



Review: [untitled]

Author(s): Jeroen Bruggeman

Reviewed work(s): The Demography of Corporations and Industries by Glenn R. Carroll ;
Michael T. Hannan

Source: *Contemporary Sociology*, Vol. 30, No. 1, (Jan., 2001), pp. 39-40

Published by: American Sociological Association

Stable URL: <http://www.jstor.org/stable/2654336>

Accessed: 02/07/2008 14:28

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=asa>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.

Surely computers are more than a status symbol, more than a managerial control mechanism.

This book is, nonetheless, a valuable analysis of the transformation of a traditional work culture and its visual literacy by computer rationalization, and the coping mechanisms that workers utilize to preserve what is valuable about traditional practice while also incorporating advanced technology. The implications of Henderson's analysis go far beyond the workplace, raising questions about how computers are changing our culture of everyday life. How is the omnipresent computer changing the way we see the world, the way we depict the world, and how we interact with each other? This book helps us to begin to think about these important questions.

The Demography of Corporations and Industries, by **Glenn R. Carroll** and **Michael T. Hannan**. Princeton, NJ: Princeton University Press, 2000. 490 pp. \$49.50 cloth. ISBN: 0-691-010307.

JEROEN BRUGGEMAN
Twente University, The Netherlands

The German sociologist Norbert Elias argued that sociologists should in the first place be myth hunters. If he were still among us, he would be pleased to see how well Carroll and Hannan live by this credo. Among other myths, they debunk that new organizations have higher risks of failure; that in concentrated markets there are barriers to entry for newcomers; and that successful organizations flexibly adapt to environmental changes.

Myth hunting takes only a small portion of this textbook, though. *The Demography of Organizations and Industries* integrates many studies on organizational populations (i.e., collections of organizations with similar forms, like banks) done by the authors, and a fair number of studies. It systematizes findings about the initiation, growth and decline of these populations, and central factors that influence population dynamics (e.g., competition). It also systematizes important factors that influence the fates of individual organizations within populations (e.g. age and size). Along with the presentation of empirical gen-

eralizations and explanatory theory, the use of data sources and statistics is elaborated, accompanied by methodological considerations based on extensive experience. The book offers a complete treatment of demographic studies of corporations, starting at data sources and proceeding all the way to general and rigorous theory. The latter is surprisingly parsimonious, in the sense that with the aid of highly sophisticated statistics a great deal of explanatory power is squeezed out of relatively simple data. Given all these qualities, this is one of the most scientific textbooks in the field; it is far aloof from sloppy theorizing common in organizational sociology and beyond, and from guru talk about best practices in organizations.

This book serves as an (almost) ideal example for students and scholars alike, and it is highly relevant for nearly everybody interested in organizations, policy, management, strategy, and contingency. Students of modernity will also find much of interest. Some readers may want to skip methodological chapters, which is possible without losing track in the theory parts. Since some chapters rely on mathematics, statistics, or formal logic, the authors suggest that their readers "brush up their knowledge" on these matters. Some brushing time could have been spared if the authors had written 10 or 20 additional pages to gently explain their statistical modeling on the one hand, and formal logic on the other hand. To the same end, a couple of graphs illustrating formal arguments about age and size dependence could have helped readers a great deal in Chapters 13 and 14. For newcomers to the work of Carroll and Hannan, I suggest they first read their easy going Chapter 2 from *Organizations in Industry* (1995), as well as Hannan and Freeman's classic 1984 article about organizational inertia.

The demographic approach to organizations used to be called organizational (or population) ecology. Carroll and Hannan argue that "demography" better covers the current content. I was surprised to discover that they not only changed the header, but also revamped their intellectual history. What else is different from their previous books? First, the niche width fragment, about generalist and specialist organizations, and the life history fragment, about first movers and efficient producers, vanished without a trace. Second, a great deal of new empirical findings have

come aboard. Third, the treatment of data sources, data files, statistics, and theory is more systematized and advanced. Fourth, “The Theory Formerly Known As Organizational Ecology” is extended by a number of new fragments. I will briefly discuss two.

A new fragment, cast in standard, first-order logic, disentangles non-monotonic effects of organizational age and size. One of the advantages of first-order logic is that it helps to make all assumptions explicit, whereas, normally, numerous tacit assumptions pass unnoticed in sociological reasoning (and can be swept under the carpet in more complex formal logics). In this fragment, I noticed several small but crucial corrections with respect to the 1998 Hannan article, and I used a so-called automated theorem prover to check all lemmas and theorems (for which I acknowledge the University of Amsterdam). It turned out that assumptions suggested by the text did not always coincide with the assumptions actually needed, even though the lemmas and theorems do follow from (sometimes other) assumptions stated in the text. Only Theorem 13.9.1 and Lemma 13.9.1 do not follow. (They do follow once in Assumption 13.8.2, “ x is not aligned with its environment at t ” is substituted for “the environments at t_0 and t are dissimilar” [for which I acknowledge Jaap Kamps]). In a formalized theory, imperfections like these can be easily spotted and repaired, whereas a theory stated in natural language can be highly ambiguous, thereby impairing control and improvement. By formalizing their ideas, the authors courageously expose themselves to scrutiny, and facilitate cumulative theory development a great deal.

In another new fragment, in Chapter 4, organizational forms are identified by sets of codes. These codes refer both to genetic codes that match an ecological Darwinian selection perspective and to codes of conduct within organizations that match an institutional perspective. The purpose of this fragment is not entirely clear, and it matches neither the other, better developed fragments in this book, nor the data collecting strategies treated. It seems that quite a bit of data are necessary to identify forms and organizations according to the authors’ ideas about codes. The line of thought seems promising, though, and I am curious how it will be further developed. The authors want to further develop this fragment, as well as the fragment about

age and size, by using a complicated non-monotonic logic. I believe that a simpler first-order logic will do. Moreover, for more complex logics, no supportive software is available, whereas, especially here, such an aid is needed. Herbert Simon said that knowing in science has always meant knowing parsimoniously. So far, organizational ecology has lived up to Simon’s statement more than most other theories in the field.

Few and minor shortcomings set aside, *The Demography of Corporations and Industries* is unique in its scope and scientific rigor, as well as its empirical support: its samples (i.e., entire populations), its methodological quality, and its historical depth—sometimes several centuries. This comprehensive textbook makes an important contribution to organizational sociology and is further evidence that organizational ecology has become mainstream. If Norbert Elias had been more appreciative of math, he would have been proud.

References

- Carroll, Glenn R. and Michael T. Hannan, eds. 1995. *Organizations in Industry: Strategy, Structure, and Selection*. New York: Oxford University Press.
- Hannan, M. T. and John Freeman. 1984. “Structural Inertia and Organizational Change.” *American Sociological Review* 49:149–64.
- Hannan, Michael T. 1998. “Rethinking Age Dependence in Organizational Mortality: Logical Formalizations.” *American Journal of Sociology* 104:126–64.

Capital Moves: RCA’s Seventy-Year Quest For Cheap Labor, by **Jefferson Cowie**. Ithaca, NY: Cornell University Press, 1999. 273 pp. \$29.95 cloth. ISBN:0-8014-3525-0.

LINDA LOBAO
The Ohio State University

For at least three decades sociologists have explored the theoretical and empirical contours of U.S. industrial restructuring. While offering useful insights, our theoretical accounts often result in an over-generalized version of industrial change in which the present period is portrayed as a fundamental break from the past. In part, this view arises because analysts often embrace popular assumptions about manufacturing firms in the pre-1970s, Fordist era, such as a preference