The Inheritance of the Digital:
Ethnographic Approaches to Everyday Realities In, Of, and Through Digital Technologies

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Inheritance of the Digital

In 1975, thirty-two computer hobbyists met in a garage in what would become California's Silicon Valley. This "HomeBrew Computer Club" imagined a future utopia of individually owned computers that would grant everyone access to the technologies that were, at that time, so expensive and technical only institutions could afford them. Club member Bill Gates developed "software" while other members, Steve Jobs and Steve Wozniak, developed the "personal computer." Together they started the digital revolution that would emphasize individual access to information through small and inexpensive individually owned devices (Howard 2012; Wozniak 1984).

In 1977, the U.S. military successfully sent "packets" of on-and-off power fluctuations between computers. Their project was born of a different vision. They wanted a distributed communication system that could survive the imagined nuclear battlefields of the Cold War. The computer code they used not only made it possible to connect computers to each other but it, more importantly, allowed networks to be "internetted" together so long as they adhered to the accepted protocol. That institutionally authorized protocol, Transmission Control Protocol/Internet Protocol or "TCP/IP", is still the basis of all digital networks today (Abbate 1999:130-3). Imagining a digital age that would be dominated by large institutional computing networks, TCP/IP would be the bridge through which these institutional networks could communicate even when other means of communication had failed.

Born of the unlikely coupling of these two very different intentions, the devices that keep us continually networked together today are the inheritance of both a vision of individual freedom and a vision of bomb-proof institutional power. With this dual ideology, a shift in the cultural meaning of information technology occurred, and participatory media became locations for the emergence of diverse, hybrid, and even conflicting voices (Turner 2006). At the same time, however, the technologies that drive our everyday network devices are quietly embedding centralizing institutional interests in, at least, the forms of advertising, and surveillance. This dual heritage has come down to us today through the last 40 years of sustained development of network

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technologies.

Until the early 1990s, "internetting" was primarily an activity for institutional computers and trained computer engineers. In the '90s, an employee of the European science institute CERN created an innovative way for people to share information using TCP/IP. Inspired by the anti-institutional ethos of the HomeBrew computer club, Tim Berners-Lee built and gave away the first internet "browser" based on the cross-platform and very simple computer coding language Hypertext Markup Language or "HTML." So doing, he created what would come to be called the "Worldwide Web": a web of linked pages that were written in this computer code.

The next year, in 1992, the U.S. Congress passed a bill that allowed technology funded by the National Science Foundation or "NSF" to be used in for commercial purposes. Previously, all technologies produced from this U.S. government program could not be used in commerce. TCP/IP had been created by the NSF, so, as a result, it was now available for commercial applications. Seeing a new financial opportunity, a small startup called Mosaic Communications Corporation began searching for funding to create an online gaming network. While seeking those funds, the company produced an internet browser that came to be known as Netscape Navigator. The software exploded in popularity and a rush of new internet users began demanding to both access media through internetted networks.

The 2000s saw these networks penetrating deeper into everyday life through the emergence of mobile network devices. First introduced in 2007, Apple Computer's iPhone ran a variant of the Macintosh operating system and thus enabled the phone to access networks via cellular or other wireless access points just as if a desktop computer. With the advent of this "smart phone," the ethos of individual access to networked information moved from the confines of the desktop computer or laptop computer to the ever-present pocket sized mobile network communication devices that are owned by 88% of South Koreans (the highest in Asia and worldwide), 72%of Americans (the highest in North and South America) (Poushter 2016), and used by 82% of the population in Denmark to access internet access on the move (Eurostat 2017).

Today, mobile devices have placed digital network access into the hands more of us for more of our waking hours than ever before, and, as a result, the dual intentions of digital networks have penetrated every aspect of many millions of individuals' daily lives.

Over twenty years since it started its surge in usage in 1990s, the internet is no longer "new media." It has been around a long time. It is also not extraordinary. Today, the internet is mundane precisely because so many of us pick it up and put it in our pockets everyday—often without even thinking about it. Starting with the realization that digital communication networks are intertwined with our daily lives so deeply that we might not even notice their pervasive influence, this special issue will consider how these network communication technologies are quietly shaping us by shaping our everyday expression.

Researchers of ethnology and folklore have made the study of everyday life

their focus, and those everyday lives are being transformed by continual access to the internet through personal computers, phones, and other mobile devices. As these technologies have become ubiquitous, the questions researchers must ask are not just about how these technologies work or about the media products they disseminate, but about the massive impact digital practices are having and will continue to have in the daily expression of our shared culture.

This special issue addresses some of the new questions that these practices raise for ethnologists and folklorists. For instance, how do digital media empower people to express themselves? How does it affect relations of power and authority? How do participatory media reshape the life-worlds of members of a diaspora community? How do digital technologies affect our understanding of place and space?

As we engage these questions, it is tempting to take the conflicting intentions at the beginning of the digital revolution as a template for understanding our experience today. Many have and still do argue that we are worse or better off because of our network access. These dichotomies play out in many forms. Does the easy access to information structured by the Google Corporation connect us to more neutral information than ever before? Or is it more that the loss of transparent and expert editorial content curation once offered by journalists, academics, and editors has left us adrift in a sea of indigestible data points? Does social media bring together people with different opinions, or does it create a polarization of debates? Do new technologies imply an increased safety and security for us citizens, or do they empower institutions with still emerging levels of surveillance?

These technologies certainly have decentralized power and enabled, in some cases, revolutionary change from the ground up such as was seen in the social-media driven revolutions in the Middle East (compare Howard & Hussain, 2011; Pfeffer & Carley, 2012). Further, high profile cases like that or WikiLeaks (Lindgren & Lundström, 2011) or the power of constant mobile devices that have revealed the daily violence in law enforcement and elsewhere have fueled communal sources of knowledge such as Wikipedia as a genre of the so-called alternative and activist new media (Lievrouw 2011), in contrast to institutionalized knowledge.

Still, even with the many examples of liberatory power through networks, one must have access to be liberated. The role played by and given to digital and mobile technologies raises concerns and questions about how an unequal access to these technologies contributes to expanding gaps between continents, countries, generations and socio-economic groups (Nakamura & Chow-White 2012; Ragnedda & Muschert 2013). Indeed, if the internet plays a major role in democratization processes, then the digital divides are a major issue to be addressed urgently at a global level.

The contributions in this volume do not affiliate to neither cyber-optimism nor technocultural pessimism. Rather, the articles seek to highlight the dynamics and implications of how people engage with the digital.

Ethnographic Approaches to Everyday Realities In, Of, and Through Digital Technologies

Contributors in this volume engage with digital technologies in different manners: in digital communication processes, locative media and participatory culture or for music distribution and languages resources. A common point of departure for these articles in this volume is the dual inheritance of the digital. Through ethnographic studies of everyday digital culture, each contribution explores our shared heritage of these digital visions.

In our first article, Anthony Bak Buccitelli begins to take account of the ways in which digital technologies are playing a central role in the creation of contemporary vernacular understandings of space and place by comparing the spatializing practices of "geocaching" to those involved in the augmented reality game Ingress. Both practices actively construct a user experience of localized real-world knowledge. Ingress, however, seamlessly intertwines the on and off-line worlds. Documenting the ways in which each community of participants establishes important geographic sites in play, Buccitelli documents how Niantic Labs, a Google subsidiary and the makers of Ingress (and of the more recent and more famous Pokemon Go, partly based on features from Ingress), structure and define spatialized notions of cultural heritage for its players.

In the second article, Andrew Peck writes of the interplay between online and offline forms of vernacular practices based on the example of The Slender Man. Through this example, he describes how digital communication technologies have created social norms that encourage the documentation and sharing of everyday behaviors across networks. As everyday life (including a variety of vernacular practices) becomes both more mediated and more visible, a vernacular awareness of these everyday practices encourages collaboration. With this collaboration, however, users begin to develop their own hierarchies of performance, and that awareness then facilitates new forms of vernacular critique.

Next, Christian Ritter offers a nuanced ethnographic study based on long-term face-to-face fieldwork as well as in digital environments. His work examines how participatory media reshape the life-worlds of members of a Moroccan diaspora community in urban Istanbul. Based on the study of Facebook-groups and forums and interviews, he offers a deep understanding of digital communication processes within contemporary diasporas, and his findings reveal the widespread use of participatory media among members of this diasporic community in Istanbul facilitated the emergence of a new realm of lived experience in these individual's life-worlds.

Maria Eriksson and Anna Johansson offer an ethnographic study of the music streaming service Spotify. They explore the idea of free and unlimited access in relation to the prescriptive and normative indications played out in music recommendations. Looking more specifically at the aspects of temporality, functionality and intimacy, they show how music is framed and contextualized in such a way that playlists are suggestive of neoliberal or radical individualist ideologies. Through their findings, we see the freedom of choice and flexibility that Spotify emphasizes while promoting their

online platform are inextricably bound up with institutional control and disciplining of audiences.

Next, Stefan Gelfgren approaches the issues of power, authority, and institutionalized structures in relation to digital practices through an exploration of Christian institutional uses of digital communication. He tracks changing power relations through the changing deployments of digital media. So doing, he reveals the dual nature of the internet – or, "diophysite" to borrow Christian terminology about the nature of the Christ. Gelfgren's study shows how the internet can be a tool for rearranging power structures in the hands of the media skilled actors.

Coppélie Cocq's article explores how the role of experts is challenged and redefined in our contemporary media landscape, based on the study of Indigenous efforts for language revitalization through digital media by Sámi people inhabiting the Arctic area of Sápmi. In her research, she reveals how authority is shaped and contributes to building new structures that complement, question and challenge institutional ones. New players are emerging, highlighting the dysfunctionality and inadequacy of the existing structures. Through interviews and other data, she shows how these initiatives are constitutive, rather than instrumental. Rather than making a significant difference in language revitalization, these initiatives play a significant role in the democratization process for these historically marginalized people.

In our last article, Robert Glenn Howard uses the example of online forums focused on recreational gun use to show how digital networks have rendered personal our webs of communication more visible. As a result of this visibility, approaching communication practices as series of discrete but related media objects can no longer adequately account for the way our webs of signification aggregate the influences of many actors in the network. To address this problem, he proposes that we seek to understand digital network communication as events that emerge in the interaction of heterogeneous volitions.

Taken together, the excellent set of articles in this volume offers new insights into the current state of network communication while still accounting for the powerful forces we of the digital revolution our everyday lives have now inherited.

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