The internet in qualitative research

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The internet is a social phenomenon, a tool, and also a field site for qualitative research. The relationship of the internet to the research project depends largely on how the internet is defined.

The term "Internet" originally described a network of computers that made possible the decentralized transmission of information. In popular usage, however, "The Internet" is an ambiguous term, referencing or encompassing innumerable technologies, uses and social spaces. Because these technologies, the capacities for communication, and the types of social interaction made possible by the internet vary so widely, qualitative researchers find it necessary to define the concept more narrowly within individual studies. This is complicated by the fact that the study of the internet cuts across all academic disciplines. There are no central methodological or theoretical guidelines and research findings are widely distributed and decentralized. As a consequence, qualitative researchers may find it challenging to locate previous studies that might prove useful in the design and enactment of their own studies.

Depending on the role the internet plays in the qualitative research project or how it is conceptualized by the researcher, different epistemological, logistical and ethical considerations will come into play.

The internet tends to be used or studied in one or more of the following ways:

- The study of any social phenomenon using the internet as a tool for collecting, sorting, storing, and/or analyzing information gathered:
 Inquiry that utilizes various capacities and interfaces available on the internet to augment or replace traditional qualitative methods of collecting, storing, sorting, and analyzing information. Inquiry is not restricted to internet studies. The internet is also associated with the use of data analysis software, albeit inaccurately, as the internet is not strictly necessary to enable the functioning of such analytical tools.
- 2. The study of social phenomena that are mediated by, rely on, or interwoven with the internet for their composition or function:
 Inquiry focused on the way people use or experience various aspects of the internet, or on the cultural formations emerging from or made possible through the internet. Methods drawn from a wide range of disciplines can be adapted to studying internet use or computer-mediated environments.
- 3. The study of internet or aspects of it as phenomena in themselves:
 Inquiry focused on the network, technologies, or capacities of the internet. This research scenario is distinguished from the previous because of a greater focus on various features and implications of this globe spanning network of connectivity, rather than those social phenomena resulting from internet use.

These categorizations of inquiry are not necessarily mutually exclusive. Researchers studying an online community may conceptualize the internet as a tool for collecting information, the fieldsite, and also an object of analysis. A researcher exploring the way

information flows through the network may use the internet as a tool and also consider the social impact of this mapping.

It is important to distinguish between the research scenario, as categorized above, and the characteristics of the internet that will become salient as the purpose of research is identified or unfolds. Depending on the focal point in each scenario, the internet can acquire or display particular characteristics that in turn influence the design and enactment of the research project.

As a hypothetical example: Researcher 1, studying how breast cancer survivors frame their experiences, defines the internet as a tool, using various internet media to contact participants, schedule interviews, distribute open ended question lists, collect research diaries, organize and sort data, and so forth. Researcher 2, studying how women feel about being members of a virtual breast cancer group, conceptualizes the internet as a field site, observing interaction practices and group norms among participants. Researcher 3, studying personal websites created by breast cancer survivors, focuses on hyperlinks between websites, mapping the network of connections created by these common elements. In the first case, the information processing and transmitting features of the internet are salient, but only inasmuch as these tools function effectively. In the second case, the 'virtual' or internet-mediated characteristics of the group are salient, but tertiary to the primary focus on the group itself. In the third case, the internet itself is the phenomenon; links between users are the primary focus. Each researcher asks distinct questions that highlight or hide various aspects of the internet.

Salient characteristics of the internet

Certain uses and capacities are noted as important considerations in the development of qualitative studies of or using the internet. This list is not exhaustive but general, intended heuristically.

The internet as a medium of communication

Inductive, naturalistic principles and processes guide qualitative inquiry. In the examination of the construction, negotiation, and maintenance of human social practices and structures, qualitative researchers engage in the process of studying communicative practices in context. As a medium for communication, the internet provides multiple means of interaction and performance of identity and community.

Although composed of vast networks of connections between computers, the internet is more associated with the tangible capacities afforded by these instantaneous connections. Users focus less on the networks of connections than the texts, still and moving images, and sounds facilitated by these networks. People use the internet in ways that parallel but depart from or extend earlier media for communication, such as letter writing, telephone, post-it notes, bulletin boards, and so forth. People can use multiple media simultaneously. These uses can be asynchronous or synchronous; one-to-one, one-to-many, or many-many; anonymous or not. The presentation of self may be represented in writing, sound, moving and still images, video (live or pre-recorded), avatars, various displayed artifacts, and so forth.

Use of a particular form of internet media may appear homogenous at the surface level of activity. For example, the seemingly simple practice of sending text messages could be conceptualized as variously as: a conversation continuer, a marker of presence, a sign of status, an opportunity to represent oneself authentically, a move of parental resistance, an opportunity to wear a mask, a location device, or a signal for unified action.

If used as a tool for research, the capabilities of the internet should be matched to the goals, topics, or participants of the project. Because internet technologies are defined and adapted in distinctive ways by different users and groups, this is often an inductive process. Collecting life histories via email may be satisfactory, but allowing participants to create ongoing life history accounts on websites that they can design with color and images may yield richly textured results. Yet while this shift would be more suitable for certain users it would be completely foreign to others. For an interview study, real-time chatrooms may provide anonymous participation and spontaneous conversation, but that may not be adequate for certain participants or research questions. Interviewing via video may be preferred by some participants, but others might provide more information if they also had an instant messaging window open; sometimes people can't say something vocally or face-to-face, but they can and will express it in text. Email interviews may be better suited to participants who have busy schedules and desire time to consider their responses, but may be unsuitable for users more familiar with shorter, more immediate forms of interaction. The key is making a conscious and measured effort to match the mode to the context, the user's preferences, and the research question.

Internet as geographically dispersed

This capacity of the internet is generally taken for granted in everyday communication with others. Internet interfaces disregard location and distance, enabling the instantaneous and inexpensive transmission of information between people and databases. Logistically, the distance-collapsing capacity of the internet allows researchers to connect to participants around the globe. This increases and/or alters the available pool of participants and can enable questions and comparisons that were previously less available.

Research can be designed around questions of interaction and social behavior unbound from the restrictions of proximity or geography. Participants can be selected on the basis of their appropriate fit within the research questions rather than their physical location or convenience to the researcher. This requires a shift from physical to discursive boundaries for the ethnographic project.

Internet as anonymous

Certain interaction environments facilitate a sense of anonymity. This has obvious advantages for certain topics or methods of qualitative inquiry. Part of this perception is facilitated by the internet's disconnection from geographic markers, which means that one's participation in interaction with other people is not necessarily linked to one's physical proximity to others, as would be the case in all face-to-face contexts.

As well as the natural—though not necessary—separation between people interacting via internet-mediated communication, certain interfaces are designed to promote and protect anonymity. These anonymous interaction environments may allow participants to speak more freely without restraints brought about by social norms, mores, and conventions. This feature is useful in studies of risky or deviant behaviors or socially unacceptable attitudes.

Anonymity and geographic distance both complicate and ease ethical considerations. In meeting the ethical requirements for conducting research involving human subjects in most countries, it is required, among other things, to gain informed consent. It is difficult if not impossible in an anonymous environment to ascertain if the user is capable of granting informed consent. The physical and legal markers traditionally available to qualitative researchers in the field are obviously absent if the participant wishes to remain bodiless, nameless, and faceless in an online context. This has raised the question of whether our regulations associated with

informed consent are appropriately designed to protect human subjects. Using the internet as a method of interacting with participants may actually facilitate protection of human subjects; the participant has many outlets to withdraw from the study and certain interaction environments can improve the likelihood of maintaining confidentiality. These ethical issues require close attention by qualitative researchers.

As an interpretive rather than legalistic issue, anonymity can be discomfiting for researchers who may not know who the participant is, at least in any embodied, tangible way. This raises concerns about authenticity. On one hand, interacting with participants in anonymous environments results in the loss of many of the interactional qualities taken for granted in face-to-face interviews and observations. This may constitute a meaningful gap of information for the researcher who relies on these qualities as a way of knowing. On the other hand, similar gaps occur in more traditional research and interaction environments, but are generally considered to be more a problem of interpretive clarity than a natural condition of doing research with unfamiliar participants.

Internet as chrono malleable

As well as collapsing distance, internet technologies can disrupt the traditional use of time in interaction. Because internet technologies accommodate both asynchronous and synchronous communication between individuals and groups, the use of time can be more individually determined. In real-time conversations, users can see their messages before they are sent. Backspacing and editing are made possible by stopping time in this way. In text based environments, pauses and gaps are expected. Users may be participating in multiple conversations or tasks at once. Users may experience different speeds of connection or interruptions in service. In asynchronous media such as email or threaded discussions, these

pauses can be quite long, perhaps even weeks or months. In synchronous audio/visual contexts as well, users expect and work around disjunctive and fragmented interactions.

The chrono-malleable features of internet-mediated communication can assist researchers in conducting interviews, for example. Complications regarding venue, commuting, and scheduling conflicts are less restrictive when interactions occur on the internet.

The elasticity of time can be associated with greater perceived control over the communication process. Because of the time-stop nature of most online media as well as the knowledge that connections sometimes fail, users have the opportunity to reflect on and revise their utterances and actions. In the midst of a conversation, synchronous or asynchronous, users can reflect on a comment or message before responding and review their own messages before sending. Designing research to take advantage of these capabilities can significantly enhance both the scope of a study and the collection of information from participants.

Internet as multi-modal

Communication via internet occurs in multiple modes, alternately or simultaneously. Whether sponsored by software and hardware, a person's individual use, or the emergence of dyadic or group norms over time, these multiple modes operate on the sense-making practices of users. Consequently, the issue of the internet as multi-modal becomes meaningful when designing interactions in the research context.

Users tend to employ more than one communication technology at once; a youth might be writing an email, downloading music, updating his or her personal web space, and watching streaming video. When instant messages pop up on the screen, he or she is prompted to type a reply within a new or continued conversation.

Qualitative researchers study these complex interplays of time, spatiality, technology, and information flow. They also use these as tools to augment the ways that they communicate with participants. Researchers can use one channel with a group and different 'back channels' with individuals to interact privately while the larger group activity is occurring. These non disruptive "whispers" can add valuable data that might not otherwise be captured in the moment

Certain environments are set up to facilitate multiple simultaneous modes of interaction, such as interactive gaming. Even in straightforward information transmission environments, which were not designed to facilitate a sense of presence, programs can evolve into shared spaces as the meanings, relationships, and communities created by the interactions transcend the limitations of the programs in which people are interacting.

Researchers might study how these multi modal interactions occur, or are made sense of in the cultural context. Or they might simply use this capacity as a means of augmenting data gathering. Whether the technology provides the multiple modes or the users adapt technologies to a multi modal way of thinking is less important than the fact that these characteristics can influence the way users perceive contexts and interact with one another. For researchers, this has great potential for augmenting traditional approaches and creating previously impossible methods of interacting with participants.

As a context of social construction

The internet comprises discursive forms of presentation and interaction that can be witnessed immediately or archived in various iterations and moments. These facilitate the researcher's ability to witness and analyze the structure of talk, the negotiation of meaning and identity, the development of relationships and communities, and the construction of social structures as these occur discursively. Linguistic and social structures emerging through social interaction via the

internet provide the opportunity for researchers to track and analyze how language builds and sustains social reality.

The internet is not novel in that individual use, habitual practice across groups, and technical capacities constitute patterns of temporal interactions, building social structures that may become concrete realities. These processes describe any language system. The internet is unique, however, in that it leaves visible traces of these processes. Internet technologies allow the researcher to see the visible artifacts of this negotiation process in forms divorced from both the source and the intended or actual audience. Websites and website archives, for example, can give researchers a means of studying the way social realities are displayed or how these might be negotiated over time.

Ethical considerations

When geography no longer determines the boundaries of the study's parameters, the researcher can be less constrained by the structure, space, and time within which interactions occur. Social behaviors and texts are easily captured for analysis. Observing internet use as it constructs social reality can be accomplished easily; obtaining access to online groups is a straightforward process, as is downloading and archiving the interactions of these groups.

This deceptively simple process of access must be balanced with ethical considerations. Not all qualitative researchers conduct studies that involve human subjects, but even this distinction comes into play in debates about ethics in internet research. In general, although this list certain is not all inclusive, ethical challenges and controversy arise in the following circumstances:

Some users perceive publicly accessible discourse sites as private. For example, although
many online discussion groups appear to be public, members may perceive their

interaction to be private and can be surprised or angered by intruding researchers. Other groups know their communication is public but nonetheless do not want to be studied.

- Anonymity is difficult to guarantee. For example, some users have a writing style that is
 readily identifiable in their online community, so that the researcher's use of a
 pseudonym does not guarantee anonymity. Also, search engines are often capable of
 finding statements used in published qualitative research reports.
- Online discussion sites can be highly transient. For example, researchers gaining access permission in June may not be studying the same population in July.
- Vulnerable persons are difficult to identify in certain online environments. For example,
 age is difficult if not impossible to verify in certain online environments.
- At the same time, several ethical concerns arise. Additionally, confidentiality of participants' talk in these groups is almost impossible to preserve with the sophistication of search engines. Ongoing discussions and statements of about ethical problems and guidelines can provide the researcher with useful background information on how others have approached and dealt with these complex and evolving concerns.

Ethical guidelines and stances vary by person, institution, and country. Given the variations in ethical stances as well as the diversity of methodological choices, each researcher must explore and define research within his or her own integral frameworks. Comprehending and critically evaluating the broader discussions about ethics is essential, not only those discussions within internet studies or within disciplines, but within communities of qualitative researchers.

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See also: Anonymity, Email interviews, Ethics and new media, Multi media and qualitative research, Virtual research, Virtual ethnography, Virtual community, Virtual interview

Recommended reading:

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