

**INSTITUTIONS IN CONFLICT:
WEBER'S BUREAUCRACY IN AN
ELECTRONIC WORLD**

BY

VALERIE A. MOLLISON

**A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of**

MASTER OF PUBLIC ADMINISTRATION

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ABSTRACT

This paper argues that the dominant communication media in a society are a primary influence on the organizational structures that are characteristic of that society. It focuses on Western industrialized society, and on bureaucracy as defined by Max Weber.

Dominant communication media are treated as a societal institution, as defined by neoinstitutionalist theorists. As an institution, they exert a cognitive and normative influence on society, legitimating certain organizational elements in the environment and delegitimizing others. Organizations are assembled from these legitimated elements. Bureaucracy, as described by Weber, is a creation of the print institution in that it is built from elements legitimated by the print institution. These elements include hierarchy, objectivity, written rules, clear spheres of competence, centralized control and separation of person and office.

The rise of electronic media represents the rise of a new societal institution, which will legitimate new elements, and thus lead to new organizational structures. At the same time, the elements from which bureaucracies are built will slowly lose legitimacy, and may become handicaps to organizational success. To be perceived as legitimate, organizations will have to incorporate at least some of the elements fostered by the electronic media institution. These include egalitarian structures, decentralization and diffusion of power, temporary structures, and increased subjectivity.

ACKNOWLEDGEMENTS

This thesis is the culmination of a number of diverse influences. Some are readily identifiable; many are much more subtle. As a result, these acknowledgements are by no means exhaustive, reflecting those people whose guidance has been most keenly felt over the course of this work. While I gratefully acknowledge their support and contributions, any errors are entirely my own.

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CHAPTER ONE

Introduction

The medium is the message.

– Marshall McLuhan

The influence of media on society has been the subject of sporadic controversy since ancient Greeks debated whether the widespread use of writing would degrade intellectual acuity. With the development of electronic media, the debate has resurfaced. Over the past 40 years, media theorists have advanced persuasive arguments that communication media are not merely neutral conveyors of information but are, in fact, "agents of change" in society. This debate, however, has received little attention in the field of organizational theory. Specifically, the role of communication media has not been given adequate attention in theories on how organizational structures develop and change.

This paper draws on communication and organizational theories to suggest that the dominant communication media in a society are a primary influence on the organizational structure characteristic of that society. It is argued that communication media exert their influence on organizations indirectly, by altering the environment from which organizations are built and in which they function. The argument is not technology-based, but rooted in sociology – change occurs at the level of the cognitive and normative systems of society, and ripples outward to ultimately influence organizational structure.

Identifying the effects at a psycho-social level, rather than at the level of the particular technology, offers two potential benefits. First, it offers a means of distinguishing between long-term trends and fads. Changes that affect the fibre of society will clearly have a lasting impact, compared with those that have little or no permanent influence on us as human beings. This suggests the second benefit, that it offers a measure of predictive value in identifying probable directions for the evolution of organizational structure.

The lack of attention paid to communication media in organizational theory can be attributed in large part to the nature of media. As Innis noted, media work quietly. They are also inescapable. Communication cannot occur without some medium – be it gesture, word, book or computer. We work, play, love, learn immersed in media – often a single, dominant set of media, such as print in Western society. The challenge becomes how to separate media from their content, to identify their influence.

The approach taken here is to identify the properties of media, independent of content, and then analyze the influence of these properties within a context that is applicable to other communication media and to the structure of organizations. That context is institutional theory.

Specifically, the argument developed here is that:

1. the dominant communication media in a society fit the definition of an institution, as developed by neoinstitutional theorists,
2. as an institution, the dominant media influence society at a cognitive level and support the development of the elements from which organizations are assembled,

3. the emergence of new dominant media facilitate the creation of new organizational elements, and thus of new organizational structures. It also erodes the legitimacy of organizational structures that reflect the older media institution.

Definitions

Terminology is ill-defined and often contradictory in the literature. This is exacerbated by the common and uncritical use of terms such as "media" in wider society.

For all intents and purposes, discussions of contemporary media are discussions of the technologies used to transfer messages. However, it is important to distinguish between the technology itself – the hardware and software that make our communication activities possible – and the psychological and social aspects of media. In this discussion, the term "media" is used in an all encompassing sense, to include both the technological and psycho-social aspects.

The terms "print media" and "electronic media" are used in their broadest sense. Print refers to mechanically mass produced printed materials. While some of the influences discussed here have been traced to the development of written language, particularly the simplified alphabet, they did not have a widespread impact on society until Gutenberg unleashed his printing press. Therefore, the primary focus of this discussion is on print. The term electronic media, while not defined as broadly as by McLuhan, is used to refer to media "in which messages are encoded as electronic

signals, transmitted, and then decoded."¹ These include telephone, telegraph, radio, television, and personal computers. No distinction is made among the specific communication vehicles – the discussion focuses on the overarching properties and influences of these broad media categories.

"Society" and "culture" are used interchangeably, generally to refer to "the complex of shared concepts and patterns of learned behavior that are handed down from one generation to the next through the means of language and imitation."² The inclusion of language in this definition implies the use of communication media to transmit culture. Patterns of learned behavior and shared concepts are as intrinsic to the organizational workplace as they are to society at large. Unless otherwise noted, the discussion refers only to Western industrialized society.

"Bureaucracy" refers to the ideal organizational type identified by Max Weber. No distinction is made between bureaucracies in the public and private sectors. Discussion of organizational form is limited to bureaucracy and the potential organizational structures that may supersede it as the dominant mode of organizing in an electronic world.

A Cautious Approach

There are several potential pitfalls to this line of study. There is a temptation to attribute too much to the impact of a particular set of communication media. The

¹ Joshua Meyrowitz, *No Sense of Place: The Impact of Electronic Media on Social Behavior* (New York: Oxford University Press, 1985), 332.

² Victor Barnouw, *Culture and Personality* (Homewood, Ill.: The Dorsey Press, 1985), 5.

printing press took hold at a time when many other events were shaping European society. As a result, it can assume neither full credit nor full blame for contemporary perceptions of reality, only for exerting an influence. Innis recognized this in his deliberate use of the word "facilitated" in his work on the relationship between communication and empires. That he was criticized for this is an indication of the influence of print, which facilitates linear simplicity and clear-cut answers.³

While it is easy to overstate the influence of communication media (Innis was accused of this, too⁴), it is also easy to attribute too little. A technology with the power of the printing press or electronic media can pervade many areas of society – cultural, political, educational, economic, scientific, business – and yet not be obvious to those affected. Hence the characterization of the print revolution as a "quiet" revolution.⁵ The impact is often determined only from a distance, and in broad brush terms.

A third danger is that of falling into the trap of "typographical" thought. There is a tendency in the literature, this paper included, to apply linear sequencing to events, seeing them as building blocks inevitably leading to today's circumstances. As previous explorers on this path have warned, "To interpret the historical significance of an event from the surety of hindsight may be to impose order and continuity where none

³ Patrick Bratlinger offers this criticism of Innis in *Bread and Circuses: Theories of Mass Culture as Social Decay* (New York: Cornell University Press, 1983), 267.

⁴ Sut Jhally, "Communications and the Materialist Conception of History: Marx, Innis and Technology," *Continuum: The Australian Journal of Media & Culture*, 7, no. 1 (1993) [journal on-line]; available from <http://humpc61.murdoch.edu.au/~continuum/7.1/Jhally.html>; Internet; accessed 18 June 1997.

⁵ Elizabeth Eisenstein, "The Impact of Print on Western Society and Thought," *Journal of Modern History*, 40, (1968), 41.

existed."⁶ Nonetheless, we must use the tools at hand, and for the time being, those tools remain print based.

A final pitfall is technological determinism. It is easy to lose sight of the fact that of all our technologies, communication media are perhaps the most profoundly reflective of the human mind. They are the most intimate and personal of the technologies, and the means by which we are able to organize, from large, complex societies to small tribes. Communication media do not determine who we are, but they do allow us to emphasize one or another aspect of our nature. They heighten, possibly to the point of distortion, human characteristics and tendencies, but they cannot force us to become what we are not. As McLuhan, Ong and others have noted, the shift between media is a shift in emphasis, not in kind. While media act upon society, they are at the same time its products and as such are also acted upon by society.

McLuhan argued that it is impossible to analyze a media shift while participating in it, for "at no time has any culture been aware of the effect of its media on its overall association, not even retrospectively."⁷ If this is so, then why bother at all? The exercise offers an opportunity to revisit accepted explanations and challenge our understanding of our society and what we call reality. That, in itself, is reason enough.

⁶ George Cheney and Steven L. Vibbert, "Corporate Discourse: Public Relations and Issue Management," in *Handbook of Organizational Communication*, Fredric M. Jablin, et al., eds., (Newbury Park, Ca: Sage Publications, 1987), 166.

⁷ Marshall McLuhan, *Counter Blast* (Toronto: McClelland and Stewart, 1969), 22–23, quoted in Arthur Kroker, *Technology and the Canadian Mind: Innis/McLuhan/Grant* (Montreal: New World Perspectives, 1984), 57.

CHAPTER TWO

The Influence of Media on Society

*For the "message" of any medium or technology is the change of scale
or pace or pattern that it introduces into human affairs.*

– Marshall McLuhan

There is a growing body of literature arguing that communication media are not merely neutral conveyors of information but that they influence the shape and direction a society takes. They do not do so through the specific technology, or even the content they transmit, but through abstract properties that shape information flows and our perceptions of society and our world.

Much of the literature treats media as "agents of change", pinpointing the change as the point at which a major shift between communication media occurs. The impact of media on society, therefore, is analyzed in terms of these major shifts.

There is less agreement on exactly when a fundamental shift occurs. Some authors identify the shift from oral to script culture as critical. Others see the critical point as the creation of movable type and the printing press. Still others argue the development of the simplified alphabet, in combination with one of these two shifts, was the catalyst for societal change. Recently, the emergence of electronic media has been identified as the harbinger of a similarly fundamental shift.

The literature, nonetheless, is agreed that media have exerted an influence on societal development and, in broad terms, is agreed upon the general characteristics of this shift, even if not upon exactly when the shift occurred.

Much of the work in this field has focused on media shifts rooted in antiquity or in medieval or Renaissance Europe. This is because of what Innis termed the "subversive" nature of media. Media shifts are evolutionary, working slowly, without being recognized or understood, until the media become such an integral part of a culture that it is difficult to recognize their influence. It takes the introduction of a new and very different set of media to offer the vantage point from which to see the influence of the old – the point McLuhan made when he argued that we can only understand the impact of media from a distance and after the fact. It is no coincidence, therefore, that careful analyses of the influence of print have only occurred in the past 40 years, the same period that electronic media were becoming widespread. The emergence of electronic media has provided the perspective to understand the shift from oral to print society.

There are three basic streams of work that most media theorists draw on: the bias of media and creation of knowledge monopolies, in the work of Harold Innis; media as expanding the human sensorium, developed by Walter Ong and Marshall McLuhan; and the historical perspective, linking trends in society with the development of a medium, typified by the work of Elizabeth Eisenstein on the printing press.

Innis: Empires and Media Bias

Harold Innis is the seminal thinker on the macro level influence of media on the structure of a society. Innis argued that every communication medium "has an

important influence on the dissemination of information over space and over time"¹ and that this tendency influences the culture in which the medium is dominant. Media which are durable emphasize time and favor decentralization and hierarchical institutions. Those that are more fragile but lighter, emphasize space, and favor centralization and less hierarchical structures.²

Innis argues that this bias of media affects the flow of information and the source of authority, encouraging the establishment of monopolies of power by religious or secular organizations. A culture that relies on spatially-oriented media tends to be centralized and secular. The portability of the media allows control to remain at the center of the society, while its relative fragility encourages a focus on the present, helping to locate authority in secular and military positions. A culture using temporally-oriented media tends to be decentralized and religious. The lack of either portability or widespread availability of the media discourages wide dissemination of information, and encourages a focus on time. This supports monopolies of power by religious organizations.

As Kuhns notes, Innis distinguishes between media only by their spatial or temporal bias.³ He does not address content; the impact of a medium is only through its tendency to distribute information over time or space, not in terms of what information is being distributed. This leads him to treat apparently disparate media, such as

¹ Harold Innis, *The Bias of Communication* (Toronto: University of Toronto Press, 1951), 33.

² Ibid., 7.

³ William Kuhns, *The Post-Industrial Prophets: Interpretations of Technology* (New York: Weighbright and Talley, 1971), 146.

parchment and clay tablets, as having the same temporal bias and thus a similar impact on a society's structure, while classifying apparently similar media, such as parchment and paper, as temporally-biased and spatially-biased respectively, with different influences on societies.

Innis also places communication media within a wider social and economic context, as part of a web that includes the language (oral or written, cuneiform, alphabetic, pictograph), the writing tool (stylus, chisel, brush, pen), cost of materials, plus portability, durability and ease of reproduction, and on a broader level, local political machinations and cultural and political influences of competing empires.

This approach offers an explanation as to why printing, which was developed first in China, had relatively little impact until the time of Gutenberg, when it could be combined with a ready supply of cheap paper and the simplified alphabet. It was the three developments – the simplified alphabet, the printing press and cheap paper – that Innis believes led to an extreme spatial bias in Western society. Innis argues that print is inherently biased toward space, and when combined with cheap production became widely accessible to an extent unprecedented in human history. The dominance of the spatial bias overwhelmed any temporal influences, and resulted in a bureaucratic and secular society.

For Innis, inherent in the bias of each medium was its own reversal and cancellation.⁴ He saw the dominance of a single bias as a sign of instability in a society, leading to a buildup of a monopoly that invites competition from a new medium

⁴ Kroker, *Technology and the Canadian Mind*, 103.

and a countervailing bias. The stability of an empire depends upon achieving a balance between the two biases:

They [societies] have tended to flourish under conditions in which civilization reflects the influence of more than one medium and in which the bias of one medium toward decentralization is offset by the bias of another medium toward centralization.⁵

Such balance is rare, however, and Innis argues that, more often, a power monopoly builds up under one bias until it eventually sparks a backlash in the form of a new medium from the other bias. The unprecedented strength and duration of the spatial bias makes Western society ripe for backlash; the rise of a medium with a temporal bias. This, according to Innis, appeared in the form of electronic media. In reincorporating hearing as a key component of communication, electronic media have more in common with oral culture, which is temporally biased, than with spatially-biased print culture. The rise of electronic media, then, is shifting Western society toward a temporal bias.

Most of Innis' work in communication is rooted in detailed analyses of ancient societies, and the framework of temporal or spatial bias is difficult to apply to emerging technologies. Innis looked for broad brush patterns across societies and over centuries, and the sweeping nature of his concepts and the complexity of the relationships he described, combined with his often obtuse writing style, limits the predictive value of his theories. Indeed, he was not attempting to frame his concepts of bias and information pathways in a predictive manner.⁶ The strength of Innis' contribution lies in

⁵ Innis, *Bias of Communication*, 7.

⁶ Kuhns, *Post-Industrial Prophets*, 151.

demonstrating the plausibility of media as working subtly to influence the basic structure of a society, and in particular, in his articulation of the spatial-temporal bias dichotomy, which has been the basis for much subsequent analysis.

Ong and McLuhan: The Human Sensorium

Walter Ong and Marshall McLuhan are representative of the second stream of media theory, which focuses on changes in the role of human senses in communication.

Like Innis, Ong and McLuhan look not at the content but at the intrinsic qualities of communication media. It is not that content is irrelevant, but that change occurs because of the simple existence of the medium. That is the thought behind McLuhan's "medium is the message" – perhaps one of the most misused slogans of the time. Content, he says, blinds us to the character of the medium – the real "message" of any medium is the "change of scale, or pace or pattern," that it introduces into human affairs.⁷

Ong and McLuhan locate the locus of change internally, within the human psyche, rather than externally as does Innis. Innis sees media as directly influencing the broad structures of society through shaping information flows and fostering monopolies of knowledge and thus of power. For Ong and McLuhan, the impact is less direct:

Media, by altering the environment, wake in us unique ratios of sense perceptions. The extension of any one sense alters the way we think and act – the way we perceive the world. When these ratios change, men change.⁸

⁷ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Toronto: McGraw-Hill Book Company, 1964), 8.

⁸ Marshall McLuhan, *The Gutenberg Galaxy* (Toronto: University of Toronto Press, 1962), 56.

Media make subtle adjustments in the interplay of human senses, and in doing so, change the way people conceptualize. The change occurs within the individual and ripples out into society.

Ong argues that "cultures vary greatly in their exploitation of the various senses and in the way in which they relate their conceptual apparatus to the various senses."⁹ The media that a culture uses influence this exploitation. Ong divides cultures into three successive stages: oral or oral-aural, relying on the spoken word; script, including the invention of the alphabet and of movable type; and electronic, combining script/print and oral communication. While Ong and McLuhan agree that the important change is from communication media dominated by sound to those where sight dominates, they disagree on when this shift occurred. McLuhan appears to locate the key shift from oral to visual culture in the development of Gutenberg's printing press, suggesting that script culture has more in common with oral culture than with print culture. Ong reflects Innis' view that the development of the simplified alphabet was the starting point for the shift from oral to print culture. It was at this point that the sense of hearing began to decline in relative importance to the sense of sight in communication – the oral-aural world of the pre-alphabetic cultures gave way to the visual world of the script and printing cultures. The printing press merely accelerated this process.

Ong argues that the declining role of sound in communication media that accompanied the development of alphabetic writing shifted Western culture's relationship with time. Sound, which dominates in an oral culture, is irrevocably linked

⁹ Walter S.J. Ong, *The Presence of the Word: Some Prolegomena for Cultural and Religious History* (New Haven: Yale University Press, 1967), 3.

with time in that words exist only as long they take to pass out of hearing. The spoken word is an event in time, which cannot be frozen in the process of occurring. One can take a photograph that freezes a motion, or slow down, speed up or freeze a video image, but one cannot freeze a word as it is being spoken or heard. This leads to a culture whose members perceive reality more as simultaneous than as sequential.

This is perhaps best illustrated in Ong's comparison of the concept of history in oral and print cultures. Oral cultures have no history in the modern sense. The past is integrated into daily life, through custom, ceremony, cultural activities and social institutions. It is immediate and personal, not distant or abstract. In script and print cultures, however, the past is conveyed primarily through written records, which are more impersonal and tend to place events at a greater distance from the present. This encourages perceptions of events as sequential.

This sequential/simultaneous dichotomy also underlies McLuhan's criticism that print divorces action from reaction: "Perhaps the most significant of the gifts of typography to man is that of detachment and noninvolvement – the power to act without reacting."¹⁰ This detachment is another aspect of the sequential outlook of print society. Print fosters a world view that is sequential because it allows events to be isolated, ordered and placed at a distance. Oral communication fosters a sense of simultaneity built on the immediate and transitory nature of face-to-face communication; oral cultures act and react at the same time. The visual can be stopped in time; the oral-aural cannot.

¹⁰ McLuhan, *Understanding Media*, 173.

For Ong, this sequential world view is exacerbated by the nature of the alphabet, which is highly abstract. Letters have no meaning on their own, but only in the proper sequence. Unlike pictographs or hieroglyphics, letters do not convey imagery or portray in any intuitive sense what they name. Where writing by pictures or characters conjures up images described by many words, each arrangement of letters creates only one word. Thus, Ong points out, the alphabet imposes a sense of order and control unknown in oral cultures. It organizes words in space, adds permanence and creates consistency.

This fosters a culture that over-emphasizes the concept of literal meaning. In oral culture, skilled storytellers do not attempt to recite stories verbatim but use verbal formulas and stereotypes to conjure images that will accurately convey meaning. This is both less precise and more complex, conveying messages heavy in symbolism.

However,

An alphabetic culture, which puts a premium on visualist qualities such as sharp outline and clear-cut sequence, is likely to regard the literal meaning, in the sense of plain or definite meaning, as something altogether wholesome and altogether desirable, and to regard other remote, perhaps more profoundly symbolic, meanings with disfavor.¹¹

Personal, subjective, complex messages are screened out in favor of abstract, precise and literal messages.

Ong stresses that it is the *mix* of senses used in communication that changes with media: "What happened with the emergence of alphabetic typography was not that man discovered the use of his eyes but that he began to link visual perception to verbalization

¹¹ Ong, *Presence of the Word*, 47.

to a degree previously unknown."¹² McLuhan also reflects this view but is more emphatic, arguing that, in the case of print at least, the sense of sight has been isolated and extended to the point where it dominates all other senses, creating a "cultural stupor" or numbness to its effects.

McLuhan and Ong agree that electronic media share the characteristics of oral society. McLuhan describes electronic media as "inclusive" and "participational" rather than fragmenting and specialist as is the written word.¹³ Electronic media eliminate detachment and abolish spatial dimension, because "everybody in the world has to live in the utmost proximity created by our electronic involvement in one another's lives."¹⁴ This is McLuhan's global tribal village, where events from around the world appear in our living rooms every night.

Ong agrees with McLuhan's global village with one qualification. The village is not tribal because it is impossible to return to a pre-print condition, "for media in their success do not cancel out one another but build on one another."¹⁵ Electronic media are fostering a renewed emphasis on sound, making our culture more oral-aural. This, Ong argues, creates a new relationship with time, reintroducing a sense of simultaneity.

¹² Ibid., 50.

¹³ McLuhan, *Understanding Media*, 82–87.

¹⁴ Ibid., 35.

¹⁵ Ong, *Presence of the Word*, 89.

A sense of simultaneity is a mark of both early oral culture and of electronic culture, a sense of sequentiality (one-thing-after-another) with a related stress on causality is the mark of chirographic and typographic culture.¹⁶

However, Ong argues that in truly oral-aural cultures, the sense of simultaneity is created by the lack of records. There is no underlying sequentialist world view.

Simultaneity in the electronic world, however, is due to the speed at which events occur.

We still have the same sequential outlook, but contemporary events are communicated with such speed that the perception of sequence disappears.

Ong also argues that oral cultures do not produce individual thinkers "as do cultures where writing, and particularly the alphabet, has become deeply interiorized and given the individual relative independence of the tribe." Rather, in oral cultures thought develops "in a communally structured glacier where individualized activity was quickly encysted".¹⁷

Like Innis, Ong concentrates his discussions on pre-alphabetic and print culture. He suggests that electronic media are shifting us to a more oral culture, but does not develop that line of thought. Rather, he appears to suggest that the complexity of this shift makes it difficult, if not impossible to analyze:

What is said and written and printed may be determined more and more by the shape which electronics and sound give to social organization and to human life generally. What we are faced with today is a sensorium not merely extended by various media but also so reflected and refracted inside and outside itself in so many directions as to be thus far utterly bewildering. Our situation is one of more and more complicated interactions.¹⁸

¹⁶ Ibid., 91.

¹⁷ Ibid., 40.

Although he resisted the idea of a structured theory, McLuhan does outline a general theory of media change. His three-step process involves; a) the introduction of a new technology that extends one or another human sense; b) the expansion of that technology until its pervasiveness numbs us to its characteristics; and c) a backlash and reversal that produces an opposite form.¹⁹ However, as is generally characteristic of his work, this theory is more suggested than fully developed and offered for its ability to stimulate discussion.

Eisenstein: Print in Historical Perspective

Elizabeth Eisenstein takes a sharply different approach. An historian, Eisenstein analyzes the changes that swept Europe from the Middle Ages through to the 19th century and concludes that the printing press was a principal "agent of change" driving these events.

Eisenstein sees the key shift as not from oral to visual culture, but from an image culture to a word culture.²⁰ To a certain extent she locates the change internally, in the perceptions print encourages or discourages through its physical properties. This does not, however, create new directions for a society, but merely heightens tendencies already present. There is no shift in the use of human senses; rather, the change she focuses on is from one visually-based medium to another. Eisenstein also places a much

¹⁸ Ibid., 89.

¹⁹ Kuhns, *Post-Industrial Prophets*, 185–89.

²⁰ Elizabeth Eisenstein, *The Printing Press as an Agent of Change* (New York: Cambridge University Press, 1979), 67.

higher priority on the content of print in determining its impact. As a result, Eisenstein sees media as less subversive in nature than the other theorists discussed.

Rather than a broad theory on media and change, Eisenstein offers a comprehensive and careful historical documentation of the properties of print based on its role in the development of contemporary Western culture. She attributes the rise of a number of concepts underpinning Western thought to the rise of printing – individualism, history, progress and rationalism among the principal ones.

Eisenstein also explores the time/space theme, in the context of the development of the contemporary view of history. Print provided the means with which to order ancient works according to the period in which they were created. For the first time, all scholars were able to share a fixed point of reference in time and space, pinpointing where and when a work was created. This fostered a rationalized view of history, as a sequence of events and placed antiquity at a much greater distance from the contemporary world.

The importance Eisenstein places on the content of print is illustrated by her analysis of the rise of individualism. She sees individualism as a byproduct of the practice by printers of using standardized illustrations in their books. The same illustration would be used repeatedly to portray different towns, or the same portrait to portray any nobleman. This led readers to compare their towns or local gentry with the stereotypes they saw in books, highlighting local or personal idiosyncrasies. Further, books preserved these idiosyncrasies and encouraged public airing of private thoughts. "Book learning" encouraged a sense of independence as more people became self taught, and "cut the bonds of subordination which kept pupils and apprentices under the

tutelage of a given master."²¹ Intellectual property rights freed craftsmen from the guilds and gave individuals fame and notoriety. The result was a new sense of individualism.

At the same time, print helped set new, consistent standards for personal and public behavior:

Instead of a cross-fire of gossip conveying random impressions about what was expected, or haphazard interpretations of what a sermon meant, came books that set forth . . . precise codes for behavior that godly householders should observe. These codes were known to others – to relatives and neighbors – as well as to oneself.²²

These are not new impulses, from Eisenstein's point of view – "Those drives toward rationalization and systematic organization which were already present in Western culture could be much more effectively implemented after printing than before; while scientific data collection was placed on an entirely new basis by the communications shift."²³ However, because Eisenstein focuses only on the post-Gutenberg era, it is unclear whether she would view these characteristics as intrinsic to human nature or as an outgrowth of alphabetic culture. Nonetheless, print's role was to strengthen existing tendencies, not to create new ones.

Like Ong, Eisenstein notes that print facilitated the creation of new knowledge. She argues that the enriched pool of knowledge created by the accessibility of print led to the deliberate creation of knowledge by individuals. Sedentary scholars were less

²¹ Ibid., 244.

²² Ibid., 429.

²³ Ibid., 379.

likely to be engrossed with a single work and more likely to consult the growing array of works available in bookstores and libraries. During the Medieval period, the search for truth took the form of the *recovery* of traditional knowledge. However, the growth in books meant more opportunity to consult a variety of different texts and "thus also made more probable the formulation of new intellectual combinations and permutations."²⁴ In the Renaissance and later, the search for truth became the *discovery* of knowledge. Knowledge became understood as something which could be created.

As an historical analysis, Eisenstein's work is rich in insights into the properties and influences of print. Her work offers a strong case for print as a driving force behind fundamental concepts that underpin Western industrialized society. Because of its historical approach, however, it holds little predictive potential.

Content Centered Approach

In keeping with the focus of this paper, this discussion has focused on seminal authors and arguments that take a broad view of communication media and their impact on society. There is another approach that is not dealt with extensively here, although it represents a large body of literature on media. This is the work of scholars such as Neil Postman, who focus on a specific medium, such as television or computer-based technologies, and emphasize the use of the medium as central to its impact on society. While the theories advanced and insights offered are valuable, their narrower focus limits their usefulness for this discussion.

²⁴ Ibid., 7.

Conclusion

There is, then, an argument on several fronts that communication media influence society far beyond their ability to transmit information. The debate is not on whether such an influence exists, but on its nature. Whether the source of change is the simplified alphabet or printing press; whether the effect is external, on political and religious structures, or internal on the senses we use; whether media influence because of their properties, content, or both – media do influence society and its institutions at a very fundamental level.

The limitations of the existing body of literature lie in its explanatory-descriptive nature. There are aspects which offer the beginnings of a predictive framework. Innis' concept of time-space bias is one such overarching idea that could be applied to various media and circumstances. However, his work is not specific as to how change occurs. Similar comments can be made about the work of Ong and McLuhan. McLuhan does attempt to identify a three-stage process of change, but as with other aspects of his work, it is highly conceptual.

Nonetheless, there is a large measure of consensus on the impact of print on Western industrialized society, and the potential impact of electronic communication media.

CHAPTER THREE

Print and the Rise of Bureaucracy

verba volant, scripta manent

(words fly away, what is written stays put)

A number of properties of print media can be drawn from the discussion in Chapter Two. These properties are compatible with the characteristics of bureaucracy as developed by Max Weber, to an extent that implies a causal link. This is not to suggest that print was the sole catalyst for modern bureaucracy, but that it is a necessary factor that has been generally overlooked.

Properties of Print

The impact of print, or more specifically of the simplified alphabet and print, on Western society can be traced to several broad properties of the medium. Some of these were mentioned in Chapter Two: it is abstract; sequential and linear rather than simultaneous; portable with the resulting tendency to centralize control; and permanent. It favors precision over symbolism, detachment over subjective involvement, gives the individual an increased measure of independence from the community, and encourages uniformity.

These properties have combined to produce the fertile soil from which grew the elements that have shaped our organizations for the past 200 years, not the least of which is Weber's ideal-type bureaucracy. These properties are contrasted with those of oral communication in Table 1.

TABLE 1
Properties of oral and print media

Oral Media	Print Media
transitory	permanent
symbolic	precise, literal, uniform
simultaneous	linear, sequential
subjective	objective, abstract
community	individualism
continuous, inclusive	segmented, discrete

Origins of Bureaucracy

Although we tend to think of bureaucracy as a creation of the past 100 years, it is an ancient form of organization. Innis describes bureaucracies supporting large empires in Mesopotamia and ancient Egypt, well before the development of print as we know it (although not before the development of written records). Clearly, this form of organization is not alien to human nature. However, it is only in the 20th century that bureaucracy has become the dominant form of large-scale organization in the Western world. In this, bureaucracy owes at least as much to the development of print as to human nature.

The rise of modern bureaucracy has been commonly linked with a number of developments in what might be termed the business environment. Among these are: the development of money economies with the attendant concept of regular salary to ensure a co-operative workforce; mass education to provide the skills required; the emergence of large-scale administrative problems out of the Industrial Revolution; and the

development of the capitalist system with its demands for rational estimation of economic risks.¹

Weber himself identifies the capitalist market economy, the "great state" and "mass party", increasing societal demands for order and protection, and the increasingly complicated and specialized modern culture as making the state and business alike dependent on bureaucracy for administration.²

Weber also cites communication as a factor in the development of bureaucracy, although he defines communication as including transportation such as waterways and the railroad, as well as media such as the telegraph. He argues that "The degree to which the means of communication have been developed is a condition of decisive importance for the possibility of bureaucratic administration, although it is not the only decisive condition."³

He stops short, however, of considering communication media as anything other than a means of operating efficiently. This tendency to view media as simply tools masks the formative influence of print on bureaucracy. The roots of classical bureaucracy lie not in the Industrial Revolution, but in the Gutenberg revolution. The central, unifying factor behind the success of bureaucracy is the print world view.

¹ Peter M. Blau and Marshall W. Meyer, *Bureaucracy in Modern Society* (New York: Random House, 1987), 28–29.

² Max Weber, "The Ideal Type of Bureaucracy", in *Bureaucracy in Historical Perspective*, Michael T. Dalby and Michael S. Werthman, eds., (Glenview, Ill.: Scott, Foresman and Company, 1971), 7–15.

³ *Ibid.*, 13–14.

Weber's Ideal-Type Bureaucracy and Print

The characteristics of Weber's ideal-type bureaucracy are summarized in Table 2, along with the properties of print media.⁴ As can be seen from Table 2, there is a strong parallel between the properties of print media and the characteristics of bureaucracy identified by Weber. The following discussion elaborates on these parallels.

TABLE 2
Properties of print media
and characteristics of Weber's bureaucracy

Properties of Print Media	Bureaucracy Weber's Ideal-Type
<ul style="list-style-type: none">• permanent• precise, literal, uniform• linear, sequential• objective, abstract• individualism• segmented, discrete	<ul style="list-style-type: none">• continuous organization bound by rules• fixed salary, life-long career• acts, decisions and rules recorded in writing• strict discipline and control of officials• efficiency as a goal of an organization• separation of person and office• impersonality in execution of duties• clearly defined hierarchy of offices• clearly defined spheres of competence• employment on the basis of technical qualification, specialized training• separation of administration and ownership of means of production

Order and control

Bureaucracy is characterized by its emphasis on order and control, in the form of rules, spheres of operation and clearly defined functions. Weber cites society's demand

⁴ Weber, "The Ideal Type of Bureaucracy", *passim*.

for order and security among the conditions giving rise to bureaucracy. However, it is the print world view that helped to translate these concepts into objective rules and spheres of action.

As Ong notes, the requirements of writing imposed a level of order and control on language that is unknown in oral societies. Letters had to be properly ordered into words, words into sentences, and so on. The potential of print for repeatability and uniformity emphasized this aspect of writing, to the point where the organization of ideas was influenced by editorial decisions on the presentation of printed information. Readers were guided in their thoughts by the order of the book:

Increasing familiarity with regularly numbered pages, punctuation marks, section breaks, running heads, indexes and so forth helped to reorder the thought of *all* readers, whatever their profession or craft.⁵

This infiltrated the education system:

Possibly no social revolution in European history is as fundamental as that which saw book learning (previously assigned to old men and monks) gradually become the focus of daily life during childhood, adolescence and early manhood. . . . Textbooks were newly designed to take students in sequence from the most elementary to the most advanced level of a given skill. As a consumer of printed materials geared to a sequence of learning stages, the growing child was subject to a different developmental process than was the medieval apprentice, ploughboy, novice or page.⁶

This new developmental process ingrained the concept of sequence in students, along with the discipline required to sit at desks for long hours. This was quite a departure from oral culture, where

⁵ Eisenstein, *Agent of Change*, 14–15.

⁶ *Ibid.*, 432.

verbalized learning takes place quite normally in an atmosphere of celebration or play. . . . Only with the invention of writing and the isolation of the individual from the tribe will verbal learning and understanding itself become "work" as distinct from play, . . .⁷

Print allowed for the publication and distribution of standards for all facets of life. As early as the 16th century, handbooks set out rules for everything from religious ceremonies to good housekeeping. Once in print and accessible to parishioners, neighbors and subjects, these rules became more difficult to ignore.

In his study on the impact of electronic media on the law, Katsh links the rise of printing with an increased attention to rule-bound solutions to legal disputes. Litigation in common law courts increased significantly during the 16th century, when statutes began to be published.⁸ Law became focused on rules and on limiting the information considered valid to a case, which Katsh argues discouraged compromise and encouraged a "dichotomous mode of thought", where in any given case, one party was right and one was wrong.⁹ Further, when laws were published, the courts became obligated to enforce them rather than to find an accommodating solution for the parties affected.¹⁰

Objectivity

The ability to fulfill the duties of office dispassionately and objectively is central to bureaucracy, as are the clear separation of personal and official roles and the related

⁷ Ong, *Presence of the Word*, 30.

⁸ M. Ethan Katsh, *The Electronic Media and the Transformation of Law* (New York: Oxford University Press, 1989), 87–88.

⁹ *Ibid.*, 98.

¹⁰ *Ibid.*, 81.

characteristic of obedience of subordinates to the position, not to the person. This requires not only the concept of objectivity, but the segmentation of individual identity into public and private spheres. Being obedient to a position and not a person means the subordinate must be able to clearly conceptualize the two as distinct.

The notion of objectivity is built on several concepts rooted in print: abstract thought, detachment, the fixed point of view, and the "fact". Several writers have noted the ability of the written word to facilitate abstract thought. Ong argues that the alphabet made abstract analysis possible by "mobilizing information in much greater quantity and detail than oral culture could do".¹¹ He suggests it is no coincidence that philosophers like Plato, whose ideas were objective, impersonal and timeless, appeared simultaneously with the rise of abstract writing, and that formal logic was invented in an alphabetic culture.¹²

As writing broadens ability for abstract thinking, it also moves away from communicating feeling.¹³ Whereas oral language cannot help but convey feeling as well as meaning, printed works can, if the writer so chooses, all but eliminate feeling. While all forms of writing would have this capability to a certain extent, only the consistency and repetition of type can virtually eliminate the personality that shows through in handwriting.

Another concept that helped nurture objectivity is the fixed point of view. In Renaissance art, this took the form of the vanishing point, which located the viewer

¹¹ Ong, *Presence of the Word*, 34.

¹² Ibid., 45.

¹³ Kuhns, *Post-Industrial Prophets*, 149.

outside of the picture and placed objects at a distance. In academic works, it was a "fixed spatial-temporal frame of reference" that all scholars could share. Like McLuhan, Eisenstein attributes this to print:

How could the entire classical past be relived from a fixed distance until a permanent temporal location had been found for antique objects, place names, personages and events. The capability to see in this way could not be obtained by new optical effects devised by Renaissance artists. It required a rearrangement of documents and artifacts rather than a rearrangement of pictorial space.¹⁴

Another concept that did not exist until print is that of the "fact". The roots lie in the development of written language when, for the first time, people no longer had to be physically present to convey information. Information began to be viewed as existing independently of any human carrier. However, until the development of printing, knowledge still often died with its creator. This was true even in scribal cultures, since the only person who could be sure what was written down and where was the author or owner of the work.¹⁵ It took the accessibility and permanence of print for this shift to have widespread influence.

Sociologist Robert Lane has pointed out that, in many societies, the truth of statements is determined by social and cultural factors, such as the power and motivation of the speaker and whether the statements are expressed in culturally acceptable forms. However, he agrees with Pool that Western society "assumes that a

¹⁴ Eisenstein, *Agent of Change*, 186.

¹⁵ James Burke, *The Day the Universe Changed* (London: BBC, 1985), 108.

statement has a validity or lack of it inherent in itself quite independent of who says it and why."¹⁶

Print encouraged inter-disciplinary activities, cross-referencing and corroboration. Drifting, the process by which text becomes corrupted through inaccurate copying, was virtually eliminated. Knowledge could be ordered, indexed, ranked, classified, checked, corrected and disseminated as never before. The "fact" was born.

In separating information from the individual, and allowing it to be disputed and verified, print also helped to undermine traditional sources of authority, and set the stage for a new source of authority, based on expertise.

The scholar-printer, who was often more erudite than the university theologian of his day, was much less likely to defer to clerical judgment than the scribe or copyist had been. As a layman he owed loyalty to princes and magistrates. The ruling of churchmen, unless backed by lay officials, seemed less compelling to him than the rules of evidence, . . .¹⁷

The authority of church officials began to be challenged by the notion of authority based on expertise or acquired skill.

The publication of personal idiosyncrasies, previously not publicly available, helped support the concept of a private face not normally seen outside one's close circle of family or friends. Further, print allowed previously public activities, such as learning or worship, to be conducted privately, without the need of a master or priest. These

¹⁶ Ithiel de sola Pool, "The Mass Media and Politics in the Modernization Process," quoted in Robert Lane, "The Decline of Politics and Ideology in a Knowledgeable Society," *American Sociological Review*, 21 (October, 1966), 655.

¹⁷ Eisenstein, *Agent of Change*, 320.

combined to support a conceptualization of people as having at least two lives: the one conducted in public, and the other lived privately, behind closed doors. This concept is important to the separation of the individual from the position in a bureaucracy. By supporting the identification of individuals, print made it possible to regard individuals independently of their role or position in a community.

Precision

Implicit in many of the characteristics of Weber's bureaucracy is the concept of precision and accuracy. As seen from the previous discussion, the concept of the fact was born in part out of the ability to evaluate and cross-check information afforded by print. Beyond that, print fostered a shift in attitude, from the approximate to the precise. As discussed in Chapter Two, oral cultures use image-based stereotypes and verbal formulas to convey complex but imprecise imagery. With print, Ong noted a rise in emphasis on the verbatim as a means of accurately conveying a message. "In literate cultures the illusion is widespread that if one has the exact words someone has uttered, one has by that very fact his exact meaning."¹⁸ Thus, in literate cultures, committing something to memory means memorization of the precise words. Indeed, learning has, in the past, been synonymous with memorizing and reciting texts verbatim. In oral cultures, memorizing means learning the formulas, rhythms, and stereotypes to recreate meaning, not recite precise content.

Literal meaning, according to Ong, is an illusion and delusion for which the alphabet is responsible. Literal or verbatim records became the accepted way to

¹⁸ Ong, *Presence of the Word*, 32.

understand meaning and gain knowledge. Eisenstein agrees, and attributes the emphasis on accuracy in the Renaissance, down to the details of costumes and place settings in art, to the influence of typographical fixity. The symbolic or approximate joined the subjective in being secondary to factual information.

Specialization and hierarchy

Print facilitates specialization and hierarchy by segmenting and limiting access to information. Eisenstein has traced specialization back to the 17th century, when the volume of printed information began to exceed the ability of any one individual to assimilate. Experts developed, who could make knowledge accessible by providing summaries, analyses and explanations in print. The form printers applied to their products – chapters, headings, indexes, and the like – facilitated the perception of "the whole" as the sum of separate parts. As such, print fostered "a mentality that gradually resists any but a separate and compartmentalizing or specialist outlook".¹⁹

Print was also well suited to the development of specialist terminology and the physical segmentation of information, which helped to support elites and hierarchies by limiting access to certain types of information, creating in Innis' terms, monopolies of knowledge. Unlike speech, written language is a code that must be learned through study. Meyrowitz argues that this coding system makes compartmentalization possible by facilitating a hierarchy of texts.²⁰ As texts become more sophisticated, the less educated are eliminated as readers. Even with mass education, specialized terminology

¹⁹ McLuhan, *Understanding Media*, 126.

²⁰ Meyrowitz, *No Sense of Place*, 77.

creates barriers to understanding by anyone outside the discipline, thus protecting the status of members of that discipline and further encouraging specialization and fragmentation.

One example is the legal profession. Katsh notes that the physical separation of law libraries and the lack of bibliographic references between law and general libraries helped to support the concept of law as a distinct profession.²¹ To this can be added the specialized vocabulary, including the use of Latin. A similar argument can be made for the medical profession.

Progress and efficiency

Eisenstein has identified the rise of the related concepts of history and progress as outgrowths of print.²² Print allowed the creation of detailed records, and with them the concept of preserving information for historical purposes. These records allowed comparisons with the past, and the realization of how different life had been. This comparison of changes over time made possible the development of the concept of progress – that today is better than yesterday and tomorrow will be better yet.

This carried over into the concept of history, which became a selective recounting of events and discoveries, aligned in chronological progression to the present, as if each event built on previous events. History became history as *progress*, as steps on an inevitable path to today. Thomas Kuhn notes this in his study of the history of science, showing how science is portrayed as knowledge being built

²¹ Katsh, *Transformation of Law*, 224.

²² Eisenstein, "Impact of Print", 14–15.

rationally, piece by piece in a linear and cumulative process, when evidence suggests that scientific revolutions are anything but linear.²³ This linear influence tends to ignore complex interrelationships in favor of direct cause and effect.

The concept of efficiency is grounded in the idea of progress – that there are better ways to be had, and that finding them will improve today over yesterday and tomorrow over today. Beyond that, print supported the notion of efficiency as printers struggled for financial survival.

In contrast to seasonal rhythms which governed agricultural work, or the church bells which patterned the daily rounds of the clergy, the pace set by their machines was relentless and unceasing. Lay manuscript-book dealers had farmed out copying jobs on an irregular basis. Books were completed by scribes who needed to make extra money by copying between other jobs. Early printers, however, had to develop some expertise in time-motion study, and try to keep their workers occupied all the time. . . A steady flow of work was required to enable firms to prosper. Idle presses signified disaster. Abhorrence of irregularity or interruption was built into the trade.²⁴

Individualism

As discussed earlier, Eisenstein argued that individualism was strongly supported by print, which permitted individuals to be measured against public standards, and preserved and publicized personal idiosyncrasies. It also encouraged information to be evaluated independently of the position or reputation of the person providing it. Further, the development of patents and publicity "transformed the anonymous artisan

²³ Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962), chap. 2 passim.

²⁴ Eisenstein, *Impact of Print*, 392–3.

into the eponymous inventor, released individual initiative from the secret cocoon of the guild and rewarded ingenuity with the luster of fame as well as the chance to make a fortune."²⁵

Although individualism is an important property of the print world view, it is inconsistent with Weber's view of the individual in bureaucracy. Essentially, in Weber's bureaucracy there are no individuals, only workers and officials who leave the personal and subjective at the office door. Individualism also suggests a level of personal power that is inconsistent with the centralized control characteristic of bureaucracy.

The separation of the individual from the office does suggest a more complex view of individuals than in an oral society. It requires the ability to segment the individual into discrete public and private personas. It can be argued that print facilitated this, through its properties of segmentation and individualism. However, this is relatively minor compared with the significant level of individualism Ong and Eisenstein characterize as emerging from print.

Not all media properties, however, need exert the same level of influence on all aspects of society. In the case of bureaucracy, the combined influence of other print properties may override that of individualism, significantly limiting its effects. Order and control, objectivity, homogeneity, centralization, precision, linearity, may combine to foster an perception of individualism as counter-productive for bureaucracies.

²⁵ Eisenstein, *Agent of Change*, 240.

Centralization and record-keeping

As discussed in Chapter Two, the portability, relative permanence, and availability of paper support centralization by allowing information to be transported to and from a centralized authority. The role of paper in recordkeeping is obvious to anyone raised in a bureaucratic society, and needs no further elaboration.

Conclusion

Weber's ideal type bureaucracy has its roots not in the Industrial Revolution, but 400 years earlier in the Gutenberg revolution, or even earlier if the creation of the simplified alphabet is considered. The fact that administrative bureaucracies pre-date Gutenberg, and span many cultures at many points in human history, is evidence that bureaucracy as an organizational form is not solely the creation of print. Nonetheless, the parallels between the conditions fostered by print and the elements of Weber's bureaucracy suggest a causal link between the two. The link is strong enough to suggest that the dominant organizational form of the 20th century would have been much different had it evolved in an environment dominated by a different medium with a different set of properties. It also suggests that if we are looking for the future of bureaucracy, we should be looking not only at economies and markets, but at communication media. The properties of emerging communication media have at least as much to offer on the future of organizational structure as does the marketplace.

The properties of print discussed here did not directly shape contemporary bureaucracy. Rather, they shaped a world view, a way of perceiving reality that created a predisposition for the elements that make bureaucracy. Objectivity, linear thinking,

seeing wholes as comprised of discrete parts, individualism – are all ways of interpreting the environment. Much as a cookie cutter shapes dough, the media we use to communicate shape our perceptions of reality. Print has shaped those perceptions in a way that led to the dominance of bureaucracy. A new cookie cutter, in the form of electronic media, should reshape our perceptions of reality and our organizations.

With the benefit of historical analysis, the influence of print on organizational structure is clear, even allowing for the tendency of those of us raised in a print world to "impose order where none exists". The question remains, however, of how the influence of emerging media can be assessed and new organizational forms predicted, without the aid of an historical perspective.

CHAPTER FOUR

The Institution of Print

*. . . once invented and used, media affect us
by shaping the type of interactions that take place through them.
– Joshua Meyrowitz*

The previous Chapter suggested, but did not explain, a causal link between print media and bureaucracy. This Chapter attempts to explain the nature of that link, using neoinstitutionalist theory. The influence of communication media on society and, in particular, organizational structure, can be explained and predicted by looking at media as social institutions.

Neoinstitutionalism

There are several strains of institutional theory, which make it somewhat perplexing and untidy to apply. Economic, political science and sociological variants have been identified, and new interpretations emerge as the theory develops.

In general, neoinstitutionalism offers several insights for this argument:

1. it gives the environment a primary role in influencing organizational structure,
2. it permits a very broad definition of the environment, to encompass society in general, and
3. it incorporates the cognitive and normative systems of human society.

Each strain offers a slightly different definition of the environment and societal institutions, and places a different emphasis on the role of cognitive and normative systems. The argument here draws on what Powell has termed neoinstitutionalism, a

variant with its roots in sociology. In particular, the argument relies heavily on the interpretations of Meyer and associates, who have been credited with a seminal role in developing institutional theory for organizations.¹

The Organizational Environment

Neoinstitutionalism focuses on the relationship between the organization and its environment and considers the environment as exerting a major influence on organizational form. Unlike other open systems approaches, including other variants of institutionalism, neoinstitutionalism defines the environment not at the organization's local level but at the level of organizational fields (which roughly parallel markets or industry groups) or, broader yet, of society. This approach permits us to consider broader cognitive and normative forces, acting through societal institutions.

Powell states that the core insights of the institutional approach are that "modern organizations are more likely to arise, expand, and survive in those settings where the social environment creates and sustains the basic building blocks of formal, rational organization."² It rejects the idea that social organizations are merely the result of the "aggregate choices of utility-maximizing individuals", instead focusing on the role of the wider environment in both constituting individual self-definition and social institutions.

¹ W. Richard Scott, "Unpacking Institutional Arguments," in *The New Institutionalism in Organizational Analysis*, Walter W. Powell and Paul J. DiMaggio, eds. (Chicago: The University of Chicago Press, 1991), 165.

² Walter W. Powell, "Expanding the Scope of Institutional Analysis," in *The New Institutionalism*, Powell and DiMaggio, eds., 188.

Neoinstitutionalists argue that it is not the nature of the work that is the key determinant of organizational structure, but rather, the institutionalized environment within which the organization operates. As Scott and Meyer suggest, "the visible structures and routines that make up organizations are direct reflections and effects of rules and structures built into (or institutionalized within) wider environments."³

Powell implies that the organization and its environment are inseparable when he argues that environments "penetrate the organization, creating the lenses through which actors view the world and the very categories of structure, action and thought."⁴ The environment not only exerts pressures from the outside, but infiltrates the organization, influencing it simultaneously from the inside through its members, who are also subject to the traditional mores and belief systems of society. This suggests that the environment not only influences the organization's structure at the outset, but continues to do so through its ongoing influence on the belief structures of actors. Thus environments "not only affect organizations and their activities but constitute and reconstitute them over time."⁵

Neoinstitutionalism tends to concentrate on formal organizational structures and, as such, is not as concerned with how work is actually accomplished as with the organization's public account of how it functions and any disjunction between the two.

³ W. Richard Scott, John W. Meyer and Associates, *Institutional Environments and Organizations; Structural Complexity and Individualism* (Thousand Oaks, Ca: Sage Publications Inc., 1994), 2.

⁴ Powell, *The New Institutionalism*, 13.

⁵ John W. Meyer, "Rationalized Environments", in *Institutional Environments*, Scott et al, 28.

Not only is organizational form not determined by the organization's work, the organization's actual operations may not match the public image it projects.

Neoinstitutionalism is specifically concerned with the rationalized environment, comprised of what Scott and Meyer term rationalized myths:

The beliefs are rational in the sense that they identify specific social purposes and then specify in a rule-like manner what activities are to be carried out (or what types of actors must be employed) to achieve them. However, these beliefs are myths in the sense that they depend for their efficacy, for their reality, on the fact that they are widely shared, or are promulgated by individuals or groups that have been granted the right to determine such matters . . . the elaboration of these rules provides a normative climate within which formal organizations are expected to flourish.⁶

These rational myths include those that are cognitive in nature, such as the knowledge and belief systems of professional and scientific bodies, and those that are normative, including traditional mores, informally sanctioned social obligations, and taken-for-granted rules that guide daily routines. These myths are highly institutionalized, perceived as objective and impersonal and beyond the discretion of any individual or organization. They must therefore be taken for granted as legitimate.⁷

As institutions, these shared systems of rules and beliefs "by precluding some options and facilitating others, shape individual identities and public discourse."⁸ They

⁶ W. Richard Scott, John W. Meyer and Associates, *Organizational Environments: Ritual and Rationality* (Beverly Hills, Ca.: Sage Publications Inc., 1983), 15.

⁷ John W. Meyer and Brian Rowan, "Institutional Organizations: Formal Structure as Myth and Ceremony," in *The New Institutionalism*, Powell and DiMaggio, eds., 44.

⁸ Powell, "Expanding the Scope of Institutional Analysis," 187.

serve to constrain certain actions and legitimate others by limiting choices thereby constraining organizational rationality.

Institutions

It is through institutions such as Scott and Meyer's rationalized myths that environments act on organizations.

The concept of institutions is, not surprisingly, critical to the institutionalist argument, yet the term is at best vaguely defined in the literature, in part because the concept is highly abstract and in part because definitions differ according to the variant of institutionalism being considered.

Fundamental to the neoinstitutionalist definition of institutions is the concept of shared cognitive systems that ". . . although created in interaction by humans, come to be viewed as objective and external structures defining social reality."⁹ Institutions represent not objective reality, but reality created by shared belief systems. They are a product of human action, yet are perceived as existing independently of humans, and are accepted as "the way things are". Institutions do not exist as entities, although they may be manifested in entities such as regulators, or as elements of organizational structure. They provide the cognitive and normative frameworks for the actions of organizations and individuals, producing certain expectations about the environment and about collective activities.

Scott, Meyer and associates see institutions as "cultural rules, giving collective meaning and value to particular entities and activities, integrating them into the larger

⁹ Scott, "Unpacking Institutional Arguments," 165.

schemes. We see both patterns of activity and the units involved in them (individuals and other social entities) as constructed by such wider rules."¹⁰

Scott identifies three rule systems: representational, constitutive, and normative rules which work with regulatory mechanisms to "define a common meaning system and give rise to distinctive actors and action routines."¹¹ Representational rules are "modes of reasoning" that create shared, taken-for-granted, understandings of reality. Constitutive rules create identities that are linked to certain behaviors or behavior routines; for example, the bureaucrat. Normative rules set expectations for behavior that are internalized by the actors and reinforced by those with whom they interact. Regulatory mechanisms can be either informal or formal, and create rewards and sanctions that encourage or discourage actions.

Jepperson argues that institutions are self-maintaining, not through specific actions, but rather through unconscious routines that support this order.¹² That is, it does not take deliberate action to maintain the system, simply letting things run their course will suffice. The system is self-correcting; responses to deviations from the social order are automatic and equally unconscious. This suggests that institutions are relatively stable and slow to change.

The literature provides examples of a broad range of institutions, including the liberal state, modern individualism, knowledge and belief systems of professional and

¹⁰ Scott, *Institutional Environments*, 10.

¹¹ W. Richard Scott, "Institutions and Organizations: Toward a Theoretical Synthesis," in *Institutional Environments*, Scott et al, 68.

¹² Ronald L. Jepperson, "Institutions, Institutional Effects and Institutionalism", in *The New Institutionalism*, Powell and DiMaggio, eds., 145.

scientific bodies, taken-for-granted social routines and obligations, such as those surrounding marriage, and even attitudes such as sexism and racism. It also identifies more concrete manifestations, such as legislatures and regulatory, legal and educational systems, although it is the belief systems underpinning these organizations that provide their institutional character, not the specific organization. Institutions can be manifested in concrete forms, but in themselves are highly abstract concepts.

Organizations are not institutions. Organizations reflect institutions, but they are specific actors that compete within the institutionalized environment. Institutions provide the rules of the game by which organizations play. Organizations operate at the functional level, providing concrete manifestations of institutional rules, while institutions operate at a much broader, abstract level. Institutions provide the building blocks of organizations, although organizations may exert some influence on their environment. Scott draws the comparison between organizations operating at the level of narrower governance systems, and institutions creating the broader rule frameworks.¹³

Several key qualities of institutions have been identified here. They:

- are not consciously created, but develop or evolve through human interaction,
- both help to create, and are the product of, shared cognitive systems,
- are perceived as objective and external to human action,
- are self-maintaining and self-reproducing,
- are relatively stable and slow to change, and
- are abstract.

¹³ Scott, "Toward a Theoretical Synthesis," 70.

Institutions and Organizational Structure

Organizations are constructed from legitimated elements that exist, in Meyer and Rowan's vivid description, littered about the landscape. These elements of formal structure are the products of institutions.

Many of the positions, policies, programs, and procedures of modern organizations are enforced by public opinion, by the views of important constituents, by knowledge legitimated through the educational system, by social prestige, by the laws, and by the definitions of negligence and prudence used by the courts. Such elements of formal structure are manifestations of powerful institutional rules which function as highly rationalized myths that are binding on particular organizations.¹⁴

These elements are the building blocks of legitimated organizations. They are assembled by organizations into structures that are legitimated by society because they reflect socially institutionalized belief systems. Organizations incorporate these elements for this reason, not because of efficiency criteria.

These legitimized elements include functions and processes common in contemporary organizations. Meyer and Rowan offer technical procedures as an example:

Technical procedures of production, accounting, personnel selection, or data processing become taken-for-granted means to accomplish organizational ends. Quite apart from their possible efficiency, such institutionalized techniques establish an organization as appropriate, rational, and modern.¹⁵

Neoinstitutionalism posits that the more of these elements an organization incorporates, the stronger it is. Since organizations are not invented, but assembled

¹⁴ Meyer, "Formal Structure as Myth and Ceremony," 44.

¹⁵ Ibid., 45.

from legitimized elements or copied from existing models, this infuses the organization with legitimacy. Conversely, the more unique the organizational structure (i.e. the fewer elements it incorporates), the less legitimacy it enjoys and the more vulnerable it is.

Organizations, then, are not organic wholes, but "loosely coupled arrays of standardized elements".¹⁶ This loose coupling makes organizations relatively more stable and less vulnerable to environmental shock. Since the loosely coupled elements are not closely linked functionally, organizations can tolerate inefficiencies and can lag behind environmental change. They can also accommodate inconsistencies between how the organization actually accomplishes its work and the formal structure it presents to its environment.

The concept of choosing from among available elements to build an organization means, according to Scott, that organizational players are not merely "cultural puppets". Although they do not design the elements, they choose those that make up a particular organization. Neoinstitutionalism, therefore, is not purely deterministic, since actors exercise choice, even though the range of choices may be limited by the environment. However, this restriction of choices by institutionalized belief systems that work more or less invisibly and thus unquestioned, does suggest a significant deterministic component to this theory.

Institutionalist explanations for the homogeneity of organizational forms tend to be less explicit, and also reflect a deterministic approach. Meyer, Boli and Thomas argue that the source of organizational homogeneity lies in "an institutional environment common to organizations in national societies throughout the world system. Common

¹⁶ Powell, *The New Institutionalism*, 14.

definitions and theories of social organizations generate structural similarities in highly disparate societies".¹⁷ Elsewhere, Scott and Meyer describe a dominant, universalistic, historical culture that leads to organizational forms relatively standardized across societies, specifically citing Western religion and the church as sources of Western organizational forms.¹⁸

The other primary explanation offered by neoinstitutionalists is that successful organizational structures are identified as models and emulated, eventually disseminating throughout societies. As successful structures are copied, organizational fields lose diversity and organizations come to look much like each other. In effect the organizational form reproduces itself. While organizational players are making conscious choices in this explanation, those choices are limited by existing, successful patterns.

This suggests that change, when it occurs, occurs slowly. Jepperson notes that collective action or environmental shock can disrupt the reproductive process and lead to organizational change.¹⁹ While neoinstitutionalism tends to focus on the effects of the environment on the organization, Scott also argues that innovative activities by the organization can become the basis for delegitimizing old and establishing new institutional models.²⁰ This suggests that the organization-environment interaction is not

¹⁷ John W. Meyer, John Boli and George M. Thomas, "Ontology and Rationalization in the Western Cultural Account," in *Institutional Environments*, Scott et al, 15.

¹⁸ Scott, *Organizational Environments*, 23.

¹⁹ Jepperson, "Institutions, Institutional Effects," 145.

²⁰ Scott, "Toward a Theoretical Synthesis," 77.

one way, but that the organization can exert an influence on its environment, presumably by influencing the institutional frameworks within which it operates.

Paquet suggests a variation on this process. He argues that institutions can be eroded by the organizational efforts of disgruntled groups. As deviant institutions are adopted and organizations adapt in previously deviant directions, the erosion of the institutional order increases.²¹

Print as an Institution

It is the argument of this paper that print media are an institution, exhibiting the qualities set out earlier in this Chapter. Specifically, print media: were not consciously created, but evolved through human interaction; both help to create, and are the product of, shared cognitive systems; are perceived as objective and external to human action; are self-maintaining and self-reproducing; are relatively permanent; and are abstract.

It is not the technology of print that is an institution, but the print world view, which has emerged over the past 500 years and permeated virtually all aspects of contemporary Western society. Further, any communication media which become the dominant means of communication in a society, such as electronic media, can become institutionalized in the same way as print.

Media are clearly deliberate human creations, yet their influence is neither deliberate nor foreseen. As the work of Eisenstein, in particular, illustrates, the impact of print has been an evolutionary one, developing over centuries, influencing the key belief systems of Western society.

²¹ Gilles Paquet, *Institutional Evolution in an Information Age*, Working Paper 95-24 (Faculty of Administration, University of Ottawa, 1995), 5.

Media, by their nature, are very intimately associated with our thought processes, yet they are also seen as external to those thought processes; as objective carriers of information. The work of authors such as Innis, McLuhan and Ong is specifically addressed to countering this dominant perception. As they have illustrated, communication media are not merely neutral means for transmitting information. Media help to shape our shared cognitive systems by emphasizing or downplaying certain information, encouraging or discouraging types of content. This tacitly legitimates certain thought processes and beliefs.

In helping to shape their content, media also shape our perceptions of reality and, as a result, the structures of our society at a very fundamental level. Thus any dominant communication medium in a society could be considered an institution, simply through the belief structures it helps to create and legitimize. At the same time, as these theorists argue, media do not create new tendencies, but amplify or constrain existing human tendencies. Thus the print world view, perhaps more intimately than most institutions, reflects our cognitive processes at the same time that it influences them. In routinely focusing our attention on some aspects of our environment and away from others, it helps to shape our thoughts and ideas, influencing how and what we learn, how we perceive and react to our environment. This is not to suggest it determines our cognitive processes, but that it influences the direction of their development.

It does this, however, without our being aware, through belief systems and normative rules that we accept unquestioningly. Thus, in Western society, history is not a human creation, but is independent, authoritative and objective. Scientific discoveries are built rationally, piece by piece in a linear and cumulative process. Facts "speak for

themselves", independently of people. These are all belief structures and norms that can be traced to print and that would be unlikely to exist as they do under a different world view.

These and other beliefs springing from the print world view help produce our collective expectations. Leaders should be cool and controlled, officials detached and impersonal in the execution of their duties. Organizations should be structured in a certain way, pursue certain ends and not others, and include certain functions, such as accounting, personnel, and more recently, information systems departments.

This print world view is self-reinforcing. Many of the institutions identified in the literature, such as knowledge systems of the sciences and professions, our legal and education systems, are actually products of the print world view. They act as reinforcing mechanisms, operating automatically to support and maintain the print world view, instilling it in us as children, subtly closing us off to other possibilities. Their success begets new applications of the print belief system, which slowly permeate society. The more these secondary institutions become integrated into our society, the less we question, or even notice them. They are the way things are, "the rules of the game".

This makes the print world view an enduring one. Indeed, Eisenstein has traced the print world view back to very early in print's history. Embedded in secondary institutions such as our education system, the print world view is continually reinforced. Print becomes the very means by which we acquire knowledge of our environment. It is only recently, with the advent of electronic media, that this has been challenged.

The print world view is an abstract concept; an intangible system of beliefs that we use to explain and evaluate our world, to structure our interactions with our environment. It is based on a written tool – the simplified alphabet – that is itself highly abstract; so much so that its 26 symbols can reproduce a wide range of oral languages.

As Innis' work suggests, any dominant medium would have the potential to shape information flows in similar ways in different societies. The properties of print – permanence, precision, uniformity, linearity, objectivity, segmentation, high coding – hold regardless of the language or culture. The print world view is the only institution with belief structures that touch virtually all aspects of society, and that is so closely linked to human cognition. As such, it offers a more comprehensive source of organizational homogeneity than religion, or emulation and diffusion.

Framework and secondary institutions

This argument also implies that one institution, such as print, can give rise to others, such as legal or education systems. There is support for this in institutionalist literature. Some authors distinguish between types or levels of institutions. Scott distinguishes between wider rule frameworks and narrower governance systems.²² Similarly, Paquet distinguishes between framework institutions, which are wide-ranging in influence, and secondary institutions, which are more limited in scope.²³ Using this structure, print would be a framework institution, because of its pervasive influence on society, including other secondary, institutions of society.

²² Scott, "Toward a Theoretical Synthesis," 70.

²³ Paquet, *Institutional Evolution in an Information Age*, 4.

Bureaucracy as an Institution

We can now offer an alternative explanation for the rise of bureaucracy, using institutional theory, with the print world view as the dominant institutional force.

As noted earlier, the development of modern bureaucracy has been commonly linked with a number of developments in what might be termed the business environment. Among these are: the development of money economies, mass education, the emergence of large-scale administrative problems out of the Industrial Revolution, and the development of the capitalist system.²⁴ Of these, the Industrial Revolution is most widely identified as the root cause. Clearly, the increase in the speed and volume of production during the Industrial Revolution required a different method of organizing administration. However, this does not explain why *bureaucracy*, in particular, arose and not another organizational form. Why an organizational form based on hierarchy, impersonality, specialization and written rules?

A neoinstitutionalist argument for bureaucracy would be that it is built from elements existing in the rationalized environment. These elements are products of social institutions, and as such have legitimacy on their own. Any organization constructed from these elements would be legitimated in the eyes of society, regardless of whether its structure was rational for the work at hand. It would be presumed to be rational. Successful organizations would be copied until the form was disseminated throughout the environment.

²⁴ Blau, *Bureaucracy in Modern Society*, 28–29.

Indeed, Meyer and Rowan argue that bureaucracy is caused in part by the "proliferation of rationalized myths in society".²⁵ However, they focus on the organization's immediate environment, identifying the processes that generate these myths in terms of the complexity of the relational networks in which the organization participates, the degree of collective organization of the environment and the leadership efforts of local organizations.

DiMaggio and Powell take a slightly different approach, arguing that the causes of bureaucracy have now shifted from those identified by Weber. Instead, the continued growth of bureaucracy is because "individual efforts to deal rationally with uncertainty and constraint often lead, in the aggregate, to homogeneity in structure, culture, and output."²⁶

None of these explanations address the source of the rationalized environment, or of the legitimated elements of bureaucracies. They begin one step removed from the source, accepting the existence of the institutions giving rise to these elements. Neither do they offer a satisfactory explanation for the dominance of bureaucracy throughout the Western industrialized world. Emulation and diffusion only go so far to explain this pervasiveness. There must be an underlying shared cognitive system that allows this model to be successfully implemented.

The print world view, as an institution, provides this underlying system.

Bureaucracy as an organizational form is created from elements available throughout the

²⁵ Meyer, "Formal Structure as Myth and Ceremony," 47.

²⁶ Paul J. DiMaggio and Walter W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," in *The New Institutionalism*, Powell and DiMaggio, eds., 63–64.

institutionalized environment; elements that owe their existence to the cognitive and normative systems of the print world view – hierarchy, objectivity, specialization, written rules, segmented functions and processes, and centralization, to name a few.

Bureaucracy rose to dominance not because it was the optimal response to the demands of the Industrial Revolution, but because it fit the expectations created by the print institution. It fit them so well that it became institutionalized itself. As an institution, bureaucracy both results from and reinforces the institution of print.

Berger et al see bureaucracy as a preeminent institutional form in society. They identify a "bureaucratic consciousness" that includes belief in delimited spheres of competence, the importance of proper procedure, and impersonality.²⁷ They also note that there is a "generally accepted assumption that . . . a bureaucratic system is necessary, especially in the public/political sphere" and that adults share a general knowledge of bureaucracy which they bring to any bureaucratic encounters. This shared knowledge includes beliefs in the competence of bureaucrats, proper procedure and anonymity.²⁸

This shared belief system, which is also normative in that it prescribes appropriate actions for bureaucracies and actors within bureaucracies, fits the main criteria of an institution, discussed earlier.

²⁷ Scott, "Unpacking Institutional Arguments," 166.

²⁸ Peter L. Berger, Brigitte Berger and Hansfried Kellner, *The Homeless Mind: Modernization and Consciousness* (New York: Random House Inc., 1973), 43–47.

Berger et al also note that bureaucracy is often arbitrarily imposed on our social reality; it is not intrinsic to the actions to be performed.²⁹ We may provide a rationale of, for example, efficiency. However, that rationale is based on socially accepted notions that bureaucracy is efficient, and is more efficient than any other organizational form. Rather than being based on actual qualities of bureaucracy, it is based on beliefs about the appropriateness of bureaucracy in certain situations. The fact that Western society has unquestioningly accepted bureaucracy as the only means of structuring large organizations reflects the institutionalization of bureaucracy in our society. Bureaucracy has become an institution because it so successfully and powerfully incorporates the elements that the print world view left "littered about the landscape".

Bureaucracy has continued to spread not because, as Weber suggested, it is a powerful form for efficiently harnessing the efforts of workers, but because it became so effectively entwined with the belief and normative structures of the print institution that it evolved into an institution itself. Using Paquet's levels of institutions, print media with their broad influence on society would be the framework institution, while bureaucracy, more limited in its influence compared with print, would be a secondary institution.

Conclusion

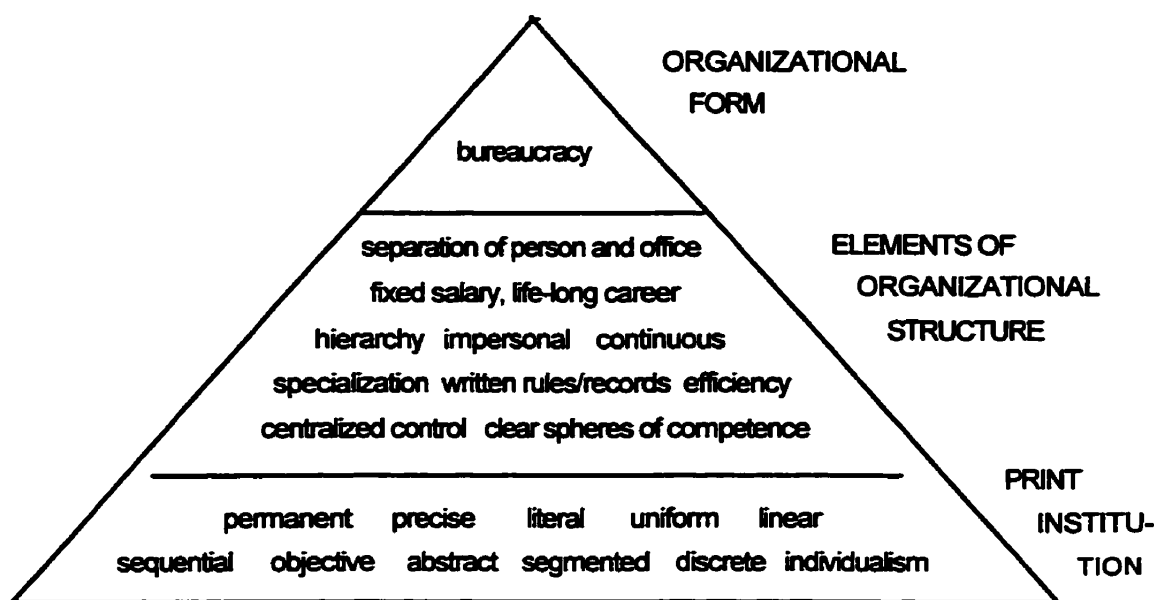
Figure 1 illustrates the relationship between print media, institutionalized elements, and bureaucracy. The relationship, as argued in this Chapter, is a causal one. Print media, as an institution, give rise to a range of legitimated elements, which in turn

²⁹ Ibid., 41–2.

are used to create organizations. These organizations are legitimated in the view of society, because they incorporate these elements, not because their structure is the most appropriate for the work at hand.

FIGURE 1

The Print Institution and Organizational Structure



This is a departure from other neoinstitutionalist discussions, which treat media, if at all, as technological tools. Rather than mere tools, media should be considered as institutions that influence organizational structure, among other aspects of society, far beyond the content they transmit.

It is interesting to note that neoinstitutionalism, with its focus on cognitive systems, developed since the late 1970s.³⁰ This suggests the theory benefits from the vantage point offered by emerging communication media. Electronic media may have contributed to the theory by offering a systemic perspective to challenge the linearity of the print world view. The print world view, with the value it places on rationality and consistency may be at the root of institutionalism's concern with the inconsistencies between formal organizational structure and the demands of the work.

Still, neoinstitutionalism places a heavy emphasis on rationalism and the role of professions and science in establishing the cognitive systems that influence organizational structures. In this, the theory itself reflects the influence of print on our belief systems, and admittedly, the reality of contemporary society. Even with this emphasis on the rationalized environment and on cognitive rules, neoinstitutionalism takes a much less segmented, more systemic view of organizations than previous theories. In particular, the severing of a direct causal link between an organization's structure and its work and the inclusion of a broader range of influences, such as cognitive and normative elements of society, are indicative of a more systemic view.

Neoinstitutionalism offers several insights for this argument. It gives the environment a primary role in determining organizational structure. It defines the organization's environment as more than a collection of other organizations and groups that the organization interacts with, but as the rules and belief systems that have become institutionalized within society and form a normative climate for organizations. This

³⁰ Scott pins the year at 1977, when Meyer and Rowan published an article focusing on institutionalized beliefs, rules and roles. Scott, "Unpacking Institutional Arguments," 165.

allows institutionalism to incorporate cognitive and normative aspects of society, making the link between belief systems and organizational structure.

In turn, we can link communication media and societal belief systems. As cognitive and normative systems, institutions are susceptible to influence by the dominant communication media of a society. The media, in effect, help to shape the rational myths that form the environment that lends credibility to certain organizational forms, and that delegitimizes others. In other words, the media act as an institution.

In the case of Western industrialized society, that dominant media set is print. The print world view is abstract, constitutes a shared system of rules or social patterns that are accepted virtually without question, is self-reproducing through routine activities, and is permanent – all characteristics common to definitions of institutions. Previous explanations for the development and dominance of bureaucracy do not address the fundamental question of why bureaucracy, in particular, arose and not some other organizational form. The missing element is the print world view, which as an institution provides the ideological basis for bureaucracy and many secondary institutions that underpin Western industrialized society. The institutionalization of the print world view provided all the elements of a fertile environment for bureaucracy to take root. The institutionalization of bureaucracy itself sealed its successful diffusion throughout society.

As a specific organizational form, bureaucracy is a creation of the print world view, built from the elements in the environment. As a concept, bureaucracy is an institution. As a successful organizational model that is emulated, bureaucracy helps to

reinforce the print world view that led to its development, in a self-sustaining feedback loop with the institution of print.

CHAPTER FIVE

A New Institution: Electronic Media

*Every culture and every age has its favorite model
of perception and knowledge that it is inclined to prescribe
for everybody and everything.*

– Marshall McLuhan

McLuhan has argued that we are in an age of transition, between the mechanical print culture of the past 500 years, and a new, electronic communication culture:

An age in rapid transition is one which exists on the frontier between two cultures and between conflicting technologies. Every moment of its consciousness is an act of translation of each of these cultures into the other. Today we live on the frontier between five centuries of mechanism and the new electronics, between the homogenous and the simultaneous.¹

The significance of our contemporary situation lies not in the shift between communication media, but between institutions. The body of literature on the influences of electronic media is not as well developed as that of print, which, in itself, is not surprising since we have less than 100 years of electronic communication compared with more than 500 years of print. Analyses of print are also conducted with the benefit of hindsight, from the vantage offered by electronic media. With electronic media, however, we do not have that advantage – it is the new technology itself that we are attempting to analyze. Nonetheless, there is evidence to support the argument that

¹ McLuhan, *The Gutenberg Galaxy*, 141.

electronic media are fostering a very different set of perceptions and beliefs, and further, that they are emerging as a framework institution in society.

Some early conclusions on the influences of electronic media can be drawn by contrasting electronic media with print and oral media, and by drawing comparisons between initial uses of electronic media and their contemporary applications.

Early Electronic Media

Initially, the development of electronic media did little more than build on the foundation laid by the printing press. This is in keeping with McLuhan's suggestion that during the transition period from one dominant medium to another, the content of a new technology is only the already dated content of the superseded technology.² The true properties of the newer media are masked by the uses to which it is put by print culture, making it all the more difficult to isolate properties and their effects. As the new technology, early electronic media did everything that print did, but faster, more efficiently and in higher volume than ever imagined. What electronic media did *not* do, however, was fundamentally alter the way we perceive or organize our world. Rather, the new media were made to conform with the old; for example, computers were made more user-friendly by incorporating print-based imagery, such as "page white" screens, and software icons showing file folders and cabinets, bottles of glue and scissors. The perspective continued to be print based.

However, as electronic media become ubiquitous this perspective is changing. Some unique properties are becoming evident. In general, these properties are closer to

² Kroker, *Technology and the Canadian Mind*, 56.

those of oral culture than of print, yet electronic media do retain some properties of print. Therefore, the emerging electronic media culture does not represent a return to pre-print culture, but the creation of a hybrid. As a hybrid of oral and print media, electronic media share properties of both, although the combined impact of these properties is very different from those of either oral or print media.

The properties of interest for a discussion on organizations are inclusiveness, transitory/permanence, segmentation, and symbolism and subjectivity.

Inclusiveness

McLuhan used the term "inclusiveness" to capture the continuous or systemic nature of electronic media, as contrasted with print's tendency toward fragmentation and segmentation. He drew a strong analogy between electronic and oral media, arguing that electronic media favor the "inclusive and participational spoken word over the specialist written word",³ and that visual [print] technologies "foster fragmentation and specialism, armies and empires. Electric technology favors not the fragmentary but the integral, not the mechanical but the organic."⁴

One of the ironies of attempting to analyze electronic media is that the analytical tools are print based. To understand the implications of inclusiveness, one of the vague, intuitive terms characteristic of McLuhan's work, requires a very print-oriented technique – segmenting it into a number of distinct properties.

³ McLuhan, *Understanding Media*, 82.

⁴ McLuhan, Forward to *Bias of Communication* by Innis, xiii–xiv.

Simultaneity

As has already been shown, print accelerated the collapse of space by reducing the importance of distance as an element of communication. With electronic media, it is time that ceases to be important, or rather the absence of delay between event and response, action and reaction, that becomes all important. This temporal speedup is returning an element of the simultaneity that Ong and McLuhan describe as characteristic of oral society. It is, however, a different simultaneity from that of oral society.

In a society without records, the sense of simultaneity came from "the need to keep talking about our conscious possessions acquired in the past in order not to lose them." In electronic society, simultaneity comes from the speedup of events; the linear view of the past remains; "The computer is actually the most quantified and most highly sequential or linear of all instruments: it creates a sense of simultaneity only because its inhuman speedup of sequences makes it appear to annihilate them."⁵ The time delay is eliminated, forcing a preoccupation with the present. In oral society, the past is part of the present, of everyday life. In electronic society, the past is forced farther into the past, increasing the sequential view of history. The result is not the incorporation of the past and future into daily life, as in an oral culture, but an intense focus on the present. History, particularly history recorded in an earlier medium, becomes much more distant.

The new sense of simultaneity is also the result of the dwindling gap between cause and effect. With developments such as electronic data interchange, we are increasingly living and working in "real time". Point of sale terminals update

⁵ Ong, *Presence of the Word*, 91.

inventories as each item is purchased, orders are automatically placed with suppliers and paid by electronic funds transfer as goods leave the supplier. A slip of the tongue by a government official or an announcement by a politician can be reflected within hours in the value of the nation's currency. Activities on foreign stock exchanges can have an immediate impact on the value of the dollar; political events can affect a company's share price within hours. As McLuhan notes, "electric speed in bringing all social and political functions together in a sudden implosion has heightened human awareness of responsibility to an intense degree."⁶ This accelerated feedback means that electronic culture cannot remain detached from the consequences of actions as effectively as can print culture.

Electronic media have also finally severed the time-space link. With print media, distance was no longer a significant barrier to the transmission of large amounts of detailed information. However, it remained a barrier to the speed of transmission – the farther the destination, the slower the transmission. With electronic media, this relationship is severed. Real time interactions can occur over vast distances or between neighbors, with little discernible difference. Activities become less and less linked to physical place.

Linking power

Katsh uses this term to describe "an enhanced ability to both locate persons with certain qualities or interests and communicate with them."⁷ Electronic media provide a

⁶ McLuhan, *Understanding Media*, 5.

⁷ Katsh, *Transformation of Law*, 240.

means of forging links among people and groups where the segmenting nature of print made such communication difficult or impossible. Newsgroups and chatrooms on the Internet are examples of this, where individuals can easily locate others sharing similar interests, however obscure, without regard for physical location. In comparison with print, "the ease of forming links makes it possible to establish groups around relatively minor interests and concerns."⁸ This type of communication is expensive in a print culture, and is limited to those individuals and organizations with relatively large pools of resources or to those who can convince journalists – gate keepers of mass information media – of the value of their message. With electronic media such as the Internet, anyone with a message can distribute it globally with a relatively small investment of time and money, and potentially attract the attention of like-minded individuals.

Group membership, then, becomes increasingly self-selected and less dependent on location. As Meyrowitz notes, social interactions are no longer linked to place as they were in print society. Individuals have access to information and people previously far beyond their reach physically and socially. Relationships can take place outside of the physical locations previously required – conversations need not be face to face; business meetings need not be conducted in the same room for participants to see and hear each other. The race, gender, age and social status of participants in Internet newsgroups or chatrooms need never be known.

As Meyrowitz argues, electronic media have fundamentally changed "the logic of the social order by restructuring the relationship between physical place and social

⁸ Ibid., 243.

place . . .".⁹ We see the creation of new social situations, with new information flows and socially-absorbed rules that are not dependent on places, such as home or office or community, and that do not respect old notions of public and private. This is reminiscent of McLuhan's global village, where events across the globe are received as quickly as, or more quickly than, events next door. The severing of the link between social position and information access also suggests more egalitarian structures.

Accessibility

Closely related to linking power is accessibility. Part of the segmenting influence of print lies in the systems of storage and retrieval it fosters. In libraries, books are stored behind walls, with restrictions on who can access them, when and for how long. Accessibility is further limited by whether the particular book is "in". Libraries themselves are isolated from each other, and can be specialized in disciplines, such as law or medicine. This physical separation of information over time contributed to a psychological segmentation, and possibly to the development of professions such as law.¹⁰

With electronic media, however, many of these restrictions no longer apply. Information on electronic networks is available all day, every day. It is never "out". Even in the case of print libraries, the holdings of individual libraries can be searched electronically, without visiting the physical library itself. Information can be more readily located, and is thus made more readily accessible. In this case it is not new

⁹ Meyrowitz, *No Sense of Place*, 308.

¹⁰ Katsh, *Transformation of Law*, 224.

information that is being created, but existing information that was previously restricted that has become more broadly available. The information was always there and could be accessed given sufficient tenacity on the part of the researcher, but print raised barriers that made access difficult. Electronic media help lower those barriers.

It is much easier, on the Internet almost effortless, to access information from another discipline. It does not require traveling to a bookstore, or acquiring borrowing rights at a library. In most cases, it does not require membership in any particular group, although it may require access to the terminology of that group. The ability to discover information accidentally is greatly enhanced through activities such as electronic browsing.

The low level of skill required to decode electronic media also supports accessibility. Until the advent of computers, electronic media required little in the way of specialized knowledge to use. There is little skill required to use the telephone or watch a television program, compared with the requirements of learning to read. Computers apparently reversed that trend, being complicated to learn and counter-intuitive. Increasingly, that is more perception than reality, as computers become the focus of intense efforts to make them completely intuitive in use.¹¹ Already, icons are replacing words for performing basic computer functions; with the point and click of the mouse replacing keyboarding skills.

The increase in image-based content, such as icons, combined with low coding, holds the potential to dramatically increase the accessibility of information. An

¹¹ David Burstein and David Kline, *Road Warriors: Dreams and Nightmares Along the Information Highway* (New York: Penguin Books, 1995), chap. 3 passim.

illustration is learning to tie a shoelace. If we had to learn by reading a description with no illustrations, that skill would be limited to the educated, and particularly those among the educated who could visualize and reproduce the steps.¹² A video, however, does not require either literacy or abstract visualization skills. Thus the information is made available to a wider range of publics. Electronic media have already opened up disciplines previously inaccessible to the layperson – cable television viewers can watch a complete operation as if they were medical students, or vicariously participate in a police arrest.

This does not, however, represent a complete return to oral culture, since reading would remain a fundamental skill for the transmission of complex information.

Integration

Another facet of inclusiveness is integration. Books are objects in themselves, independent of each other and of other sources of information. They compartmentalize information, within covers and chapters, and are themselves compartmentalized within libraries. Electronic media can translate previously independent components – images, text, speech – into digital form and merge them in ways previously impossible. The results are less linear, more complex and subjective, and work to undermine the segmentation of print media.

McLuhan criticized print for its "visual homogenizing of experience . . . and the relegation of auditory and other sensuous complexity to the background".¹³ Electronic

¹² Meyrowitz, *No Sense of Place*, 79.

¹³ McLuhan, *Gutenberg Galaxy*, 125.

media reintegrate this sensuous complexity, through the use of sound, movement and interactive applications of the technology. Virtual reality, for example, allows the creation and manipulation of "objects" that do not exist. Although still primarily a visual activity, it is one taking place in three dimensions, that requires interaction between the user and the technology. Video games incorporate sound and action into a much more complex sensory experience than the sequential act of reading. Participants must assimilate information much more quickly, and in what is at least in appearance, a more random order than with print. Linear thinking becomes an impediment.

Not only does this integrate discrete media but it undermines the distinctions print media fostered between disciplines, professions, and public and private lives.

Again, the Internet is the most dramatic example of this:

The Internet embodies the spirit of the integration which McLuhan identified. It literally integrates all forms of media by providing a global networked digital medium that can accept any form of information that can be digitized, from text and visual images to audio and music. Information flows from one domain to another and by doing so breaks down the barriers between work and learning, entertainment and education, work and leisure, technology and culture, art and science.¹⁴

This leads to an increased ability for ideas and concepts to cross boundaries between disciplines and a corresponding difficulty in keeping information within boundaries. A case in point is the development of chaos theory, which owes much to the integration of information from different disciplines. Its development was impeded by the traditional compartmentalization of scientific disciplines. Work was duplicated

¹⁴ Robert K. Logan, *The Fifth Language: Learning a Living in the Computer Age* (Toronto: Stoddart Publishing Co. Limited, 1995), 291.

between meteorologists, physicists and biologists, because none read the others' journals. The cross-disciplinary nature of the theory was discovered by accident. This is a clear example of how the specialization and segmentation facilitated by print and technical rationalist thought can impede the creation of new knowledge.¹⁵

Electronic media also lack the visual cues of print media that distinguish types of content – entertainment content from academic, fact from fiction. An academic journal, a comic book and news magazine all look very distinct; their appearance is a cue to the nature of their content. Sites on the Internet's world wide web, however, tend to share the same basic visual characteristics. This further erodes distinctions between types and sources of information.

Transitory/Permanent

The transitory nature of oral communication means that concepts such as literal meaning, verbatim reports and permanent, original records are alien to an oral culture, as is individual ownership of ideas. Electronic media reincorporate an element of this transitory nature. For example, Pool describes a "subculture of authors" using computer networks to distributed their work to colleagues, who add their comments to the electronic file and pass it along: "Thus the manuscript stored in the computer may change daily. There may never be a canonical version."¹⁶

¹⁵ James Gleick, *Chaos: Making a New Science* (New York: Penguin Books, 1987), 31.

¹⁶ Ithiel de sola Pool, *Technologies Without Boundaries* (Cambridge: Harvard University Press, 1990), 252.

At the same time, electronic media make it possible to permanently store and retrieve more information than ever before. Live reports from war zones or of police chases are experienced in real time; the audience watches them as they happen. At the same time, however, a video record is preserved, to be reviewed at any time. Information from a web site can be downloaded and permanently preserved in the user's computer, but the site itself changes, sometimes daily. Visitors to some web sites can add their comments, changing the site content at times and in ways that are unpredictable, but those changes also assume a type of short-lived permanence, remaining available to other visitors for days or weeks, or permanently if downloaded to a computer hard drive. Thus electronic media permit the combination of the perception of temporariness with the permanence of print.

Segmentation

At the same time that electronic media break down barriers established by print, they foster a different type of segmentation. Print compartmentalized information. However, its repeatability also helped to create mass media, where the same message could be distributed to thousands or millions of audience members. In essence, these are two sides of the same coin – information is segmented and defined, but it can also be distributed to a mass, undifferentiated audience.

At the same time that electronic media support integration, they undermine what McLuhan termed "homogenization". Electronic media continue to make a mass audience possible, although increasingly unlikely, as the choices among narrower, more specialized information become wider.

An elusive and fragmented audience confronts any speaker who wishes to address an issue and convey information of a general public concern. This is a major problem faced by the media consultants of governments and campaign organizations. The technological structure of the "forum" is available, but it is often difficult to find the "public".¹⁷

Mass communication is giving way to *individualized* communication that can be distributed on a mass basis.

In one way or another, the programmed logic that can be built into modern electronic communication is reducing in part the passive uniformity of mass communication. Just as computer-controlled assembly lines can vary the product in a way that would be prohibitively expensive otherwise, so too computer-controlled media production can bring into the realm of economic feasibility kinds of communication that take some account of the individual to whom they are addressed.¹⁸

This goes beyond the tailoring of messages to audiences in regional editions of magazines or other such publications. It allows the individual to tailor the information. Internet services such as PointCast¹⁹ will automatically send a daily news packet to the computers of individual subscribers, composed of only those articles and from those news sources that are of interest. This is leading to fragmentation of audiences and specialization of messages to particular groups, subgroups and individuals in society.

The difference between this segmentation and the one fostered by print is its source. With print, the segmentation is externally imposed – the compartmentalization of information by those who produce and package it discourages integration. With

¹⁷ Paul Corcoran, *Political Language and Rhetoric* (Austin: University of Texas Press, 1979), 164.

¹⁸ Pool, *Technologies Without Boundaries*, 60.

¹⁹ Internet, available at www.pointcast.com, accessed June 26, 1997.

electronic media, the segmentation is self-imposed. Individuals seek out the messages they want and block those they do not want to receive. The choice rests with the individual.

The other difference is that the segmentation by electronic media also divorces information from its context. Television news programs consist of a series of events connected only by the fact that they occurred within the same time period. Each event is presented as an isolated point in time, devoid of context. Similarly, travelers on the Internet can enter web sites at any point; the concept of beginning, middle and end no longer applies. Links move the traveler to other sites that may be only tangentially related. Information is acquired in chunks, which are treated as if they exist independently of any other information chunks.

Subjective and Symbolic

Corcoran argues that print has helped change the nature of public discourse by making speeches a source of information secondary to print, with the resulting "tendency for oral address to become a performance and to be received as such by the audience".²⁰ Electronic media are taking this one step further, fostering "a preference for communications designed to convey images and symbols rather than agreement, scenes rather than speech, actions rather than words, emotions rather than thoughts."²¹

Electronic media do this because they transmit images and voices as well as text. As a result, they support more subjective and symbolic content, similar to oral

²⁰ Corcoran, *Political Language*, 129.

²¹ Ibid., 161.

communication. Words are once again linked with vocal intonation or facial expression. Even in text-based email, messages are now including symbolic representations of a smiling face, :) or a frowning one, :(to add emotional context to the message.

Similarly, media capture and publicize previously private emotions with an intimacy not achievable by print. Authority figures are caught in unguarded moments by cameras or microphones. Audiences watch "live" as people scurry for cover in fear at the sound of air raid sirens. The subjective, emotional content is inescapable.

At the same time, however, electronic media are themselves mediators in the communication process. So while the media can have the simultaneity and emotional content of face-to-face communication in oral society, they also maintain a sense of distance, with participants separated in time or space or both, by the telephone, video or audio tape or computer. The emotional content is emphasized, yet an element of detachment remains.

The image-based nature of many electronic media, as well as fostering accessibility, also makes it less precise than print. As Ong notes, symbolic content, by its nature, allows greater latitude in interpretation, favoring generalities over specifics. Yet in the case of electronic media, this is combined with an ability to transmit text in unparalleled quantities, and to keep permanent, easily accessed records. Precision is not eliminated.

Summary

Table 3 summarizes these properties of electronic media, opposite those of print and oral media.

TABLE 3

Properties of oral, print and electronic media

Oral Media	Print Media	Electronic Media
transitory	permanent	transitory/permanent
symbolic	precise, literal, uniform	symbolic
simultaneous	linear, sequential	simultaneous
subjective	objective, abstract	subjective
community	individualism	individualism
continuous, inclusive	segmented, discrete	inclusiveness/segmentation

As a hybrid, electronic media exhibit properties of both oral and print media at the same time, such as permanence and simultaneity; but they also exhibit unique properties, such as linking power and integration. However, the nature of these properties is different from those in oral or print media, which suggests different influences on society. This will be explored in the next section.

EMERGING BELIEF SYSTEMS

Electronic media are replacing print as a framework institution in Western society. In doing so, electronic media are challenging the mores and belief systems that have guided the development of Western industrialized society.

This section reviews the changes in cognitive and normative systems that could result from such a shift. The influences discussed here are chosen for illustrative

purposes, for their contrast with print institutionalized elements and their potential effect on organizations.

Individualism

This is perhaps the single most significant shift occurring between print and electronic media institutions. It is manifested in two broad forms: increased sense of individual control and increased expectations for individual treatment.

Individual control

Through properties such as accessibility and linking power, discussed earlier, electronic media are encouraging the perception of the individual and not the organization, as the source of action in society. This goes far beyond the increased sense of individualism that print fostered. It is a shift in control from the organization to the individual.

It is not just that people have far greater access to information, but to the information they want, when they want it. Individuals can control the information they receive to a degree never before possible. This is captured in the concept of push and pull communications in organizational communication. In push communication, the organization determines the audience, the content of the message, and pushes the message out to the audience. This is epitomized in the print approach of producing a brochure or newsletter and distributing it to a target audience. In pull communication, the individual decides what information he or she wants, and seeks it out. This is the concept behind Internet-based services such as PointCast, and proposed pay per view

television, where viewers order what they when they want it, not according to a centrally determined schedule and menu.

There is a subtle but significant shift in control occurring here. Rather than sending out a message, the organization places the information where the individual is likely to look for it, and waits for the audience to come. The individual assumes responsibility for initiating the contact, and receiving the message. In effect, the individual determines what messages he or she receives. While unable to control the content of the message – that remains with the originator – the individual has a far greater capacity to tailor the information stream to personal interests, to seek out what is of interest, block out what is not, and to find alternative sources to verify or discredit that information.

The organization is no longer in the role of providing prepackaged messages to be accepted or rejected in their entirety. Instead, it is providing message packets, that can be accessed in whole or in part, accepted in whole or in part, and that can be viewed independently of the context of the remainder of the message. Manipulation of a message by the organization becomes increasingly more subtle and complex. Manipulation of a message by individuals, however, becomes increasingly easy.

Individuals can not only more easily access the information they want, but they can disseminate information much more readily than before. Through email, web sites and news groups, individuals have access to potentially vast audiences, without the need for correspondingly vast resources or the co-operation of media gatekeepers. The potential power shift in this respect is enormous.

A case in point is that of Lexis-Nexis, a database service in the United States that was virtually shut down for several days by an email sent by one, unidentified individual.²² The individual took issue with what he or she believed to be the content of a new database launched by the company, although similar databases were already being marketed by competitors. The individual sent an email containing erroneous information about the database contents (intentionally or not is unknown) to a personal email list. The recipients passed it on to their email lists, and so on. Within two weeks of the first email, Lexis-Nexis was receiving so many public inquiries that its phone system, which supports 300 customer service representatives, began collapsing several times daily.

It is doubtful that such a campaign could have succeeded in print. First, the length of time required to build momentum would have given the company time to correct the false information that was being disseminated. Second, an effective, nation-wide campaign would have required the co-operation of the media; again, another opportunity for the information to be clarified and corrected. Third, information being received through a public source, such as a newspaper, does not have the immediacy or credibility of a personal email sent from a friend or colleague. In effect, the Internet email system became a giant rumor mill, which once operating was very difficult for the organization to counteract. The important point is that this began as a result of the action of *a single individual*, and ended with a large organization

²² Lesley Sprigg, "How to do Crisis Public Relations on the Internet", in *Corporate Communicators Conference VI, Sessional Synopses*, Bill Sweetland, ed. (Chicago: Lawrence Ragan Communications Inc.: 1997).

temporarily brought to its knees. This signals a potentially significant shift of control to the individual.

Gilder characterizes this shift in terms of power moving from the center to the periphery. He equates the movement of computing power from centralized structures to the individual through the popularization of personal computers, with a decentralization in power, which is inherently hostile to hierarchies, monopolies, industrial bureaucracies and all kinds of top-down systems.²³ This diffusion of power supports systems in which the individual rules his or her own domain, a society of equals under the law.²⁴

This suggests a number of emerging expectations. One is that individuals assume greater control and responsibility, initiating action on their own, rather than only through an organization. Related to this, information may be viewed as a common resource, that should be widely available and free for the taking; indeed this is fundamental to individual freedom to act independently. Perhaps more important would be a shift in perception of the power of the individual opposite the organization, the belief that individuals can successfully influence organizations – the organization is not necessarily more powerful than the individual.

Individual treatment

Electronic media may also encourage expectations of individual treatment and undermine belief in the fairness of identical treatment of all individuals. As Meyrowitz

²³ George Gilder, *Life After Television* (New York: W.W. Norton & Company, 1992), 126.

²⁴ *Ibid.*, 48.

notes, "What many people learn and experience through electronic media have relatively little to do with their age, traditional education, and social position."²⁵ The exposure of larger segments of society to a variety of places and ways of life could foster increased awareness of individual characteristics and acceptance of diversity. At the same time, Katsh points out that this new access to information also leads to greater awareness of inequality of treatment in society, and attributes current demands for rights and concerns with equality to this increased exposure.²⁶ Meyrowitz agrees, linking the rise of the civil rights movement to the expansion of television across the U.S.²⁷

Heightened expectations of individual treatment could erode public acceptance of standards of impersonal, objective treatment, in favor of that which takes into account unique individual circumstances. This suggests that process may no longer be accepted as legitimizing outcomes; rather that outcomes, in terms of the end impact on the individual, must be seen as legitimate in themselves.

This also suggests increased acceptance of a subjective component in public interactions and decisions. As electronic media come to dominate public communication, more emotional and subjective content enters the public arena. One result is that the rules of the game are being altered by the movement of subjective and symbolic content into areas previously dominated by the literal. In a print world, literal, precise content is highly valued across a wide range of disciplines and especially in

²⁵ Meyrowitz, *No Sense of Place*, 79.

²⁶ Katsh, *Transformation of Law*, 263.

²⁷ Meyrowitz, *No Sense of Place*, 133.

bureaucracies. A primary criticism of many non-bureaucratic organizations, such as environmental or social groups, is that they are not disciplined or rigorous enough in their work. However, now this objective content may increasingly be seen as only one facet of information, with the subjective/symbolic content also in demand as balance for the literal. For example, ten years ago, a survey by Fortune Magazine showed that chief executive officers in Fortune 500 companies ranked financial acumen, an objective skill, as most important to their position. In a 1996 repeat of the survey, financial acumen was displaced by marketing, a subjective/symbolic skill.²⁸ Thus we see an emphasis on values discussions in organizations and on the need for organizational vision. The shift is from viewing subjective and symbolic content as external to the social situations of the workplace, to seeing them as an intrinsic, normal part of these situations.

Erosion of Hierarchy

Meyrowitz observes that "the reliance of authority on privacy suggests that hierarchies are usually supported by media that foster a clear distinction between leaders' personal behaviors and public actions."²⁹ However, electronic media are exposing the personal behavior of leaders to a degree not possible through print. Further, subordinates have greater access to information, and greater ability to share information horizontally. This removes the link between place or position and access to information. Since hierarchy "depends greatly on restriction of information and on

²⁸ Anne Kingston, "Girding the Corporate Warrior for TV", *The Globe and Mail*, April 19, 1997, C3.

²⁹ Meyrowitz, *No Sense of Place*, 66.

limiting subordinates' access to all but a few on-stage [public] situations" it may "be undermined by new media that expose what were once the private spheres of authorities."³⁰

Similarly, increased accessibility of third-party information, particularly of alternative facts and views to those presented by official channels, could undermine official sources and support a trend of increased challenges to official information. Within days of an airliner crash, one can find detailed information on the Internet on the safety record of the airline and of the particular make of airplane. Why should the public accept the explanations offered by government or the airline when they can look up the information themselves and draw their own conclusions? Respect for authority figures, based on assumptions that those in authority know more or answer to a higher standard of personal behavior, may be undermined.

The low coding characteristic of electronic media means that those with little training can use the media as effectively as those with significant training. A caller to a radio show can publicly stump an expert, or use the Internet to confirm or refute an expert's analysis, such as a medical diagnosis. When translated into a lower skill medium, information loses some of the mystique that helps support specialization and hierarchy.³¹

However, it is not just increased access to information that is undermining traditional structures, but the problem of what Kroker terms "twenty-first century

³⁰ Ibid., 65–66.

³¹ Ibid., 63.

technology and nineteenth century perception".³² The simultaneity of electronic media demands instant responses from those in authority, responses which then are analyzed and criticized in light of other available information. We are demanding the immediate responses we might expect in an oral society, but using the standards of print society to assess those responses. It is this contradiction in expectations created by the overlap of media that is creating perceptions that can undermine authority, not necessarily the specific actions or inaction of those in authority. Thus, electronic media permit the combination of the perception of temporariness with the permanence and precision of print, in an "instant replay" culture. Events must be immediate, but must also be accurate.

As electronic media challenge authority, through availability of contradictory information, upstaging of experts by laypeople, conflicting demands of speed, precision and consistency on complex issues, they are undermining authority based on restriction of information. This could foster decreased respect for authority linked to position, creating, in Savoie's words, a new order that is "much more challenging, less deferential."³³

Change as the Norm

Electronic media are creating an expectation of change, rather than stability, as the norm. The experience of electronic media is a transitory one in itself; content often

³² Kroker, *Technology and the Canadian Mind*, 127.

³³ Donald J. Savoie, "Reforming Civil Service Reforms", *Policy Options* 15, no. 3 (April 1994), 5–6.

exists only while it is being experienced. Further, content in electronic media is ever changing – as often as daily on world wide web sites. One obvious outcome is a move toward acceptance of less permanent structures and relationships. It is increasingly taken for granted that things don't last – people will have a number of different jobs throughout their career, businesses fail, skills become outdated.

The transitory nature of electronic media holds the potential for a number of more subtle effects on our belief systems. The increased pace of electronic media could foster attitudes that permanence and stability, however comforting they may be, hinder progress. Absence of change may be equated with stagnation.

If permanence becomes perceived as a hindrance, then physical location may be seen as increasingly irrelevant. Bricks and mortar represent the permanence and stability valued in a print world. In an electronic world, they may represent an anachronism, not only made irrelevant by the technology, but also perceived as dysfunctional.

Systemic Outlook

Electronic media are creating a unique combination of systemic and segmented viewpoints, that may foster a belief that the whole is greater than the sum of its parts, but that those parts can be severed and recombined endlessly. As argued, electronic media facilitate a systemic viewpoint through linking power, increased accessibility of information, and the ability to integrate previously discrete content such as text, sound and image. This influence can be seen in the emergence of systemic approaches to a number of disciplines, including medicine, with the growth of holistic medicine;

administrative and organizational theory; and science, with emergence of chaos theory. Chaos theory represents a rejection of the trend to reductionism in the sciences, and concentrates on the patterns of the whole, resulting in a new approach to science; one that attempts to integrate uncertainty, unpredictability and the need for adaptation. It is now being applied to a range of disciplines, including administrative theory.

It has also been suggested that this organic outlook, which takes a broader perspective, is one factor in the growing use of mediation services to resolve legal disputes. Designed to find a solution that benefits all parties, these services are finding increasing acceptance with the public just as the strict rules of the legal system are being increasingly criticized by the public. This approach, of finding a solution that fits individual circumstances rather than one that fits the law, is in closer step with the pre-print exercise of justice.³⁴

At the same time, electronic media have extended a segmenting influence through the subdivision of audiences and erosion of the mass, homogenous audience. The property of simultaneity means that the genesis of an event is not as accessible as the event itself. Television newscasts provide a glimpse of the events of the past 24 hours, but allow no time for perspective or contemplation. To know what happened today is sufficient, events leading up to today are not relevant. Electronic media also make it easier to take information out of context. The Internet allows access to sites and information at many points; context and linear sequencing are not important to the use of the material.

³⁴ Katsh, *Transformation of Law*, 87.

These two apparently contradictory forces – systemic and segmenting properties – have a similar impact; the sense that information can be combined and recombined, divorced from its original context, to create new information. The segmenting barriers of print are removed, permitting new combinations and the identification of previously invisible interrelations, but the print-based belief in the existence of facts independent of any particular source is heightened. History and context become less relevant, and creative use of components becomes more important, as do the ramifications of new combinations as they role out through the system. The systemic focus, then, is rooted in the present.

Conclusion

Chapter Four summarized the general characteristics of an institution, according to neoinstitutionalist theory, and argued that any dominant communication media hold the potential to evolve into an institution. Institutions are abstract concepts that create shared, taken-for-granted understandings of reality and expectations about collective activities; that are self-reproducing, relatively permanent and evolutionary.

Innis suggested that new media are the source of change in a culture dominated by one communication bias. Electronic media are fulfilling this role, and in doing so, they are emerging as a new framework institution – one with the potential to supplant print. As such, they hold the potential to foster a profound shift in our understanding of reality and our expectations for our relations with organizations, and the role, position and responsibilities of the individual in society. A few of these shifts have been outlined in this Chapter, as they pertain to organizations.

As with print, when talking about electronic media, we are talking about the cognitive and normative influences, not the specific technologies. It is clear that there is nothing deliberate about the belief shifts, although the implementation of the technology in society and organizations may be deliberate. At the macro level, the development is evolutionary. It is only the permanence and self-reproducing nature of electronic media that have yet to be demonstrated, because of the media's relatively brief existence.

The final Chapter will apply this argument to suggest what new institutionalized elements may arise, from which future organizations could be built.

CHAPTER SIX

Organizations in an Electronic World

*An invasion of armies can be resisted,
but not an idea whose time has come.*

– Victor Hugo

Bureaucracy has become the dominant organizational form in Western industrialized society because it successfully incorporates many of the elements created by the print institution. Without the belief systems and elements of the print world view, bureaucracy may well have been stillborn or have foundered against the rocks of incompatible belief systems.

However, the belief systems underpinning bureaucracy are being transformed by the introduction of a new institution – that of electronic media. As argued in Chapter Five, there are some fundamental differences between the belief systems associated with electronic media and those associated with print.

If a change in framework institutions occurs as dramatically as the shift from print to electronic media suggests, then the institutionalized elements from which organizations are constructed will also change dramatically. Organizations legitimated by the use of print elements will no longer be in step with the environment. The elements that previously fostered the stability and success of an organizational form will no longer do so. Organizations will have to incorporate a very different set of elements to ensure legitimacy; to match the belief systems of the new electronic institution.

Table 4 illustrates the gap between the properties of electronic media and characteristics of bureaucracy.

TABLE 4
Characteristics of Weber's bureaucracy
and properties of electronic media

Bureaucracy Weber's Ideal-Type	Properties of Electronic Media
<ul style="list-style-type: none"> • continuous organization bound by rules • fixed salary, life-long career • acts, decisions and rules recorded in writing • strict discipline and control of officials • efficiency as a goal of an organization • separation of person and office • impersonality in execution of duties • clearly defined hierarchy of offices • clearly defined spheres of competence • employment on the basis of technical qualification, specialized training • separation of administration and ownership of means of production 	<ul style="list-style-type: none"> • transitory/permanent • symbolic • simultaneous • subjective • individualism • inclusiveness/segmentation

Chapter Five identified a number of emerging belief systems that will have an impact on the types of elements generated in the organizational environment. Restated as shifts between print and electronic media institutions, they are:

1. from the organization to the individual as the focus of attention and source of action in society,
2. from stability to change as the desired state,
3. from a sequential to a systemic view, but one where components can be reorganized indefinitely, and
4. from a place-dependent view of interactions, to "placelessness".

This four-point structure is, in some respects, arbitrary, for the purposes of setting a framework for discussion. Each media property can contribute to a variety of belief systems in an interconnected web. There will undoubtedly be many other shifts in belief systems attributable in some measure to electronic media; however, the discussion here is limited to the main ones influencing organizational structure. It must also be noted that there is a certain irony in using a simple, linear, cause and effect argument from the print institution to describe a complex systemic shift driven by the emerging electronic media institution. This is done for the sake of clarity of the argument, although at the risk of over-simplification. It must also be recognized that the belief systems and elements function systemically. No single element accounts for any particular aspect of organizational structure, nor is it the product of any single belief system. That complexity, however, is almost impossible to capture in a relatively short academic work.

Institutionalized Elements

This Chapter discusses the belief systems identified in Chapter Five in terms of the new organizational elements they are likely to foster. The speculative nature of some of the following discussion means that all the points cannot be illustrated. However, concrete examples are provided where possible.

1. The individual as the focus of attention and action in society

Electronic media are fostering a belief in the independence of, and control by, the individual far beyond that encouraged by print. This diffusion of control from the organization to the individual is perhaps the most significant impact of electronic media

for organizational structure. It marks the emergence of individualism as a property influencing organizational structure, no longer constrained to the same extent by other properties of the print institution.

Hage and Powers make a similar point when they argue that organizational structure must change to reflect the emergence of a qualitatively distinct form of society – "a society in which social fabric at the individual level has undergone a fundamental alteration."¹ The alteration reflects a shift between industrial society, with its organizational emphasis on rules that standardize, and post-industrial society, with an emphasis on transforming rules to individualized cases.² This suggests a number of potential changes in institutionalized elements.

Individualization

One is a move away from the standardization of bureaucracy as the norm, to individualization – structures that permit the treatment of individuals as individuals and not members of a distinct group. Organizations would be expected to adapt to individual needs, through modification of rules and procedures, and through making it easy to deal with the organization. Those receiving services would be less willing to accept rules and more demanding of services that reflect their personal needs, such as increased flexibility in receiving products and services. This can include flexible hours, 24-hour access to services or service through a variety of channels. The latter is already

¹ Jerald Hage and Charles H. Powers, *Post-Industrial Lives; Roles and Relationships in the 21st Century* (Newbury Park, Ca.: Sage Publications, 1992), 21.

² *Ibid.*, 69.

present in the Canadian banking system, with services accessible through branches, automated teller machines, telephone, or computer. In the federal government, the Department of Human Resources Development Canada is implementing a new delivery network with client accessibility as a basic principle. The network includes links with non-profit and community organizations and other levels of government, and service via telephone and electronic kiosks.³ In this environment, efficiency may become defined not in terms of compliance with standard procedures, but in accessibility of services, speed and responsiveness to individuals. Indeed, the Public Service 2000 Task Force on Service to the Public cited a results-oriented focus and client service culture among the new management principles of the public service.⁴

Another aspect of the shift away from standardization is the definition of fair treatment. In an electronic world view, fair treatment is no longer equal treatment, but equitable treatment. Already, critics of systemic discrimination have pointed out that applying the same rules to everyone is not the same as treating them equally. The circumstances of various segments of society must be taken into account.

This may continue to expand in the electronic world view, to include the circumstances of individuals, not just those of designated groups in society. Individuals may expect exceptions to be made if a strong enough case can be developed. This

³ Herman Bakvis, "Getting the Giant to Kneel: a New Human Resources Delivery Network for Canada," in *Alternative Service Delivery: Sharing Governance in Canada* (Toronto: KMPG Centre for Government Foundation and The Institute for Public Administration in Canada, 1997), 157.

⁴ *Public Service 2000: The Renewal of the Public Service of Canada* (Minister of Supply and Services Canada, 1990), 46.

strongly suggests a move away from inflexible rules and impersonal treatment as means of ensuring fairness. Indeed, the application of standardized rules, the bedrock of fair, unbiased treatment in bureaucracy, may increasingly be seen as just the opposite.

For example, personnel policies that are tightly controlled by centralized human resources departments, which in a bureaucratic mindset are essential to fairness, could be perceived as unreasonable and discriminatory. Instead, the organizational models could be more generalist policies that serve as guidelines, with authority of interpretation in the hands of immediate supervisors. The bureaucratic focus on rules and procedures may be replaced by a more flexible approach, allowing a greater degree of latitude in decision making at the front line or local level. Inconsistent application of guidelines may be seen as a strength, rather than a weakness, particularly in loosely coupled or highly decentralized organizations. This suggests an organizational focus on outcomes, not processes.

The influences of individualism are not limited to the organization's external environment. Monahan et al suggest that we are seeing the rise of organizational "citizens", who are "bringing to the organization a sovereign capacity to manage their own participation in organizational life."⁵ Associated with this, they have identified a trend toward individuals creating and modifying their jobs within organizations, and a

⁵ Susanne C. Monahan, John W. Meyer, W. Richard Scott, "Employee Training: The Expansion of Organizational Citizenship," in Scott et al, *Institutional Environments*, 257.

shift in the focus of training programs to personal growth and self management.⁶ They identify the start of this latter shift as post World War II, which also parallels the growing dominance of electronic media.

Subjective bases for action

A focus on individualized cases reduces the impersonal basis for action and draws in a more subjective component. Acceptance of diversity, also a factor in individualization, makes it more difficult to find common, objective bases for decisions and actions. That which, in a homogenous society, is perceived as objective can be perceived as biased in a diverse society. Purely objective criteria may be seen as incomplete, lacking in sufficient understanding for the individual. Subjective considerations may be called upon to fill the gap, as an addition to, rather than replacement for, objective criteria. An example is victim impact statements, which have found a limited role in the Canadian criminal court system. This type of input to decision making may migrate into other areas of society, including government and private organizations.

Rather than seeking to eradicate emotion from the workplace, we see a trend in organizations to recognize and manage the emotional states of workers. Examples are the introduction of Employee Assistance Programs to provide counseling services, and recognition of non-psychotic mental conditions by disability insurance plans. While these are commonly justified in terms of economic benefits to the organization, there

⁶ Ibid., 262–268.

must still be a generalized public acceptance of issues such as these as appropriate for action by employers.

Another example is Schon's reflective practitioner, who re-incorporates the intuitive and artistic into professional practice. Schon argues that the professions must recognize the value of intuition and tacit knowledge in their work, particularly in coping with complex problems traditionally left to rational, scientific methods.⁷

Associated with a rejection of the impersonal may be the growing rejection of bureaucratic and legal language. The plain language movement, active in North American business circles for a number of years, promotes less technically precise, but more user-friendly language. Rather than impersonal, passive constructions and specialized terminology, plain language uses common words, active grammatical structures, and liberal use of pronouns. While this promotes understanding, the use of personal pronouns also speaks directly to the individual in a less impersonal tone.

This is consistent with the bias of electronic media to subjective, emotional content. It points to the undermining of the print world view emphasizing objectivity, impersonality and detachment, characteristics which may serve less to legitimize organizations and their actions than to delegitimize them.

If, as Corcoran suggests, public preference shifts to communications conveying symbolic content, then communication and image management functions may become key elements to organizational success. Just as the absence of centralized human resources departments could reduce the legitimacy of a bureaucratic organization, the

⁷ Donald Schon, *The Reflective Practitioner* (New York: Basic Books, 1983).

lack of a function focused on conveying the expected symbolic messages could similarly damage the legitimacy of organizations in the new electronic media society.

2. Change as the desired state

As argued in Chapter Five, the electronic institution is likely to value change over stability. The bureaucratic characteristic of permanence will have less and less relevance in the electronic world. This is not to suggest a chaotic environment of constant change. While the services provided may be permanent, the organizational structures that deliver them may not. Moreover, changes in organizational structure may not be evident to recipients of the products or services.

Temporary organizations

Embracing the belief that change is the norm would increase acceptance of temporary organizational structures as appropriate and efficient. Early evidence of this is emerging in the form of joint ventures, strategic alliances and partnerships, formed to pursue a specific opportunity. Beyond an economic necessity in a newly-wired world, these forms are becoming generally accepted as efficient, effective organizational structures. As institutionalists would argue, these forms may be diffusing throughout the environment by emulation. However, the prerequisite for successful diffusion is a belief system that legitimizes the specific elements of that organizational form; in this case, the electronic media institution.

These temporary organizational structures may continue to evolve to a form where the large organization is actually a relatively small core around which units are

created, expand, contract, or are disbanded, depending on the demands of the organization and its environment.

One such form, that makes strong use of electronic elements, is the organic model described by Bennis. In this model, organizations are temporary systems, organized around a problem to be solved, consisting of group of diverse strangers selected for their professional skills. Bennis argues that "adaptive, temporary systems of diverse specialists, solving problems, linked together by co-ordinating and task-evaluative specialists in organic flexibility, will gradually replace bureaucracy as we know it."⁸

To a print mindset, this is an untenable proposition. However, the structure is not foreign to human organization. Consider the theater; for each production, a complex organization of people is created, each chosen for their specific skill set. This group becomes a cohesive organization for the duration of the project, then disbands and the individuals move on to the next project. In the world of the theater, itself very much a product of oral culture, this is taken for granted. It is only in the world of bureaucracy, a print creation, that this structure is considered inappropriate.

Guidelines and frameworks

The institutionalized belief in constant change may foster a sub-belief that any given decision, any solution, is at best temporary. Situations will change, requiring new solutions. This would place less emphasis on precedence and more on the uniqueness

⁸ Warren Bennis, *Beyond Bureaucracy: Essays on the Development and Evolution of Human Organization* (San Francisco: Jossey-Bass Publishers, 1993), 13–14.

and transitory nature of the situation being confronted. The past may be seen as increasingly less relevant for contemporary situations. With the decline in precedence, written rules would decline in perceived validity. Guidelines may replace hard and fast rules. Rather than prescribing or proscribing actions, these guidelines would act as frameworks within which decisions and actions are taken. They would exert a general cohesive influence on an organization, directing its activities toward a predetermined end but not specifying the means to reach that end. The application of guidelines and specific work processes could differ radically from one segment of an organization to the next. This suggests, again, that outcomes, not processes, would be the focus of attention at the organizational level.

3. A systemic view, where components are reorganized indefinitely

The combination of the systemic viewpoint discussed in Chapter Five and the belief in continuous change could foster organizations in which component parts can be combined and recombined within a larger framework. Not only would temporary organizations be accepted as appropriate, but their internal structures would be more fluid as well. In particular, it would support the concept of an organization as a general framework, within which segments can be created, disbanded or otherwise altered, according to the demands and opportunities of the organizational environment.

A systemic view focuses more on overall outcomes, rather than on localized processes. Within this type of framework, internal restructuring would not necessarily be seen as indicative of organizational problems; but as rational and legitimate in the context of the overall organization.

Fluid internal structures

This suggests that clearly delineated spheres of action would be seen as impediments, rather than aids to efficiency. Rather than being assigned to a department, workers may be assigned to several interdisciplinary work teams. They may be drawn from loosely organized professional pools within the organization, which would provide them with specialized support in their profession. They would spend most of their time, however, on work teams outside the pool. This suggests that boundaries between units would be unstable and permeable. As members of a project team and also of a central pool, individuals would transfer information, perspectives and loyalties between the two.

The structures for this type of organization are emerging today. Organizational Intranets give individuals ready access to information of other units. The perception is much different from that of, for example, receiving a written report. In the latter case, the originating unit develops the content and sends it out, automatically or on request. In the case of an Intranet, the individual, in a sense reaches into the unit, selects and retrieves the required information as needed. Control over when to cross unit boundaries lies with the individual needing the information, not with the unit. Boundaries become perceived as much less significant.

The result is an "organic flexibility", such as that described by Bennis, but one that would not necessarily be apparent to those outside the organization. The public would see the identity of the overall co-ordinating structure, within which units and products may come and go. We may, as a result, see a growth in organizational

branding, as opposed to product branding, where it is the values of the organization that are represented by the corporate brand image, not specific products.⁹ This would have the advantage of allowing sufficient detachment between the image and the actual work performed to give the organization maximum flexibility in adapting to the demands of its environment.

Similarly, mission statements and guiding values, far from being fads, may increasingly be seen as important in providing overall direction to the organization, as the means for achieving organizational ends are increasingly left up to individual units and workers.

The systemic view also permits the erosion of boundaries between the organization and aspects of its immediate environment. Extranets are already allowing clients selective access to organizational Intranets, eroding the boundary between the organization and its clients. For example, client companies can access insurance company databases to update information on their benefit plans, such as employee records. The work is being performed by the client's staff, at the client's office, but it is the insurer's centralized database that is being changed. To a print mindset, with its inherent belief in segmentation and clear-cut boundaries, this type of client access would be unacceptable, if not threatening.

⁹ Richard Branson, "The Elastic Brand", *Report on Business Magazine* (January 1997), 74.

Return of generalists

As the systemic view places greater emphasis on co-ordinating and negotiating functions, we may see the re-emergence of the generalist and recently much-maligned middle manager. This is reinforced by the tendency to egalitarian structures, which encourage lateral rather than vertical interaction.

This is not to suggest that generalists will replace specialists, but rather that we may see the rise of a new type of worker. The increased emphasis on consensus and collaboration among diverse units of a decentralized organization will require a broader perspective. Workers must be able to identify the implications of actions beyond their own areas of specialty; solutions may cross boundaries of specialization. Bureaucratic compartmentalization and emphasis on spheres of competence could increasingly be seen as inhibiting creativity and undermining efficiency. Structures must allow for overlap of duties and responsibilities among individuals and units. Rather than being seen as jacks-of-all-trades, masters-of-none, generalists may be seen as masters in their own right – that of collaboration and consensus.

Thus, we may see the return of the middle manager, but one whose function is not to funnel information up and down the hierarchy, but to co-ordinate and negotiate between work units.

A systemic viewpoint may also be driving the shift in the nature of organizational diversification. Previously, organizations diversified within their industry – vertically by acquiring suppliers or vendors, or horizontally, by acquiring organizations producing related products. In either case, decisions on diversification reflected linear thinking. Increasingly, however, diversification is crossing industries.

Organizations are taking a much broader view of their purpose. Thus, we see the Royal Bank creating a subsidiary to help researchers turn laboratory ideas into commercial products. In addition to financial and business plan support, the subsidiary is to be a clearing house for expertise on prototype development, technology, intellectual and property protection – well beyond the traditional purview of a bank.¹⁰

Banks are also teaming up with software developers to create new distribution channels for financial services products. For example, the Bank of Montreal has formed an alliance with Intuit, Inc. to use their Quicken financial management software to provide financial services to customers via the Internet.¹¹ Competition, then, may increasingly come from disparate sectors, with markets and services that, previously considered unrelated, are now perceived as logical candidates for expansion. Organizational diversification into these areas may be seen as showing foresight, rather than taking unnecessary risks.

The systemic outlook, by encouraging a focus on outcomes, also reinforces other emerging elements, such as the use of guidelines over rules, and the use of facilitative or negotiative models for interactions within organizations and between organizations and the environment. The process, in terms of following established procedures, becomes less important than the overall result, allowing more flexibility in how results are achieved.

¹⁰ Richard Blackwell, "Royal Bank Launches Ideas Incubator", *The Financial Post*, May 31, 1997, 13.

¹¹ Internet, available at www.mbanx.com, accessed July 18, 1997.

4. "Placelessness"

The severing of the psychological link between physical location, social position and access to information has a number of implications for organizational structure.

Egalitarian management

It has been shown that electronic media undermine traditional sources of authority through increased access to information and previously private behavior. This, combined with increased independence of the individual, suggests that rigid bureaucracy and top-down chains of command will be seen as outdated. More egalitarian structures may be constructed out of elements such as teams, with decision making powers diffused to the outer edges of the organization, rather than positions or departments at the center. Hage and Powers' network organization typifies this type of structure, where decision making is no longer part of a hierarchy, but shared among autonomous units.¹²

Demands for individual services and the ability of technology to support decentralized operations are two factors supporting this. However, decentralized decision making may be increasingly seen as a means of making organizations more efficient. Previously centralized, control-oriented functions, such as communications, would see control and authority distributed throughout the organization. With decentralized control, any remaining core functions may instead be more focused on support and facilitation of the needs of various segments of the organization. The

¹² Hage, *Post-Industrial Lives*, 57.

command and control role of centralized departments in bureaucracies becomes more of a co-ordinating, guiding role.

For example, the establishment of an Intranet within an organization requires the co-operation of a range of departments, including communications and information systems, as well as all those contributing information to the Intranet. Whereas with print media, the communication department would control content and distribution of corporate information throughout the organization, under an Intranet, it assumes the role of facilitator, providing guidelines and setting standards. The various departments of the organization assume responsibility for developing and posting their own content. Workers assume responsibility for seeking out the information necessary to their jobs. Responsibility and authority diffuse to the fringes of the organization and the relationship becomes one of mutual support and service, not hierarchical control.

In the case of IBM's Intranet, for example, there is no attempt made to vet information through a central source. Icons indicate the organizational level at which information was created and approved, providing workers with an indication of the reliability of that information.¹³ The role of the centralized communications department is to provide content related to the overall organizational image.

The interactive, non-hierarchical nature of Intranets supports an analogy of an electronic community. Concerns such as abusive treatment of colleagues become more of a community responsibility and less an organizational one. That is, individuals on

¹³ Shel Holtz, "Do Your Intranet Right," *Corporate Communications Conference VI* (Chicago: Lawrence Ragan Communications, Inc., April 23, 1997).

the Intranet assume responsibility for indicating when a colleague has contravened community standards of discourse.¹⁴

The print mindset of push communications, with the organization as controller and the worker as passive recipient, could not tolerate this approach. Not only would the loss of control be perceived as threatening by the organization but workers would also likely resist, considering it the organization's responsibility to deliver the information necessary for them to do their jobs.

Authority vested in the individual

Another potential outcome is the vesting of authority in the individual, rather than the position. In a world where information is restricted, access to information through position in a hierarchy becomes a source of authority. In a world where information is widely available, it is not access but application of information that counts. Application is linked more closely to the individual than to the position. Authority becomes earned, not assigned.

This has implications for the role of specialists. Rather than those with access to restricted information, specialists may instead be those who can interpret and apply that information. This shift in focus may be one factor in the preoccupation with accreditation programs among a growing range of professions. Graphic designers, interior designers and public relations practitioners are among those who have been actively pursuing the implementation of accreditation programs through their professional associations. These programs often require a combination of education and

¹⁴ Ibid.

experience, not necessarily in years but in terms of the accumulation of a work portfolio. They include ongoing requirements that must be met to maintain the accreditation once it has been achieved. It is the ongoing nature of the commitment, and the requirement of experience, that makes this type of accreditation different from, for example, a university degree. It reflects the attitude of continuous change, that skills can fall out of date. It also reflects the attitude that having access to the information sources of a group does not automatically confer professional legitimacy. Where previously, having the education and role within an organization was sufficient professional status, now there must be an indication of individual accomplishment or worth. The status is attached to the individual, not the position.

This suggests the potential for loyalties at the professional level to shift from the organization to the profession. Ongoing employability is not linked to a particular job or employer, but to the ability to maintain good standing with the professional association. It is also a natural outgrowth of an acceptance of temporary organizations and an emphasis on the individual and on egalitarian structures.

Decentralization

Where print facilitated decentralization of physical facilities, it encouraged centralization of control. Electronic media encourage decentralization of control. The physical source of the service may not be relevant, but the location of the decision making may be, if decisions must reflect local norms and beliefs. With a viewpoint born of the simultaneity of the electronic world, the public may have no tolerance for waiting for service or for assembly line service. Organizational structure will have to be

flexible enough, loosely coupled enough, to allow for local decision making and, more importantly, for inconsistencies in service delivery and levels, depending on the locality. This is similar to the pre-print Medieval Europe, where local priests and monks had wide latitude in their religious ceremonies, as long as they remained within broad outlines and did not attract the attention of Rome.¹⁵ Consistency may give way to diversity, reflecting local needs.

Electronic media also facilitate decentralization by eliminating time as a concern. This permits effective co-ordination of efforts, not possible with the time delays inherent in transmitting print messages. With print, co-ordination of large organizations could only be achieved through a highly centralized structure. Telephone, videoconferencing and email permit virtually the same level of co-ordination as if all relevant parties were in the same room.

The separation of activities from place also supports a much more extreme form of decentralization – the virtual organization. Such organizational structures are now being seen in the banking industry in Canada. Vancouver City Savings Credit Union, for example, has launched Citizen's Bank of Canada, a federally-chartered bank that will provide services exclusively through computer, automated teller machines and telephone.¹⁶ It has no formal physical presence in terms of buildings. Customers never deal face-to-face; indeed, if they conduct their business via the computer, they may never even talk with a person. The growth, albeit slow, of this type of structure

¹⁵ Eisenstein, *Agent of Change*, 310–315.

¹⁶ Ann Gibbon, "VanCity's Virtual Bank Off to Quiet Start," *The Globe and Mail*, (January 21, 1997), B1.

indicates the magnitude of the shift in belief systems that is occurring. In the print world, the physical presence of the bank, in bricks and mortar, was a crucial part of the bank's image of stability and permanence. With Citizen's Bank, there is no previous national exposure or branch network to support an image of security with its potential clients, yet customers are dealing with the institution.

The virtual organization also pushes a level of control of its services into the hands of its customers – perhaps the ultimate in decentralization – with customers performing work previously done by the organization, and thus to an extent controlling their own service levels. Its existence depends on the customer accepting what is, in essence, a shift of responsibility from the organization, plus an increased measure of independence in determining service levels.

A decentralized structure also permits organizations to respond to the various audiences that are likely to continue to emerge as the linking power of electronic media fosters group formation. These audiences may themselves have no link to place, and the organization must be prepared to respond wherever the demand arises. The single, monolithic organization presenting a united face to the world may be replaced by a loosely co-ordinated group or network structure with an imprecise, values-based organizational brand that can reflect the image necessary to secure local legitimacy.

This has implications for some of the current core functions of bureaucratic structures. Whereas it was once unusual to outsource core functions such as personnel, a survey conducted in 1997 showed that three-quarters of employers in the United States now outsource at least one human resources function, such as benefit plan administration.¹⁷ With the acceptance of temporary structures and permeable

organizational boundaries, outsourcing key functions becomes acceptable.

Alternatively, personnel functions may be diffused throughout the organization.

Conclusion

Institutionalist authors have identified some of the changes discussed here. Scott et al identify expanded individualism as the source of a number of changes in organizational structure, arguing that as formal organizations

become more structurally complex, they lose a great deal of imperative authority, they take on network (or matrix) forms, and develop "staff" functions and elaborated white-collar and management elements, and they emphasize lateral and coordinator relations. The bureaucratic forms envisioned by the Europeans (e.g. Weber and Fayol) tend to disappear, and the word *bureaucracy* is replaced by the looser term *organization*.¹⁸

They also note that organizations must deal with "rather forward and much differentiated people", and that these people "come equipped with qualities that directly fit into (modified) formal organization".¹⁹ In their argument, individualism is the institution fostering the change, and is defined primarily in terms of individual rights and status. This leads to a very print-oriented view of the individual as "an organizational member, not a private entity,"²⁰ and of the elaboration of staff functions.

¹⁷ "U.S. Sets the Pace in Outsourced HR", *Group Healthcare Management*, 5, no. 3 (May 1997), 9.

¹⁸ Scott et al, "Institutional Environments and Individuality," in *Institutional Environments*, Scott et al, 213.

¹⁹ *Ibid.*, 209.

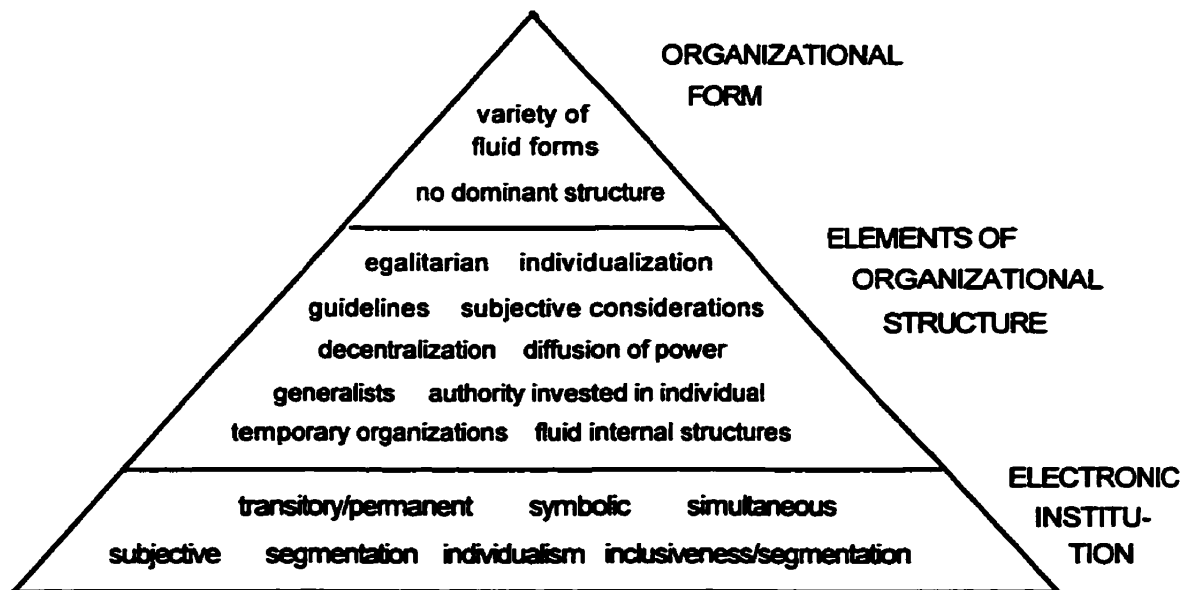
²⁰ Monahan et al, "Employee Training," in Scott, et al, *Institutional Environments*, 269.

Taking electronic media as the institution, with individualism as a property of this institution, places individualism in a broader context that reveals a more comprehensive set of shifts that is underway.

Electronic media are becoming the dominant institution influencing organizational structure. The belief systems associated with electronic media are leading to the emergence of a number of elements from which new, very different organizational structures may be assembled. These new elements are summarized in Figure 2.

FIGURE 2

The Electronic Institution and Organizational Structure



To be perceived as legitimate in this new environment, organizations will have to incorporate at least some of these emerging elements. At the same time, the elements from which bureaucracies are built are slowly losing legitimacy. In particular, hierarchy, standardized rules and procedures, and centralization, may become handicaps to organizational success.

Following the neoinstitutional model, the incorporation of these new elements would bring an organization in line with societal cognitive and normative beliefs and thus increase its chances of success. If successful new organizational types emerge, the theory suggests they will become models for emulation and diffuse throughout the environment.

CHAPTER SEVEN

Conclusion

*... a society with twenty-first century engineering
but nineteenth-century perception*

– Arthur Kroker

The organizational elements discussed here should come as no surprise to any student of organizational theory. They have been widely studied and discussed by a variety of researchers. The purpose of this paper is not to identify startling new structures, but to propose a theory explaining why these particular structures are emerging, and to suggest the general direction of their evolution.

The argument here relies heavily on neoinstitutionalism. In arguing that organizational structure reflects fundamental belief systems in the wider environment, and not the actual work of the organization, neoinstitutionalism provides the bridge between the broad theories of the impact of media, and the specific structures of organizations, allowing us to make the link between belief systems and organizational structures. Neoinstitutionalism gives a primary role to the environment without being purely deterministic, recognizing an element of choice in the selection of organizational elements. It also suggests a means for change through the addition or deletion of organizational elements from the environment.

The argument presented here is much more comprehensive than purely economic or technology-based arguments. While these arguments can offer insights on what is happening, they do not give a satisfactory account of why. Why do particular elements

and particular structures emerge at particular points in history? It is not only that markets or technologies make these types of structures possible, but that the belief systems fostered by the institutions of electronic media make them *acceptable*, or even necessary for success. It also considers an underdeveloped area of neoinstitutionalism; namely the nature of the relationship between the wider societal environment and organizational structure.

Critical to this argument is the treatment of dominant communication media as framework institutions in a society. Identifying media as institutions helps to separate their effects from both the specific technology (such as the radio or telephone) and from their content. Once media are viewed in this light, the link between media, society and organizational structure becomes clear. Equally important is the definition of media in very broad terms, to shift focus away from the technology, and on to the properties inherent in each media group.

It is not the intent here to suggest that any particular element will emerge or any organizational form is inevitable. There are many impediments to the emergence of these new organizational structures. Secondary institutions that emerged from the print, such as legal, regulatory and legislative systems, will be slow to change, although as this paper has attempted to show, change is already being felt throughout society. These secondary institutions, however, are subject to the belief systems of our society, and will evolve as those belief systems fail to support their continuation in their print institutional form.

It is unlikely that the electronic institution will entirely displace print. As Ong noted, media do not cancel each other out, but build on one another. Electronic media themselves are a hybrid. Properties of the print institution will remain, absorbed by the new electronic media, just as properties of oral media lingered long after Gutenberg, and re-emerged with electronic media. The Internet, in particular, continues to make heavy use of the written word to communicate complex information – a situation it is difficult to imagine changing.

Further Research

There are a number of areas of potentially fruitful research spinning off from this line of study. The rise of the communication professionals, the proverbial spin doctor, can be analyzed as an organizational response to the widening gap between organizational structure and public expectations – an attempt to manipulate images rather than change the elements from which they are constructed.

Another is the implications of the emerging organizational structures and changing public beliefs, for regulation and the role of regulatory agencies, and for public accountability of government organizations. The skill requirements for workers in the new electronic world bears elaboration, not in terms of using the technology, but of working in the new organizational structures. What changes might occur in educational systems as a result? What changes might occur in the design of work places, if units and entire organizations become temporary? What are the implications for urban design, for the infrastructures built up to support the permanent structures of industrialized society?

At a very broad level, another area for speculation is the social implications of a society structured like the world of acting, dominated by temporary organizations with transitory relationships. For example, would the provision of pensions and medical care at the social level, as with CPP and medicare, become perceived as more effective than the private system in the United States?

A final area that might be particularly enlightening is the study of changes in power structures in organizations and in society at large, that might accompany these media shifts.

The Human Context

Some institutionalists have resisted being labeled deterministic in their approach to organizational structure. Despite a lingering concern with the pitfalls of determinism, identified at the outset, this argument does show a decidedly deterministic slant. However, it is perhaps a "soft" determinism, in that it is one that recognizes that ultimately media cannot create, but only expose and enhance, human characteristics. Fundamentally, then, the control lies not with media, but within ourselves, in human nature.

The effects of media must be separated from both the technology and the specific content. Innis and McLuhan tried to do this, to get at the unique properties that affect the developmental path a society takes. They, along with Ong and Eisenstein, saw media as enhancing existing human tendencies, rather than creating new ones. Regardless of the medium, its impact was felt because of a human inclination in that direction. The medium heightened or uncovered the predisposition, but did not create it.

Thus print fostered our rational, abstract, linear aspects, while electronic media draw out the subjective and symbolic in us.

This also means that in these shifts, it is our perceptions that are changing, not any type of objective, measurable reality. Our perceptions are being opened to a different range of possibilities. Print spoke to the rational, individualistic aspects of human nature and allowed us to build up boundaries. Electronic media call on our intuitive, creative, emotional side, allowing us to break down some of those boundaries. Although the outward changes may appear obvious and, with the cognitive tools of the print world, disturbing, it is the internal change, in how we think about our world, that will have the lasting impact.

The invisible process of change, and the subversive effects of media are what make it imperative to study this evolution. If we do not understand how media work, then the new institution of electronic media will become our taken-for-granted reality, unquestioned and unchallenged.

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