appended glossary. His overview of "disparate treatment" on pages 60 and 61 is an excellent example of the skill with which he summarizes laws and principles governing personnel matters.

As part of his discussion, Baldwin offers a number of useful lists containing important precepts, tendencies to avoid, warning signs of potential problems, steps to be taken under certain circumstances, and so on. Particularly noteworthy lists are "Steps to Take before Terminating an Employee," the summary of traits that employees like least about their managers and the attitudes necessary to be a good manager.

In short, this is an exemplary work with which I can find few faults. Of course, a handbook dealing with legal matters will inevitably include some information that becomes outdated quickly. For example, Baldwin tells us the minimum wage is \$4.25 per hour, but subsequent to his book's publication, Congress has passed a minimum wage increase. Nevertheless, in my view the important management and legal principles and guidance the author dispenses will never be obsolete.—W. Bede Mitchell, Appalachian State University, Boone, North Carolina.

Lacy, Dan. From Grunts to Gigabytes: Communications and Society. Urbana, Ill.: Univ. of Illinois Pr., 1996. 193p. \$29.95 cloth (ISBN 0-252-02228-9); \$13.95 paper (ISBN 0-252-06531-X). LC 95-32512.

Few would find fault with the statement that begins Dan Lacy's latest book on communications and society: "the patterns of skills and technologies with which humans have been able to communicate have profoundly affected the societies in which they have lived." From the moment the first words were spoken between two humans, modes of communication in society have affected the creation and distribution of power,

the structuring of society, and "our internal perceptions of reality."

From Grunts to Gigabytes is a concise, well-written synthesis of what is known of the emergence of communication systems in Western society. Beginning with the human capacity for speech and its transformation into communities held together by orality, Lacy traces the history of communication in European and Anglo-American cultures along a single line: from oral to written culture. and from writing to printing, and the emergence of new media in the late 1800s through the twentieth century. He is at his best in his lucid discussion of the impact of print on Western society and its endurance during the modern era of audiovisual and electronic media.

Of greater consequence, From Grunts to Gigabytes is more of a provocative treatise on the relationship between communication and power in society than it is a history of the book. Lacy's portrayal of the impact that new and emergent technologies have had on the public sphere are central to his thesis. From one chapter to the next, he illustrates how power is associated with access and control of new forms of communication. Although he does not allege that access and control of communication systems necessarily create power, there is a convincing argument presented for the centrality of communication as a tool for empowerment, and this is evident throughout his analysis of the interaction between communication and public policy. For instance, Lacy considers the relationship between church and state in fifteenth- and sixteenth-century Europe in regulating and licensing printers and, by extension, controlling what was actually published. When discussing the appearance of audiovisual media in the twentieth century, he also uses government (Federal Communications Commission) and industry (Motion Picture Association of

America) to illustrate how public and corporate sector policy regulates radio, television, and movies.

Although Lacy's comfort in his knowledge of the communication industry, particularly with regard to interactions between publishing and other media, is in evidence throughout this work, there are several important shortcomings. Without any explanation, much of the corpus of recent writings in communication studies, whether by media critics (such as Ben Bagdikian or Herbert Schiller) or researchers and critical theorists, has been given little attention in the construction of the author's arguments. This is particularly ironic given their focus on critiquing media monopolies, power, and hegemony. Also, in his discussion of computer-based communication, Lacy gives scant attention to the impact of networked communication in general and of the Internet in particular. Given the breadth of recent literature in this area, his arguments are somewhat constrained by his focus on a relatively limited range of information technologies.

Finally, Lacy's thesis on the history of communication in society rests on his interpretation of the idea of progress. As useful as his work is for understanding the development of communication in Europe and the United States, it is less relevant to understanding communication systems in other cultures. Early on, he engages in a troubling discussion in which he distinguishes between oral and written cultures. "In oral societies," Lacy asserts, "only a few works could be so frequently performed, like those of Homer, as to acquire a more or less stable and recognized identity. It would be difficult to conceive of an extensive body of separate, individually recognized works in an oral culture. Writing made possible the existence of many hundreds, even thousands, of identifiable works, fixed in form, usually of identifiable authorship,

self-consciously created in recognized genres."

Although society at large has clearly benefited from the transcribed narratives, tales, and histories of oral cultures, along with other ways of preserving and communicating culture (through art, music, and other forms of expression), Lacy's contention undervalues the presence of sophisticated systems of communication among diverse cultures by placing a higher premium on the written record.

This last point has two consequences. First, toward the end of the book Lacy expresses grave concerns over the "information disenfranchised," arguing a widely held belief that many people even whole societies—are information poor because they lack access to available information within the mainstream of communication systems. (Alternatively, resolution of this dilemma may begin with analysis of such populations through a different lens, one that is focused on understanding the nature of their methods of communication.) Second, the gigabytes of new and emerging computer-based technologies are proving to have a much greater capacity than print to accommodate different forms of communication among cultures, particularly where such cultures rely on oral or visual transmission of knowledge.

At the end of his book, Lacy writes, "Successive advances in communications technology and skills have given us an almost inconceivable power both to master and shape reality and share the capacity benignly throughout society. How we use that power and how broadly we share it will depend on our wisdom and will." Lacy has, in the end, contributed to our conversation on this important issue.—William C. Welburn, University of Iowa, Iowa City.

Reilly, James M., Douglas W. Nishi-mura, and Edward Zinn. New Tools for Preser-