A challenging view on the future of global knowledge sharing

By Christina Merl [1]

Ramesh Srinivasan is assistant professor at the Department of Information Studies and Design/Media Arts at the University of California, Los Angeles (UCLA). In his media design projects, the 30-year-old Indian American focuses on integrating the knowledge practices and realities of diverse cultural groups and communities – tribal, migrant and rural groups – into system design. The insights gained are applied in such diverse venues as distance learning, e-governance, and management information systems. With "Rural Development News" Ramesh talked about the necessity to re-think the nature of literacy in a digital age, about the potential ICT hold for the re-empowerment of communities traditionally left disadvantaged by the digital divide, and about the future of global knowledge sharing.

Ramesh, you mainly work with communities left disadvantaged by the digital divide. You have gained extensive field experience within Africa, Asia, Central and Latin America, Australia, and also Europe. How can ICT help to re-empower these communities?

I realised very early that the new technologies and their design can empower human beings socially, economically, and artistically. They are tools fundamentally, media that must be sculpted and re-sculpted based on the needs of the party that uses it. My focus is on how the design of these technologies can connect, or 'mediate', between human beings and information that may be empowering, or even between human beings themselves, forming bridging and bonding social networks. Technology certainly does not have to dismiss the social flows of in-person, physical interaction but rather can be one tool people use in information sharing, organizing, communicating, and coming together as an already existing community. Therefore, my projects investigate participatory and ethnographic methods toward system design. I believe new media systems can be appropriated by any and all, and can serve the aims of diverse groups when one considers the knowledge practices and belief systems fundamental to these groups. Visual anthropologists have shown us, for example, how video cameras have worked to re-activate indigenous communities through the preservation of ancestral knowledge and its re-circulation into the everyday. My aim is clearly to assist disadvantaged groups with the re-empowerment that ICT-based knowledge sharing may often provide. Today, this is often effectively accomplished via mobile systems that have reached a stunning level of ubiquity.

Within a modern business context, we usually consider knowledge as a "commodity" that can lead to a competitive advantage. Knowledge management thus has a strong engineering and technical component to it. How can 'information transfer' in disadvantaged communities become knowledge sharing and collaborative knowledge construction?

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Diverse cultures will always maintain diverse methods and means of seeing and managing their worlds. For example, organizations and businesses have different systems and methods of organizing personnel and data flow. When we talk about creating a knowledge society and/or managing knowledge it is therefore important to not see IT as a solution for poverty or other social problems in a vacuum. It is more to be seen as a mechanism of resolving our collective poverty as a set of societies or cultures. Development can be seen as something that all societies and peoples strive for, and new media technologies can assist these visions. However, I believe that only an appropriate design and deployment of IT can make collective development possible, a type of knowledge commons that emerges from the sharing of diverse traditions – allowing us all to learn from one another with a focus toward equity. When development is framed within the discourse of equity and praxis, or the collaborative creation of knowledge, such possibilities could emerge. There are therefore critical social externalities within managing knowledge that considers diverse cultural ontologies [2] and methods of approaching their worlds. As an example, take the subject of health. We do know that there are many different cultural approaches toward treating the body, viewing medicines, and so on. However, the diversity of these knowledges are often locked from each of these individual cultures, perhaps because it is always simpler to persist with already existing practices. Thus, it will be crucial to find how a system can open up the knowledge that is available to all these diverse practitioners.

Would you agree that the concept of digital literacy and the introduction of appropriate media systems in disadvantaged communities are a major challenge of knowledge management?

Absolutely – but only so much as they are embedded within real world, community-articulated issues and visions. It is therefore important to think of digital literacy not so much as the written word but the power to conceptualize and share knowledge using a media instrument. The power of visual media to make this possible cannot be understated. We see examples – such as in Turner's work with the Kayapo – of indigenous, non-literate people rapidly using video cameras to document, share, reflect, criticize, and mobilize. It is therefore critical to re-think literacy from its basis – the ability to conceptualize a body of knowledge and experience and share it via some form that can be transported. Therefore, a video blog maintains a literate behaviour in a manner different than a book, but not less significant.

Another major challenge seems to link disparate information. How can knowledge be disseminated and used as a tool for empowerment in the context of disadvantaged communities? Can ICT 'give voice' to these groups?

I believe so. Particularly when ICTs are placed in the hands of communities to author their own content, and build systems based on their own local capacities and knowledge traditions, what we call ontologies. Opening up the pathways to such possibilities is therefore critical to the future of knowledge management on the global scale. We can then think of information and knowledge societies that work to share multiple traditions based on their discourses and voices.

Can technology help to overcome issues of equal access, sex, gender, race, and religion in the global knowledge society?

It would not be technology in and of itself that could do this as much as social and embodied outreach processes that attempt to think out the digital divide in more subtle manners. The unequal access to authoring and designing media is a key issue to look toward. However, on some level, I do believe that both around the metaphor of the avatar as well as via Haraway's cyborg manifesto [3] we do see a digital world emerging that maintains identities that are physically disembodied and significantly separate from the "real world" of identity of the user.

[2] Systems based on local capacities and knowledge traditions that follow the structure of knowledge of a culture, how concepts are linked and connected within the cultural group.

[3] A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction. Donna Haraway, „A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in Simians, Cyborgs and Women: The Reinvention of Nature (New York; Routledge, 1991).

Do different age groups, ethnic groups and rural communities have a different approach to "digital identities"?

I think the question of identity is really difficult these days. Some, like Sherry Turkle, for example, have shown that identity can be re-created digitally, so as to release aspects of self otherwise repressed in the physical world. This seems like a really healthy development and possibility. It merits theorization and study: that is the question of which systems release "real-world" identities in extended manners vs. which systems allow altogether "new" identities to emerge. I think we are waiting to see how this works in the cross-cultural realm, as more and more voices emerge online.

There is definitely a huge diversity of knowledge in the world -- but isn't it constructive dialogue wherein shared visions and aspirations emerge? Can ICT lead to a constructive dialogue across cultures?

Absolutely – the goal here is one of thinking about the knowledge commons, the public sphere of dialogue – an idea invoked in so many of the great thinkers from Habermas to Freire. It draws from eastern and western precedents, deliberative democratic spaces in West Africa under the Palaver tree, to the Greek Agora or Roman Forum. The idea here is that in a world that is increasingly mediated we need to think about and design ICTs that enable constructive dialogue to occur and maintain simultaneity yet ubiquity in access.

What do you think about the recent explosion of tagging, RSS (really simple syndication), Weblogs and other allied web environments? Are these technologies going to deepen the gap between age groups, different ethnic groups, industrialised nations and the developing world?

These new methods of categorizing present powerful opportunities for folk cultures (both web-based as well as the physical analogue) to easily author and classify according to their own visions. There are therefore quite positive potentials around these. Of course, the issue of access continues to persist, and needs to be considered independently. Certainly, we believe that when these technologies coalesce with cross-cultural and indigenous epistemologies, then local knowledge systems may proliferate yet also be accessed around their own voices and categories by others more globally. It moves us toward the knowledge-media society rather than the top-down information society.

How can equal information access be provided? And, not less important, how do communities and individuals know which information they can trust?

I believe access is part of the question and the solution, but as a number of studies have shown, blind provision of technology rarely works to advance local concerns. Important then is to introduce an information technology to harmonize with local and grassroots-specific goals and concerns. My response to these issues is to think about how IT could work to catalyze community reflections and visions toward development. Many studies have shown that development visioning has often been incomplete and not fully embraced by such communities. Others have speculated that this is perhaps because individuals within such communities do not see their community from a reflective distance, the distance that literacy makes possible. Therefore, a study we are currently running in India, titled "Village Incubators and Information Visions", is focused on looking at how community-created video stories may shift the process of visioning, dialogues, and participation. Much more on these issues can be found via web site: http://polaris.gseis.ucla.edu/srinivasan/index.html

What about ownership and Intellectual Property Rights?

This remains critical and still is an issue that confounds techno-cultural studies. We need to consider methods such as open source and the creative commons to realistically create a knowledge society that is built on respect more so than legalistic frameworks. It seems clear that the further policing of digital copyrights in contrast with more and more technologies of "piracy" is making the rift wider, rather than being bridged by conversation and consensus. At the least, legal statutes must openly consider these realities and legal scholars must debate and re-frame legal frameworks accordingly.

In one of your papers you state that the community-designed ontology can become a dynamic structure that can model a community and the cultural material it can produce. Could you give an example here?

My dissertation work for example involved the design and creation of a tribal digital system to enable tribal members who were disconnected from one another (on separate reservations) and their common collective cultural memory to re-connect. Individuals added content, stories, and information and the system itself was not only authored by these tribal individuals, but also designed by them in terms of the categories by which content was annotated, classified and retrievable. This was according to the notion of ontology, of a representation of knowledge that was designed by the community itself. The key here is that the community decides which themes and relationships are relevant in their own world. And this structure then becomes the method by which communities can model their own worlds and their knowledge can be accessed. The goal here is to think about how cultures can model and share their own knowledge, even amongst themselves. The idea of thinking about information architectures specific to groups or domains is an important one and key to knowledge management in the business or community setting.

What about the importance of narratives, or stories, in the creation of shared knowledge and values in such communities? Can we say that stories are ideally suited for transmitting knowledge in this context?

Certainly, stories are a unit of cultural knowledge, presented within the form and structure (and in oral cultures – rhythmic and syntactic) that make possible the dissemination of cultural truths. These are key to elicit in interactions with communities. Folklorists have focused on such insights for many years, and we all can benefit greatly by learning from such scholars.

If we think of migrant communities that maintain social differences across age, gender, and religion and are confronted with issues of assimilation and treatment of their own culture: How can community-designed ontologies help these communities to both preserve elements of their ancestral culture, while also engaging in the discussion of new priorities?

I believe this is exactly where such systems can come in handy, particularly when they are not presented as a technocratic solution, but rather part of a socio-technical process (integrating the social and the technical). Systems that preserve and share community knowledge (according to local ontologies) amongst community members, present them with the ability to view and reflect upon themselves and their evolving identities. Identity is so critical in community development, and with forced migration, diaspora often are placed in situations of conflict and a type of Durkheim-like anomie. Appadurai has written about this theme in his "Capacity to Aspire" paper. I believe that systems are much more than mechanisms of presenting a rarefied memory but also must embed the everyday: the reminder to communities of identity and knowledges they hold. However, such systems also present the potential to humanize and show the depth of diverse traditions to those who are not from within. In other words, I believe such systems can enable non-migrants to view the realities of their fellow neighbours, and in a manner that shows the depth and bases of their different cultural realities. Certainly, these are challenging yet highly important issues that designers, policy-makers, and scholars must engage to allow our world to embody a true civil society, one of active communication between communities of incommensurable traditions. This presents a much more significant possibility for socially communicative futures versus conceiving of minorities or migrants as mere statistics to be allocated for structurally.

Thank you.