

Designing a More Equitable Internet

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In discussing technology in the most recent phase of human history, one challenge seems particularly salient: in the move toward a network society, with knowledge stored on the Internet and political and social affairs conducted online, what is the impact on equitability? The Internet is a fundamentally unequal place. Wikipedia is the fourth most popular information site in the world—the Library of Alexandria of our time—yet (displaying a map of contribution rate by region) huge fractions of the human population have very little input into this ostensibly “free encyclopedia.”

In his work on enhancing Internet equity Professor Parikh examines a wide variety of issues: the manner in which media are accessed, using what kind of devices; the *kind* of literacy required (not just levels of education but types of scripts—i.e., if sites, browsers, etc. are all designed from a Western, literate perspective, how does that affect equity?); the potential for designing systems that afford greater equity; and reinvestigation of social media, maps and geographical sites, and databases, to see how they would look with a different socioeconomic baseline. One step in the direction of widening Internet access is Professor Parikh’s Awaaz.De (literally, “Give Voice”), a phone-based, social media system for farmers in India, using mobile phones and voiced inquiries and responses in place of computers and websites. There used to be a weekly half-hour radio program featuring two people, a farmer and an expert, discussing local agricultural issues and trends. The show was followed by a call-in hour, which wasn’t broadcast; but the show was so popular that the line was always jammed and most people couldn’t get through. This is a problem the Internet is really good at dealing with, since it allows for asynchronous responses to incoming questions, and one can also re-use answers to similar or identical questions. The Awaaz.De program features a supervised call-tree process, in which a moderator “triages” the incoming question, checking the inbox interface, adding metadata as necessary, and routing the inquiry via telephone to the appropriate expert. The expert’s answer is then sent back to the caller, who can choose to revise or amplify his question and resubmit it (again, availing himself of the capacity for asynchronous dialogue). If something appears to have general applicability it can be broadcast.

Other members of the farming community can respond, giving the discussion a peer aspect. During the initial phase of Awaaz.De, when the project was paying for air time, there was a lot of open, public give and take; unfortunately, once the program went to a metered system, people began to call in exclusively to ask their own question—no one’s interested in paying to respond

to anyone else. There are now a half-dozen other similar organizations in other fields, like social work field education, labor awareness, youth advocacy, education, and human rights.

Another project directed toward extending Internet access involves mapping. Parikh observed that there were places in Ethiopia where people had produced wonderful, highly informative maps of their villages which were ignored by government planners, whose information lacked the intimate level of detail the villagers' maps possessed as well as any sense of how local people were using the spaces on which the planners' projects would be located. Addressing a corollary situation in the East Bay, Parikh worked in conjunction with UC Berkeley's Y-Plan youth development initiative (<http://citiesandschools.berkeley.edu/yplan.html>) to involve local youth actively in the redevelopment of Martin Luther King, Jr. Park, in Richmond's Nystrom Village housing project. The goal was to make it possible for local youth to contribute to the redevelopment process by building local ground, and collecting, digitizing, and presenting data about the district or neighborhood. Parikh felt that the use of tablets, smartphones, and the like becomes a distraction, creating a disproportionate focus on technology and apparatus, both on the institutional level and out in the field. He wanted to make data collection as simple as possible, with no technological barrier to the students' focus on observation. The method employed was to have students annotate physical maps, using any colored implement they found convenient or appealing, scan or photograph the annotated map, and overlay the annotations, such that they could be displayed in layers, onto a Google map of the area. A presentation of the final product, involving narratives about local spaces, was created.

The Nystrom Village mapping project had social studies classes go out and document how space was being used, bringing their intimate knowledge of and history in the area to the creation of a canny, often trenchant description of their turf: the area has no trees; the Community Center is "not very welcoming"; the basketball court's a major robbery zone; the children's playground is across the street from a methadone clinic. . . . Places suitable for "cupcaking" (making out), or where the streetlights had burned out, were identified. The project participants decided to focus on getting a graffiti wall, and made a highly sophisticated presentation at City Hall in support of that objective, only to be informed there was "no money for it"—thereby learning an invaluable lesson about the extreme difficulty of attaining political impact: you can do a really great job, but it simply may not matter. There was, however, one non-negligible outcome of the project's interaction with city authorities: the streetlights, about which the students had notified city authorities, *did* get fixed.

There were many lessons learned about how best to organize and facilitate such local land-use documentation projects. The low-tech/high-tech aspect was key—making sure it was easy to collect data, because once participants had *their own* data they became really excited about presenting it. Simple means of production, involving paper, stickers, markers, and the like, were fun and led to greater participant engagement. They also involved less training and supervision; the previous year's project had used PDAs and spent the entire time configuring the devices. Drawing on the map was an instructive and collaborative experience, and finally putting the map on Google—right next to the Chamber of Commerce!—conferred real legitimacy on the students' efforts.

Future goals and foci include the imminent release of the platform, to just get it out there and have people using and discovering new applications for it (games involving mapping, perhaps?), fostering youth data literacy, and encouraging youth advocacy and participation. A major realization was how fundamental, indeed indispensable, a role teachers played a in such work. The students involved in the Nystrom Village mapping project all graduated. Continuity is a huge issue, and teachers alone can provide it.