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Implications of the Media Habit for Electronic Publishing

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INTRODUCTION

The observations and analyses of viewer behavior reported in Section I seriously challenge traditional assumptions about how and why audiences use media. Two of the positions articulated have extensive ramifications. The first position, based upon evidence summarized by Russell Neuman under the label of "media habit," is that audiences are likely to pay, at best, only partial attention to the media and their use of it, and then primarily when such use is tied to daily living patterns. That is, media use is habitual, seldom instrumental and only vaguely conscious. Television use is not only passive, but, for the most part, directed to nothing more significant than pleasantly passing the time.

The other position argues that use of new media such as electronic publishing must be analyzed in both a historical and comparative context by looking at early patterns of media use and at how similar media have been used in the past. This position overlaps with the media habit position when one considers social norms that develop around new media, or locational contexts that foster habitual use of new media. John Carey asserts that we need to analyze the historical patterns of media use to determine social and technological forces that make analogies to new media appropriate or inappropriate. This position leads us to be more thoughtful about automated teller machines, vending machines, telephone answering machines and video cassette rentals as a basis for making predictions about videotex and online software. We should use this wider perspective in studying the social role of mass media in general.

MEDIA MYTHS

W. Russell Neuman makes explicit some of the myths we hold about audience's use of media: that the audience is as interested in the content as are the authors or producers; that the audience is active, conscious and purposeful in its media use; that people want specific information in addition to entertainment; and that the audience is literate enough to choose, use and recall most of that information. The possibility that respondents' perceptions and attitudes about new media are ungrounded in actual applications suggests that new users are not likely to be insightful critics of pilot systems. Nor are they likely to provide accurate assessments to market researchers. The result also could be consumer backlash if actual system performance does not match people's inaccurate expectations.

FACTORS INFLUENCING CONSUMER USE

We continue to be surprised by the sort of findings that Martin Elton refers to. Blind typists preferred audio feedback. People liked the convenience of the telephone to access a computerized information source, even when the quality of the sound channel was poor. For credit card input they favored slower manual telephone dialing over reading numbers to a phone entry clerk. Alcoholics, drug abusers and juvenile delinquents tended to prefer computer-assisted interviewing to discussions with doctors. And, in general, the ostensible needs of individuals did not necessarily drive their choice of medium.

Awareness

While it may be true that most media audiences cannot remember much content, do not use media for specific information searches and substitute attitudes about media for actual experience, researchers may nevertheless underestimate the cultural, social and situational aspects of media use. Reading the newspaper may well be like smoking a pipe. People doing it for a long time in familiar contexts hardly notice except when they run out of tobacco or are told they cannot do it because it bothers others.

The very strategies adopted to learn how to use new media may be habitual as well. Learning how to use television, newspapers, radio or magazines is so subtle, so bound up in the process of growing up, so contingent and non-obvious, that we may never be able to understand the process fully. Learning

how to use videotex is a much larger and more consequential process than can be captured on a single instruction sheet provided with the new terminal. Imagine a marketing attempt to sell newspapers which emphasized their ease of use and described how to access information in them. Without proper contexts and models for early experience, users may never learn how to use a new medium.

Thus, media consumption must be seen in the wider context of daily living and social activity—including mindless, superficial, unconscious and casual use. Media are objects in one's environment, sometimes transparent in purpose, use or recall. That is why lessons from public teletext terminals or arcade video games are instructive. They emphasize how these media are an accessible part of a social context and wider learning environment. The introduction of new media can even lead to the creation of social gathering places, much like the early public telephones in drugstores, or demonstrations of the first typewriters where people stood in line to take home paper slips with their names typed on them.

The home is clearly a major and primary social context for use. Media use is most likely to be habitual there, because there are so many other ongoing habitual behaviors, familiar locations and recurrent situations. The failure of residential users to embrace the instrumental aspects of Prestel led to the shift in its marketing toward business users. Videotex may enjoy greater diffusion in the home when its use complements other activities.

Pre-use attitude and usage projection surveys run the risk of being quite misleading. Attitudes toward actual media use come from experience, reactions to daily situations, unplanned needs and creative ideas. Aggregate data about new media use is also likely to be misleading, insofar as it overlooks audience segmentation.

Modalities

If people do watch television passively, read newspapers habitually and listen to radio unconsciously, is it the content or format that becomes ingrained? Even if media use is conscious and instrumental, what is the driving aspect? Is it safe to assume that content is primary, and that different transmission channels just provide different sets of constraints? In traditional mass media, content is not separated in the mind's or public's eye from format, thus confounding research. The carrier of information is not separated from the information itself, despite formal regulatory policy emphasizing this distinction. Audiences do not access "common carriers" or savor a dollop of "scarce frequency." They talk on the telephone and watch television. But with videotex and teletext, audiences and vendors can mix and match con-

tent and format across technologies and across services within technologies. This separation is crucial to the information society.

Content and Format

Cristine Urban explores this distinction in considerable depth. She argues that format (defined by dimensions of depth, accuracy, speed, transmission quality, cost, credibility, amount of information accessible, additional processing, peripheral transformations, permanence, timeliness, privacy and user control) guides the satisfaction of needs in influencing media choice and use. That is, media habits may be largely format-linked, and only secondarily content-linked. Because content is rather diverse within specific media and can satisfy multiple needs, format becomes the primary discriminatory force. Within certain formats, audiences learn what to expect and how to assess the content.

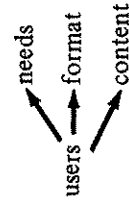
Urban's model can be diagrammed as follows:

users → needs → format → content

where actual content is rarely chosen explicitly. Thus, not only are some media more appropriate to satisfy instrumental needs, but they are simply easier or more familiar for some audiences, and they will continue to be the media of primary use.

A good design and marketing strategy is to fit types of content to the technology that affords the most appropriate format, while expanding the ability of the format and content to satisfy needs. John Carey suggests, for example, that the addition of mirrors to vending machines (for personal grooming) and daily fortunes to scales (as entertainment) increased the likelihood of success for those technologies.

The difficulty of analyzing the new media in this framework is that learned expectations are being upset or challenged by the novelty of both the technologies and the combinations possible. New formats, new kinds of information and new ways of accessing the information all make outcomes ambiguous and media choice uncertain. Thus, the model shifts. All three components may or must be selected independently.



User Expectations

Thus, more than ever, users are likely to fall back on associated expectations, situational cues, interpersonal modeling or conservative attitudes. The strategy is particularly problematic when new media such as videotex require greater user involvement in the choice of medium and content. Habitual behavior is less appropriate.

The access to more kinds of information in larger amounts, with quicker delivery and increased customization, is a boon to social policy makers, advertisers and researchers, but in fact may run directly counter to the expectations and learning strategies of users. Videotex may never be a mass medium precisely because of its flexibility and need for user involvement.

Cost and efficiency considerations also demonstrate a paradox of sorts. Systems charging by connect time or pages accessed will be used less as the efficiency and expertise of use increases. The more efficient a videotex service is in satisfying the instrumental needs of user groups, the less time users will spend on the system! Habitual or pleasure users will not be as constrained in their usage.¹

The Future

As Martin Elton suggests, these concerns are still more complex for "hearing data" or audiotex. Communications and policy researchers have not spent much time on format aspects of audio communications, except in conversational interaction studies and some comparisons of alternate media in decision-making. This is partly because of the ephemeral nature of speech, partly because of the complexity of experimental designs when speech is involved and partly because of communications' preference for print and video images. Both content and format of audio communications need to be brought into considerations of the future of electronic publishing. A particularly salient application would be a system for visually impaired users.

CONCLUSION

Policymakers, vendors, designers, implementors and managers are asking who, how and how much in assessing future uses of the new media. It is too soon to know. Even data on the initial, innovative users is as yet insufficient. Some researchers have tried to extrapolate new media use from patterns of prior use of the traditional mass media. Extrapolation by analogy is fraught

with problems due to the habitual nature of media use, the unreliability of usage recall, myths that everyone but the media audiences hold and our incomplete understanding of prior media use. The decoupling of format and content, introduction of new technologies without socializing contexts and situations, and ongoing competition rather than complementarity among media, suggest increasing variation in viewing tendencies in the future. Thus, while historical descriptions of prior media use and contexts are necessary, they are not sufficient.

NOTES

1. R. Rice and Associates, *The New Media: Communication, Research and Technology* (Beverly Hills, CA: Sage, 1984).