Research Article

The Complex Position of the Intermediary in Telecenters and Community Multimedia Centers[1]

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Abstract

The critical role of the information intermediary in supporting community participation in telecenters and community multimedia centers [CMCs] has been recognized for some time. However, the literature has largely taken a neutral/positive perspective (that the center manager/staff are necessary social connectors and should ensure equitable access) or a negative one (that they may replicate hierarchies, be unwilling to help, or direct users toward "undesirable" information). Drawing on how identities are embedded within and formed by networks, this article takes a third perspective: Telecenter and CMC information intermediaries are in the complex positions of brokers and translators, and their roles are constantly negotiated and performed within multiple, dynamic, and constructed networks. This interpretive, narrative analysis of interviews with the center manager and staff at Voices CMC in India illustrates that intermediaries can be in an ontologically insecure position, bridging these multiple networks, but can also navigate their roles and create their "spaces of development" within these same networks. Therefore, the article argues that it should not be taken for granted that these intermediaries are simply executing policy; instead, further research into how they interpret and perform it in vernacular terms is necessary because this, in turn, can shape user perception of CMCs and telecenters.

Introduction

Although Western models of ICT access point to disintermediation, and there were initially similar expectations in developing countries, it was quickly realized that human intermediaries would be "needed to bridge both the overt and social resource endowment gaps between what the poor have and what they would need in order to use ICTs" (Heeks, 1999, p. 18). The role of such intermediaries, particularly in communication and information provision to the most underserved—for example, through telecenters and community multimedia centers in rural areas—has largely been seen as a positive one. It has been argued that these intermediaries are necessary social connectors (Díaz Andrade & Urquhart, 2009) who should raise awareness of the information and services offered in the centers (Bailey, 2009; Colle, 2005; Hughes, 2004; Kuriyan, Toyama, & Ray,

2006; Madon, 2005; Roman & Colle, 2002). There are only a few stipulations: They should attempt equitable participation (Hughes, 2004; Kanungo, 2004), be trusted by the community (Heeks, 2002; Rajalekshmi, 2007), and preferably be "local" (Hughes, 2004; Puri & Sahay, 2007; Rajalekshmi, 2007) and technically proficient (Rajalekshmi, 2007; Roman & Colle, 2002). Yet, one question remains largely unanswered: How do the network-based settings in which these positions are immersed shape the roles of telecenter intermediaries? This question, and the network-based perspective on ICTD that it entails and develops, is the focus of this article.

The departure point for our argument is that there is insufficient research on the complex role of the intermediary in those endeavors that Hughes (2004) groups together as "community operated communication and information service provision"—namely telecenters, CMCs, community learning centers, information centers, and community radio. It is proposed that this role can be examined in further detail by analyzing how intermediaries are embedded in multiple networks. It will be argued that, on the one hand, intermediaries can be located in an ontologically insecure position, as the polymorphous nature of the interactions to be managed by them involves a multiplicity of identities, roles, and approaches to be taken toward the different stakeholders that gravitate around telecenters. Yet on the other hand, intermediaries in this study illustrate how they navigate roles and create "spaces of development," both economically and socially.

The article is structured in the following way: First, existing perspectives on intermediaries in development and information science (both seen as relevant), as well as in ICTD, are reviewed and summarized. The hypothesis from this review is that "intermediation" is dynamic, constructed, and vernacular, as opposed to unproblematically following normative scripts (Corbridge, Williams, Srivastava, & Veron, 2005; Mosse & Lewis, 2006). This is theorized in the subsequent section by applying concepts from network theory: Intermediary actors are situated within networks, which are both enabling and constraining; these actors belong to multiple networks; networks are dynamic; and perhaps most important, networks are cognitive constructs. The argument is then applied through a narrative analysis of field-level intermediaries (i.e., the center man-

ager, current [at the time of writing] and previous staff, and a management committee derived from the community) at a donor-established CMC (community multimedia center) in India.

Existing Literature on Intermediaries

The Intermediary in Development Literature

In the post-war modernization era of development (to the extent that it can be homogenized as such), the intermediary appeared to mainly be seen in normative terms, employed by governments or development agencies to create awareness and promote development initiatives, change behavior, and create a "modernized society" (Schramm, 1964). Intermediaries, whether agricultural extension officers or educationalists, were seen in a neutral/positive light, largely expected to transfer information and execute development policy. They were, therefore, no more than a simple "channel," transmitting a message from the source(s) to the receiver(s).

In the 1970s, the paradigm shift to "community participation" in development included Freirian "conscientisation" (Freire, 1972), where an "animator," effectively an intermediary, would work with the "oppressed" to free them. However, Freire's vision of this intermediary as benevolent and those he/she works with as "oppressed" is criticized for being too simplistic and binary—both on account of disregarding the potential power play of the intermediary, as well as homogenizing the oppressed, since it is likely that power struggles also occur on their end of the intervention (Blackburn, 2000). From the 1990s onward, post-development literature began to question the position of the intermediary in more detail. Crewe and Harrison (1998) state that intermediaries working between development agencies and a community may align themselves with the development agency, which they consider modern, while considering the rest of the village to be traditional and conservative. It may, indeed, be accepted by all parties that intermediaries are merely replicating top-down policy (Arce & Long, 1993).

A third perspective in development argues for a greater deconstruction of how development policy is interpreted by intermediaries. As argued by Michener (1998), unlike policy makers "who have

the luxury of expanding participatory rhetoric," intermediaries have to deal with the day-to-day realities of project implementation. Long and Long (1992) state that these interfaces enacting policy need to be deconstructed so they can be seen for what they constitute—an ongoing, socially constructed and negotiated process, not simply the execution of an already-specified plan of action with expected outcomes. Lipsky's analysis of street-level bureaucrats (teachers, health care workers, and other public sector employees) illustrates how policies are interpreted using discretion, and are influenced by beliefs and stereotyping (Lipsky, 1980). Corbridge et al. (2005) therefore call for further inquiry into, and analysis of, how "development" is performed in what they call "vernacular" terms, and how intermediaries create their "spaces of development." Understanding those hidden transcripts which coexist with official goals may both shed light on areas of development practice that are hidden or silenced by policy, and bring fresh insights into how policy is translated and performed (Mosse & Lewis, 2006).

The Intermediary in Information Science

Writing in 1902, the librarian Corinne Bacon listed "approachableness, omniscience, tact, patience, persistence, accuracy, knowledge of one's tools, knowledge of one's town, and familiarity with current events" as the reference librarian's essential skills (Bacon, 1902/1991). Mendez and Montero (2007) say that one of the essential roles of the librarian in developing countries is to ensure "democratic access" to information. A reference librarian is a typical information intermediary, but one with the particular challenge that, unlike an agricultural or health intermediary, she or he is a nonspecialist, and needs to have knowledge of various subjects. Sturges (2001) stated that, even with the onset of the Internet, librarians were needed as intermediaries to help direct users in accessing online information in libraries (depending on the capabilities and knowledge of the users).

Yet, information providers could also abuse this position. Their decisions are highly subjective (Bagdikian, 2004; Livingston & Bennet, 2003), ultimately shaping the information they disseminate. Their power also comes into play: White (1999) reports instances of the public being told to search online and not bother "busy librarians." Equally,

drawing from their research in the Dominican Republic, Mendez and Montero (2007) state that lack of government funding (meaning low salaries), along with the poor public perception of librarians as "boring," can potentially lead to mutually antagonistic relationships with users.

Instead, Barzilai-Nahon (2008) argues that there is insufficient discussion on the power that "network gatekeepers" (for example, those who control news transmission) hold, as they can deploy so many information gatekeeping mechanisms—selecting, editing, withholding, strategizing over the means of display, channelling, shaping, manipulating, repeating, timing, localizing, integrating, disregarding, or deleting information they consider irrelevant for some reason. However, she also states that the salience between the gated and the gatekeeper depends on four attributes: the political power of the gated in relation to the gatekeeper, the information production ability of the gated, the relationship between the gatekeeper and the gated, and the alternatives the gated have. This suggests a more dynamic and contextual interpretation of gatekeeping, as gatekeepers or intermediaries construct their roles depending on those with whom they interact, as well as on those networks within which they are situated. The gatekeeper/intermediary can be gated, as well as vice versa.

The Intermediary in ICTD

An increasing number of scholars have remarked that an intermediary is necessary to facilitate public access to information and ICTs (Bailey, 2009; Díaz Andrade & Urquhart, 2009; James, 2004; Nair, Jennaway, & Skuse, 2006; Sambasivan, Cutrell, Toyama, & Nardi, 2010; Sein & Furuholt, 2009; Srinivasan, 2007, 2010). An early example of the positive view of intermediaries was Prahalad's vision of the 16 EID Parry kiosks established in Tamil Nadu, India, in 2001. Although the following is a lengthy quotation, it illustrates the assumptions made:

> [T]hrough use of technology, farm extension services are now available from village kiosks. Farmers can gather information directly from the kiosk or communicate with an agronomist to get specific, customised advice via e-mail. A typical turnaround time is a day. Services such as crop diagnostics can even be performed remotely. The franchisee can use a digital camera to photograph the crop to be inspected and e-mail the image to

the agronomist. The agronomist then can follow up with his diagnosis. All this can be done without the farmer leaving the village. (2006, pp. 157–158)

Yet, there is no further discussion on "the franchisee" (intermediary), who is simply seen as a willing channel.

On the other hand, darker and more complex elements of intermediaries are discussed. Wahid, Sein, and Furuholt (2011) state that, while religious organizations are key providers of public Internet access in Indonesia, they may also regulate which sites are accessed, even with the possibility of directing users toward extremism (although the latter claim is not substantiated). Tacchi, Watkins, and Keerthirathne (2009) caution that intermediaries may be recruited from higher caste/class groups, and in turn, may fail to adequately connect with marginalized communities, reinforcing local power relations and inequalities. Intermediaries have to achieve a delicate balance between being active enough to empower staff and volunteers, and knowing when to stand back and allow others (who may now be reliant on them) to make decisions, a challenge experienced by the center manager in Van Belle and Trusler's (2005) South African case study. Cecchini and Raina (2004) state that motivation is a key factor, as low-paid government/NGO intermediaries working in telecenters and CMCs may not be inclined to assist users.

Finally, more nuanced studies of intermediaries are offered. Researching the same EID kiosks mentioned by Prahalad, Srinivasan (2007) finds that kiosk operators are assessed by farmers for their trustworthiness, with this assessment dependent on where they are housed and the operator's status/ social network. Sambasivan et al. (2010) suggest it is informal (i.e., family and friends), rather than formal, intermediaries who facilitate mobile phone access in a Bangalore slum, as trust is paramount. Díaz Andrade and Urquhart (2010) posit that the way information is exchanged is highly dependent on interpersonal trust and goodwill, as well as on the extent to which intermediaries are willing and interested in educating others and are receptive to new ideas. Srinivasan (2010) adopts the conceptualization espoused by Corbridge et al. (2005) of "spaces of development" on how the SARI information kiosks in Tamil Nadu, India, created opportunities for three female kiosk operators, but also notes that these operators have to negotiate relationships with family and the wider community. It is this third perspective, that of the more complex roles of intermediaries and how those roles are socially constructed in terms of the networks they belong to, which is of interest here. Table 1 summarizes the above perspectives.

Theoretical Constructs

Actors Are Embedded Within Networks
The proposition that intermediaries are in a complex position is theorized by the notion that actors are defined by networks—both situated within them and constructing them. By the nature of their position, intermediaries straddle multiple networks. Networks have been defined as "sets of relatively stable contacts and people through which information is generated and flows" (McPhee & Tompkins, 1985, p. 7), and alternately, as "a finite set or sets of actors and the relation or relations defined between them" (Wasserman & Faust, 1994, p. 20). Actors may create networks on the basis of friendship, relationship, biological (family) or physical (living close together) ties (Marin & Wellman, 2011; Wasserman & Faust, 1994), or any other perception of homophily (Louch, 2000; McPherson, Smith-Lovin, & Cook, 2001). However, the perceived norms and rules of belonging to a network may be interpreted as constraining in addition to enabling, as members may be so keen to belong and afraid of ostracism or punishment in case they deviate from the "norms," continued by long-obsolete conventions which once may have served a purpose (Emirbayer & Goodwin, 1994; Hayami, 2009).

Actors Belong to Multiple Networks
In addition, actors belong to multiple networks (Kilduff & Krackhardt, 2008; Kilduff & Tsai, 2003), and it is argued that they accrue more benefits from belonging to a greater number of networks (Kilduff & Tsai, 2003). The rationale behind this position lies in the ideas that multiple networks increase the number of stakeholders revolving around actors, and that these stakeholders generate gains from interaction, in terms of both increased knowledge and exploitable relations. By the nature of their positions, telecenter/CMC intermediaries straddle multiple networks. Yet multiple network membership can also be problematic: First, Burt (2002) argues that

Table 1. Differing Perspectives on the Intermediary in Development, Information Science, and ICTD.

Perspectives on intermediaries	The intermediary in development	The intermediary in information science	The intermediary in ICTD
Neutral or positive (i.e., simply that an intermediary is necessary)	Freire, 1972; Ghosh, 2006; Melkote & Steeves, 2001; Schramm, 1964	Bacon, 1902/1991; Sturges, 2001	Bailey, 2009; Colle, 2005; Heeks, 2006; Hughes, 2004; James, 2004; Kuriyan et al., 2006; Puri & Sahay, 2007; Rajalekshmi, 2007; Roman & Colle, 2002; Sein & Furuholt, 2009
Deconstructed	Arce & Long, 1993; Blackburn, 2000; Crewe & Harrison, 1998; Harrison, 2002	Bagdikian, 2004; Livingston & Bennet, 2003; Mendez & Montero, 2007; White, 1999	Cecchini & Raina, 2004; Tacchi et al., 2009; Wahid et al., 2011
Complex and constructed	Corbridge et al., 2005; Lipsky, 1980; Long & Long, 1992; Michener, 1998; Mosse & Lewis, 2006	Barzilai-Nahon, 2008	Díaz Andrade & Urquhart, 2010; Sambasivan et al., 2010; Srinivasan, 2007, 2010

those who bridge multiple networks may be regarded as outsiders in all cases, with their ties subject to rapid decay, unless the networks consider them as assets. Second, goals of multiple networks may conflict, and individuals may thus be forced to make decisions as to which network they want to belong to (as illustrated in Kapferer's 1972 analysis of how ties became stronger or weaker and actors shifted allegiances at times of strike action in a Zambian textile factory).

Networks Are Dynamic

As actors join and leave networks, depending on the compatibility of the network-level and actor-level goals, networks are also constantly dynamic (Howard, 2002; Kilduff & Tsai, 2003). Dyads and triads may form within larger networks, and events may rupture ties, not only illustrated by Kapferer, but also in Menjívar's (2000) ethnography of how Salvadorean immigrants in the United States welcome new immigrants, though it should be noted that these networks shrink during times of financial crisis. In addition, events may generate unpredictable consequences, as actors are not even aware of which networks they belong to, unless they are forced to choose (Wellman & Berkowitz, 1988). Therefore, although McPhee and Tompkins' definition of networks as "sets of relatively stable contacts and people through which information is

generated and flows" (1985, p. 7) was adopted above, the phrase "*relatively* stable" is important in this definition, as network membership is constantly in flux.

Networks Are Cognitive

Most important for the purposes of this discussion, it is argued that networks are cognitive and constructed maps (Weick & Bougon, 1986). Perceptions of homophily are highly subjective (Cialdini, 1989) and temporary (Kilduff & Tsai, 2003). Strathern defines networks as "the tracery of heterogeneous elements . . . or string of circumstances, held together by social interactions; in short a hybrid imagined in a socially extended state" (1996, p. 521). In addition, inclusion can be constructed on the basis of excluding others. For example, Gino, Ayal, and Ariely (2009) give an example of a test case where students sitting for an exam not only cheated more openly when they saw a student of their "in group" visibly cheating, but did not cheat if the planted cheater wore a rival school's shirt, illustrating how values and norms are constructed relatively. This perception of networks as cognitive is linked to the argument that identities are socially constructed and performed, as put forth by Goffman (1959). Goffman posited that this may be for multiple reasons, including the desire for ontological security, as well as for simply replicating what

is considered appropriate ritual (Goffman, 1967, 1971, 1974).

Networks and Intermediaries

This brief discussion on actors and networks sets the framework for how intermediaries belong to networks that are not only multiple, but also dynamic, and that may conflict or be constructed by intermediaries to justify their practices or limitations. As an illustration, a telecenter/CMC worker may be reluctant to disseminate agricultural produce prices or acceptable interest rates if doing so would jeopardize ties with middlemen or moneylenders. A female intermediary may face strained ties with family, particularly with her male relatives, if they do not approve of her new ties at the CMC. Yet the extent to which intermediaries feel constrained by these ties depends on how they cognitively perceive the importance of them. It is this complexity that emerges in the case of Voices.

Case Study

Voices is a CMC in an Indian village, referred to here by the fictitious name "Bhairavi." It was already narrowcasting (playing NGO information on cassettes at self-help group meetings) when it was given funding, computers, a scanner, printer, and photocopier, as well as a studio for community radio production by an international donor agency[2] in 2002. The donor's aim was to provide information about employment, better farming techniques, and health, which would lead to sustainable job opportunities and improved quality of life (the exact wording of the mission has not been used here in order to preserve the anonymity of the case study). At the time of research, Voices had no Internet access (there were conflicting reports on whether an Internet connection ever worked at the center), which was a major impediment to the project. Despite this, basic computer familiarization, navigation in Windows Explorer, Microsoft Word, and Excel continued to be taught. The key "multimedia" component of Voices, however, was the community radio, which played for roughly an hour daily, with content such as agricultural and medical advice, market prices, as well as songs and quizzes. In 2004, loudspeakers were placed in the neighboring

lower-caste villages, which further disseminated the programs.

When donor funding ended after three years, the two intermediary NGOs, Maatu and Jaan, decided for financial efficiency to merge Voices into Jaan's existing operation of a "community managed resource centre." Guru, the Jaan center manager, a 35-year-old ex-agricultural extension officer with an 11-year history working in the area with Jaan, was then effectively in charge of Voices. At the time of research, he employed four CRPs (community resource persons) and an IT teacher. Between them, they taught the IT classes; contributed to, edited, and managed programs for the community radio; conducted other outreach work for Jaan; and generally publicized the center. According to Guru, the CRPs were "the bridge between the centre and the people," illustrating their intermediary role. A management committee had been formed for Voices in 2001, comprised of 12 representatives from the self-help groups in the village. However, this committee had disbanded in 2004, when it was replaced by a more diverse committee covering a larger catchment area. Similarly, although volunteers were initially recruited at the center, they were not seen at the center during fieldwork, for the reasons explained below.

In the narratives that emerged, three particular events appeared to be critical in the history of Voices for those interviewed. First, in 2004, a camera was stolen, which, as will be seen, appeared to divide and create new networks. Second, also in 2004, Divya, one of the staff, left under complicated circumstances. Third, in 2006 (during fieldwork), the cables carrying the community radio to the neighboring villages were cut, and the loudspeakers were stolen. They then appeared to be used for a local festival. All these events appeared to result in increasing tension between the center and the residents, and follow-up visits in 2007, 2008, and 2009 saw the center as more of an outpost for Jaan's NGO work than a true community center.

Methodology

Following a pilot research trip in December 2004, one of the authors spent six months at Voices in 2006 to understand the processes of community

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2. All details have been kept anonymous.

participation in CMCs for doctoral research. As fieldwork progressed, the role of the intermediary in channeling community participation became increasingly apparent. Here, interviews with 13 intermediaries are included: Guru, the center manager; existing employees at the time (Nikhil, Sheila, Veena, Manu, and Rani); previous employees (Divya and Arun); and members of the management committee (Lakshmi, Bhavana, Rajagopal, and Devi). A brief interview with Shivani, the initial Maatu project manager, is also included for her perspective on intermediaries. In addition to interviews, observations were an integral part of the research, affording triangulation with interview responses (Atkinson & Coffey, 2003; Bernard, 2000). It should also be clarified that neither author of this article had previous affiliations with the center, chosen for research due to extensive national and international publicity in 2004.

Firmly in the interpretivist domain (Walsham, 1995), this research deploys narrative analysis, which analyzes in depth how individuals construct and reconstruct what is happening to them through the stories they narrate (Cunliffe, Luhman, & Boje, 2004; Emirbayer & Goodwin, 1994; Riessman, 1993). The main aim is to try to understand how various actors use vocabulary and emphasis on different events (plot lines) to create their interpretive narrative. Plots are generally seen as comprised of an original state of affairs, an action/event, and a consequent state of affairs or resolution (Boje, 2001; Riessman, 1993). Narrative analysis complements a network lens in two ways. First, it provides insight into how actors situate themselves through their narratives, as well as into how self-making (Bruner, 2003) occurs. Slippages, hesitations, and auto-corrections illustrate the "cognitive resolutions" narrators are attempting to perform pertaining to where they belong (Chafe, 1990). Second, narratives provide insight into how the actor has interpreted the wider social dialect (Casey, 1993; Riessman, 1993). Furthermore, narrative analysis was chosen for its value in researching ICTD, in understanding how people come to terms with what "ICTD" means to them. An insight into temporality in narrative—that is—into both the way in which interviewees remembered events, and the way in which this memory changed through time (Cunliffe et al., 2004; Levine, 1997; Ricoeur, 1988)—was also afforded by the six months spent at the site.

Interpretive research and narrative analysis are both, of course, highly subjective (Guba & Lincoln, 1994; Riessman, 1993). Much depends on what the narrator includes and excludes (the latter could be just as relevant as the former, as noted by Riessman, but is harder to ascertain), as well as on the researcher's analysis. Myers and Newman (2007) suggest all interviewees and interviewers/researchers perform their ascribed roles, and therefore, while the interviewees are sharing these narratives, Klein and Myers' (1999) principle of suspicion is nevertheless applied. Despite this, there were (understandably) concerns about sharing these still-personal narratives and whether doing so would impact respondents' lives and work. To mitigate this, the site's name and individuals have been anonymized. However, out of ethical concerns to keep the actors in Voices anonymous, much background detail has been lost, as has analysis performed by other authors. This opens up under-researched debates on representation, reflexivity, and ethics in ICTD projects, which are living, complex phenomena (Sterling & Rangaswamy, 2010).

Discussion

Multiple Networks

Intermediaries in Voices certainly appeared to straddle multiple networks in their narratives, as suggested by Kilduff and Krackhardt (2008). On the one hand, their speech illustrated affiliation with the positive donor perspective on information. Guru, the center manager, frequently employed the "social dialect" (Casey, 1993) of development, saying things such as "I am just a facilitator. I link developing villagers with facilities. Everything the community does. I just facilitate." For him, "a radio programme on agriculture, on how to respect the law can only be good. Most problems here are small. Like drinking problems, husbands beating their wives. They are uneducated people." Guru therefore sees the center as educating "uneducated people"—thereby also distancing himself from the latter. Similarly, according to Divya, in a 2004 interview conducted when she was still employed by the center,

> [T]he rural people are forgetting family values . . . we are talking about how the family should be. . . . [I]nformation can prevent diseases attacking. . . . [R]ural people cannot be neatness. . . . [W]e have to tell them boil water nicely and tell others. . . . [N]ow we are helping change that.

Even though she was portrayed in publications as a "community representative," an illustration of how Voices was "community owned," she, too, distinguished herself from "rural people." Another employee, Sheila, stated that "giving awareness is important. Information is important. It is good to help others." Sheila also saw herself as "giving awareness" to "others," although she, too, was portrayed as a community representative in publications.

Therefore, in terms of narrative analysis and plot lines, these intermediaries see the establishment of the CMC as a seminal event/action in bringing about the resolution (Boje, 2001; Riessman, 1993) from uneducated to educated villagers. Veena states that, "in the beginning, you have to feed a child first, then it can feed by itself. That is what we are doing." According to Divya: "Before the centre, the village people did not know how to talk, how to behave, they had no social skills," implying that the resolution is that "the village people" now do. Guru states: "Jaan [the NGO] is like a god to them. Other than Jaan, nobody is helping them." This paternalistic attitude is also apparent in the management committee. Devi, one of the female members of the committee, states that "people here are uneducated. Only boys study here. We want people to be educated. We want to bring awareness." For Lakshmi, another management committee member: "As long as you keep telling people, they will gain more knowledge." These information intermediaries place value on the information being disseminated by the center, in line with the donor's aims. However, by distancing themselves from "other," "village," "rural," "uneducated people" who need to be fed as children, they create their identity as more educated, knowledgeable, and helpful to others, situating themselves within donor and NGO values, on the basis of excluding themselves from other, less-educated networks (Gino et al., 2009).

On the other hand, intermediary narratives also indicated not quite belonging to the "donor and NGO network." For example, when Voices won a prestigious international award in ICTD in 2005, Guru recalls:

When we won that award I was not the one who went to collect it. But I'm the one who has to deal with all the problems. They tell us what to do, they come from outside, and in the end they all go back to [the city] and we are left to deal with everything.

Narratively, although he had previously considered himself informationally superior to and distinct from the "uneducated people," in this narrative, his self-making (Bruner, 2003) consists of himself as belonging to the network that wins the award when he uses the words "when *we* won that award." However, his subsequent use of *they*, in that "they tell us what to do, they come from outside," indicates his marginal position; he is the one "left to deal with everything" when the donors and NGO representatives go back to the city.

Guru also questioned the donor and NGO emphasis on making radio programs about corruption: "People do not want to get involved. Because supposing they complain about the richer people, and later the richer people offer work, they will not support them if they have complained before." Guru was therefore himself recognizing that the wider community itself was comprised of actors embedded in networks, giving rise to fear of punishment (Emirbayer & Goodwin, 1994) if they were to participate in programs on corruption. Similarly, while one of the donor aims was to broadcast several market prices on the radio, so as to inform the farmers' choices of where they wished to sell their produce and effectively improve their sales, Guru discussed the more complex reality:

It is very difficult for me. So for example, people read in the paper that after getting market rates from Voices, farmers were going to [nearby major cities] to sell their produce. I said, "It's very difficult for us to say that." I'm not saying because of Voices their life has improved. So much of what they say to the outside world is just bullshit. Especially in Bhairavi, farmers have other options—they call friends, they call agents, friends, everybody.

The strength of his language illustrates the vehemence of his feeling. He adds, "It is very difficult to get people to listen to market rates. People are so used to dealing with the agent, they're happy to pay someone for their security. I will openly say, market rate nobody bothers." Once again, there is the distinction of "they," but this distinction is not only in terms of "they" as in "so much of what they say to the outside world," but also "they" in terms of farmers: "They call friends, they call agents,"

leaving Guru narratively belonging to neither network.

A tragic family event that occurred to Sheila, another employee at the center, further illustrated the multiple pulls on these intermediaries. Sheila had an older sister experiencing a difficult pregnancy during the time of this fieldwork, and the baby was born with complications between the trachea and esophagus. Despite Rs. 80,000 (US$1,800) being spent on operations, the baby died soon after birth, and Sheila returned to work subdued. In one interview, she questioned the value of the information on the community radio: "We talk about information on health, we are the ones who keep telling other people to listen. But none of this is worth anything, if you don't have money [for operations]." This was a very different perspective to her earlier stance that "giving awareness is important. Information is important. It is good to help others." Her reflection illustrated her thoughts about the validity of the information she was broadcasting, and it could be said that the influence of the events in her family network led her to question the values in her work network.

Similar potential contradictions and challenges in belonging to multiple networks were illustrated. While the IT teacher, Manu, appreciated his position because it gave him an opportunity to return to his village and look after his parents while also holding a relatively lucrative job, he was not entirely convinced that the basic skills he taught could benefit the students. At the same time, he set himself apart from the students, commenting, "Students are thinking, after learning computers, life in the city is very easy. It is not easy, I worked night shifts, lived next to the railway station." The female employees, in particular, appear to be caught between different networks. Divya stated that her husband was unhappy with the long hours she worked when she was employed by the center. In addition, during fieldwork, Rani, one of the intermediaries, was upset by a young boy constantly calling and saying he had fallen in love with her after hearing her on the radio when it was working, and that when the broadcasts had stopped, he would go to see her come in and out of the center. After one call, she decided to go home for the day, and her father visited in the afternoon, stating that it was no place for young women, and that Rani would be leaving. This not only ensured Rani's break away from the center, which she did not reenter for the remainder of the fieldwork, even though we encountered her several times at the adjacent bus stop, but it also illustrated her stronger tie (Emirbayer & Goodwin, 1994; Kilduff & Tsai, 2003; Marin & Wellman, 2011; Wasserman & Faust, 1994) to her father than the center.

Network complications notwithstanding, these intermediaries have the power to shape content, as suggested by Barzilai-Nahon (2008). Shivani, the previous Maatu project manager, illustrated this with an example of the internal discussions of the management committee on what prayer to begin the radio broadcasts with:

> I did play devil's advocate and said if you want to play a prayer song, does it have to be a Hindu song every day? What about the Muslim community? And they said no, the Muslim community could come in and sing their song every Friday.

As the management committee was entirely Hindu at this time, although there was a sizable Muslim population in Bhairavi, the intermediaries had decided to restrict a Muslim prayer to Fridays, thereby powerfully shaping content. Manu's IT classes were observed as starting late, ending early, with somewhat listless and unstructured teaching, teaching mainly mouse control, typing in Word, and experimenting in MS Paint. This could have been a result of his above-mentioned lack of belief in the value of the classes, but it nonetheless resulted in very basic skills being taught, therefore powerfully shaping content. However, neither did these intermediaries comprise a discrete, holistic entity. One instance of this was when, early on in the broadcasts, one of the committee members stormed in to the center, demanding that the program she had contributed to be aired immediately. According to one publication, the center volunteers went on strike until their security and respect were assured. Further instances of such rifts are discussed below.

Networks Are Dynamic

As stated by Howard (2002) and Kilduff and Tsai (2003), network membership is constantly dynamic. As with Kapferer's shifting allegiances at times of strike action in the textile factory (1972), seminal events at Voices changed the composition of the network of intermediaries. The "goal directed" Voices network, with the goals to provide information about employment, better farming techniques,

and health through ICTs, was most likely disrupted by the above committee members' actions and the resulting strike, although interviewees did not mention this. Instead, the camera theft illustrated further rifts. At the time, two of the workers at the center were suspected and held overnight in a cell. Shivani recalled that "next day [after the theft] a group of 20 or so volunteers came to the center. They said we will never volunteer for you again and we will make sure nobody in this village ever volunteers for you again." This clearly marked the departure of these volunteers from the Voices network. Yet, when interviewed, one of the employees at the time, Arun, stated that his decision to leave the center was not because he was protesting against the detention of these workers, but because one of his colleagues "had robbed." According to him:

> After the camera was found, the person who stole it was reappointed. I was disappointed. . . . [H]e had robbed, and if he served in Voices, others will learn to rob. As long as he is there, I will not go back there. We kept asking the management committee not to employ him, but they did.

Arun's narrative illustrates a further break and complexity within these intermediaries. It also illustrates his self-making (Bruner, 2003): By distancing himself from the person who committed this theft, he no longer wished to associate himself with Voices or the management committee.

Finally, the departure of Divya again illustrated the fracturing and changing networks of intermediaries. Although her participation at Voices was portrayed in one publication as contributing to her transformation from a silent, scared girl to a courageous, dynamic, and inspiring woman, Shivani recalled that Divya wanted to leave because she felt the pay was insufficient. When pay negotiations were not forthcoming, Shivani stated that she started "saying things against the station." According to Shivani: "It came to the point where the management committee were seeing it as Guru and Shivani versus her, and they were on her side." Although we should point out that this is only Shivani's perspective, it again illustrates allegiances being deconstructed and reconstructed. Most important, this deconstruction and reconstruction has occurred within the domain of an informal network, which is not grasped by the codified professional dynamics of people at work. It should serve to remind us of the importance of informality in com- munity-based initiatives, and of its power to shape professional relations in unpredicted and polymorphous ways.

Networks Are Cognitive

According to Cialdini (1989), Kilduff and Tsai (2003), and Weick and Bougon (1986), networks are dynamic because they are cognitive constructs. Actors' perceptions of their ontologies are constantly changing, and behaviors are constructed according to what the network norms are felt to be (Kilduff & Tsai, 2003). Guru was a key example of this phenomenon, and he illustrated his ontological insecurity through attempts at cognitive resolution (Chafe, 1990) when he vacillated, "We, that is they, Jaan," first considering himself belonging to Jaan, then separating himself from his employer, manifesting his uncertainty as to where he belonged. At the beginning of the six months of fieldwork, he used the "social dialect" (Casey, 1993) of development, with phrases such as "I'm just a facilitator. I link developing villages with facilities. Everything the community does. I just facilitate," or with his assertion that

> everything is local, management is local, programs are done by local people. . . . [W]e are supporting the self-help groups, who are supporting the community. We are not taking any decisions for them. We are saying this is an institution run by you.

The repetition of certain phrases such as "facilitator," "facilities," and "I just facilitate," as well as his emphasis on "local" and "we are supporting," illustrates the focus on simply being a conduit, rather than a manager. Yet, by the end of the six-month fieldwork period, he referred back to the loudspeaker and cable cutting in the satellite villages, stating, "it is not their property to do that." While the rhetoric of participation and facilitation was initially employed, running parallel to this was Guru's apparent translation that the loudspeakers and cables did not *really* belong to the villages.

Another example was when, during fieldwork, a representative from a donor agency visited. The visitor asked,

> So, children can come here and play on the Internet? That's fabulous. This is a real example of bridging the digital divide. . . . [A]re you part of Mission 2007 [the Indian government's scheme to establish a telecenter in each of India's 600,000 villages by its 60th anniversary of independence]?

Instead of saying that the Internet did not work, and neither did the community radio by this time, Guru stated, "Yes, the Internet is very useful. Any development information people need, we give them. Even farmers phone to ask the market price." First, this is in direct contradiction to Guru's previous statement that "I will openly say market rate nobody bothers," illustrating that he would not, in fact, "openly say" as he had claimed before, but "frame" (Goffman, 1971) what was required in that network. Second, narratively, Guru could have stopped at "Yes, the Internet is very useful." Instead, his additional sentences imply his familiarity with an unwritten script, or the norms and values that he perceives are expected in the temporary, imagined network (Strathern, 1996) with that representative, in which he expects to be asked about "development information" and market price, and therefore provides this information unprompted. Performance is therefore enacted because it is expected as the relevant ritual, and also for ontological security, to illustrate that he is doing what he has translated (and therefore, what he feels the representative would want to hear) as necessary to do his job well.

A final example of network membership changing cognitively is provided by Divya. As noted above, in 2004, she distanced herself from the "rural people" and, instead, associated herself with Voices ("but now we are helping change that"). However, in 2006, after her departure from Voices, she attributed her departure to being dismissed because she was "not innovative" in her contribution to content on the radio. Her response was, "What is innovative? I live in a village—how innovative can I be? I am a simple village girl." Therefore, whereas earlier she had "othered" the network of "rural people," she was now placing herself within the same network to justify her lack of innovation (according to her), another illustration of how actors are constantly creating their identities.

Spaces of Development

As discussed in the literature review, it has been argued that development policy is interpreted and constructed by intermediaries (Corbridge et al., 2005; Long & Long, 1992; Mosse & Lewis, 2006), and that they create "spaces of development" (Corbridge et al., 2005; Srinivasan, 2010). It has already been seen how Divya attempted to increase her pay at Voices. Nikhil, one of the employees at

Voices, is a farmer's son who used to work in a bar before joining Voices. According to him, "I have learnt computers, audio editing, video editing, graphics editing, mixing. Life is much better now. I have a nice job." He has a plan "to use the camera to cover weddings, special events in Bhairavi and then I can earn some money for myself. I can make CDs and sell them to people." Similarly, Rajagopal, a male member of the committee who is an auto [three-wheeler] driver, says, "Business is good with all the visitors to Voices. The taxi can be around Rs. 600 to 800 [US$12–16], but they can just call me on my mobile and I will give a good rate." Bhavana, another committee member, earns money providing food for visitors to Voices. These intermediaries create economic development for themselves through their intermediary role, even though it is tangential to their actual interaction with ICTs.

Such an attempt to achieve economic development through his intermediary position was illustrated by Guru when a Reliance mobile phone salesman visited the center to use it as a sales point. The following conversation ensued:

Reliance salesman: "What can we do for you, so that we can make this happen?" [For the center to be an outlet for Reliance mobile phones]

Guru: "Give me some money, we are so happy."

Reliance salesman:"That is there."

Guru: "Some incentive, anything, like 50 phones we sell, we get motorbike."

[Guru and salesman laugh]

Guru: "I am thinking, I am helping, getting information, ICTs to the people. So 50 phones, one bike. 100 phones, one car."

Reliance salesman: "This will be a costly thing for us."

Guru: "We want people to get a connection, to get ICTs."

Reliance salesman: "So, it is not only upliftment of the community, it is also upliftment for you."

[Guru and salesman laugh]

Guru: "I am also community, no? I'm joking."

Guru's use of "community," his focus on ICTs, and his assertion that he is "helping, getting information, ICTs to the people" illustrates his awareness

of how important this vocabulary is, and he performs these terms to achieve his own goal of earning some sort of commission. Yet his play on ambiguity with the phrase "I am also community, no? I'm joking" suggests the fragility of his position: Does he belong to the community or not? This illustrates the tentative nature of his attempts at creating his space of development, and also perhaps his understanding that the latter is always dynamic and reconstructed.

Finally, actors such as Veena, Divya, Devi, Sheila, and Nikhil, as well as Guru, all create some sort of perceived social development for themselves, affiliating themselves with the educated, and not with those who need education. They may already have distinguished themselves from the rural, "uneducated" population before starting work with Voices, but now, this position is strengthened *through* their intermediary roles by the structural distance they build between themselves and others. However, as seen in the example of Divya's changing perspective on where she belongs (reverting to "I am a simple village girl"), this construction of social development is also complex; she would not use it if it did not serve a purpose. Similarly, Sheila's thoughts on the relevance of health information illustrate that she is not always entirely comfortable in this position. Therefore, these spaces of development are tentative, temporary, constantly created and renegotiated, and crucially, do not follow a linear trajectory, as actors constantly deliberate over what development means.

Conclusion

What contributions can the argument that actors are situated within networks contribute to understanding the role of information intermediaries? First, the argument here is that, rather than simply stating that intermediaries are necessary, or that they may replicate hierarchies/be unwilling to help/direct users toward "undesirable information," there needs to be further research on who these intermediaries are and how their identities are socially constructed. Walsham and Sahay (2006) state that there needs to be more research on how development is individually translated, and these examples illustrate that it is a personal, ongoing process, influenced by the multiple networks that actors belong to. This article may therefore make what sounds like an

obvious point, that telecenter and CMC intermediaries are not neutral, simple black boxes enacting policy, nor are they homogenous or static, but we believe that this role and network perspective have not been sufficiently researched in ICTD. Intermediaries move dynamically between networks, and there can be tensions and differences within the overall network of intermediaries, a point that is fully illustrated by several narratives in our fieldwork: first and foremost, Divya and Rani's departures, as well as Arun's motivation behind his decision to leave the center.

Second, intermediaries may be in a vulnerable position straddling networks. Harrison (2002) states that intermediaries may be considered as outsiders by both NGOs/donors and the community they are working with. Of course, this may not always be the case, but intermediaries are not passive entities; they navigate their way within these roles, creating "spaces of development" for themselves.

This is of importance as it regards the impact of how normative policy is translated in vernacular terms. Although the examples discussed in this paper are anecdotal, they do have impact. The management committee's decision to have a majority Hindu opening prayer shapes how the community radio begins every day; Manu's scepticism about the IT students' optimistic perspective on obtaining jobs in the city and living there appears to shape his late arrivals, early departures, and unstructured teaching; and the intermediaries' illustrated desire to educate "uneducated people" informs what they consider relevant content—programs on agriculture, respecting the law, addressing drinking problems or domestic violence, health information, family values, and "how to behave." Of course, we must return to Klein and Myers' (1999) principle of suspicion here, as this perspective could have been one performed for the researcher because the interviewee felt it was what the researcher wanted to hear, when it is known that a major and popular component of the community radio was entertainment.

This impact also, of course, depends on how this information is received, and on how those in the community perceive the intermediaries. Although, initially, there was much excitement about the center, opinion circulated in Bhairavi that "the people who work there are snobbish," and "they are not from here, so how can they understand the village" (even though, other than Guru—who had lived in

the area for 11 years—all the intermediaries and members of the management committee were from Bhairavi or neighboring villages). Therefore, in this case, it did seem to be as if these intermediaries were also considered—or rather *constructed* as—outsiders, by those for whom such a classification and distinction was useful, as in Burt's (2002) and Harrison's (2002) studies.

Finally, this research illustrates that narrative analysis is an underused tool in ICTD research, because, if we pay greater attention to the vocabulary and language used by interviewees, and where they place themselves, we will approach an answer to that elusive question: What is the "development" in ICTs and development (Walsham & Sahay, 2006)? This approach may only provide an answer at an individual level, but it shows how development is not simple, and that actors are constantly attempting it (Guru) and defining it (as in the information necessary for others, but not for themselves), but also questioning it (Sheila) and using it performatively (Divya). Moreover, the relevance of narrative research for ICTD emerges from the capability, embedded in biographical accounts, of qualifying the impact of newly introduced ICTs on people's lives.

In the language of both network theory and Guru, "bridges" will always be necessary between different networks in ICTD, and further research needs to be conducted on how these intermediaries materialize their positions. Further theoretical perspectives could be applied to this case to discuss the liminal position of these intermediaries, such as structuration theory, to understand the contradiction and conflict between the different networks within Bhairavi, or actor-network theory, to see how actors make attempts to enroll others. Finally, we firmly believe that this insight would not have been possible without the extensive six months spent on site, which afforded the time to listen to narratives illustrating the ontological complexity of intermediaries at community multimedia centers, and therefore allowed more immersive, ethnographic research in ICTD. ∎

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