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### Studying the Sent-Down Internet: roundtable on research methods

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#### Methods Forum for CJC Special Issue "Sent-Down Internet"

Moderators: Elisa Oreglia (EO), Jack Qiu (JQ) Discussants: Wei Bu (WB), Barbara Schulte (BS), Jing Wang (JW), Cara Wallis (CW), Baohua Zhou (BZ)

# EO&JQ: Welcome to this dialogue on methodological issues in studying the Internet in rural China, an area where you all have direct experience. What do you find is most challenging in researching this topic?

**WB:** Rural people make sense of things in their own contexts, which researchers from urban areas usually do not understand in the first place. Back in 2002, when I was doing fieldwork in Renshou County, Sichuan Province, I was shocked to see the local cable TV channel "broadcast" online news. They cut and pasted pure text from Internet news sites such as Sina and then showed it on a special channel 24 hours a day. Information from Sina thus entered the contexts of ordinary rural families, now all equipped with TV sets. This was something urban people wouldn't understand without being in the field.

A second challenge is, who sets the standard? Researchers often bring a rigid set of standards from cities, from their own experiences, about what's "advanced technology" and what's "backward." They apply these standards with little respect for rural experiences, become judgmental, and miss important things. Rural people may also fabricate answers to please the researchers, telling them that they go online often when it is not true.

A third challenge is gender sensitivity. The tremendous gender inequality that characterize rural areas (in addition to other forms of inequality) is also beyond imagining for inexperienced, urban researchers.

All these challenges boil down to one point: how can we recognize in a way that remains true to its (rural) context new modes of what I call "media convergence from below"?

JW: Cultural studies critics always ask questions about the validity of foundational discourses. In that spirit, I think we must not take the word "rural," the "countryside," or its semantic opposite the 'urban' for granted. On the practical level, China's administrative space has continuously been rescaled and destabilized since the Reform period. In recent years especially, economic zones were shuffled and regrouped, and as a result, China's administrative scales became highly unstable. The government has started implementing the policy of 撤乡并镇 ("dismantling the xiang scale by integrating it into township). Provinces like Zhejiang are even experimenting with the initiative of 撤镇建市 ("dismantling township by integrating it into county-level cities). This musical chair effect is changing what used to be known as 'rural' and 'urban' China. The boundary between xiang and zhen is becoming more and more fluid, as is the dividing line between *zhen* and *xian*. By 2020, it is estimated that the total number of 'urban' residents will consist of more than 60% of China's total population. As what's defining 'rural China' is shifting significantly in administrative terms, we have to ask ourselves to what extent would such change impact our perception or the reality of 'rural China'? What's the impact of the recent Chinese administrative reform on the geo-cultural life of Chinese people? How do we begin to talk about 'rural China' under those circumstances? How do we name it?

I feel that's the kind of questions that critical geographers and policy researchers might help us tackle with. My point is: disciplines do not work collaboratively enough even though 'interdisciplinarity' has become a clichéd proposition. That's one of the most challenging issues I encountered even before I started writing a paper on ICT in rural China.

In the specific context of my work on the NGO sector, I ran into other challenges. As I argue in my article, technologically empowered institutions that serve the underprivileged in the countryside are usually not 'rural' institutions per se, that is, their offices and operations are most likely based in first, second, or third tier cities even though the services they provide benefit rural communities. Apart from infrastructural investments made by local governments, human and technological resources *travel to* rather than emanate from the countryside. "ICT in rural China" is thus a complex proposition we need to unravel.

CW: There are several challenges to studying Internet use in the rural China. The first is that the "Chinese countryside" is a bit of a misnomer because rural China is so diverse. There isn't one "Chinese countryside." When I did fieldwork in Shandong province, the villages just outside of Qingdao were almost indistinguishable from the city in terms of transportation and communication infrastructure, standard of living, etc. Then, not surprisingly, the villages in central Shandong weren't as developed, but there were shops, restaurants, and paved roads. Internet access was widely available and many residents had computers with Internet connections in their homes. Those villages are nothing like the villages in Gansu province a few hours from Lanzhou, where nobody had computers or Internet connections in their homes and there was no way to make a living other than agriculture. So, based on this small comparison, what do we mean by "rural China?" The second challenge is because there is so much circular migration in China, what do we mean by "rural resident" aside from hukou status? The third reason is that as a feminist scholar of technology, I am very interested in how gender is articulated to technology. In the villages where I did research, it was very common for the male head of the household to dominate the conversation and harder to hear the voices of older women (by "older" I mean women in their 30s and 40s). A lot of the interviews I did were with couples, and often the husband would say things like "She doesn't know how to use a cell phone" or "She doesn't need a cell phone; she can use mine" when referring to his wife. Such statements say a lot about gender relations but they aren't necessarily true factually, because of course a woman knows how to use a cell phone.

**BZ**: The first main challenge to me is the scarcity of empirical data on Internet in rural China, quantitative and qualitative. For a long time, urban rather than rural China has been the focus of new media scholars, so it is quite easy to find research that uses data from metropolis like Beijing, Shanghai, and Guangzhou. But aside from the general and very basic descriptive reports from CNNIC (China Internet Network Information Center), data on Internet development in rural areas, on how rural people use it, and on its influence on rural society are quite scarce. We need to collect more empirical and comparative data on the countryside, which can serve as a foundation for further study. Another, related challenge is the trap of "urban-centralism" in the design of empirical studies on the rural Internet. Since scientific research, especially quantitative, emphasizes the accumulation of knowledge and instruments, including measurements, scales, and indices, research designed for rural areas always follows the design of research carried out in urban ones, without distinguishing contextual differences between the two. For example, when scholars measure basic online behaviors, it is quite natural for them to adopt the well-developed measurements from the urban Internet studies, even when these measurements might miss the real exciting characteristics of online activities of rural users. In our large-scale national survey from 2010 we had to use the same measurements for rural and urban areas, to ensure that we could compare Internet use patterns across the whole country; this, I feel, limited both possible theoretical innovations and practical insights. The tension between "local knowledge" that emerges from rural China and the "well-defined knowledge" mostly developed in urban areas is the main challenge facing scholars.

**BS:** For me the biggest challenge is to understand individual users, and arrive at more nuanced understandings of issues such as digital empowerment, or digital literacy. How can we, for example, disentangle academic and policy discourse about Internet use and digital literacy from how these are understood on the ground, by specific users in specific settings? This is difficult to answer from an abstract perspective; it needs a very intimate understanding of how people integrate technology in their everyday lives.

# EO&JQ: What is data to you? How do you gather and analyze it? What are the advantages and disadvantages of your research methods?

**BS:** For me, data within the social sciences are the outputs that are generated in social (inter)action. We'd usually restrict these data to human outputs but of course human/machine interactions can generate very interesting data too. Gathering data, analyzing and conceptualizing them are no separate processes to me but are co-constructive: I need an initial puzzle that I want to solve in order to look for certain kinds of data; but through gathering, ordering, coding and labeling data, I'll also readjust my criteria of what data I'm looking for. People I interview can say something that puts things in a new perspective or even challenges established truths; 'policy talk' (e.g. retrieved from policy documents) can work as subtext to certain practices that would otherwise be difficult to understand (or would be understood very differently). Data should be able to tell me what processes are going on and what messages/discourses are being generated by whom, for which purpose and within which realms; how different actors relate to these messages (refuting, legitimizing etc.) and how they have access to them; how messages change across time, space and actors/groups. At the same time, I need to be aware of my own relationship with the data – how I affect them and how they affect me.

The research methods I use are closely tied to my critical constructivist approach towards gathering data, gaining knowledge and making theoretical claims. They are based on the premise that human beings are active agents who intersubjectively construct the world(s) they live in. Following largely the Grounded Theory tradition, I'm interested in how people frame/'label' their world, and how they are motivated/constrained by their and others' interests and expectations, social and spatial mobility etc. Consequently, methods include classic ethnographic elements such as (participant) observation and taking field notes, textual analysis (with tools taken from discourse analysis), intensive interviewing (involving coding, clustering) etc. I have also used social network analysis (SNA; however so far only on historical examples) in order to analyze paths of social interaction and diffusion, to see what types of people connect with one another, who acts as mediator/broker, how ideas (might possibly) get transmitted, and so on. These are all methods that can help us understand social practices, human interaction, and the formation of identities in particular settings over certain periods of time. They are apt for theory construction (middle-range rather than grand theories), but they do not aim at population representativeness, nor do they provide tools to produce generalizations or even predictions.

**BZ:** I use multiple methods in response to different research purposes and questions. Collaborating with my colleagues in Fudan I have conducted the first large-scale national audience survey in the new media environment, which included detailed quantitative measurements on Internet and mobile phone adoption, usage and social impacts on people's identity, subjective social status and citizenship engagement in the rural areas (Zhou 2011). In this survey, we collected data with a standard random sampling survey procedure. In each of

the 31 provinces (including 5 autonomous regions and 4 municipalities) of China, a sample of 1,200 to 1,300 was drawn via a multi-stage cluster sampling procedure, which produced the final dataset containing 37,279 complete interviews (Zhou 2014). Then we use multiple statistical techniques including classic OLS regressions and multi-level regressions to analyze the data to assess the Internet use and its social influence at a national and regional level, using a comparative lens. This kind of random survey has the obvious advantage of allowing scholars to find the general pattern and the whole map about Internet development and its interactions with other social institutions in China's countryside.

In my other research projects, such as the long-distance family communication between migrant workers and their parents or children staying in the countryside, I use qualitative methods, including field observation, in-depth interview and also action research, which help me make sense of the actions of rural people and the logic behind them.

**WB:** Experiences, values, feelings, knowledge (including especially local knowledge): these are the kinds of data I collect along with the demographics and background information of the rural people I encounter (see CHAPTER FROM DOING FIELDWORK for more details - before contributing to this book, I thought that only Chinese researchers could do good fieldwork in rural China. I was amazed to see the work of foreign scholars such as Stig Thogersen far surpassing the level of most Chinese colleagues – in part due to the impressive methodological rigor).

I use both quantitative and qualitative methods. In 1990, I did surveys on the diffusion of media, video, and *zhonghua xuexiji* ("China Study Machine," an early form of PC) in the countryside. But now I use mostly qualitative methods and action research, because I have different research questions. I'm more interested in empowerment and collaboration with local people in solving their problems, and find tools like surveys to be limiting. Now I prefer to work closely with my rural participants (whom we no longer call subjects), in producing videos for instance; they are no longer subjects, survey respondents or interviewees. This doesn't dismiss the usefulness of quantitative methods. If my collaborators think a survey can help our projects, I will do it. It's not the method which has this advantage or that disadvantage. It's the research question that matters.

**JW:** The Old English Dictionary tells us that the term 'data,' from classical Latin, refers to "an item of information" and to "related items of (chiefly numerical) information considered collectively, typically obtained by scientific work and used for reference, analysis or calculation." There are different types of data—qualitative and quantitative. *I think each academic discipline prioritizes one kind of data over the others* and that preference defines how we collect data. Classical Cultural Studies distinguishes itself by the ways it engages with meta-theory rather than by its development of practical methods. Things are changing with the rise of the new generation of popular culture studies scholars. They have turned increasingly to fieldwork to capture the *here and now* and given participant observation a new layer of significance. I think the question most important to all qualitative researchers is: What can count as data, and how do we recognize it when we see (or sense) it?

As I pointed out in my article, I built NGO2.0 as an activist. "Research method" is an alien question for an activist. I have waited five years before attempting to publicize the project in writing. Keeping a low profile about this project has been my intention all along. It's a necessary step to take to evade censorship. Before NGO2.0 became fully established, the less people in the U.S. talked about it, the better. Equally important, I felt uncomfortable about turning my grassroots comrades into research objects. I am certain that it's the kind of dilemma many social action researchers face.

I would like to reiterate what I said about method in my article. First, there would be no NGO2.0 if I were not trained as a cultural studies critic. Design specialists saw in NGO2.0 human-centered design and they told me that I am a creative 'designer.' Translating that observation into the idiom of Cultural Studies, it means to take "the whole system of knowledge itself and, in Benjamin's sense, attempt to put it at the service of *some other project*"—a quote from Stewart Hall. That 'some other project' is my activist project, NGO2.0.

That is, I turn to the epistemological underpinning of Cultural Studies for agenda setting whether I am engaged in activism or research, and eventually I will have to turn to action research as a method, however imperfect it is. As I said in my article, no matter how hard I had thought that the research arising out of NGO2.0 should fall naturally within the domain of participatory action research, I remain uncomfortable with the positivist tradition deeply ingrained even in this highly progressive brand of scholarship. Othering is interwoven with writing about any lived experience, activism included.

The positivist tradition of action research is dated far back to the inventor of this term, Kurt Lewin, who defines it as "a comparative research on the conditions and effects of various forms of social action and research leading to social action." The linear, causal, and binary mode of thinking is emblematic of the pitfalls of the methology in question. I am much more taken with the School of 'cooperative inquiry' advocated by John Heron and Peter Reason who look upon action research as 'research' 'with' rather than 'on' people." Combining that school with what ethnographers call "participatory research," I think we get a good chance of renewing the best in the tradition of action research. For my own purpose, I coined the term "social media action research" to insert the question of *media* into an old field of inquiry. I ask: What happens to traditional action research when it intersects not only with digital media but also with social media? As I said in my article, "It would take another full-length article to do justice to my vision for social media enabled action research, which is going to be an approximation of a form of scholarly affordance that captures the authenticity of the practice of the NGOs and other social change agents we are working with <u>and</u> the authenticity of my own *modus operandi* as a activist-scholar."

With a few exceptions, I have yet to see action researchers address either trajectory to my full satisfaction because thus far, the agenda of 'research' inevitably overweighs 'action.' I am tempted to reverse the emphasis and see what happens. I am, in other words, experimenting with a form of writing that delivers an authentic glimpse of both worlds—activism and research.

**CW:** I believe technology and culture are mutually constitutive, so to me "data" could be almost anything. If we only pay attention to the technological object and view it as just a "thing" or a "tool" then we will miss a lot. I situate myself within critical/cultural studies of technology because I'm interested in discerning the entire technological assemblage of a given context, which cannot be separated from gender relations, multiple power relations, various practices, feelings, desires, etc. I use qualitative methods for a number of reasons. I situate myself within critical/cultural and feminist studies of technology, which has a long history of critiquing quantitative methods. I'm not saying that surveys can't be useful; they certainly can. However, qualitative methods are able to help me answer the types of questions that I think are important and that interest me. I rely primarily on participant observation, indepth interviews, diaries, and virtual ethnography as well as textual analysis. Obviously, these methods are also up for critique. I think any critical scholar who does ethnography is very

careful to try to avoid "othering" and takes measures so that they are doing research with "participants" and not "subjects." Still, in the end, I am the one doing the analysis and the writing of the text. Having research participants read the final draft can help avoid misinterpretations, but this is not always possible. I have also been involved in participatory action research projects. I have found that in such projects there are also often misunderstandings and issues of trust and communication, no matter how hard everyone tries to communicate clearly. So, obviously no research method is perfect and I think that is something we have to admit and accept as scholars while being critical in our work, including critiquing ourselves.

#### EO&JQ: How do you define and assess the accuracy and reliability of your data?

**WB:** Every method has its own procedure, and I find comparative thinking helpful, as well as considering contradictory cases or contradictory opinions in data interpretation. I also go back to my participants to re-examine my assumptions and conduct workshops with them. For example, in 2003 I designed a questionnaire on Internet pornography (*wangluo seqing*). When I talked to the rural people, they told me they did not understand the term, but they used other words such as *selang* (predator), *biantai* (sadist), *qifu* (harass, sometimes euphamism for rape). After several iterations, we changed the wording of the questionnaire to reflect the experiences and local knowledge of rural women.

**BS:** Two important questions regarding data are their suitability and sufficiency: do my data help me understand the processes at hand? Are they detailed enough, and do they represent sufficiently many angles? Do they enable me to understand differences across time and space? Are they able to uncover details that have remained hidden so far? A further question concerns the point of saturation: does new data gathering generate new insights and concepts that require new data, or do my concepts have enough grounding?

**JW:** That's a tough question. 'Accuracy,' like the term 'objectivity' or even 'truth,' is relative and hence deconstructible. There is always an extra mile to go when it comes to 'accuracy.' NGO2.0 has different datasets for different surveys. We have different ways of verifying the reliability of those data, but they all share one thing: they are attached to real names and real organizations.

I will just give two examples to illustrate how we evaluate our data:

(1) The 2.0 crowdsourced map (www.ngo20map.com): there are over 1530 NGOs that registered. We hired a full-time employee to vet the data, checking the links submitted by each registered organization to determine whether they are real or not. We are also developing a mechanism of collaboration with provincially based support-type NGOs which, because of their familiarity with the local NGO network, can help verify the existence of small NGOs whose presence online is ephemeral.

(2) NGO online self-evaluation: The survey, which is conducted annually, has a highly accountable mechanism that assesses NGOs' public trust, financial management, and social influence respectively—criteria that serve as points of reference for corporations, foundations and government in their selection of NGO partners. We do not publish those survey results, which motivates participants to be honest in their self evaluation. But every year we choose 20 best-scored NGOs and send a specialist to do an on-site participatory evaluation. We've done this for three years. This is a rather rigorous way of evaluating their self-evaluation. Thus far, only two NGOs overrated themselves. The online survey is also designed in such a way that it not only enables participating NGOs to situate themselves in comparison with

other NGOs in each evaluative category, but it also provides them a set of programmatic options to consider if they want to move up the score. Critical to this self-evaluation is the process of self-discovery and the desire for self-improvement. The scores are far less important.

**CW:** I'm not sure anyone can ever be 100% sure about the accuracy and reliability of their data. This doesn't mean these terms aren't important, but as Jing Wang describes above, they can be desconstucted. One of the advantages of doing ethnographic fieldwork is that you are spending extended time with participants and having multiple conversations with them. What people say they do and what they actually do is not always the same, regardless of the circumstances. In rural China there are two main reasons for this. The first is that most rural residents are aware of how the Chinese countryside and its inhabitants are constructed as "backward." So, someone might tell you they go online or use certain applications when they actually don't, but they want to appear knowledgable, which Bu Wei mentioned earlier. The second reason is that often the terms we use that we think are so clear are not actually clear in another context. I love Elisa's example in her fieldwork of how a grandmother chatted online with her relatives and watched movies online yet said she didn't use the Internet. That is why having extended time to observe practices over time, to have ongoing conversations, to clarify anything that seems confusing or contradictory is really important. Also, if I'm focused on the logic of discovery, and at some point I'm not discovering anything else new, then I can assume my findings are accurate and reliable, which I understand within Cliffords' notion of "partial truths" and Haraway's "situated knowledges."

**BZ:** Quantitative study has a standard procedure to guarantee data accuracy and reliability, but we should be more careful when we conduct surveys in rural China, because of "the measurement bias towards urban China" that I mentioned earlier, as well as the lack of "situated knowledges" suggested by other colleagues in this discussion. The way our team approached this problem was to first run several rounds of pre-tests, especially in rural areas, to see if wordings developed from established empirical studies in urban areas, still made sense to people in the countryside; and then, based on the pre-tests results, we added some questions that were especially meaningful for rural respondents, such as voting in local elections; and finally, since we recruited a reputable audience research agency to conduct the fieldwork, we also conducted our own quality control procedures such as calling back and selectively asking some questions again. For me, two aspects are especially crucial: to stay in the field as long as I can to deeply understand the local context and situation; and to crosscheck what people say to me and to link it with what they do, as mentioned by Cara.

# EO&JQ: Are some of the latest Internet trends, like Big Data and cloud computing, having an impact on your research or other relevant work you are engaged in? How so?

**WB:** Big Data still depends on human brain. I am using a Big Data firm now in analyzing the content of *dagong chunwan* (Migrant Workers' Spring Festival Gala) including its influence on public opinion platforms such as Sina Weibo. However, my experience is that the quality of this project will depend more on our theoretical thinking and analytical framework. Big Data is, after all, just a tool.

**BZ:** I am doing some "big data" research since I am running a public opinion research center and a new media master program in Fudan. I think "big data" approach shouldn't be separated from other data collection methods, and I expect that in fact it could help us make sense of the dynamics of the Internet in China's countryside. For example, I would like to mine the *Weibo* data to explore some "critical events" in the lives of migrant workers, or how

Shanghai people express their opinions towards migrants in their city. I have conducted surveys and interviews on these two issues before, so I hope the "big data" can help me understand the online expression and interactions between urban people and rural people from a discourse angle. I look forward to more empirical studies using big data, but only for possible theoretical innovation, not because it is currently a "fashionable game".

**CW:** I am not exploring "big data" at the moment. I think one reason is that my knee-jerk reaction is always to be skeptical of the latest buzzwords. The biggest reason, however, is that I don't think it gives me access to the kind of fine detail and nuances that I find so interesting. Moreover, there are also a lot of unresolved ethical issues with the use of big data.

**BS:** I haven't yet worked on Big Data in my own research but find them interesting in so far as they have an effect on how we construct our realities by using our computers/the Internet. While we constantly select and filter information with the help of our cognitive apparatus, Big Data enables machines to do this for us—with what consequences, and at what cost? Do we miss out on something important? Would we be not less, but *differently* informed without Big Data? Moreover, making use of Big Data of course also changes the ways that individuals and groups are observed, dealt with and controlled, both at the level of state and commercial agents and at the meta-level of doing research on controller and controlled. This opens up interesting methodological questions.

**JW:** The impact of the Internet trend of Big Data on the social sector is crystalizing itself into a micro movement of Data4Good in the United States, which means unlocking data for philanthropy. This is a new challenge to NGO2.0. We have developed civic hackathon projects in response to the ideology and practice of tech4good. Now data philanthropy is something of a different order.

In the nonprofit sector, Big Data could mean several things at once: access to data helps the underprivileged get what they need (for example, the map of Red Cross Shelters); access to data helps facilitate post-disaster relief work (for example, the Ushahidi's crisis map); data access helps UN and other development organizations around the world to monitor efforts to predict and detect anomalies, and take action to improve the well-being of humankind. We may call those data "social change data," which means big data can enable the growing of a collective capacity of human beings for identifying and solving social problems.

Where would the Big Data come from? That is the big question. Would big data companies like Google, Facebook, and Twitter in the US, or Baidu, Tencent and Sina in China donate their public use data to a data commons? What about government data? On this front, the US fares better than China. All in all, I am afraid unless Open Data Movement gains a solid footing, 'data4good' would remain a chimera. At the time when Chinese grassroots NGOs are still struggling with maintaining the basics of operation, it is perceivably difficult to convince them that they need to become sophisticated in data access, manipulation and display skills. We have taught the NGOs how to conduct their own online surveys and to collect data from ground up. Perhaps in the future, the data that was gathered by NGOs themselves and aggregated on those platforms like Survey Monkey or Wendao can add up to something meaningful.

Those who have worked in Chinese nonprofit sector know that different organizations conduct similar surveys and that they don't share with each other the data collected, not to mention creating standardized metadata. In the US, there is a range of efforts that takes aim at connecting the data dots to generate a larger data picture of activities and information

revolving around civil society organizations, such as The Gates Foundation's Markets for Good, or DataKind, which brings together leading data scientists with high impact NGOs to explore positive action through data in the service of humanity. It's something I am dreaming of for NGOs in China. Both kinds of data activism are going to be absent in China for a long time.

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