4 TRANSITIONING TOWARD AN INTERNET CULTURE: AN INTERORGANIZATIONAL ANALYSIS OF IDENTITY CONSTRUCTION FROM ONLINE SERVICES TO INTRANETS

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Abstract

A great deal of attention has been given to the Internet's capacity to enable new and multiple presentations of the self even to become a site for new identity construction. While we do not deny the potential of Internet technologies to transform contemporary social practices and the way we see the world and ourselves, a closer look at the transition from "older" media and technologies to the Internet gives us a better understanding of how electronic discourses are being shaped. In this paper, we examine a few sites of identity, paying particular attention to the practices and technologies that shape presentations and interpellations of individuals, as well as the construction, deconstruction, and reassemblage of collective identities. Using data from two empirical studies, we examine what has shaped the presentations and interpretations of online identities over the past decade. Interestingly, we see that creative uses of older media, like online profiling, have set the stage for common uses of the Internet; and that constrained uses of Internet technologies, like intranets and extranets, allow

corporations and governments to extend control over selfpresentations and to more effectively interpellate identities.

1 INTRODUCTION

Since the early 1990s, researchers have devoted increasing attention to the Internet as a site for new identity construction. Many early analyses focused on the interactions of individuals within new forums and online communities, like MUDs, MOOs, and IRC chat groups (Bruckman 1993; Stone 1995; Turkle 1995). These studies examined the psychological and social aspects of identity construction and self-presentation, drawing theoretical insights from Erikson (1974), Goffman (1959), and postmodern scholars (Baudrillard 1988; Derrida 1978; Jameson 1984). Authors often emphasized the upbeat, playful side of going online as they presented the opportunities for self-exploration that online technologies could bring, and how the Internet could enable new forms of avowed identities.¹ Those analyses contrast sharply with earlier studies of online technologies, like interconnected databases, in which researchers cautioned that the proliferation of electronic data about individuals could enable increased institutional control of individual identities through profiling and electronic dossiers (Laudon 1986; Rule et al. 1983). Such studies more often reflected social understandings about ascribed identities and institutional interpellations,² rather than avowed identities (Deleuze 1992; Foucault 1977).

As long as we look at these aspects of avowal and ascription from an atomic individual perspective, it remains difficult to reconcile the contrast: how can online identity construction be both emancipatory and constraining? Perspectives that clarify the discursive existence of the self, and enable a situated association of concepts about identity construction, social control, and information and communication technologies (ICTs), like the Internet, can explain how very different uses of new ICTs complement each other and provide opportunities for creative collective identity constructions, while simultaneously enabling new ways to manage knowledge and to interpellate identities.

¹Identity is always multiple (since each person plays a number of roles) and is multiply interpreted (since how one is perceived by others is based on their context as well as one's own presentation of the self). *Avowed* identity is the way a person portrays herself. *Ascribed* identity is what another perceives when presented with representations of that self. The two are rarely the same (Goffman 1959).

²An interpellation is a specific type of identity ascribed to an individual by an institution, like society or history or the state. Interpellations are often narrowly conceived and functionally specific, like consumer profiles, and difficult to resist or disavow.

In this paper, we will examine how online technologies have enabled and constrained identity construction by organizational individuals over the past decade. We will show that, even when identities are constructed in a spirit of freedom and self-exploration, they still can be enlisted into practices of institutional control. We draw on profiling examples from two related studies of ICT use conducted from 1995 through 2001 to examine the ways in which ICTs have become part of identity constructions (Lamb 1999; Lamb et al. forthcoming). These examples depict an organizational individual as both more than and less than an atomic individual. In one sense, this personification entails only the professional self (e.g., the office manager) and not the integrated self (e.g., the mother, gardener, environmentalist, office manager.) In another sense, it entails collective identities (e.g., companies, departments, workgroups, projects) and their carefully orchestrated presentations to selected audiences (e.g., regulators, competitors, clients, potential collaborators). Interactions with these audiences take the form of interorganizational relationships and affiliations with industry or professional associations. The identities of organizational individuals are perhaps more consciously, and so more obviously, constructed and manipulated than those of atomic individuals. What is fascinating are the ways in which these constructions are then deconstructed and reassembled into profiles by other organizational individuals depending on the kind of relationship or affiliation that is being considered.

For the most part, our data show how organizational individuals deconstruct and reassemble the identities of others through profiling. But the data also show that organizational individuals are keenly aware of these practices by others, and that they act to control them through direct avowals and ICT use. We view these controlling activities (some of which could be seen as deliberate lies, propaganda, misinformation, malicious manipulation, or playful fiction) first through a contemporary corporate lens-as common legal organizational practices for presenting, disseminating, collecting, and analyzing information. Many of them are highly prescribed by industry norms and government regulations, in support of which online services like the U.S. SEC's EDGAR serve as interorganizational intermediaries that facilitate the legal rules of free-market competition and information sharing among competitors. In our discussion, we examine these practices as evidence for the intertextuality of online information resources that theorists have described (Derrida 1978), and as examples of the institutional structures of identity that these ICTs enable (Poster 1995.) We analyze how two activities in particular (i.e., intranet directories and the online constructions of expertise associated with knowledge management efforts) come together in current practice, integrating contradictory theoretical expectations about the potential for Internet technologies to empower new identities. Finally, we contemplate how the discursive construction of identities though profiling marks a transition in the movement toward an Internet culture.

2 CONTRADICTORY THEORETICAL EXPECTATIONS

Better explanations of changing social practices related to Internet technologies are those that tie understandings of dominant technologies to historical ways of interrelating, exchanging, and interpreting information. Such approaches focus attention on cultural shifts, and the local dynamics that often accompany the introduction and use of new ICTs (Beck 1992; Giddens 1991; Latour 1993.) Empirical studies guided by these perspectives can analyze change through socially rich descriptions of changing practices, rather than solely through the cumulative compilations of economic and demographic statistics. Over the past 30 years, statistical analyses have guided influential speculations about emergent informational society (Bell 1973; Castells 1996; Porat and Rubin 1977). Many subsequent interpretations have viewed the postindustrial social transitions that have brought us toward an Internet culture largely through the eyes of these forecasters (e.g., Gilder 2000; Toffler 1980). Bell's historical extrapolation of the information age, in particular, greatly influenced interpretations of current events by attributing an imperative force to the economic changes that were rippling through the global community in the 1980s and 1990s. We have argued elsewhere that this totalizing view needs to come to grips with regional community enactment to fully appreciate the nature of the cultural shifts underway both then and now (Poster 1990). But we are also mindful of the rhetorical force of his vision in projecting an information society that can be enacted (Lamb 1996.) Bell himself recognized that adoption of an informational mode of production would be accompanied by profound and conflicting cultural shifts, but his presentation of these contradictions failed to capture popular social imagination, as complex, hazy visions of difficult futures frequently do (Bell 1976). This study clarifies one of those contradictions and its interrelated social enactment: the emancipatory and controlling aspects of identity in the emerging cultural milieu of an information society.

2.1 Emancipation

Much of the hope (and hype) about the emancipatory qualities of Internet technologies involves the informational nature of identity, the malleability of electronic text, and the digital construction of virtual places, in Cyberspace, for presentations of the self (Turkle 1995.) Traditional psychological understandings describe identity formation as a stage of development, occurring during the teenage years, but also reactivated at key life milestones, such as parenthood or decline in old age (Erikson 1974.) More informational understandings of identity derive from Goffman's (1959) analyses of social interactions in face-to-face encounters, and the various situationally motivated presentations of the self (or selves). These presentations and the reciprocal interactions they evoke frame

the relationships that ascribe roles to social actors and provide feedback to their avowals about themselves. Goffman's analyses focus on the information that is conveyed through speech and gestures as well as dress, possessions and associations, in ways that allow application of these analyses to contexts beyond the *real* face-to-face encounter to, for example, the simulated world of *real-time* interaction in text-based Internet chat rooms (Bruckman 1993; Reid 1994; Turkle 1995). The emancipatory nature of Internet-based interactions lies in an individual's ability to try out new personalities, or to present latent talents under the protection of anonymity.

The malleability of electronic text and digital images through Internet technologies enables another degree of freedom in presentations and interpretations of the self. According to Derrida (1978), electronic writing in new media, like hypertext Web pages, constitutes another level of reality-textuality-where readers coconstruct the text with the author, blurring the roles of author and reader, and destabilizing subject identities. For example, when reading a hypertext publication posted on the Internet, a reader may follow many alternative paths or hypertext links through the text, as well as outside the text prepared by the author, by jumping to other sites and texts. In this way, the reader may experience something entirely different from the text that the author originally constructed, something that selectively reinterprets the subject of the discourse and recenters it to the perspective of the reader, effectively dispersing the subject across a range of technologies and media (Poster 1990). Deconstructions of electronic text serve readers in their interpretations of others, and they also serve authors in presentations of their own identity. The Internet and other ICTs allow people to cope with the multiple roles and the multilayered presentations and interpellations of modern identity, as well as the instability of blurring roles and postmodern relationships (Wynn and Katz 1997). It has become common practice to cut and paste from available Internet resources (texts, digital images, audio) to construct a self-presentation (Bly et al. 1998; Walker 2000). As we will discuss, it is even more common to selectively interpret a specialized pastiche of information gleaned from a variety of electronic and print-based media to understand the multifaceted identity of an organizational individual or her company. These deconstructions and reconstructions have become fundamental cultural practices through which we come to know and present ourselves, and through which we come to know and relate to others (Barndt 1994; Wong and Sviokla 1994).

2.2 Control

The technocultural turn is not only emancipatory, however. Critical analysts understand that, in many ways, people are compelled to display, signify, and resignify their relationships to one another by cobbling together meanings presented to them through media and consumer products, rather than being merely freed to do so (Baurillard 1988; de Certeau 1984; Poster 1995). When media-rich technologies offer a preformed and prescribed set of identity building blocks, ascriptions can take shape as avowals. Some contemporary studies of marketing that examine the ways in which new technologies with identity-shaping potential are affecting the internalizations of American youth have cogently analyzed such high-tech identity avowals (Kinder 1991; PBS 2000).

The importance of avowal in identity construction varies, depending on who is doing the construction. Since, over time, self-presentations have ranged from slightly exaggerated representations to over-fanciful self-interpretations to outright lies, controlling authorities have sought to establish objective sources of personal information as a counterbalance, mainly through documentation (Foucault 1980). Control through documentation and information exchange takes many forms within an organization (cf. Beniger 1986; Yates 1989). When the documentation is assembled into concise, standardized formats, controlling authorities can quickly characterize an individual with respect to certain propensities, such as credit-worthiness or criminal tendencies.

Over the past 40 years, electronic databases have enhanced these institutional interpellations and extended the controlling reach of authorities that employ them (Poster 1990, 1995). Researchers have shown that online documentation can be inaccurate and very difficult to correct (Laudon 1986; Rule et al. 1983). Nevertheless, ICT data sources enable better data management, encouraging governing bodies to require greater disclosure in hopes of achieving greater social control by invoking more monitoring and self-monitoring behaviors (Poster 1990).

While online database representations may not be more truthful, ICTenabled profiling practices have certainly become more pervasive, and more taken for granted. Deleuze (1992) has characterized this *cultural* change as a shift away from Foucault's disciplinary societies, and toward "societies of control," where control takes shape through the normalization of identities, or of *dividuals*. ICTs that can rapidly compute demographic statistics, allow for *continual* identification rather than monolithic identity construction (Baudrillard 1988; Foucault 1977). As a mechanism for continual identification, online databases have changed institutional practices, extending documentary activities, proliferating docucentric forms and increasing the volume and frequency of documentation. This volume of information demands statistical approaches, defines the possibilities for multiplicity, and privileges a global marketplace (Harvey 1990). As new media, the Internet and the Web have further increased the practicality of multiple identity constructions (Poster 1995).

3 PROFILING AND COLLECTIVE IDENTITIES

The emancipatory and controlling aspects of identity converge around the practice of *profiling*.³ Electronic text is malleable in a number of different ways, and to a number of different ends-but particularly to profiling. Profiling essentially involves reconstructing an identity around a specific ascription or interpellation through the manipulation of electronic text and other media. By compiling selections from the electronic text of self-presentations, along with images, statistical data and excerpts from print media, profiles are constructed and used as a basis for relationship building among organizational individuals and their firms. A profile, therefore, is a specific kind of identity ascription that includes a particularized interpretation, and is used to predict future behavior about specific upcoming events. It has a shelf life, and needs continual updating, as later data examples will show. Documentation, particularly online database documentation, is an important source of materiel for profile construction, in the sense that these constitute a legitimate record of actions by the organization, group or individual being profiled, and can be used to assert justifiable attributions about character traits and competencies. (See the footnotes in section 7 for links to sample profiles.)

In this information age, people are encouraged to construct online identities, and institutions are expected to perform more interpellations using online sources. Professional identities are one kind of personal identity that organizational individuals construct. Sociologists like Whyte (1956) have described the ways in which people identify themselves with the kind of work they do and the organization where they work. His portrayal of the "organization man" shows that the workplace strongly influences our identities and self-presentations. Our educational background and membership in professional associations also shapes our sense of who we are, how we should conduct our professional activities, and how others should regard us. Although doctors, lawyers, and scientists have held special titles and degrees for many centuries, the rise of professionalism in modern society has increased and standardized the ways in which people identify themselves and signal their occupational *expertise* (e.g., the MBA degree for managers, the CRS certification for realtors) (Larson 1977). As we shall see, *experts* are a common profiling construction.

³Profiling is sometimes referred to as *competitive intelligence gathering* or *corporate intelligence*. Profiling, as observed in these studies, differs from documenting. Documentation involves the detailed recording of activities, such as the steps followed in a clinical trial phase. Documentation is used for legitimization of activities, whereas profiling is used to characterize expertise and to make predictions about future behaviors.

Organizational individuals also shape *collective* identities through their communities of practice and the projects on which they work, and they characterize themselves through the aggregate successes or failures of the project team (Lamb and Davidson 2002). Castells (1997) describes project identities as an important social transformation in the information age, but the ability to develop these collective identities on the Internet is fairly new. In contrast, collective project identities, *as profiles*, have been constructed from electronic information on behalf of corporations, almost since online databases began. Through such continual construction activities, collective identities also take shape as organizational profiles, department profiles, group profiles, etc.

Over the past 30 years, profiling activities have developed into a widespread set of corporate *cultural* practices for collective identity construction that use an array of information resources including print and personal communication, but that have been greatly facilitated by the existence of online databases. In the next sections, we describe two studies that examine the use of online information services and intranets in organizational profiling practices. Our examples describe the situated actions of collective identity construction, and focus attention on the profiles of *collective identities* and *experts*. This careful look at current profiling practices can help us understand the shape and shaping of collective identities, and should provide a better sense of how Internet-related cultural transitions involve an interplay between the emancipatory and controlling capacities of the Internet.

4 RESEARCH DESIGN AND METHODS

The organizational studies that furnish data examples for our current analysis were not undertaken to primarily explore the ways in which identity shaping occurs through the presentation and use of online information and related ICTs. Rather, this finding emerged as a dominant theme in the first study, and has emerged again in interesting ways as important phenomena in a related second study. As a result, these studies present a unique approach to researching online identity construction and institutional interpellation. They go beyond the individual focus of expert profiles to examine potential partner sketches and complex constructions that profile organizational capabilities and propensities. As examples in the next two sections will show, these rich collective constructions are a pastiche of social signals, ornamented with institutional credentials, shifting the site of identity from the individual to the aggregate.

The first study (October 1995 to March 1997), examined the use of online services by 26 California firms in three industries: biotechnology/pharmaceuticals, law, and real estate. The firms were all located within two areas of Cali-

fornia (Orange County and the San Francisco Bay Area) that each support an active legal practice, a strong real estate market, and a viable biotech/pharmaceutical industry. This cross-sectional study included firms that were nonusers as well as regular users of online resources, late as well as early adopters, large firms, small firms, and poorly financed as well as richly capitalized organizations.

Data was gathered primarily through semi-structured, on-site interviews. Questions to informants focused on their firm's use of online resources and print-based media, as well as their own personal contacts. During these interviews, people consistently mentioned their firms' interactions with outside organizations when they talked about using information, and they often linked changes in their data gathering practices with changes in key interorganizational relationships. Thus, while collecting data about information gathering practices at the individual level, attention was focused on the interfirm associations that influence the use of online services.⁴

Findings from this study indicated that corporate online use is shaped by five influences that derive largely from the interorganizational relationships of the firm. The most important of these, from the perspective of this paper, is *the demonstration of competence and superior service to clients, as illustrated by the packaging of information and the profiling of clients, experts, competitors, and markets in all three industries.*

Further analysis suggested that technical and institutional pressures at the industry level could affect the intensity of all five influences within each firm, shaping key practices such as profiling and information packaging. Therefore, a second study was subsequently designed to systematically investigate these influences to see if they also shape the use of new ICTs, like Internet technologies, and to determine how strongly these largely external influences might shape the use of "inside-the-firm" online technologies, like intranets. This second study is ongoing. To date, over 250 Midwest U.S. companies in five industries (manufacturing, law, health care, real estate, and restaurants)⁵ have been queried about their intranet development and use, and over 50 organizations have been visited to further examine their intranets.⁶ In-depth onsite case studies have been conducted at a Fortune 500 manufacturing firm, a prominent international law firm, a large health care services provider, and a

⁴For a detailed explanation of the research methodology, see Lamb et al. (forth-coming).

⁵The industries under study span the range of industry environments dimensioned by Scott (1987).

⁶See Lamb (1999) for an extended description of the study methodology and research goals.

commercial real estate firm. In each industry, intranet adoption, development, and use data are collected through interviews, and through direct examination of intranets and intranet logs, development guidelines, intranet component samples, and related documentation. These diverse data sets are analyzed using qualitative methods for thematic coding and data reduction for cross-case comparison (Lofland and Lofland 1995; Miles and Huberman 1994; Strauss and Corbin 1990). The analysis is guided by theoretical insights about informational environments derived from the first study (Lamb et al. forthcoming), and by a constructivist view of ICT use by social actors in organizational contexts (Bijker 1995; Latour 1987). One goal of this second study is to identify emerging trends related to intranet adoption and development that are evident in different contextual settings and to assess how trends may be evolving across contexts and over time. As data examples will show, profiling trends have easily migrated to organizational intranets—becoming, in some firms, the dominant intranet use.

5 PROFILING WITH ONLINE SERVICES

Informants in all industries of the first study reported collecting online data to characterize the people and organizations with which their firm forms relationships. Law firm members gather data to construct profiles when they need to find experts for legal or technical consultation, when they need to retain expert witnesses for upcoming litigation, or when looking for potential clients or evaluating existing ones. They profile the judges who preside within the courts where they plead their cases.

5.1 Profiling Institutional Individuals and Experts

Although some judicial profiles are published online, and widely consulted, they may not contain information about a judge that could help an attorney make a good case presentation in the judge's court. One firm in the study has compiled a database of judicial profiles extracted from online databases and annotated with firm experience in the judges' courtrooms to provide the inside scoop to all attorneys in the firm. These institution-specific interpellations are archived for future reference and continued annotation. The firm has compiled similar archives, along with data gathered from external databases and publications, to inform attorneys about expert witnesses that they or the opposing side could call. When, during a trial, the names of the adversary's expert witnesses are revealed, a law firm with online database access can quickly profile those witnesses and provide that information to its attorneys on the case, just in time, as this librarian relates. I actually did a really interesting case with one of those, where the case was ongoing in a different part of the state. And I went every end of the day—luckily court tends to wind up about 4 or 4:30 so [the legal team] could still get hold of me—and they'd tell me who the defense was going to call the next day. And I would work that evening to pull up information about them, and fax it to our attorney so that when they went into court the next morning, they were prepared to talk to this person.

Law firms also monitor their clients' competition by comparing each client's patented technologies and scientist profiles with those of other companies in the client's industry. Some of this profiling is part of litigation, some is part of routine filings, and some is an analytical service that they provide to their clients.

In the biotech industry, companies reported performing some of these types of data gathering themselves, such as profiling competitors patents, or gauging their own competitive strength in the industry. But biotech firm informants also construct profiles when they need to find experts in a new medical area, when fulfilling U.S. Food and Drug Administration (FDA) mandates to document the competencies of physicians in their clinical trials, and when investigating potential partner organizations. Before a new drug application (NDA) is submitted to the FDA, for example, the company will have to compile enough information about the physicians who will take part in the clinical trials to assure reviewers that the data resulting from the trials will be reliable. The resulting profile will include educational background information, research journal articles, certifications, and any other evidence of area expertise or general physician competency; and it will mediate the company's working relationship with the physician.

5.2 Profiling Potential Partners and Competitors

When a biotech firm considers forming a cooperative interorganizational relationship with another company, a similar process is initiated to compile a profile of that potential partner by searching through available literature resources. Biotech companies use some of these same profiling techniques to track their competitors. But they also watch domestic and international patent filings for clues about competitor activities, as this informant describes.

> One of the things that we do is monitor patent literature, which is really a basic view of the competitor...we monitor the competitors. "Is this patent going to infringe one of ours?" So they'd want to know—find everything you can published before that date about it...for that you'd look in mostly online databases.

The resultant company profiles, when compared to the physician's profile will contain different elements, like a product history versus a clinical history, but both serve to identify the competencies and characteristics relevant to the biotech company's needs for each type of relationship.

5.3 Profiling Markets

Biotech firm members also gauge their own company's strength in new markets by comparing its technologies to those of its competitors as reported in the business literature and in market research reports. The biotech/pharmaceutical industry is very competitive. One market researcher at a medical device manufacturing firm described in detail how she evaluates a new market. Her resulting market profile is essentially a set of competitor profiles, composed from information gathered through multiple technologies.

The first thing that I would do is I would identify, one: the current products that are out there, and who is selling them, and I would get information on what these products are and what the market is for these products....We'd obviously have to take a look at what the revenues are from these other companies for as far as what the total size of the market is. How many units they're selling, where they're selling these to, what markets are they selling them into, and how much are they selling these for....You also have to look at who the companies are that are in there. Are they just a bunch of little companies that you think you could take market share away from?....And then we'd make a determination whether or not we even wanted to pursue this further.

Law firm members also stated that they compile industry profiles as a service to their clients. A law firm specializing in securities might gather data of this nature for one of two reasons. It might be assisting the client in making an initial public offering (IPO), in which case it would want to present the client's data in the best light possible. Or it might be defending a client against securities litigation, in which case it would want to know about all of the negative information that might come out.

Researchers construct market and industry profiles, like the ones described above, not through direct contact with competitors or customers, but primarily by correlating data from a number of information resources, many of which are online.

58

5.4 Changing Relationships

Several of the law firms, who profile judges and experts, also profile existing and potential clients. They may request a financial report on the client, or they may use other, more discreet resources, to construct a financial profile, or to get an idea of what to charge a client for retained services. There are more direct ways to gather this sort of information, like running a Dun & Bradstreet query. But Dun & Bradstreet reports all such inquiries to the firm inquired upon, and often a lawyer will not want the other party to know that someone is looking into their records. Law firm members also indicated that, more and more frequently, they gather data about the clients of other law firms. As the legal industry has become more and more competitive over the last 20 years, firms also have done more research of this nature to keep their own clients.

5.5 Constructing Ourselves

In the real estate industry, profiles are part of the core product that brokerages offer to their clients. Researchers, brokers, and realtors gather data about properties and markets, distill these into analytical profiles, and present them to potential investors. These profiles, and the data gathering practices that produce them, are vital practices of the firm. When presenting a commercial or residential property to an investment client, a broker will use standardized evaluations to profile the property against competing properties and other competing investment opportunities. Essentially, real estate industry knowledge is a vast compendium of profiles. Realtors and brokers profile everything properties, markets, their clients, even themselves—as this brokerage does.

> [We have] done a lot of research on this just by looking at our own [databases]....[We are] constantly looking. At our corporate office, they know every single deal that has been done by every office in the country. They're constantly combing through that data to see what can they find, and to learn about who is our target: know what markets you really excel in and know what markets you're wasting your time and your effort and your money in going after. Because there are a lot of different segments to the real estate markets, and some of them [we are] set up to perform really well in, and some we aren't. We keep stubbing our toe.

Knowing who you are and what you're good at, as a firm, can help to conserve resources, and to promote yourself and your analytical savvy to potential clients. Being able to go online to do it is also seen as important. Both brokerages and law firms mention in their promotional literature their ability to quickly access online data resources to serve the analytical profiling needs of their clients.

5.6 Drifting Toward the Internet

Throughout the online study, informants discussed their profiling activities as if these were common practices in their industries. When discussing their own marketing and promotion efforts, and other kinds of public information disclosure, they mentioned packaging the information and crafting the message with an awareness that it would be selectively examined and particularistically interpreted by profilers like themselves. As online database providers and real estate multiple listings services migrated their databases to the Web in the 1990s, profiling practices migrated too. Firms now commonly mix Web page excerpts with fee-for-service online database information to construct company profiles. They have also learned to be cautious about how their Internet browsing activities are construed. For example, one firm member mentioned that his researchers purposefully refrain from visiting a firm's site before a merger announcement so as not to tip off Web site log watchers. But Internet and Web-based technologies offer some new profiling possibilities, and firms have begun to explore these inside the firm as well as in public Internet forums.

6 INTRANET/EXTRANET PROFILING

The second study showed that, just as many of the online database services migrated to the Web, many proprietary databases of judges, experts, properties, markets, and competitor profiles have migrated to corporate intranets. Other identity-shaping practices, like company newsletters, have also migrated to corporate intranets.

6.1 Building a Collective Self

Internal organizational communications groups, in particular, have found intranets to be a very useful technology for building corporate identity among the firm's employees. At a 100-year-old manufacturing firm that had been growing rapidly through merger and acquisition, the intranet was seen as a means to convey a strong message that "We are one company!"—to loosen allegiances to locations and units that once functioned as separate companies, and to build identity around the corporate goals and symbols.

One division of the company had constructed an intranet newsletter and forum for company news and "interactive" discussions with the President about employee concerns. The forum was promoted as a means of frankly communicating with upper management. Employees sent e-mails to a forum address. These were then read by a team that included the President and selected for inclusion in the online newsletter. Responses were carefully worded by the team to keep an upbeat tone, to build a sense of community, and to reshape internal perceptions of the company image. This highly curated forum was seen by the communications director as a model for interactive communications throughout the company:

> We're looking much more closely at the electronic presentations. We're trying to become much more global in our outlook....I think one of the best approaches to communications in the company is the [online newsletter]...it's interactive, it's quick, it's informal, and I think that...it's a model.

While much of the use of external online databases was concerned with who *they* are and what *they* know, as this example begins to show, use of inside-the-firm technologies, like intranets, is strongly focused on who *we* are and what *we* know. That focus is expressed in terms of what the firm can control: technology, process, expertise.

6.2 Communicating Organizational Techno-Savvy

When law firms are trying to attract and maintain high-tech clients, they may feel compelled to demonstrate technological competencies that the client expects. In recent years, one way to build a techno-savvy image has been to build an extranet that can be visibly linked to the corporate Web site and accessed restrictively by clients and firm attorneys. Although IT groups might wince at the prospect, building an extranet that will serve primarily as a marketing device is not uncommon. An immigration attorney at one prominent international law firm explains how his firm members use their extranet:

We've kind of used it as a marketing tool. Right now we're pitching for a new corporate client—a big corporate client and they're an IT company—[name omitted.]. A lot of these IT companies employ Web site developers, and they know how easy it is to put together something like this. And, you know, they're the type of company who would say, "Well, it makes perfect sense [to build an extranet]. It's so easy to do." And we say, "Well yeah, I mean, maybe to you it is, but it's [difficult to us]." So, we put together a sample extranet site, just to show. And, so we can demonstrate to people within our [immigration practice] group how it's used.

Another attorney in the firm explained why this fully-functional extranet is unlikely to be used "as advertised" throughout the firm until security concerns are met.

> Well, you tend not to exchange e-mails with London counsel, because they don't view it as secure enough for client matters. I had actually proposed to [an intranet director] that we build out an extranet and have it secured with encrypted transmissions, and [she] was all hot to trot for this. But the European attorneys thought this was bizarre, in fact, reckless—that it would obviously cost a mint and would probably not be secure, and the other side would break in and find everything out. And so that was deep sixed very quickly. The client has spent probably twice as much money shipping documents across the Atlantic, and she has paid tremendous sums of money in just all of these faxes.

Now that the extranet in question actually exists at the firm, the economic objections cited above may be easily overcome. But since the purpose of the extranet is also solidly focused on projecting a techno-savvy image, another criteria for success will be to show that one new client was convinced to hire the firm, in part, by an extranet demonstration.

6.3 Demonstrating Collective Self-Mastery

The processes of law firms are not generally open for inspection, but manufacturing firms are frequently called upon to show that they are in control of their manufacturing processes by regulators and customers. Intranets are becoming integral components of quality control systems, which require accessible, up-to-date process documentation, such as those that are developed to obtain ISO-9000 certification. A quality control manager at an aerospace manufacturing plant describes how his intranet is used, and how it helps assure auditors that plant processes are controlled:

> The [intranet-based quality control system] really gives us what we need [for ISO 9001 certification.] In fact, the customers that have come have been fairly impressed with using that method of document control. In their travels they haven't seen

Lamb & Poster/Transitioning Toward an Internet Culture

that many companies that have put all this stuff online....[The intranet documentation] tells [manufacturing employees] how to do a certain process, and then after they learn it, they may not need to refer back to it. So it usually isn't something that they will look at every time they do what is described in there....As time goes on it becomes more reference material.... And then having the approvals there...I mean, [the approval history] doesn't help the employees at all because only approved versions get online where they can access it, but where it helps is when customers or auditors come in and say, "Well show me the approval," and its right there.

From this example, we see that the intranet documents describe not only the currently correct manufacturing processes, but also how those processes have developed over time and by whose authority, providing further assurance to auditors that the plant processes are properly controlled.

6.4 Knowing Organizational Dividuals

Firms construct self-images, and profile themselves to outsiders using intranet and extranets, as noted above, to control corporate or functional unit identities. Some have also begun to construct complex profiles of organizational individuals that demonstrate control over organizational expertise, as well. One primary use of online services was to find experts outside the firm; a growing use of intranets is to find experts inside the firm. In most organizations, this takes the form of an enterprise-wide directory that lists names, titles, department locations, phone numbers, and e-mail accounts. Some online directories also include photos and brief biographies that profile employees in a professional way. A few firms have taken the directory a step further, linking personnel data with project data and other documents to create enhanced, searchable profiles of expertise within the firm. At one innovative organization, expert profile construction has started to bump up against the ethical limits of personal privacy by monitoring Internet page viewing, as this IT director explains:

There are now emerging a bunch of tools to help automatically find experts. What makes [our] work unique is we actually automatically construct competency profiles from what people have produced. So what we can do is, since we produce all of these [corporate publications and newsletters], we can actually build models of little things like occurrences of names and topics of competencies of individuals. Obviously, if they have a resume online you, can exploit the fact that they have a resume. You could even potentially look at logs of their usage and determine by the account that they look at what their expertise is. That is if a person spends a lot of time looking at Web sites having to do with, you know, data mining or, pick your favorite technology—Microsoft Enterprise-wide Servers they might be a good candidate to talk to, if I'm interested in Microsoft Enterprise-wide Servers.

The system described in this example goes beyond simple directory profiles, cutting and pasting together a pastiche of local expertise—extracting organizational knowledge from various databases, associating it with firm members, and justifying its expert ranking choices to viewers. Firm personnel confirm that these databases and applications are widely used and relied upon throughout the organization for knowledge management. Interestingly, other data from this study show that even the simpler, relatively unembellished directories that firms construct are heavily used. In fact, directories have been dubbed the "killer app" of the intranet (Chee 1998).

7 DISCOURSE

The data examples in the previous sections show that identity construction is just as much a part of using intranets and extranets as it has been of using online databases. With online services, organization members constructed expert profiles, and they also compiled collective profiles of markets by aggregating profiles of organizational partners, competitors, and their own firms. Some collective identity constructions, like partner profiles, blur the boundaries between biological individuals and their organizations. Others, like expert profiles, blur the boundaries between people and the technologies they employ. Each of these interpellations, individual and collective, is shaped for a particular affiliation or interorganizational relationship. As relationships have changed, profiling activities have often increased. In law, for example, where relationships based on loyalty and trust are being replaced by those based on efficiency and service, clients and potential clients are now commonly profiled. These practices provide evidence for the intertextuality of online information resources that Derrida (1978) has theorized, but they also show that intertextuality is not simply emancipatory—it can also be turned to controlling objectives through institutional interpellations, like individual and collective profiles (Poster 1990, 1995). Insights from such analyses, when amply exemplified with everyday practices of ICT use, help to clarify one of the cultural contradictions forecasted by Bell (1976): the emancipatory and controlling aspects of identity in an information society.

7.1 Profile Contents

Profiling with online services has tended to focus on external entities, potential partner firms or experts who are not firm employees (and this also seems to hold for Internet Web sites and online services that have migrated to the Web), to construct a picture of who *they* are and what *they* know. Profiling with intranets and extranets, however, shifts the primary focus to an internal shaping of corporate identities and images of processing provess, to construct a picture of who *we* are and what *we* know. These new sites of identity construction expand the discourse about organizational control over technology, process, and knowledge.

The profiles that firm members construct often begin with publicly available information, and are then embellished with proprietary knowledge and analyses from paid professional service providers, like market analysts. A judge's profile might start with something from an Internet Web site,⁷ and some comments from firm attorneys who have appeared before the judge. It might later be linked to case histories in the firm's database, and citations to cases in LEXIS that the judge has presided over. Similarly, a partner profile or an expert profile might start with information from "free" resources,⁸ and then grow to include data from paid analysts or online database providers, like DIALOG or FindSVP, as well as information that firm members may have gathered through organizational interactions. The resulting pastiche conveys a sense of traditional traits such as competency, reliability, and honesty, and it also conveys a sense of some new traits that are increasingly linked to success in a globalizing networked society, like technology savvy and process adaptability (Castells 1996). Understanding profiling, thus provides a way of understanding how technologies like online resources become part of identification, particularly when use enhances perceptions of expertise about the user. Manipulation of the online compendium can signify that a valuable expertise is possessed by the manipulator. The masterful re-presentation of knowledge selectively compiled from a series of resources is often perceived by others to indicate the degree of control an individual, group, or organization has over an important subset of its environment. When presenting themselves to clients and regulators, firms try to demonstrate these traits, as evidenced by their extranets or quality control documentation intranets. For internal audiences, the identity construction focus is on self-awareness-for

⁷See, for example, the judges' profiles on the site http://www.flabar.org/DIVPGM/ PU/FCPCSurvey.nsf.

⁸See, for example, the company profiles at http://profiles.wisi.com/profiles/scripts/ corpinfo.asp?cusip=594918104 and the physicians' profiles at http://hsc.virginia.edu/ people/dop/dopDetail.cfm?drid=15.

instance, knowing what you're good at, knowing where the firm stands in relation to its competitors, and knowing what kind of expertise can be attributed to firm employees.⁹

7.2 Collective and Dividual Identity Constructions

The shape that a profile takes and the subject it describes is governed by the relationship that needs to be established. When a biotech firm is working with an FDA regulator, for example, it seeks to present what might be termed a legitimacy profile: a compilation of documents and analyses that build confidence in the firm's competencies and self-mastery through a series of aggregate profiles, including process control profiles of manufacturing practices and clinical trials. A great deal of online resource usage revolves around finding expertise and either colocating it with an organizational individual or distilling it into a controlled presentation of organizational practice. The latter interpellation process shifts some traditionally individual identity traits into the organization's profile, deconstructing the individual in favor of the organization. Within sophisticated intranet directories, the deconstruction process shifts gears and runs in reverse. By mining databases for evidence of project-based expertise and knowledge building activities, and associating these with organizational individuals, the intranet-based system constructs what Deleuze might call "dividual experts"-informational others that may or may not correspond to actual embodied expertise.

This practice is particularly interesting because it indicates that ways of knowing others and the self have come to *routinely* include profiling practices, at least within organizational settings. This seemingly natural expansion of the practice from external to internal applications suggests that a cultural shift is underway. Knowing ourselves and others through the profiles we construct may seem to contradict Goffman's highly interactive, face-to-face understandings of identity construction. But a focus on Goffman's insights about reciprocity casts profiling in a different light, and suggests an interesting way to further investigate the cultural aspects of ICT use. By constructing online presentations of ourselves, some researchers have suggested that we have eliminated the need for reciprocal interaction (Erickson 1996). This may be true in the traditional sense: one can download texts from a Web site without ever contacting the author or acknowledging her directly. But the examples of profiling presented and discussed above suggest that there has been a type of asynchronous reciprocal interaction itself.

⁹See, for example, the employee profiler described in the company's newsletter at http://www.mitre.org/pubs/edge/june 98/third.htm.

In other words, online identity construction and profiling are reciprocal *virtual* interactions. That organizations have begun to merge intranet directories and the online constructions of expertise associated with knowledge management efforts suggests that within an Internet culture, social interaction and identity will entail profiling.

8 CULTURAL TRANSITION

In this paper we have used findings from two related studies about the use of online technologies to suggest how a transition toward what might be termed an Internet culture has been taking shape over the last few decades. This shift has occurred through a series of smaller transitions. The widespread adoption of online profiling practices was a critical step. The migration of online resources to the Internet and the expansion of profiling practices and organizational control strategies using intranets and extranets mark another important movement in this transition.

The manifestations of cultural shift that we have observed by focusing our attention on profiling practices are just a small part of the social changes that have attended new technology introductions in recent years, but they provide interesting insights that give some additional credence to critical perspectives on social development and possible future scenarios for post-industrial society. In particular, we see that Internet technologies do indeed provide new places to form identity and to try out new persona; that more online resources and mandated disclosures provide information that can empower individuals to monitor organizational activities; and that the malleability of online text and graphical representations permits creative expression of collective as well as individual identity. We also see that cyberspace provides a new place for powered relationships to form; that more information and faster information technologies encourage the use of agents and filters to mediate interactions and discourage the formation of traditional relationships; and that malleable texts can be reconstructed to enhance the perception of organizational control.

So what does it mean to be part of a transition toward an Internet culture? For organizational individuals, it means that personal identities are superpersonal. Skills of the individual are appropriated and represented as collective profiles of "plant" processing capabilities in process control intranets, and expertise is gleaned from organizational practices and projects and reassociated with firm members in "smart" intranet directories. It also means that relationships are changing. In some instances, complex aggregate identities are constructed that support interorganizational interactions. In other instances, dynamic documentation (i.e., continual identification) is substituted for nuanced interpersonal interaction. Above all, interorganizational relationship building depends on profiling via online resources, and these technologies are bound up in the identities they help to construct.

Ironically, the more connected people are in the network society, the fewer traditional relationships they seem to cultivate—more connections but less connecting? Deleuze (1992) has observed that in institutionalized settings, or societies of control, digital documents replace intermediaries. Within the firm, we see that dynamic documents, like expert finders, can potentially substitute for the network of organizational connections that one would need to find an expert within the firm. In contrast, organizational profiling activities are intently focused on building interorganizational relationships. And in the intranet study, some informants mentioned that the "next step" beyond systems like the expert finder would be to demonstrate that their firm can access expertise and exercise process control within this network (e.g., linking internal and external experts; and linking internal and external processes in controlled ways).

Some look at these fragmented and re-aggregated, technologically enhanced identifications as evidence of the emancipatory capacity of Internet technologies (e.g., Turkle 1995). We also see them as a new source of control, and we suggest that particular attention be paid to Internet infrastructures, their political dimensions, and the nature of identity. As we have warned elsewhere (Poster 2001), even through the liberating activities of presenting online identities, we are enlisted in producing our own interpellations: constructing our selves from the components made available through information and communication technologies.

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10 REFERENCES

- Barndt, W. D. Jr. User-Directed Competitive Intelligence: Closing the Gap between Supply and Demand. Westport, CT: Quorum Books, 1994.
- Baudrillard, J. Selected Writings. Cambridge, MA: Polity Press, 1988.
- Beck, U. *Risk Society, Towards a New Modernity*. Trans. from the German by Mark Ritter. London: Sage Publications, 1992.
- Bell, D. *The Coming of Post-Industrial Society: A Venture in Social Forecasting.* New York: Basic Books, Inc., 1973.
- Bell, D. The Cultural Contradictions of Capitalism. New York: Harper and Row, 1976.

- Beniger, J. R. *The Control Revolution: Technological and Economic Origins of the Information Society.* Cambridge, MA: Harvard University Press, 1986.
- Bijker, W. E. *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change.* Cambridge, MA: The MIT Press, 1995.
- Bly, S., Cook, L., Bickmore, T., Churchill, E. F., and Sullivan, J. W. "The Rise of Personal Web Pages at Work," *in Proceedings of CHI 98*. New York: ACM Press, 1998, pp. 313-314.
- Bruckman, A. "Gender Swapping on the Internet" in *Proceedings of INET '93*, 1993 (available at http://www.cc.gatech.edu/elc/papers/bruckman/gender-swapping-bruckman.pdf).
- Castells, M. The Power of Identity, Volume II of The Information Age: Economy, Society and Culture. Malden, MA: Blackwell, 1997.
- Castells, M. The Rise of the Network Society, Volume I of The Information Age: Economy, Society and Culture. Malden, MA: Blackwell, 1996.
- Chee, A. "Killer Apps on the Intranet," www.Corporate-Intranet.com, November 23, 1998 (online at http://www.corporate-intranet.com/treasury/articles/art10.html; accessed October 10, 2001).
- De Certeau, M. *The Practice of Everyday Life*, trans. Steven Rendell. Berkeley: University of California Press, 1984.
- Deleuze, G. "Postscript on the Societies of Control," *October* (59), Winter 1992, pp. 3-7 (this essay first appeared in *L'Autre*, May 1990).
- Derrida, J. "Structure, Sign and Play in the Discourse of the Human Sciences," in *Writing and Difference*, trans. Alan Bass. Chicago: University of Chicago Press, 1978.
- Erickson, T. "The World-Wide Web as Social Hypertext," *Communications of the ACM* (39:1), 1996, pp. 15-17.
- Erikson, E. H. Dimensions of a New Identity. New York: Norton, 1974.
- Foucault, M. Discipline and Punish: The Birth of the Prison. Hammondsworth, UK: Penguin, 1977.
- Foucault, M. *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*, C. Gordon (ed.). New York: Pantheon Books, 1980.
- Giddens, A. *Modernity and Self-Identity: Self and Society in the Late Modern Age.* Cambridge, MA: Polity Press, 1991.
- Gilder, G. Telecosm. New York: Free Press, 2000.
- Goffman, E. The Presentation of Self in Everyday Life. New York: Doubleday, 1959.
- Harvey, D. The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change. Oxford: Blackwell, 1990.
- Jameson, F. "Postmodernism, or the Cultural Logic of Late Capitalism," New Left Review (146), July-August 1984, pp. 53-92.
- Kinder, M. *Playing with Power: From Muppet Babies to Teenage Mutant Ninja Turtles.* Berkeley: University of California Press, 1991.
- Lamb, R. "Informational Imperatives and Socially Mediated Relationships," *The Information Society* (12:1), 1996.
- Lamb, R. "Using Intranets: Preliminary Results from a Socio-Technical Field Study," Proceedings of the Thirty-Second Annual Hawaii International Conference on Systems Sciences. Los Alamitos, CA: IEEE Computer Society Press, 1999.
- Lamb, R., and Davidson, E. "Social Scientists: Managing Identity in Socio-Technical Networks," *Proceedings of the Thirty-Fifth Annual Hawaii International Conference on Systems Sciences.* Los Alamitos, CA: IEEE Computer Society Press, January 2002.
- Lamb, R., King, J. L., and Kling, R. "Informational Environments: Organizational Contexts of Online Information Use," *Journal for the American Society of Information Science and Technology*, forthcoming
- Larson, M. S. The Rise of Professionalism: A Sociological Analysis. Berkeley: University of California Press, 1977.

- Latour, B. Science in Action: How to Follow Scientists and Engineers through Society. Cambridge, MA: Harvard University Press, 1987.
- Latour, B. *We Have Never Been Modern*, trans. Catherine Porter. Cambridge, MA: Harvard University Press, 1993.
- Laudon, K. C. Dossier Society: Value Choices in the Design of National Information Systems. New York: Columbia University Press. 1986.
- Lofland, J., and Lofland, L. H. Analyzing Social Settings: A Guide to Qualitative Observation and Analysis, Third Edition. Belmont, CA: Wadsworth Publishing, 1995.
- Miles, M. B., and Huberman, A. M. *An Expanded Sourcebook: Qualitative Data Analysis,* Second Edition. Thousand Oaks, CA: Sage Publications, 1994.
- PBS. "Merchants of Cool," 2000 (online at www.pbs.org/wgbh/pages/ frontline/shows/cool).
- Porat, M. U., and Rubin, M. R. *The Information Economy*. Washington, DC: U.S. Dept. of Commerce, Office of Telecommunications (OT), 1977 (9 volumes).
- Poster, M. The Mode of Information: Poststructuralism and Social Context. Chicago: The University of Chicago Press, 1990.
- Poster, M. The Second Media Age. Cambridge, MA: Polity Press, 1995.
- Poster, M. *What's the Matter with the Internet?* Minneapolis: University of Minnesota Press, 2001.
- Reid, E. "Virtual World: Culture and Imagination," in S. Jones (ed.), *Cybersociety*. Newbury Park, CA: Sage, 1990, pp. 164-183..
- Rule, J. B., McAdam, D., Stearns, L., and Uglow, D. "Documentary Identification and Mass Surveillance in the United States," *Social Problems* (31:2), 1983, pp. 222-234.
- Scott, W. R. Organizations: Rational, Natural, and Open Systems, Second Edition. Englewood Cliffs, NJ: Prentice Hall, Inc., 1987.
- Stone, A. R. The War of Desire and Technology at the Close of the Mechanical Age. Cambridge, MA: MIT Press, 1995.
- Strauss, A., and Corbin, J. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage Publications, 1990.
- Toffler, A. The Third Wave. New York: William Morrow and Co., 1980.
- Turkle, S. Life on the Screen: Identity in the Age of the Internet. New York: Simon & Schuster, 1995.
- Walker, K. "It's Difficult to Hide It: The Presentation of Self on Internet Home Pages," *Qualitative Sociology* (23:1), 2000.
- Whyte, W. H. The Organization Man. New York: Doubleday, 1956.
- Wong, A., and Sviokla, J. "Profiling at National Mutual (A), (B), and (C)," Harvard Business School Case Study 9-191-102, 1994.
- Wynn, E., and Katz, J. T. "Hyperbole Over Cyberspace: Self-Presentation and Social Boundaries in Internet Home Pages and Discourse," *The Information Society* (13:4), 1997, pp. 297-327.
- Yates, J. Control through Communication: The Rise of System in American Management. Baltimore, MD: Johns Hopkins University Press, 1989.

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