

Towards a theory of network locality

by Eric Gordon

Abstract

The theory of network locality suggests that location continues to matter in a globalized and networked culture. But the conditions under which local knowledge is produced are changing. With the ubiquity of digital networks, individual users can produce and consume information about local spaces no matter where they are. But information and knowledge are different things. This article describes how local knowledge is produced in a social context where location is wherever we happen to be.

I live in Boston next to a large garden cemetery where, in addition to its traditional function as a place of mourning, people walk their dogs and ride their bikes. The official entrance to the cemetery isn't within convenient walking distance from my street, but there is a covert hole in the perimeter fence located behind a playground parking lot only a block from my front door. When I first moved to the neighborhood several years ago, I had no idea that this secret entrance existed. But within days, several conversations with new neighbors turned to the topic. "You *do* know about the entrance to the cemetery, right?" This was the neighborhood secret. It was where the locals met with their dogs to walk and talk. It's not in any official guidebook; it's not something my real estate agent boasted about; and yet, it is one of the things that binds the neighborhood together — a piece of local knowledge that defines the neighborhood's internal identity.

Local knowledge is a commonly held understanding of customs, spaces, or politics shared by a group of people with shared interest in a given space (Geertz, 1983). This understanding can be as trivial as a secret entrance to a cemetery or as significant as native religious and cultural practices. What binds these understandings to local knowledge is the fact that they are social in origin. If I were the only one who knew about the entrance to the cemetery, that bit of information would merely be a secret. However, that same secret, commonly held by a well-defined group, quickly becomes the connective tissue of a local community. It becomes, as I have explained elsewhere, a *placeworld* (Gordon and Koo, 2008). A subset of the phenomenological notion of lifeworld, a placeworld is the socially manifested recognition of "being in the world" that has its origins in geographic space. Edmund Husserl (2001) describes a lifeworld as an individual's experiential horizon that shifts as perspectives shift. It is the minutiae of everyday life that appears to be natural — everything from smiling at someone on the street to the social conventions of a business meeting. Jürgen Habermas (1987) reconfigures the concept of the lifeworld away from the experiencing subject and towards the social situation. He argues that lifeworlds are composed through *communicative action*, or some form of reasoned deliberation. According to Habermas, the lifeworld is not a product of individual consciousness as defined by Husserl, but instead a relational phenomenon that emerges within the act of communication. Exchanging a smile with someone on the street is only natural because it is an act of communication that constructs a commonly held horizon between the actors. A placeworld, therefore, is a group-defined horizon that is specifically oriented around geographical location. Sharing information about the secret cemetery entrance, for example, is communicative action that results in a placeworld. It is the product of local knowledge.

While a placeworld is synonymous with meaningful spaces, they are certainly not always benign. They are used to wield power within geographically defined contexts. They distinguish between here and there, us and them. Those who share a placeworld can choose to open it to newcomers, or they can keep it to themselves, effectively creating a hierarchy of local

authenticity. 'You might live here, but you don't authentically live here.' In older neighborhoods, this can play out between "natives" and "gentrifiers" or old and young. They can also be produced along lines of race, class or gender. Outward signifiers of difference can be used to exclude newcomers. For example, a black family that moves into an all white neighborhood, or a man in business attire walking down the street in a predominantly working class neighborhood. While placeworlds are defined by the ideal exchange of knowledge, their conditions are determined by the material reality of bodies. These material conditions are even more apparent in high-traffic tourist areas, where locals commingle with visitors. Walking around downtown Boston on a sunny July day, for instance, throngs of tourists heighten my perceptions of possessing local knowledge, as the uniqueness of that knowledge is foregrounded by those who don't possess it. As they look down at maps trying to navigate the circuitous unlabeled streets of the city, I become distinctly aware of my ability to find my destination and locate myself within the larger structure and flow of the city. I become aware of their exclusion from my placeworld.

Placeworlds are amplified when their edges are revealed, either by tourists entering a local space, or by locals deliberating for the purpose of political organization. And those edges are constantly in flux. Individuals move fluidly between the center and periphery of placeworlds. The experiential horizons held by each individual within the socially produced placeworld are contextual and fluid — even without changing my physical position, my horizons are constantly shifting. On one day, my perception of a placeworld might be defined by my immediate neighbors; but on the next, threatened with the destruction of a local park, for instance, the placeworld might extend for miles. As such, a placeworld is not solely contingent on geographic space; its subject is oriented towards geographic space, but it can originate anywhere. Dispersed groups of people can share a placeworld — consider diasporic populations that, through stories, continue to connect with a "homeland." In this sense, what is local or considered home is not necessarily geographically proximate. Benedict Anderson (1983) calls this an imagined community. Anderson describes how daily newspapers, situated within a given location and perspective, enable individuals to imagine their connection through the rather nebulous concept of the nation. Anderson provides an explanation for how one's personal sense of local community might include people whom they have never met and places where they have never been. Disparate people and places hang together through a form of communicative action (although Anderson doesn't use this term). Anderson looks specifically at how mass mediated forms of communication, specifically editorials within newspapers, help construct a collective horizon of place and identity. While his study focuses on newspapers, his general proposition can be expanded to include most forms of media, *i.e.*, radio, television, telephone, film, etc. Media representations, collectively consumed and discussed, are instances of communicative action that can enable large numbers of people to imagine themselves as collaboratively occupying and knowing places.

Joshua Meyrowitz (1985) suggests that media's influence goes beyond their representations; they actually reframe the parameters of social situations. He begins from Erving Goffman's place-based formulation of how social situations happen; in essence, people determine their actions based on who is near by, or who is in the room. Goffman uses the theatrically framed example of waiters. They behave differently in the dining room (front-region) than when in the kitchen (back-region). They act in a certain manner when "in public" and in a quite different manner when "in private." Goffman uses the physical setting as a metaphor for social behavior, determining that social behavior is compartmentalized in regions not unlike an actor and crew in a theatrical production. When in the dining room (onstage), a waiter's behavior is directed outward to the customers; when in the kitchen (backstage), the waiter can engage in conversations composed for a more intimate scale. While the behaviors prompted by being onstage and backstage are distinct, they reflect interrelated situations. The kitchen conversation is connected to the dining room conversation, insofar as there is a tacit agreement between the actors regarding the rules of each situation. Just as a theater audience knows that the actors are engaged in unseen social situations backstage, the restaurant's customers understand perfectly well that a waiter might return to the kitchen and speak to her co-workers in a completely different tone. And, like the theater audience, if that tone were to accidentally bleed over onto the dining room floor, the customer would surely be unsettled, if not offended. Goffman describes a world where tacit agreements between social actors provide a complex intermingling of distinct social situations. But Meyrowitz takes issue with Goffman's framework, suggesting that he too closely connects his argument to physical space. The back-region can transform into the front-region if a customer, or boss, walks into the kitchen. And the front-region can similarly transform if there are no customers. Instead of the situation being tied to space, the situation is determined by what he calls "information-flow." "The patterns of information-flow, whether direct or mediated, help to define the situation and the notions of appropriate style and action." [1] Social situations are never determined solely

by physical factors — context and media are persistently altering the boundaries of normativity and acceptability. Meyrowitz concludes that the new media are not just altering existing social situations, but with the increased presence of mediation, entirely new situations and behaviors are created.

With remarkable prescience, Meyrowitz explains how hidden microphones and television cameras can alter our perceptions of public and private, citing examples such as television cameras in Carter's White House and microphones in the Watergate Hotel. The notion that the inferred presence of mediation might alter the nature of the situation, might confuse the accepted norms of the front region and the back region, has direct implications for our contemporary media environment, where cameras, blogs, and mobile telephony confuse the boundaries of nearly every social situation. In a culture where young people disclose intimate details of their lives on MySpace and Facebook and CEOs document business decisions on their personal blogs, the traditional boundaries of situations need to be reconsidered. It is not as though, as some commentators have claimed about young people's use of social software, that technology creates mass hysteria characterized by an entire generation no longer capable of distinguishing between the natural order of private and public. Rather, technological practice, in accordance with spatial practice, is redefining the very nature of the situation (boyd, 2008). Private space is no longer solely defined by control over a geographic domain; it is control over the access and production of data within flexible information-flows. Even in the most mundane situation, users are perpetually making decisions about public appearances. When selecting to listen to the Internet radio service Pandora.com, for instance, I need now be aware that that action is transmitted to my Facebook news feed. The private decision to listen to the radio is automatically communicated to my designated friends on Facebook. That decision remains private insofar as I understand and control the dissemination patterns of information. If, for example, that news feed gets picked up by CNN or used by the government to prosecute me for abnormal musical tastes, it might be considered a breach of privacy.

Just as private space is defined by a user's ability to control information-flows, local space is defined by a user's ability to *locate* information-flows. It should come as no surprise that the ubiquity of digital networks in everyday life is significantly enhancing the locative mechanisms available to the average user. Local knowledge acquisition, once relegated to the sidewalk conversation, church meeting or town hall, is now potentially extended to the Internet or mobile phone. I am just as likely to learn by e-mail that my neighbor's house was broken in to as I am by talking to that neighbor on the sidewalk. And I am *more* likely to learn about the neighborhood's history from *Wikipedia* as I am from a local meeting. In both cases, I am privy to local information even without setting foot in the physical space to which that information is connected. And while connections to physical space enhance the conditions through which information is accessed, in a networked society, they don't necessarily enhance its quality or authenticity. It is primarily the dynamics of information-flows that are constitutive of the local. This is not to suggest that gathering with neighbors in the dog park to commiserate about neighborhood life is not important for producing and sharing local knowledge; face-to-face interactions will always matter. But that neighbors share ideas on a listserv, or share secrets on Facebook's neighborhood application, or map the best places to get a cup of coffee on Google, or locate each other on mobile devices, enhance the structure and extend the boundaries of situations from which placeworlds are constructed.

The importance of the local is not just situational; the extended purview of local space is one of the driving forces behind the rapid growth of the Internet. The global reach of the user-generated Web is the product of an accumulation of local information. With millions of users contributing very specialized information and documentation of their daily activities, the result is an unprecedented interlinking of local spaces. Even when user-generated content is not local in origin, there is considerable motivation to locate it. As an example, the photo sharing system, Flickr, has a feature that enables users to plot any photograph on a Google map. A photo of a non-descript cat on a non-descript window ledge can now be organized according to its global coordinates. It can be located — an action that has less to do with documenting a particular space than with the visualization of the global reach of local information. The dynamic map of the globe, complete with personal thoughts and pictures, provides further incentive to designate location in one's daily activity within digital networks. Local politics, broadly defined, are no longer the domain of shotgun-on-the-porch, NIMBY (not in my backyard) initiatives, aimed to protect private interest from outside influences by strategically limiting access to local knowledge. In the case of located information on Flickr, the local doesn't so much bolster the boundaries of a geographic space as it extends those boundaries into global space. The local is the building block of the global. Flickr is just one example, but there are countless others that perpetuate this process: the Web site Placeopedia offers users the ability to map *Wikipedia* content to a Google map; Google Earth provides a three-

dimensional platform for users to plot various kinds of data; and GPS enabled mobile phones makes every local action global. Global networks are built from local information. This is easy to forget as the spectacle of global networks overshadows the humble material of local knowledge.

While there is a difference between the impulse to locate information in space and the impulse to produce and consume local knowledge, they are interrelated. The impulse to locate information is a by-product of the global reach of communication. It is primarily an individual action (often performed within a social context) that provides a legible framework for information-flows. Local knowledge, however, is often manifested through the deliberate process of placeworlds, and while almost always informed by located information, it is distinct insofar that it is necessarily social in origin. It is the shared information about the cemetery gate, or the collected reviews of a local café, or the debates that take place on a local listserv — the knowledge of other people having the same knowledge of location is integral to the construct of local knowledge.

The majority of scholarship on this topic has emphasized the displacement of local knowledge in the wake of networks. This is not surprising, considering that Tim Berners-Lee declared that the product of the Web would be a “single, global information space.” [2] Accordingly, Manuel Castells describes a radical shift in social organization that prioritizes the network in every aspect of communication and exchange.

“Networks constitute the new social morphology of our societies and the diffusion of networking logic substantially modifies the operation and outcomes in the processes of production, experience, power, and culture. While the networking form of social organization has existed in other times and spaces, the new information technology paradigm provides the basis for its pervasive expansion throughout the entire social structure.” [3]

According to Castells, the network has become so pervasive that what he calls the “space of flows” has all but replaced the primacy of the “space of places.” Places are relegated to a subordinate position in a new system of organization that never ceases to look at global flows, even within the most intimate of social interactions. While Castells provides a systemic analysis of social systems, he too readily disregards the experiences of actual people. People are located. And this simple fact continues to influence social interactions. According to Jochai Benkler (2006):

“Human beings, whether connected to the Internet or not, continue to communicate preferentially with people who are geographically proximate than with those who are distant. Nevertheless, people who are connected to the Internet communicate more with people who are geographically distant without decreasing the number of local connections.”

Barry Wellman (2002) adopts a similar position, pointing to the myriad ways in which certain forms of geographic location continue to influence social connections and behaviors:

“Place — in the form of households and work units does remain important — even if neighborhood or village does not. People go from somewhere to somewhere to meet someone, usually inside their homes.”

In what he calls “networked individualism,” traditional spatial organizations are entirely subordinated to an individual’s mobility in the space of flows. Location still matters within this framework, but local knowledge is all but erased. Wellman’s proposition implies that networks take people out of context. But it seems that there is ample evidence to the contrary. People still live on streets, in neighborhoods, in cities, and form placeworlds with those that share local spaces. Local situations cannot escape the influence of physical space. They do, however, alter their structures and boundaries with the addition of information-flows.

Local knowledge produced within the context of located information can be called *network locality*, a process that is shaping everyday life in contemporary culture, from significantly altering user-practices of digital networks to redefining what we mean by local politics, local culture, and local knowledge. Network locality is premised on the fundamental reorientation of the user within digital networks in relation to content, spaces, and other users. The restructuring of local situations is relational. The person still exists in the house, block, neighborhood, and city, but the relationship between the user and the information used to


assemble those concepts has changed. For instance, I used to keep all my documents in my personal file folder at work; now many of those documents are stored on networks, accessible anywhere. I used to keep my personal pictures in a photo album at home; now those pictures are on Flickr and Facebook, accessible anywhere. I used to only have access to neighbors when physically in my neighborhood; I now have access to many of those people through e-mail or a community Web portal. The local is that which is near — having files, pictures and people accessible regardless of physical location fundamentally alters what it means to be near. While we would typically refer to these things as objects, Martin Heidegger (1962) calls them equipment to suggest that they are available for our use, or “ready-to-hand.” For example, the crack in the sidewalk, the local café, the old clapboard houses are immediately apparent to me when I walk down my street — they are ready-to-hand. This is the raw material of local space. But all the things I am not immediately conscious of, including the hundreds of pictures and blog posts on the Web, are merely ready-at-hand. When I am conscious of them, they become ready-to-hand and alter the immediate experience of the street. Both the ready-to-hand and ready-at-hand are near — they are impressions that are immediately accessible to me. The addition of information-flows into traditional spatial situations doesn’t create distance; on the contrary, it increases that which is near.

Within digital networks, there is a growing set of equipment that is near: content, such as movies, music, news, fiction, blogs, home videos, short animations, software applications, games; and people, such as friends, “friends”, acquaintances, and anonymous contributors. We now have access to nearly everything — entire music and film catalogs, archives of news stories and commentary on those news stories, a massive encyclopedia magnitudes larger than *Britannica*, and social networks in address books, buddy lists, and friend groups. As computing leaves the desktop and extends to laptops and mobile devices, local space is wherever we happen to be. Entire industries are invested in perpetuating the perception that all the stuff we might want is always accessible. For example, after Napster was shut for enabling peer-to-peer sharing of copyrighted content, it reemerged a year later as Napster 2.0, promising its users access to everything without fear of legal retribution. Essentially, they adopted a leasing model, where users pay a monthly fee to access a vast database of music. They can download files onto their computer, for a nominal additional fee they can transfer them to mp3 players, but as soon as they stop subscribing, the files go away. The initial tag line of the new and improved company was “own nothing, have everything.” And while this particular slogan was short-lived, it remains the most cogent definition of contemporary networked media. Users are no longer interested in navigating the minefield of intellectual property; they simply want to access stuff whenever and wherever they happen to be. Isolating personal content on a local hard drive is counter to the social drive for local content. In other words, network locality suggests that stuff is kept local to us, not local to our machines, our houses or offices.

Users are increasingly mobile. And with new, user-friendly devices, such as Apple’s iPhone, extending traditional desktop practices (*i.e.*, Web browsing) to non-traditional spaces (subway, street, or car), the parameters of access are greatly expanded (Goldman, 2007). So while our stuff is placed in placeless networks, we are more likely to access that stuff now in places other than home or office. Images stored on Flickr or Facebook are beginning to replace the standard wallet pictures. At social gatherings, people often pass around their iPhones to share baby and wedding photos. What makes the current phase of mobile computing distinct from previous iterations enabled by the personal desktop assistant (PDA), is the disconnect between user and stuff. The initial innovation of the PDA was that it enabled users to take some of their stuff with them. The innovation of the new network mobile device is that it gives users freedom *from* their stuff, while simultaneously promising near complete access to it. The ability to assemble the ready-at-hand to enhance any situation is the defining feature of the new mobility. It makes any situation potentially local, as each user has access to their intimate stuff kept near on distant networks. But just as users assimilate the ready-at-hand to construct local situations, they are simultaneously locating the ready-to-hand. Consider the popularity of online maps. Literally thousands of Google Map mash-ups, a plotting of information in the Google map interface, can be found on topics ranging from Seinfeld episodes to used car lots. Reams of data connected to small towns and big cities are now visible on Google Earth or Microsoft’s Virtual Earth. The participatory turn of information mapping (once relegated to GIS specialists) is reflective less of individual user desire for local meaning than the individual user desire to perpetuate the construct of global access. Plotting a picture of my garden on Flickr’s map doesn’t give me more information about the content of my picture *per se*; but by contextualizing my picture in a global framework, it reinforces its local meaning. This is where locating information compliments the production of local knowledge. This is network locality in practice.

But let me return to where I started. How does the global network alter the formation of

placeworlds? The answer is: it doesn't necessarily. It is quite possible for placeworlds to form outside of the influence of network locality. It is quite possible for local knowledge to be disseminated by word of mouth, body language and other non-networked forms of communication. But it is equally possible that the composite structure of local situations is changing in accordance with emerging practices of digital media. While I do not intend to suggest that everything we know about local knowledge is different — that the realities of local poverty, oppression, ritual and pleasures, can be easily transcribed over digital channels — I am suggesting that network technologies and their corresponding practices are significantly altering the nature of local situations, both socially (how we share located information) and phenomenologically (how we experience that which is near).

Network locality is descriptive of a changing media landscape, where the relationships between user and information, body and space, local and global are shifting to accommodate emerging patterns of media consumption. This shift is not total, or totalizing; implied in the concept of network locality is the possibility that network and location can exist apart from one another. Local knowledge is still deeply rooted in physical presence and unmediated experience. There is no substitute for being raised in a particular culture, or having knowledge of something rooted in generations of embodied practice. What is increasingly clear, however, is that embodied practices are never outside information flows. Even if one doesn't carry around an iPhone or Blackberry, as normative understandings of situations shift to accommodate new practices, network locality operates outside of the tools that enabled the practices in the first place. The tools are themselves just a medium to address much wider cultural changes around what it means to occupy space, to be with others, and to be local in a world where everything from the spectacular to the mundane has global reach. 

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Notes

1. Meyrowitz, 1985, p. 39.
2. Berners-Lee, 1999, p. 4.
3. Castells, 1996, p. 469.

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