
**The
Modern
Invention
of Information**

Discourse, History, and Power

Ronald E. Day



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Southern Illinois University Press
Carbondale and Edwardsville

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Printed in the United States of America
04 03 02 01 4 3 2 1

Library of Congress Cataloging-in-Publication Data

Day, Ronald E., 1959–

The modern invention of information : discourse, history, and power / Ronald E. Day.
p. cm.

Includes bibliographical references and index.

1. Information society—History. 2. Information theory—History. 3. Information theory in literature. 4. Information science—Philosophy—History. I. Title.

HM851 .D38 2001
306.4'2'09—dc21

00-047033

ISBN 0-8093-2390-7 (alk. paper)

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1992. Ⓢ

*To Michael K. Buckland
In Admiration and Friendship*

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▪ Acknowledgments

This book came out of a series of investigations into the history and social production of information and the information age, utilizing the resources of critical theory and centering on the role of professional, authoritative, and utopian rhetorics in this production. The people acknowledged below supported this project at different stages and share with me the belief that the history of information in modernity needs recovery and that the current social parameters for discussing information and knowledge need to be enlarged and to be more critical.

Barrett Watten, poet and theorist, helped inform some of the vocabulary and concepts in this book during the years I worked in the field of poetics. Robert Cooper of Keele University in England made it possible for me to explore the work of Pierre Lévy through an invitation to the Centre for Social Theory and Technology at Keele University during 1997. Yves Le Coadic of the Institut National des Techniques de la Documentation in Paris gave me an opportunity to coalesce thoughts on Suzanne Briet through an invited lecture with Michael Buckland at the INTD in December 1998. I have been fortunate to have Laurent Martinet of Paris as my co-translator of Suzanne Briet's *Qu'est-ce que la documentation?*, and some of the translated quotes from Briet's work in my book are from that co-translation. And last, Michael Buckland of the School of Information Management and Systems, University of California at Berkeley, to whom this book is dedicated, met with me for tea and discussion almost weekly from 1994 to 1999, providing source material and intellectual tools that are used throughout this work. I should add, as others would attest, that Michael's life has been not only that of an exemplary scholar, teacher, and administrator but also that of an extraordinarily generous and compassionate person.

I thank Mary Gray, currently in communications at the University of California at San Diego, Nina Wakeford in sociology at Surrey Univer-

Acknowledgments

sity (U.K.), and Steve Brown in psychology at the University of Loughborough (U.K.) for their support of my work in the past and for valuable conversations that contributed to this book. I also thank several friends at, or formerly at, the University of Oklahoma, whose assistance and companionship were valuable to me during my stay in Norman during 1999–2000: Claire McInerney (Rutgers), who was a great support and whose comments on parts of this manuscript are very much appreciated; Francesca Novello for her patient work to improve my Italian; and Timothy S. Murphy, through whom my vocabulary and intellect were challenged and grew and who also was kind enough to comment on parts of this manuscript.

Though it came late in the composition of this text, I also acknowledge Jay Semel, director of the Obermann Center for Advanced Studies at the University of Iowa, and Lauren Rabinovitz and my other colleagues at the Digital Cultures seminar during June 2000 for their support and the discussion of the materials contained within this book.

I thank the readers of this manuscript during its review for their helpful comments; Karl Kageff, my editor at Southern Illinois University Press, for his work and support; Julie Bush for a superb job of copyediting; and Hermina Anghelescu (Wayne State) for supervising the indexing.

Finally, my thanks go to Mia and Pico, who were patiently next to me as I wrote through the night.

The Modern Invention of Information



1 ■ Introduction: Remembering “Information”

It is important for the materialist historian, in the most rigorous way possible, to differentiate the construction of a historical state of affairs from what one customarily calls its “reconstruction.” The “reconstruction” in empathy is one-dimensional. “Construction” presupposes “destruction.”

—Walter Benjamin, *The Arcades Project*

If we look in the *Oxford English Dictionary* under the term “information,” we will be struck by the impression that its use as a substantive, as a synonym for fact or for knowledge, is relatively new. Until very recently, “information” had the sense of imparting knowledge (in the sense of telling someone something) or of giving sensory knowledge (in the way that our senses inform us of some event). For us late moderns, however, information has now become a thing, and not only that but also an economically valuable thing. Why is this so, how did it come to happen, and what are its consequences, particularly now, in the so-called information age? How did we arrive at this reified and commodified notion of knowledge or of becoming informed? And what have we forgotten in this historical process?

This book is about vocabulary and its role in constructing and producing history. In particular, this book is concerned with the social production and history of the term “information”: how the term and its connotations became an important social and epistemic value for Western society of the twentieth century and how that evaluation came (and comes) to construct a historical future that we all must live with into the twenty-first century. This book, however, is also about those critical elements of historical agency that attempted to speak about information and communication technologies in some other manner than a determined future. This book not only tells of three information ages but also attempts to recover

different, riskier historical engagements with information culture and ideology such as occurred in Europe in the late 1930s.

In this book, I examine texts of three information ages: European documentation before and soon after World War II, United States information theory and cybernetics soon after World War II, and the “virtual” age that is proclaimed today. I attempt to show how professional and authoritative texts about the social importance of information tried to use language (particularly through books) to construct a social, utopian value for information and helped to raise information and its connotations of factuality and quantitative measure to a privileged, even totalitarian, form of knowledge and discourse. I also attempt to show how a popular “scientific” or authoritative meaning of information has been constructed by rhetorical devices and how the notion of an “information age” has been, since the beginning of the twentieth century, a futurological trope used for professional self-advancement.

In trying to restore a context of literary, social, and historical production to “information,” we are forced to account for the social, professional, and textual means through which information is produced, presented, and deployed as a historical form. In this book, I have chosen to focus largely on the textual means of information’s historical development, because, in my view, textual accounts are sometimes best able to account for the movement of concepts *across* institutionally defined social networks. Through a historically conscious rhetorical analysis, I believe that one can account for the powerful ability of vocabulary to construct cultural and social histories. That we can point to three information ages that utilize similar diction and tropes to proclaim the “newness” of their ages suggests that the historical and social cycles of remembering and forgetting, which mark each of these ages, involve rhetorical devices that leverage language and history toward creating the present and the future. If, as I believe, *the history of information is a privileged site for understanding the intersection of language and political economy in modernity*, then an analysis of the history of information first of all involves the untangling of the language of information and its ideological supports and interests.

No historical account of information in the twentieth century can turn away from the problem of how a rhetoric, an aesthetic, and, consequently, an ideology of information has come to shape late modern history and historiography. As a high school librarian at the historical moment when on-line access became widely available, I witnessed a revolution in how students understood the meaning of “history” based on the rhetoric and aesthetics of on-line digital texts. “Doing” historical study for these stu-

dents became a matter of cutting and pasting informational texts, a process many times faster than any sense of *reading* itself. It may be objected, of course, that these students were not really “doing” historical research, because they were not working with difficult primary documents in relatively unknown historical contexts. This is true, but in terms of creating an *informational sense of history*—what might be thought of in one sense as a *popular* history—informational bits of history were exactly what was needed to create the narrative, causal illusion of a true “history.” In a very real social and political sense, these students were creating and recreating an informational history from informational documents of history. This sense of filling in a narrative of history with informational facts or “sound bytes” is not so different from what information utopians have done within the narrative forms of technical determinism or capitalist global destiny. In both Heidegger’s sense of metaphysics and Benjamin’s sense of commodity or of nationalist aura, the popular sense of information in twentieth-century modernity has often acted as a trope for the dominant ideological narrative within which culture, society, and knowledge are represented and projected.

My argument is not only that the history of information has been forgotten but also that it *must be forgotten* within any “metaphysics” or ideology of information, because information in modernity connotes a factuality and pragmatic presence (what Heidegger in *Being and Time* termed a “present-at-hand” [*vorhanden*] quality) that erases or radically reduces ambiguity and the problems of reading, interpreting, and constructing history—problems that are intrinsic not only to historiographic construction but also to historical agency.

The main argument of my book is divided into four chapters. The second, third, and fourth chapters examine texts that use rhetorical devices to produce reified and commodified notions of information. The fifth chapter examines attempts at intervening in this process of social and historical abstraction and production in 1930s Europe and later. The last chapter concludes with some thoughts on the relation of a critical theory to the rhetoric and concept of information in late modernity.

In chapter 2, I attempt to sketch some of the rhetorical strategies that early European documentalists used for expanding the social meaning of the technical treatment of documents into the world on a global scale. The second chapter also examines the rhetoric of “science” in European documentation and how that rhetoric worked in the social expansion of a professional understanding of technique.

The third chapter examines attempts at the expansion of “information

theory” into social space after World War II, particularly in the writings of Warren Weaver and Norbert Wiener. In this chapter, I suggest that this expansion was driven by Cold War political motivations and by a reactionary humanism. Toward the end of that chapter, I propose a sense of community different from that which Weaver’s and Wiener’s understanding of information leads to, one based on an older concept of information as affect rather than as reified “fact.”

Chapter 4 examines the work of the contemporary French theorist Pierre Lévy on virtual identity and community. Lévy’s work reflects earlier expansions of technical norms and vocabulary into social space but now within a rhetoric of “cyberspace” and the “virtual.” As I will show, Lévy’s use of the term “virtual” demonstrates how popular tropes for information form what we might call ideological “strong attractors” for redefining earlier historical works, events, and vocabulary. Lévy appropriates the term “virtual” and other related concepts from earlier works by, particularly, Gilles Deleuze and Félix Guattari, and he makes this vocabulary perform ideological and historiographical tasks that are, at times, quite opposite those intended by the original authors. Lévy’s work performs a similar but more pronounced appropriation of language, history, and culture for the purposes of professional and political capitalization and control than that performed by the European documentalists and by Weaver’s and Wiener’s popular writings. His work casts an interesting light on the information age’s ability to bend history and social space through the prisms of ideology.

The fifth chapter introduces modernist attempts at critical intervention into the construction of an information culture. In this chapter, I examine theories of the production of information and information culture from the aspect of a critique of metaphysics (Martin Heidegger) and from the aspect of a formalist Marxist critique (Walter Benjamin). The purpose of this chapter is to recover historically forgotten critical interventions of “information” that attempted to examine and exploit those processes of reproduction through which information is reified and commodified, both as a concept and as actual values, and through which it becomes a historical force.

Throughout this work, it is my desire to expose the process by which language passes through the machinery of authoritative rhetorical devices and institutions for the purposes of ideological control. Professional discourses, particularly in management, organizational theory, and information science, sometimes contain rhetorical edifices built upon tropes such as “Information Management,” “Knowledge Management,” and “Infor-

mation Architecture.” The attempt in this book is to put critical pressure on professionally and politically based reifications and commodifications of language and to demonstrate some of the plays of power and ideology that are involved in the rhetorical and aesthetic capitalization and exploitation of human relations and affects in the names of “information” and “communication.”

It is my hope that this book constitutes one text in an increasing series of critical interventions into the “information society.” Particularly in the United States—partly due to the vast concentration of wealth in military and corporate research and partly due to the subsequent willful ignorance of Marxist, nonquantitative, non-“practical,” and, largely, non-American analyses of information—analyses of information and society and culture have almost totally been given over to so-called information specialists and public policy planners, mainly from computer science, business and business schools, the government, and the quantitative social sciences. This concentration has led to a focus on quantitative methods of analysis, a neglect of critical modes and vocabularies for analysis, a dependence on naive historiographical forms for analyzing the phenomenon of information, and a neglect of art and culture outside of conceptions of historical transmission (that is, “cultural heritage”). The overwhelming trend has been to place responsibility for the creation of an “information society” into ideologically conformist, “professional” hands, which inhibits truly critical analyses and discussions where the fundamental premises and political stakes of information and communication might be shown and put into question.

I would ask that these last remarks be understood not as mere complaints about the present but as concerns about how a future might be imagined and lived. For what this book traces is a tendency toward an increasingly uncritical and idealistic history and a speculative relation to historical and political agency. In many ways, the death of materialist analysis and of personal agency in the twentieth century follows the rise of the ideology of information. And with this death, the struggles, affects, and language of individual lives lose their power within the categories of acceptable meaning.

The original title for this book was *Where Do You Want to Go Tomorrow?*, which was a pun on Microsoft’s late-1990s ad campaign, “Where Do You Want to Go Today?” Given that the latter phrase is owned as a Microsoft trademark, and given that Microsoft has, apparently, in the past threatened to sue others for the use of the *former* phrase as well as the latter, I decided not to use that title. This situation, I think, speaks loudly

of the problems of ownership and control of language and history by dominant players in information and communication technologies. We need to take language and historical agency back and thus take back from the information and communication technology “prophets” and profits their determination of our todays and our tomorrows. I hope that this book will be one part of this critical *praxis* in its attempt to demystify the trope of information in modern culture.



2 ■ European Documentation: Paul Otlet and Suzanne Briet

European Documentation

The active history of European documentation spans the years from the founding of the International Institute of Bibliography by Paul Otlet and Henri Lafontaine in 1895 in Brussels to its eclipse by information science after World War II. Though European documentation still exists in the form of such organizations as the Fédération Internationale de Documentation, the period just before and after World War II saw the publication of several defining texts by leading figures in documentation: the *Traité de documentation* (1934) and *Monde* (1935) by Paul Otlet and the small but important manifesto by Suzanne Briet, *Qu'est-ce que la documentation?* (1951). The distinguishing characteristic of documentation in Europe, in contrast to both librarianship in Europe and to what would subsequently become information science in the United States, was the manner in which documentation understood the relationship between information technology and social systems. For documentation, the technical retrieval of materials was deeply tied to the social and institutional use and goals for documentary materials. In contrast to the functions of libraries and librarians, which defined themselves in terms of the historical collection and preservation of books, documentalists emphasized the utilitarian integration of technology and technique toward specific social goals.

The founders and leaders of European documentation were advocates of documentation as an upcoming profession, distinct from librarianship, based both within and serving the development of science in modernity. As an organized system of techniques and technologies, documentation was understood as a player in the historical development of global organization in modernity—indeed, a major player inasmuch as that organization was dependent on the organization and transmission of information. It was within the context of a “scientific” culture of modernity that