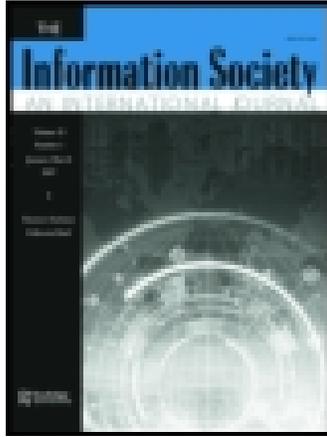


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From the Philosophy of Information to the Philosophy of Information Culture

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From the Philosophy of Information to the Philosophy of Information Culture

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The contemporary world is experiencing an ongoing cultural change, made both distinctive and far-reaching by the centrality of information and information technologies. In light of this development, we propose a research path in the philosophy of information that could be called the philosophy of information culture(s). After a brief survey of the idea of culture, we reflect on the interrelationships between information and culture. We focus on the notion of “information as culture,” or distinctive values, artifacts, and practices that are constituted by and oriented around information. We suggest that friendship provides a particularly appropriate locus for philosophical investigation of information cultures.

Keywords culture, friendship, information, information technology, philosophy

Since the early 1990s, Luciano Floridi has been developing a philosophy of information in multiple dimensions that rivals the philosophy of technology as a comprehensive effort to engage and understand the new world that human beings are creating through their making and using activities. It is arguable that information more than technology—or information technology more than simply technology—is the distinctive feature of the contemporary world. Moving from classical studies and the history of philosophy through analytic philosophy and pragmatism, Floridi’s approach spans theory and practice. With regard to theory, he works mostly in logic and epistemology; with

regard to practice, his focus is on ethics and the relations between information technology and the humanities. It is in this last area that we would like to offer some modest suggestions for future research. In particular, we suggest that the philosophy of information and cultural studies could benefit from interdisciplinary collaborations with one another. Both communities can profit from reflecting on how culture could be used to interpret information or information to interpret culture.

These suggestions are motivated in part by a comparison between the historical origins of the philosophy of information and the philosophy of technology. As has been argued elsewhere, the philosophy of technology has two roots: One, arising within the community of engineering intellectuals, constitutes an expansionist view of technology as deeply and comprehensively human, and thus properly extended into all areas of life; the other, emerging among humanities intellectuals as a limitationism, sees technology as a properly circumscribed or restricted dimension of the human (Mitcham, 1994). These two perspectives find analogies in the philosophy of information between those who would critically celebrate and extend the notion of information and those who view it as more limited in application (Mitcham, 2004). Our goal here is to consider the possibility of bridging the two perspectives, beginning from a critical reflection on culture, a key concept of the limitationist position. This reflection takes place in three movements: a brief analysis of culture itself, consideration of its relation with the concept of information, and suggestions for a case study.

THE CONCERN FOR CULTURE

Our primary concern is with the relation between information and culture. According to Floridi, information—a

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term relatively new in philosophical significance and one subject to competing interpretations and analyses—can be understood in four not mutually exclusive senses: (1) information about something (e.g., the age, height, and weight of a person), (2) information for something (e.g., how to bake a cake or drive a car), (3) information as something (e.g., genetic information), and (4) information in something (e.g., the structure or pattern of streets in a city). The first three types have been independently distinguished by Albert Borgmann (1999) as information about reality (scientific information), information for reality (engineering designs), and information as reality (digital images or music). In both Floridi's and Borgmann's third senses, information can constitute a kind of culture, sometimes distinguished as high culture in opposition to folk culture. In Floridi's fourth sense the structures of culture, including popular culture, can also be described as forms of information.

Yet culture is, if anything, an even more complex and contested concept than information. Thus, it is wise to first consider the meanings and uses of the term "culture" before suggesting combinations with information. Theories of culture can be found more or less well articulated in social scientific and political terms, each of which tends to highlight or stress a particular aspect of culture, from education and law to religion. For example, one mid-20th-century survey, by anthropologists Alfred Kroeber and Clyde Kluckhohn, *Culture: A Critical Review of Concepts and Definitions* (1952), collected a set of 164 definitions. The philosophy of culture generally acknowledges these uses and then argues as well for culture formation as a particular and defining human activity. In a philosophy of culture such as that of Ernst Cassirer, for instance, human beings are understood as distinguished by their ability to produce culture in the form of symbols, which themselves exhibit certain structures. In the philosophy of culture of Matthew Arnold, by contrast, culture is understood as a summation of human achievement and its means of historical transmission serves a political not to say ideological function.

The most basic contrast, however, is one between nature and culture. In this contrast, nature is that which is independent of human activity and, as in Aristotle's phrase, its own source of motion and rest; culture is dependent on and reflective of human activity, a rough equivalent for what the Greeks called *ethos* or patterns of human behavior. Just as the English word "nature" is drawn from the Latin *natura* (which translates the Greek *phusis*), so is the word "culture" rooted in the Latin *cultura*. But "culture" has as much or more in common with the Latin *mos* (singular) and *mores* (plural), which translate the Greek *ethos*, and from which the English "morals" is derived. Thus, culture often serves as an equivalent for morals or morality in the strictly descriptive sense of the patterns of conduct

characteristic of individuals or groups. The philosophical examination of *ethos* or morals has generally been called "ethics" or "moral philosophy."

In the modern period, the notion of culture has broken out of any restriction to ethics or moral philosophy and become a technical term in the social sciences—especially in history, anthropology, and sociology. In addition, "culture" has served as the nucleus for an interdisciplinary field of "cultural studies," which was initiated in the mid-1960s as a modification of Marxism. Raymond Williams was instrumental to the founding of cultural studies, as he bridged a variety of disciplines and intellectual traditions in the articulation of a theory of "cultural materialism." Williams saw culture as a productive process or a constitutive signifying system that forms, in the anthropological sense, a whole way of life. In his *Culture and Society* (1958), Williams argued that the idea of culture came into its modern use as a response in feeling and thought to the changes wrought by the Industrial Revolution. This thesis raises questions about similar influences of the contemporary Information Revolution on culture.

Marxist thought originally understood cultural forms as part of a superstructure resting atop a political economic base. Williams, Theodor Adorno, Max Horkheimer, and Antonio Gramsci, all in different ways, updated classical Marxism by analyzing the dangers manifested in a "culture industry" that functions as a means of political and social control. Capitalists not only used brute force or economic pressure to maintain power, but capitalist entertainment, for instance, insinuates itself into the fibers of everyday culture, often appropriating and redirecting would-be countercultural trends. Such an argument shifts culture to the center of left-wing politics in addition to or in place of class-based antagonism.

Gramsci's core concept was "cultural hegemony," indicating the ways in which a (putatively) diverse culture can be ruled by one group or class such that everyday practices and shared beliefs provide the foundation for complex systems of domination. The notion of cultural hegemony entered the philosophy of technology primarily via Herbert Marcuse (1964), Andrew Feenberg (1999, 2002), and others in the critical social theory tradition. Feenberg, for example, argues that technological or material culture is often enlisted to support hegemony—a form of domination in social life so deeply rooted that it is seen as natural by those it dominates. But the concept applies to other traditions within the philosophy of technology as well. For example, Michel Foucault writes about technical "truths" that constitute and reproduce a predominate hegemony. Furthermore, Borgmann's notion of the "device paradigm" resembles a kind of cultural hegemony in which technological devices maintain and reproduce a homogenous set of practices and shared beliefs (1984).

Borgmann is a mediational figure in the philosophy of technology between a “classical” approach and the “empirical turn.” In contrast to the transcendental analyses of a humanities tradition in the philosophy of technology, the empirical turn attempts to pay close attention to what people and “things” (technical artifacts and systems) do. It is thus easily allied with cultural studies of the meanings and practices of everyday life. Indeed, one could claim that empirical philosophy of technology is “material cultural studies,” or the study of human significance in the design and use of technological artifacts and systems (see Verbeek, 2005). This positions the philosophy of technology squarely in the same issues—gender, development, sustainability, agency, identity, globalization, work, etc.—central to cultural studies. In particular, the philosophy of technology seeks understanding of the role of technology in cultural change from innovation and diffusion to acculturation.

INFORMATION ↔ CULTURE

It is widely maintained that the contemporary world is experiencing an ongoing cultural change, made both distinctive and far-reaching by the centrality of information and information technologies. We suggest that this raises two issues. One concerns whether it is possible to speak of “information culture” as a distinctive kind of culture. This notion of “information as culture” raises another issue concerning “culture as information”—that is, whether culture itself constitutes a special kind of information. That is, to what extent can culture be used to interpret information or information to interpret culture?

The second option involves interdisciplinary attempts to characterize culture. There is ample opportunity for contributions from the philosophy of information, because diverse definitions of culture imply information at nearly every turn. Culture is frequently characterized in terms of symbols and meanings that are created, enacted, embedded, manifested, communicated, and reproduced in and through practices and objects. The philosophy of information could add a valuable perspective on the meanings of and relationships between these key terms. One avenue into this field would be through evolutionary psychology, which shares with the philosophy of information an interest in understanding the human mind as an information processing system. More specifically, there is great promise in engaging the neo-Darwinian field of memetics, which is an approach to evolutionary models of cultural information transfer. Memes are analogous to genes as self-replicating units of information—the former encoding cultural information, the latter biological information.

But it is the first option—concerning information as a kind of culture—on which we wish to focus, because it at once raises questions about the nature of informa-

tion and connects directly to popular contemporary issues. The analysis and evaluation of information cultures is one way in which the philosophy of information can plug into debates about the nature and value of our current “networked” existence.

What would it mean to think of information as a kind of culture? It would mean, initially, abandoning an understanding of information as a neutral medium or empty package for encoding and transmitting culture. Information in this sense, then, is not just the box but the contents as well. As Marc Ambinder (2008) noted in his discussion of “new media” and U.S. presidential politics, the very notion of a “United” States worth fighting for in the Civil War (1860–1865) was given credibility by the power of newspapers to bring news from afar, thereby fostering a sense of commonality. Information is more than transmitted; it transforms. In the words of Marshall McLuhan (1964), “the medium is the message.” Given that the fundamental question for ethics concerns how to act in accord with what really is, there are reasons to inquire into the kind of reality disclosed and created by information technologies. There is also a need to inquire into the scope of freedom individuals have in working out their lives. As Williams has argued, if “the medium is the message,” then what room remains for individuals to shape culture?

If information is just any “difference that makes a difference” (to use one common definition), then there could be no information culture with an identity of its own—an identity that is defined in large part simply by the presence or perhaps omnipresence of information or information technologies. According to this view, although we may live in an information society (cf. Castells 1996; van Dijk 2006), this society does not engender novel cultural forms. Rather, existing cultures and ideologies simply utilize information and information technologies as neutral means to encode, communicate, and enact their values and practices.

Of course, it has long been a core message of cultural studies that the information and information technologies comprising the information society shape culture rather than just convey it. The technological and economic changes associated with the information society are accompanied by cultural changes, including lifestyles, patterns of consumption, and modes of cognition and experience. Floridi has worked with Charles Ess and others in developing the emerging field of Intercultural Information Ethics (IIE) (see Ess and Thorseth 2006; Ess and Hongladarom 2007). We take one of the central claims of IIE to be that information technologies have diverse impacts, designs, and uses within different cultures and that there is thus an imperative to investigate these differences from European and non-European cultural perspectives.

What cultural studies helps us see, however, is that information culture cannot be understood solely in terms

of extrinsic information “impacting” pre-established cultures. Rather, the term asks us to conceive of distinctive information cultures, the values and practices of which are constituted by and oriented around information—information as culture, not just information for, in, or about culture. This phenomenon has gone under several names including new media culture, Internet culture, and cyberspace. These cultures interrelate in complex ways with other cultures already present in the information society. Understanding these interrelations is, we suggest, a significant task for the philosophy of information culture.

Another question concerns whether there is a single information culture or many information cultures within the information society. Several postmodern thinkers are—perhaps ironically—inclined to identify a single information culture. They look for essential characteristics such as information saturation, decline of centralized political and epistemic authority, individualism, speed, consumerism, commodification, heterogeneity, simulation, a blurring of the distinction between representation and reality, and the fragmentation of experience and personal identity (cf. Brey and Søraker, in press). These cultural forms are expressed in information technology as is the case, for example, with the many-to-many connectivity and user-generated digital content of new media. Of particular interest to the philosophy of information culture is Jean Baudrillard’s theorized shift from an economy of goods to an economy of signs and spaces (Baudrillard, 1995). Notably, at times he characterized this as an era of simulation, rather than information. Alternatively, he argued that life is ruled by a new “mode of information,” which is similar to Borgmann’s concern that, in an information culture, we are at risk of losing our grip on reality.

Nevertheless, many theorists argue that there is in fact a plurality of cyber- or information cultures, which resonates with Don Ihde’s optimistic vision of “pluri-culture” as mutually augmenting, partial fusions of various cultures—fusions made possible and enhanced by information technologies (Ihde, 1990). With regard to plurality, Manuel Castells, in *The Internet Galaxy* (2001), identified four “Internet cultures”: techno-meritocratic, hacker, virtual communication, and entrepreneurial. Each exhibits a distinctive set of practices and beliefs, but all have developed in relation to the Internet. For example, the cult of personalities involved in the development of the Internet valued freedom, creativity, and open sharing—values that became instantiated in practices such as open-source software that were not profit-driven. By contrast, the entrepreneurial culture turned many of the same values toward profit-centered practices—indeed, “information culture” is most commonly used as a corporate business term of art.

We could read Floridi (2007) as perhaps sitting in between the monistic and pluralistic take on information

culture. On one hand, he sees “re-ontologization” or blurring of distinctions as central to what might be called an information culture. He argues that we are probably the last generation to experience a clear difference between offline and online, because (a) there has been a steady increase in the *kinds* and *amount* of information that can be represented digitally; (b) emerging portable and miniature technologies will allow continuous online communication constituting an Internet of things; and (c) as a result, the information society is becoming a collection of “connected information organisms” or “inforgs.” On the other hand, although there is an essential cultural shift to new forms of connectivity and sociality, these forms can vary widely in terms of their nature and quality.

FRIENDSHIP IN INFORMATION CULTURES

It is thus important, for a future philosophy of information culture, to conceptualize and evaluate the nature and quality of these new forms of connectivity. Friendships and other personal relationships are a perfect place to begin a set of case studies in the philosophy of information culture for two reasons. First, they are central aspects of the age of digital media, including Web 2.0 social networking sites and Web 3.0 virtual worlds. Such technologies are bound to influence the nature and quality of friendships in ways that may both enrich and diminish our lives. Second, although social and psychological research has long been conducted on online friendships, there is a dearth of philosophical reflection (Cocking & Matthews, 2000; Cocking, 2008; Briggles, 2008). Such reflection is necessary for understanding whether and how friendship might be taking distinctive forms in information cultures.

The philosophy of information culture is not, however, lacking resources with which to begin a distinctive analysis of friendship. Indeed, it will need to blend its special approach with two other philosophic streams. The first is the philosophy of friendship, which was recovered by Elizabeth Telfer (1971) from the shadow of modern ethical theories and their neglect of human flourishing and the lifeworld. The contemporary literature both recapitulates ancient debates and develops new theories of friendship inspired by modern experience (Pakaluk, 1991; Badhwar, 1993; Lynch, 2005; Vernon, 2005).

The second stream is the philosophy of mediation, especially with respect to the mediation of personal relationships. In this field, two general approaches are discernable. The first is *filtration*, which pictures mediation as a more or less adequate map or representation of reality. Computer-mediated communication (CMC) situations are composed of activities that correlate to specific offline activities and only differ insofar as they do not carry the same richness of information. The second is *reconfiguration*, which pictures mediation as world making, not world

representing. CMC is argued to shape ways of inhabiting and perceiving the world, opening up new modes of interacting with very different structures of experience constituted in part by novel information not existing in offline practices, such as a heavy presence of text and screens, profiles, search features, avatars, and hyperlinks. Importantly, both approaches have been used to derive positive and negative conclusions about information technologies. Filtration can strain away the bad as well as the good. Reconfiguration can reveal as well as conceal, create as well as disfigure.

This is hopefully a sufficiently intriguing invitation for further research in a philosophy of information culture(s). We are not sure how precisely to proceed, and we do not wish to limit the creative potentials that have been opened up. Nonetheless, we can briefly indicate the rudiments of just one approach by all too crudely sketching some suggestions from Floridi's fourfold taxonomy: (1) information about friendship, (2) information for friendship, (3) information as friendship, and (4) information in friendship.

1. Social networking sites such as MySpace, Facebook, and Friendster allow users to create their own profiles and contribute comments on their friends' profiles. These profiles then serve as novel forms of information about the friendships involved. One controversial example is the "top 8" feature on MySpace, which allows users to rank their best friends, but in so doing introduces a new kind of "politics of friendship," since friends must navigate the delicacies and potential misunderstandings and ill will of publicly ranking their relationships. How do these new forms of information about friendship contribute to new practices and values in information cultures?
2. Information for friendship could be understood in terms of self-help books for people struggling to sustain friendships. More interestingly, however, is the use of information technologies for the day-to-day enactment of particular friendships through chatting, texting, e-mailing, sharing videos, etc. These means are tightly interwoven in most friendships with offline relating as well. Because users have choices, a pressing philosophical question pertains to their judgments about when and whether to use which kinds of information for relating. Why, for example, is it commonly considered inappropriate for a close friend to send an electronic "get well" card instead of paying a hospital visit? There is a value in "being there" that deserves philosophical attention in an age of information. Finally, one could consider the ways that information might be more explicitly designed in accord with or to promote a particular

view of friendship, say, that of Ivan Illich's notion of conviviality (Mitcham, 2007).

3. What would it mean to think of information as friendship? Borgmann (1999) would likely interpret it in a negative way—friendships are reduced to the communication of feelings and self-exploration, or worse, the simple exchange of information about what one likes, where one is now, or what one happens to be doing. Similarly, Zygmunt Bauman (2003) has argued that online relationships are shallow, because "the union only goes so far as the dialing, talking, messaging" (pp. 34–35). This implies that "information" is ultimately an impoverished way of thinking about friendship. Alternatively, Sherry Turkle (1997) at least points the way toward an understanding of friendships liberated as information. The self is expanded into a multiplicity of identities and relationships.
4. What kinds and amounts of information are to be found in friendships? How does this information in friendship change when information technologies are introduced? Those adopting a filtration view on mediation may argue that essential information is missing in mediated friendships, thereby diminishing their quality. Others could argue that in fact distorting information is filtered out, permitting a more genuine, closer connection between the friends' true selves. Adam Briggie (2008), for example, has adopted a reconfiguration view to argue that the Internet allows for the expression of novel kinds of information in friendships, which can increase intimacy and self-knowledge.

CONCLUSION

Our suggestions have been motivated by an effort to extend the philosophy of information into a philosophy of information culture in ways that might bridge tensions between engineering expansionist and humanities limitationist approaches to the philosophy of technology in general and of information technology in particular. To this end we have indicated some trajectories for the development of critical reflections on culture, a key concept of the limitationist position, that might also incorporate analyses of information. The three movements of this brief note—from culture through the information–culture relationship to the outline for a case study of information and the cultivation of friendship—are no more than promissory indicators of work we hope to undertake more fully in future research that might advance the philosophy of information as a comprehensive engagement with the world that humans are in the process of creating through their own advanced making and using activities. It may also be suggested that this complements research interests

that have independently been indicated by Floridi and others.

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