First there was ethnographic photography. This was joined by ethnographic film and video. Now there is also ethnographic videoconferencing.

The evolution of communication technology that has brought us videoconferencing has the potential to have a special impact on ethnographic research, documentation, and presentation practices. The evolution -- in visual terms -- is from still-images; to moving images that have been previously-recorded; to moving images interacting with each other (representing living people almost instantaneously).

Representation has been an issue in ethnography for a long time. In the past, the scholar alone had the power to write about, and to compose images of, the people whose culture was being studied. Now people of the culture under study can participate in the image-composition process -- including by composing their own photos and movies, and through videoconferencing. Ethnographic videoconferencing enables the people of a culture under study to frame themselves, and to speak for themselves. They can also ask their own questions of the distant scholars, because videoconferencing enables interactivity, the back-and-forth of conversation.

This article presents the concept of ethnographic videoconferencing. It asks and begins to answer such questions as: “What is ethnographic videoconferencing?” “What makes a videoconference increasingly ethnographic?” And, “What are some things that can be said about ethnographic videoconferencing in the context of ethnography, and life, in the world today?”

Ethnographic Photography, and Ethnographic Film and Video

Photography technology, and the academic disciplines of Anthropology and Folklore, came into existence and developed as members of the urban elite of the “advanced” nations were leading the way in colonizing the rest of the world. These scholars' work -- including their uses of photography -- were in many cases part of the colonizing process.

Giants of early ethnographic photography and film include Edward Curtis, Robert Flaherty, and Margaret Mead and Gregory Bateson.

Edward Curtis published twenty volumes of his photographs of Native-American peoples (1907-30). He also made one of the first ethnographic films meant for general audiences: In The Land of the Head-Hunters (1914). This movie featured Native-American people of northern British Columbia (Canada), and southern Alaska. However, this movie did not enjoy commercial success, perhaps in part because it lacked a lead character with whom movie viewers could identify.

Robert Flaherty’s film, Nanook of the North (1922) did find a commercial audience and become very famous: movie-goers could identify with the lead character, Nanook, and his (portrayed) struggle for survival.
Margaret Mead and Gregory Bateson published books of photographs with analysis (Bateson and Mead, 1942; Mead and Macgregor, 1951), and made a series of films about infant behavior and child-rearing methods in Indonesia and New Guinea (filmed in 1936-8 and released in 1958).

Following these early innovators, there have been countless ethnographic photographers, and ethnographic film- and video-makers -- and much of their work has been thrilling and revelatory.

However, an issue -- especially with the film and video work -- is that through the image-composition, editing, and translation processes, the movie-makers at times may impose their worldviews on the material that they would present to their audiences. Thus, scenes have been staged, scenes have been presented out of order, and voice-over translations have often not corresponded closely to what the people in the movie were actually saying. Moreover, the ability to interpret the meaning of events has often been the movie-maker’s alone, especially through the device of a narrator’s voice-over.

Timothy Asch -- filmmaker, professor of Anthropology, and director of the Center for Visual Anthropology at the University of Southern California -- was a central figure in the development of ethnographic film. He collaborated with a series of anthropologists, filming in Canada, numerous African countries, Trinidad, Venezuela, Afghanistan, Indonesia, and elsewhere.

The first phase of Asch’s career involved filming Yanomamo Native American people in the Amazon rain forests in Venezuela, in the 1960s. He did this work in collaboration with Anthropologist Napoleon Chagnon. Here, as throughout most his career, Asch did film work in collaboration with a scholar who specialized in the culture and language of the people under study.

By the mid-1970s, Asch had a number of reservations about the Yanomamo films. His intellectual shift can be seen as representing an awakening realization by Western ethnographic filmmakers in general:

Films of people who look exotic can be, and frequently are, used to reinforce Western prejudices about “primitive” people... I regretted not filming more Yanomamo conversations, which would have allowed individual Yanomamo to reveal their thoughts and opinions more directly. It is disappointing that so few individual characters emerge in ethnographic films.
(As cited in Connor 1986, p. 43-4)

This mid-career statement by Asch involves his recognizing that the subjects of ethnographic research are individuals with intellectual, emotional, and other types of interiors, and recognizing the value of enabling these individuals to speak for themselves to and with the public. When he was asked in 1991 how he felt about his films of the Yanomamo, Asch answered,

I am no longer as interested in making films about them, as I am in seeing the kinds of films that they might make about themselves. Moreover, I now question my role as an outsider representing their life and concerns to the outside world.
(Asch et al, 1991, p. 102)

Ethnographic media practices conducted in the discipline of Folklore should also be mentioned in this context. A special issue of Folklore Forum back in 1975 explored
many ways that people document their own and other's lives. Ways that Hmong people in the USA create and watch videos about themselves and their culture has been studied (Koltyk, 1993). This work has raised the question, "Who does the documenting?", and has promoted the idea of people documenting themselves. Indeed, Documenting Ourselves: Film, Video, and Culture (Sherman, 1998), is the title of a book that surveyed ethnographic media work related to the discipline Folklore.

Indigenous media

Indigenous Media is the study of what happens when indigenous people use mechanical or electronic media. The field is often said to have begun with a project led by Prof. Sol Worth (Communication) and Prof. John Adair (Anthropology) (Worth and Adair, 1972). They brought 16mm film equipment to a Navajo community in New Mexico, and enabled a number of Native American people to make movies.

One point of the project was to discover if and how the Native American film-makers might express their traditional culture through the film equipment and process. The resulting films including the portrayal of a lot of walking, and few close-ups. Perhaps the most telling finding, however, was that community members seemed to be at least as interested in the process, as they were in the product: they were very concerned with the details of the social processes around the production and exhibition of the films.

This work was followed up on by Eric Michaels, who in the early 1970s was hired by the Government of Australia to advise it regarding how to bring commercial TV to some of Australia’s Aboriginal populations, utilizing satellites newly in place. Michaels discovered that some Aboriginal people were making their own video recordings, and were in some cases transmitting these recordings to each other. Michaels became an outspoken advocate of Aboriginal people developing these activities (Michaels 1986). Michaels especially worked with Warlpiri people, in the town of Yuendumu, north of Alice Springs.

Michaels’ work was one of the inspirations for Warlpiri people and others to, in 1992, create the Tanami Network -- an indigenous people's global videoconferencing network. The Tanami Network (named after a local desert) was founded by Robin Japanangka Granites and Peter Toyne, an educator and politician. The Tanami Network linked four remote Warlpiri settlements with each other and with videoconferencing sites in the cities of Sydney, Darwin, and Alice Springs, and beyond.

Videoconferencing

Crystal balls -- through which it is claimed that one may (with magical or divine assistance) see distant scenes, and scenes from the future -- have existed in folklore since time immemorial. But perhaps it is primarily in relation to dreams, the imagination, and spiritual visions, that people have spoken of seeing beyond one’s immediate physical environment, of being a “seer.”

Television (literally, “seeing from a distance”) had already existed in the popular consciousness long before it was achieved electronically:
For centuries, the portrayal and the putative portrayal of illusions and images had attracted the attention of magicians, charlatans, and pseudo-scientists. There appeared to be a popular demand for visual displays and exhibitions of the unexpected as part of the social fabric of living. The demand was partly filled by the treteours, or wandering entertainers, of the Middle Ages, with their silvered concave mirrors, by peep shows and magic lantern shows, by theaters and pageants, and by phantasmagoria. Other means, panoramas and dioramas, offered their audiences two-dimensional images which were the precursors of the modern newsreels and travelogues as seen on television... The appeal of “distant vision” was beguiling and was enhanced by the ideas, crude and simplistic as they were, which had been propounded in the 1870s. These notions encouraged writers and cartoonists to evoke fantasies showing, perhaps, the eventual outcome of “seeing by electricity.” (Burns 1995, p. 34)

Ways to generate, store, and apply electricity first appeared around 1800. Transmission of electrical signals that could be coded to represent letters of the alphabet, known as a “telegraph,” was developed shortly thereafter. Transmission of sound via wires, known as “telephone,” was invented in the mid-1800s. Wireless transmission of sound, known as “radio,” was invented in the late 1800s.

Attempts to transmit visuals -- both through wires and wirelessly -- occurred at an accelerating rate after the inventions of the telephone and radio. By the late 1920s, wired and wireless one-way television had been demonstrated by numerous inventors (Miller 2010).

Videoconferencing is two-way (or multiple-way) television. Videoconferencing -- also known as video calling, and video chatting -- is a form of interactive telecommunication in which parties at two or more sites can send-and-receive audio- and-video to and from each other.

Videoconferencing can be seen as a further development, and a convergence, of all other electronic communication technologies. Videoconferencing is the ultimate interactive telecommunication process in the sense that all other forms of electronic communication (including typing; electronic drawing; image-processing of participants’ images; the viewing and manipulating of websites; the observing of prerecorded video; etc) can occur within a videoconference.

The first videoconferencing systems consisted of two closed-circuit television systems connected via cable. Bell Labs demonstrated such in 1930. In 1964, at New York World’s Fair, AT&T displayed the “videophone,” which delivered two-way voice and video over standard telephone lines.

In the 1960s, during space flights that carried humans, NASA used two (UHF or VHF) radiofrequency links, one in each direction, to videoconference with the astronauts in space. In the 1980s, digital transmission -- such as through ISDN lines -- came into being. This marked the beginning of the wide use of videoconferencing, especially in the business world.

Presently, a shift is occurring in the videoconferencing world -- led in part by the global higher education infrastructure -- to the use of the Internet and Internet2 (www.internet2.edu). Internet2, which was signed into existence in 1996, is a very high-speed, second generation of the Internet. Originally developed at USA universities, Internet2 has now spread to universities around the world, and into the business world and elsewhere.
We have become acclimated to videoconferencing by observing others do it, in comic-strips and comic-books (comics of fictional detective Dick Tracy introduced the 2-way Wrist Radio in the 1930s, and the 2-way Wrist-TV in 1964); in TV shows (such as Star Trek and The Jetsons in the 1960s); in countless movies; and perhaps most of all, on TV news (when anchor people converse with reporters and guests outside the studio).

Skype and other free videoconferencing software programs have now become quite popular for use on home and office computers, and on a variety of portable communication devices. However, many people who could use videoconference technology are not yet doing so, for a variety of reasons -- such as that the activity may involve additional costs, discomfort over being looked at, and fears of relinquishing one’s privacy.

We are well into the Age of Videoconferencing. The needed hardware, software, and infra-structure are becoming ubiquitous. Most new laptop computers, tablet computers, and mobile telephones come with built-in cameras, usually above the screen, facing the user; videoconferencing software is now often pre-installed in these devices; and broad-band Internet and 3G Networks are becoming widely available. It seems inevitable that videoconferencing will become an ever more available and practical communication option in our personal and professional lives.

Even though videoconferencing is not a daily activity for many people, we know it is possible and that it is being widely-used. Thus, we tend to measure all other communication in relation to the frame of reference provided by videoconferencing (as in, “I can read his words, and I can see his picture, but it is too bad that I can not see his moving image and speak with his image now”).

**Ethnographic Videoconferencing**

Four factors, the presence of which make a videoconference increasingly ethnographic, are:

A) All of the participants agree that a primary purpose of the event is the presentation of, and discussion about aspects of, a community’s culture.

B) The videoconference has at least one fieldwork-related site, and one university-related site. The organizing scholar may be at either site. People who attend at the university-related site may include faculty and students of the university, members of the public (including artists and experts) who are interested in the culture under study, and members of the culture’s diaspora community.

C) The videoconference follows an extended period of physically-present ethnographic fieldwork by the organizing scholar. Ethnographic fieldwork involves visiting and staying with members of the community under study -- classically for at least a year. Videoconferencing should not be seen as a replacement for physically-present fieldwork: previously-conducted physically-present fieldwork makes a videoconference increasingly serious, sophisticated, and ethnographic. And of course, fieldwork is typically embarked-upon only after the scholar has begun reading existing historical, sociological, and other scholarship about the community and culture under study.
D) The oral language of the community under study is used in at least in parts of the videoconference. At least one person who speaks the community’s language attends from the university site of the videoconference.

**Four Ethnographic Videoconferences**


B) *Title of the* videoconference: “*An anti-war sentiment in the performance of Mahabharata, an epic about war.*” 15 October 2011. Chennai and Bloomington.


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I organized these two videoconferences to gather data for my Ph.D. dissertation. In both cases, the videoconferences’ primary scholar (myself) was at the fieldwork-related site, in Chennai, south India, and I was accompanied by the people of the culture under study, namely Kanikaran (Kani) tribal people.

I had done over a year of physically-present fieldwork with Kani people, in the village of Vellambi, in a forest area in the far south of the Western Ghats mountain range. Then, as planned, I invited approximately ten Kani children, and some of their parents, to Chennai to take part in these videoconferences. It seemed appropriate to hold the videoconferences in Chennai, which is Tamil Nadu’s capital city and is known as the “Gateway to the South,” rather than seek to use a site closer to the Kani people’s homes in the Kanyakumari district of Tamil Nadu, five-hundred kilometres south of Chennai.

At the University site, members of the culture’s (Tamil Nadu’s) diaspora community attended.

For these videoconferences, a video-mixer was used at the Philadelphia site to combine the local and incoming images (Chennai on the left, Philadelphia on the right). The Philadelphia site sent this mix, as its outgoing videoconference image, to Chennai. This mix was also simultaneously relayed onto the Internet as a live webcast, so people around the world could observe and send e-mail comments and questions to the videoconferencers). An advantage to this method is that videoconference participants at both sites saw the same mix and so could develop spatial relationships between the two pictures; a disadvantage is that we in Chennai saw our own image with a double-delay (having sent it and received it), and this was somewhat distracting.

The primary agenda of these videoconferences involved the children at the Chennai site teaching traditional Tamil children’s songs/chants/dances/games -- some of which could be considered “singing-games” -- to the children of Tamil descent at the
Philadelphia site. In these events, the *Digital Divide* was reversed in the sense that the children of the more humble background (the tribal children in Chennai) were the teachers, and the generally more-privileged children (in Philadelphia) were the students.

At the Chennai site, some Kani (Tamil) children and I also demonstrated a method of practicing Tamil language, using four elements I had observed in the Tamil children’s play: 1) physically-enacting words as one speaks the words, 2) repetition of sentences with variations, 3) question-and-answer routines, and 4) role-playing.

The children at the two sites also at times engaged in one-on-one conversations, practicing speaking Tamil language routines.

For example, in the above still-image (which occurred near the end of the 90-minute session on 16 October 2004), children used puppets in the course of practicing Tamil language. They spontaneously improvised with elements of a traditional Tamil question-and-answer game. The game is: Something is stated to be a certain thing. Then a question is asked about that thing -- such as, “What kind of ___ is it?.

An answer is given, and then a similar question is asked about that answer. Ad infinitum.¹ Puppets were introduced near the end of the videoconference, just for fun. The puppets seemed to help people get over the self-consciousness of constantly being seen by others (and oneself) in the videoconference.²

Another incident in these two videoconferences I would recount is: Approximately 30 minutes into the Oct 2005 videoconference, the children at the Chennai site

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¹ The original Tamil-language verbal-game is presented on pp. 243-9 of my dissertation. A description of how the children modified this game in this instance is on p. 495 of the same work.

² The puppets were mine from my childhood days in NYC. Indian-style puppets, or at least puppets made by the children, would have been better for this event.
performed the action-song, “One Garden.” Someone on the Philadelphia site asked, in English, for a translation of the words. In Chennai, Banu -- a young tribal woman who is fluent in English (due to language training in a Catholic school), Tamil, and “Kani Pasai” -- conferred with Rajammal in Kani Pasai. (Kani Pasai, or Kani Speech, is a dialect of Tamil that contains some Malayalam as well as other languages.) Rajammal was the senior member of the Kani party, and the mother of my research assistant, Velmurugan.

Rajammal explained the words in Kani Pasa to Banu. Banu then explained the words in Tamil to Dr. Vasu Renganathan (a Penn faculty member) at the Philadelphia site. Finally, Dr. Renganathan explained the words in English to the other people at the Philadelphia site.

This sequence illustrates the linguistic and social steps that often are necessary in fieldwork and documentation processes. A key figure is the young member of the community -- in this case, Banu -- who has the language and social skills needed to communicate both with senior members of the community, and with outsiders. In this ethnographic videoconference, the step-by-step translation process occurred for all to see. The scholar who facilitated the event (myself) was at the Chennai site, but was off-camera during this sequence: in this case it was his role to enable the conversation, but not to participate in it.

Incidentally, in Chennai in the days before the first videoconference the Kani participants, after conferring amongst themselves, had told me that -- for the sake of their conversation partners understanding them -- they had decided to speak standard Tamil (rather than the Kani dialect of Tamil) as much as possible, when speaking to the Tamil people on the Philadelphia side of the videoconference.

To the possible objection that exposing tribal people to, and helping to involve them in, videoconferencing might somehow be detrimental to their culture, I would answer: These people are already inundated by electronic visual images, from TV and cinema. Videoconferencing, like video recording technology, simply gives community members the opportunity to engage with this technology as active creators, not just as passive consumers.

In arranging the 16 October 2004, and 15 October 2005, Chennai-Philadelphia videoconferences, I sought to create a "natural context" for the Kani participants at the Chennai site as much as possible (Goldstein 1964). I did this in a number of ways, including by inviting a large group of them -- approximately ten children and ten adults -- to Chennai. This way, the children could perform their songs, chants, and dances with and for each other, under the watchful and encouraging eyes of their elders, just as they would in their home village of Vellambi. Of course, outsiders observing this process does tend to increase the artificiality of the situation somewhat.

However, when the Kani children in Chennai were demonstrating their activities for the children on the Philadelphia side of the videoconference, they were following a traditional folk practice of performing for outsiders. There is an ancient tradition in India of tribal people performing for a visiting king; and also of tribal people visiting a king and performing for him at his court (Falk 1973).

And when the Kani children in Chennai taught their activities to the children on the Philadelphia side of the videoconference, they were following the universal traditional children's folk practice of sharing their activities with other children, and initiating these "new" children to the group's ways.


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4 One example of this would be: The ancient Chera king Shenguttuvan, when traveling in the mountains, witnessed women worshipping at the statue of the epic heroine, Kannagi, and asked to be told her story.
Storyteller Udayarani chants an invocation (near the beginning of the event).

This videoconference occurred on 15 October 2011, as an event in the annual meeting of the American Folklore Society, held in Bloomington, Indiana. The theme of this AFS meeting was, “Peace, War, and Folklore.” The primary scholar of this videoconference, Dr. M. D. Muthukumaraswamy, was at the fieldwork-related site, in Chennai, south India. He was accompanied by three people of the culture under study: Udayarani (a professional Mahabharata storyteller), Siva Muthu (an accompanying musician), and Jayachandran (a village elder, and community organizer).

This videoconference concerned a particular episode of the Mahabharata, one of India’s most prominent epics. The episode is the Patukalam, the battle on the final day of the war.

Dr. Muthukumaraswamy presented a paper on the topic: “Patukalam: Performing the Banality of War and Evil” (2011). He had done fieldwork in the village where Udayarani often performs the story. In the course of the videoconference, three brief video recordings of the story being enacted during the Festival by large groups of people in the village were played from the Bloomington site. (We in Chennai had posted these recordings on YouTube for advance viewing, and they had been downloaded by people at the Bloomington site.)

On the Bloomington side of the videoconference, one of the discussants was Dr. Brenda Beck, who especially studies the Annanmar Kathai (the Story of the Older Brothers), another epic performed in Tamil Nadu. In the course of the videoconference, Dr. Beck compared the final battle of the Mahabharata to the final battle in the Story of the Older Brothers.

I chose a side-by-side screen-configuration for the webcast, so viewers of the webcast could see the listeners, as well as the speakers, throughout. However, this time no external piece of video hardware was needed to combine the images: the mixing was done by people operating the videoconference system on the Bloomington side. The videoconference was webcast live, and the recording of the webcast can be seen online.\(^5\)

We had a translator on the Chennai side, who orally translated the Tamil speech into English. However, one output of the event was the clear need for an ongoing visual translation, perhaps to appear in a separate window. This could be done by a person who could listen to the Tamil and type in English. It could also be done by automatic voice recognition, transcription, and translation software -- this is an important potential development area in relation to cross-cultural, cross-linguistic, ethnographic videoconferences.

Storyteller Udayarani, in addition to performing certain episodes of the Mahabharata, commented on these episodes primarily in terms of the ethics and morality the story can teach. As can be seen in the still-image (above) from the videoconference in which Udayarani is performing an invocation (her hands clasped in prayer): from the perspective of people inside the tradition being studied, the storytelling is a

\(^5\) The recording of this videoconference is at http://tinyurl.com/archived-webcast-of-videoconf. The Videoconference Agenda webpage is http://www.storytellinginstitute.org/36.html.
devotional and ritual activity. For scholars, on the other hand, it may be that the activity is being approached more on sociological, linguistic, psychological, and technical and mechanical levels. As is always the case with ethnographic work, the scholars in an ethnographic videoconference will be most effective, and least disruptive to the culture being studied, when they show great and sincere humility and respect in regard to what community members are sharing, and how community members are experiencing and viewing their cultural practices. The scholars’ comments (in English) -- including abstract ideas about how the story-realm is mapped onto village places and people during performances -- would have been needed to translated more fully into Tamil for Udayarani, Siva Muthu, and Jayachandran to have really engaged in this part of the conversation. In such English-to-local-language cases, two types of translation may be called for: linguistic, and cultural (including the need to state ideas in terms to which non-scholars can relate).


\[Image: Chennai (large image); Cairo (small image in lower right corner)\]

This videoconference was a meeting between students at the Indian Institute of Technology - Madras (where I am Guest Faculty), and students at the American University in Cairo, Egypt.

As is the case with the previously-mentioned videoconferences, this one was also webcast live. The recording of the webcast can be seen online. The visual configuration used for this videoconference was: the present speaker's image automatically fills the screen, and the listener's image appears in a small size in the screen's lower right corner. While this configuration does enable the observer to see the (on-camera) speaking and listening parties at all times, the automatic alternation of which image is large and which is small tends to push the viewer around somewhat, instead of permitting one to choose to shift one's attention to the image of one's choice.

\[Footnote: 6\] The recording of this videoconference is at http://youtu.be/V2hLzX-Rs5A. The event handout is at www.storytellingandvideoconferencing.com/737.pdf.
Videoconferences between (both K-12 and university level) students have in some cases come to be known as Virtual Field-trips (in the USA), or Virtual Study-trips (in India and elsewhere).

In this videoconference, students discussed their identities in terms of personal experiences, language, epics, social structures, and so on. This kind of videoconference involves mutual, reciprocal ethnographic processes, with participants at each site telling about and demonstrating their own culture, and also asking about the culture of their videoconference partner.

This videoconference might need to be considered a relatively lightweight instance of an ethnographic videoconference, in that participants did not do very much advance reading about the other culture, no prior physically-present fieldwork was conducted, and local vernacular languages (such as Tamil and Hindi, and Arabic) were not used beyond the consideration of a few words. Instead, English was used -- and local vernacular uses of English were discussed.

Conclusions

Ethnographic videoconferencing (with optimal translation processes) presents opportunities to overcome the barriers of distance and language between people, and to together discuss a culture. The mind boggles regarding ways that ethnographic videoconferencing might develop once videoconferencing via mobile devices might become popular. Once people begin using videoconferencing in one area of their lives, they may also consider using it in other areas (such as giving language lessons, helping to provide cultural tourism experiences, and other forms of work). It needs to be kept in mind that prior physically-present fieldwork, and scholars' attempts to learn community member's spoken languages, will always be factors that will give depth to ethnographic videoconferences. It may also be useful to keep in mind that every conversation can be seen as containing the seeds of an ethnographic conversation, and we are all just folks.

Bibliography


