

your interest play a bigger role, and, in fact, use pieces from the cutting-room floor that did not make the cut on popular demand" (1996, p. 153). This widely debated idea of news personalization has left some scholars concerned about its potentially negative impact on civil society. For instance, in a book suggestively titled *republic.com*, Cass Sunstein has written that "a market dominated by countless versions of the 'Daily Me' would make self-government less workable [and] create a high degree of social fragmentation" (2001, p. 192).

Two themes cut across these and related reactions to what was initially called "cyberspace": (1) the predominance of accounts that concentrate on the effects of technological change and pay much less attention to the processes generating them and (2) the pervasiveness of analyses that underscore the revolutionary character of online technologies and the web and overlook the more evolutionary ways in which people often incorporate new artifacts into their lives. Paradoxically in view of its claims to novelty, this focus on revolutionary effects was also common during the early years of other major developments in mass media technology. Early witnesses of movies worried that they were going to irreversibly damage the moral character of the population by fostering both inactive use of time and primitive passions, to the point that authorities occasionally closed down theaters. The popularization of radio was also accompanied by strong claims about its "social destiny" (Douglas 1987, p. 303), including the end of demagoguery, the advent of a more reflexive polity, and the rise of national unity in a country of growing diversity.

As with the case of movies, radio, and other major developments in the history of mass media technology, the focus on revolutionary effects has played a valuable role in raising our sensibility about the potentially radical consequences that online technologies and the web may have in the contemporary media landscape and in contemporary society at large. However, this focus has also been limited and limiting for at least two reasons.

First, it has made less visible that these effects derive not from how the technology's perceived properties fit anticipated social needs, but from the ways actors use it. The difference between these two modes of understanding the effects of technology becomes particularly evident when we look at the unforeseen uses of new artifacts in the history of mass media. For instance, the pioneer companies of recorded sound sold their first units as devices for recording and replaying the outcome of a common domestic activity: people playing musical instruments at home. However, in a short time, people began using phonographs to play music per-

formed elsewhere, thus contributing to the birth of today's recording industry. The firms that did better were those that could shift focus from artifact makers to content producers.

The second limitation of the focus on revolutionary effects is that history also tells us that most of what ends up becoming unique about a new technology usually develops from how actors appropriate it from the starting point of established communication practices. The books published in the first decades after the invention of the printing press drew heavily from the content and the narrative traditions of oral storytelling, as well as from the layout and the production techniques of the hand-copied manuscript. Over time, this evolutionary appropriation of printing technology led to the construction of a communication artifact with the then-unique features of standardization and mass reproducibility—an artifact whose widespread adoption has been associated with such major transformations as the coming of the nation-state and the rise of modern science.

In this book, as an alternative to the dominant concern with technology's revolutionary effects, I look at the practices through which people working in established media appropriate technological developments that open new horizons and challenge their ways of doing things, and the products that result from this process. I pursue this alternative route not because I think the mass media's adoption of the web may not have revolutionary consequences but precisely because the potential for these consequences appears to be so significant that it is necessary to examine the often more evolutionary processes whereby they may or may not arise. I do this through a study of how American dailies have dealt with consumer-oriented¹ electronic publishing since the early 1980s, and I devote special attention to the emergence of online papers on the web in the second half of the 1990s. More precisely, I concentrate on technical, communication, and organizational practices enacted by print newspapers in their attempts to extend their delivery vehicle beyond ink on paper, such as the artifacts used to gather and disseminate information, the editorial conventions followed to tell the news, and the work processes undertaken to get the job done.

Online newspapers are a critical case of how actors situated within established media appropriate novel technical capabilities. Daily newspapers are a lucrative yet steadily declining business. At the end of the twentieth century, they exhibited profit margins higher than most industrial sectors and the largest share of advertising expenditures of all media. However, the indicators of progressive economic decline (among them