound for both anthropology and sociology, even though the incorporation of linear progress within the notion of evolution went against Darwin's own conclusions. Another surprise is the way that the impact of innovative theorizing of time in natural science is treated in much the same manner as conjectures and refutations of notions of time in positivist social sciences. In fact, the Einstein-Minkowksi notions of relativity and, following it, quantum theory, were a conceptual revolution in the natural sciences. They changed not only notions of causality and hence scientific method derived from Aristotle, but brought with it, albeit reluctantly, changed understanding of observation as it relates to scientific truth. While natural science wrestled with the meaning of both changes from the 1930s onwards, sociological positivism, predicated on earlier conventions of mechanical causality, underwent no such profound shift for about another 50 years. Even now, many of the changes in the sociological and anthropological literature have been to a conception of time, as body time or "time within," rather than to an investigation of the systemic aspects of time. Systemically, new environmental conditions demand concordance of "time within" with "time without" in a non-dualistic manner, and with this comes a profound revision of human agency.

I believe that Adam, who is well aware of the differential histories of natural science and social science should have made this point more pertinently. There is no doubt that she poses the theme: "If contemporary physicists can embrace temporality, relativity and reflexivity, why then is it proving so difficult to find public approval for such an approach in the social sciences..." (p.64). But the theme is not answered in the following chapters. In many ways, it would have suited her purposes better if she had proceeded in a reverse chronology, deal first with issues of temporality raised by global warming and environmental change. This would have given the book core themes focussed around the 5C's above, each of which would help explicate the failure to embrace relativity and reflexivity until insurgent post-modernism, with the final chapter returning to issues surrounding the environment and 'social time.'

Nevertheless there are few books on the market for social scientists who want to cover the issue of "time" from a combination of social science, natural science and environmental science perspectives, and in such a compressed but authoritative form, and on this ground alone it has to be recommended reading.

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