

Technology

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EXPERIMENTS IN INTERPRETATION: RESEARCHING MEDIA, SOCIETY, AND CULTURE WITH TECHNOLOGY

Are methods continuously emerging in the age that comes after the internet, digital media, and ‘pervasive computing’? There is something curious about the question of method as it arises at the interface of social research, media technologies, and computing today: on the one hand, the use of digital techniques in the conduct of social and cultural inquiry is becoming ever more common and routine. Few people would expect social, media, and cultural researchers *not* to use search engines, analyze online materials, or interact electronically as part of the research process. Indeed, the attempt to avoid such technological mediations altogether would likely result in a highly artificial methodology and affect the very credibility of the research. On the other hand, however, the uptake of computational techniques in social and cultural research continues to unsettle established methodologies and, as I would like to argue here, forces the development of more experimental ways of knowing.

This puzzle of method arises from the following circumstances. Most importantly, so-called technology-driven forms of inquiry that some years ago were heralded as ‘radically innovative’ have been shown to be less of a novelty than previously proclaimed. Approaches like the

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‘new network science’ and ‘natively digital’ methods such as Google Trends have been shown to contain many elements deriving from long-standing methodological traditions in social research, including social network analysis and sample survey analysis. Notwithstanding its declared ambition to revolutionize social and cultural science, this work replicates key analytic and methodological presumptions from a pre-digital age, such as the notions that all actors are human and that data can be presumed to be passive. This insight into the methodological inertia of at least some parts of computational social and cultural science is liberating in some respects, insofar as it turns the tables on ‘innovation’ in social and cultural inquiry. Many of the technology-driven approaches have been developed in collaboration with tech industries and, while these industries certainly have access to more powerful machines, larger volumes of data, and more sophisticated analytics than most social and cultural researchers, this does *not* necessarily mean that they have the methodological edge.

It is becoming increasingly clear, then, that the uptake of digital techniques, data, and methods in social and cultural research compels a more fundamental interrogation of the analytic assumptions guiding social and cultural inquiry than previously recognized. Digital data prove to be heavily formatted by technology, and digital objects of inquiry are marked by ‘interactivity effects’: the internet, social media, and sensor networks do not just make the social world available for empirical analysis, they disclose phenomena that are themselves shot through with media-technological dynamics, like linking, tagging, and ranking. In brief, this means that the uptake of computational techniques, data, and methods in social research disrupts the assumptions and ideals of *representational* social science. Digital machines do not just qualify as windows on the social world, but present us with ambiguous instruments of social media research. As such, they invite us to explore alternative methodologies, for example by turning to interpretative approaches in social and cultural inquiry that explicitly recognize the possibility of the type of interactivity effects already noted: interpretative methodology has long emphasized that the categories used to describe social life may affect its very enactment, at least since the beginning of the 20th century. This form of reflexivity is proving all the more pernicious in relation to interactive technology.

How can we deal with this? Insight into the historicity of computational social and cultural research—the realization that it is animated by

deeply familiar methodological concerns and problems—does not cancel out the provocation that technology presents to social and cultural inquiry. Insofar as it compels us to recognize openly the role of technology in social life (as well as in social research), it invites and indeed forces us to experiment with alternative research designs, ones that explicitly recognize the participation of technologies, environments, and formats in social and cultural life. Each of the contributions collected in this volume in its different way takes up this challenge by adopting and developing experimental strategies of researching media, technology, and society. While many of us trained in qualitative methodology have grown accustomed to viewing experimental methods with trepidation, the contributors to this section courageously take up computational methods, data, and techniques that require them to cross into alien methodological territory, as they experiment with tools from the domains of information science, human–computer interaction, and network analysis: they compare social media feeds, take up self-tracking applications, model connectivity, and automatically extract (scrape) data from peer-to-peer networks. As such, these contributions follow the intuition that the development of social and cultural research methods ‘with technology’ must be a creative as well as an interdisciplinary project.

Why call these research projects at the interface of digital media, computing, and social research experimental? Their willingness to take up unfamiliar research techniques—the application of which therefore inevitably involves trying and tinkering—is certainly part of the answer. But another is their reliance on basic research protocols to generate empirical objects. As social and cultural researchers capture and analyze data by computational means, their research acquires a formal character, following a series of steps and implementing technical instructions. Taina Bucher compares social media feeds (one unfiltered, one curated) for six months; Pablo Velasco relies on ‘the public transaction information displayed in the blockchain’ to map socio-technical networks. As social and cultural researchers curate and analyze digital data in this way, they are likely to generate empirical objects that did not exist prior to the research: they actively produce phenomena that are *not* already given in the data or in the machine. In doing so, these projects move beyond the descriptive or observational modes of qualitative inquiry, and unsettle—if not reject—the anti-methodical impulse in much qualitative research, even as they conduct their experiments in order *to produce interpretations of an exploratory kind*.

What is critical, then, is that efforts to develop more experimental ways of doing social and cultural research ‘with technology’ should not be equated, as a matter of course, with the uptake of methodological frameworks taken from the sciences. These efforts are better understood as attempts to configure ‘experiments in interpretation’, as heeding the call to cultivate distinctively experimental forms of social and cultural inquiry that has been voiced by philosophers and sociologists since the early 20th century. Pragmatist thinkers like John Dewey, the ethnomethodology of Harold Garfinkel, and the social studies of science and technology (STS) undertaken by Susan Star, Bruno Latour, and others have long argued that we need to move beyond description and observation to intervention—or provocation—in order to truly know social, political, and public life. They also made the case for a broader analytic sensibility for the ‘experimentality’ of social, political, and public life itself: in their views, ongoing disruptions, breakdowns, surprises, and controversies—in short, the disturbance of taken-for-granted ways of doing—mean that experimental moments proliferate in our worlds, and these present positive, enabling occasions for interpreting the world, for social research but also in social life, more widely defined.

How does social research at the interface of computing, digital media, and social life take this broad approach forward? On the one hand, this work focuses our attention on the experimentality of phenomena in digital societies. Velasco shows how the emerging socio-technical infrastructure of Bitcoin unsettles the very notion of ‘currency’. Alberto Frigo conceptualizes lifelogging as a social and cultural practice that seeks the transformation of habit through measurement. Richard Husky invites us to include neural networks among the heterogeneous formations that inform and inflect life and media in digital societies. The experimental quality of these methodological propositions, to be sure, gives them a rather slippery status—but social and cultural research conducted with computational technologies is able to translate this constraint into an empirical brief. They invite us to ask: What are the relevant constraints—algorithms, social structures, standards, resources, interests, and so on—that come together in a socio-computational phenomenon like a distributed transactional network, a social media recommender system?

Approaching such a question experimentally, it should then be clear, does *not* mean that it becomes our aim to implement maximally ‘controlled’ research procedures (the digital networked environment as social science laboratory). Experiments in social and cultural research have

various merits, but one of them surely is that they take experimental inquiry into an opposite direction from the presumption that conducting an experiment requires that the researcher control the setting and gain full and complete access to the data. Rather, it is to pursue exploratory knowledge through the active configuration and combination of networks, data, feeds, and measures and by deploying the ongoing provocations of life in technological societies in order to generate partial empirical objects.