Seeing Nacirema: How Students and Professors Interpret Ethnographic Film

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Abstract: Students and professors of anthropology were asked to interpret two pieces of original ethnographic video, one from central Mexico, the other from the United States. Both students and professors approached the interpretation of the video shot in Mexico in much the same way; they made few judgments and frequent expression of uncertainty. However students made more judgments and more expressions of certainty than the professors when viewing the film shot in the United States. We posit these data suggest a developmental sequence of interpretive skills where the ability to interpret activities perceived as culturally strange develops before the ability to interpret activities perceived as culturally familiar.

In 1956 Horace Miner published the essay *Body ritual among the Nacirema* in the AAA's flagship publication, American Anthropologist. Since this publication the Nacirema have held a ubiquitous presence within anthropology. Upon first exposure to the "exotic" Nacirema students are often shocked to learn of a culture whose members

> have an almost pathological horror of and fascination with the mouth, the condition of which is believed to have a supernatural influence on all social relationships. Were it not for the rituals of the mouth, they believe that their teeth would fall out, their gums bleed, their jaws shrink, their friends desert them, and their lovers reject them. They also believe that a strong relationship exists between oral and moral characteristics. For example, there is a ritual ablution of the mouth for children which is supposed to improve their moral fiber. (Miner, 1956:505)

only to learn that *Nacirema* spelled backwards is *American*. Thus, the story of the Nacirema is meant to demonstrate that our culture is inculcated with the same level of myth, ritual, magic, and superstition as the "exotic other" that anthropologists have traditional studied (Rynkiewich & Spradley, 1975). As a pedagogical strategy, then, the Nacirema have helped teachers encourage students to see that all cultures can be made strange, that "exotic" is a way of seeing rather than a category that resides in those seen, and that with practice we can turn our ethnographic lens inward and see our culture just as we viewed others.

But does the introduction to the Nacirema serve these purposes? We suggest that it does not. In this paper we argue that undergraduate students in anthropology have asymmetrical interpretative strategies for representations they believe come from "our" culture and those they believe come from "other" cultures. The basis for this claim is a study of students and professors who viewed and commented on two pieces of ethnographic film. In this study, both students and professors tended to make few judgments, few linkages to prior knowledge, and more expressions of uncertainty when viewing an ethnographic video they were told was shot outside of the United States. Conversely, while the professors tend to maintain these interpretive strategies when viewing a film they were told was shot in the United States, students tended to make more judgments, more linkages to prior knowledge, and more expressions of certainty when viewing the same film. We suggest this imbalance in their interpretations across films is an important marker of their development of their development of ethnographic interpretation practices.

Theoretical Framework

We know something of how expertise manifests in chess players (DeGroot, 1965), electricians (Egan & Schwartz, 1979), radiologists (Lesgold, 1988), computer programmers (Ehrlich & Soloway, 1984),

mathematicians (Hinsley, Hayes, and Simon 1977; Robinson & Hayes, 1978), physicists (Chi, Feltovich, and Glaser 1981; Larkin, McDermott, Simon, & Simon, 1980), political scientists (Voss, Tyler, & Yengo, 1983) and historians (Wineburg, 1991; 1998). Similarly, we know something of how people become truck drivers (Agar, 1986), police officers (Manning, 1977), navigators (Hutchins, 1995), and even marijuana users (Becker, 1953) yet we know little of how people become anthropologists in general, or more specifically how people become experts in cultural interpretation.[1]

This research contributes to the learning sciences in three ways. First, this research contributes to a growing body of studies of expertise in solving ill-structure problems yet is somewhat unique in its use of a video elicitation paradigm and exclusive in its focus on the discipline of anthropology. Second, understanding something of what constitutes an expert form of cultural interpretation should be helpful in understanding our own interpretive practices. Lastly, within a growing trend of using studies of expertise to inform K-12 education, this study should contribute to our understanding of teaching and learning in the social studies.

The purpose of this project is to better understand how people become cultural interpreters. More specifically, our aim is to understand the similarities and differences in the way the students of anthropology and anthropologist interpret ethnographic film.

Method

Three undergraduate students in anthropology and three professors of anthropology participated in this study. We showed each participant two short pieces of original ethnographic video using the VideoTraces software package and asked the participants to think aloud as they viewed the video segments. The first video, *The Rosary* (see Figure 1) was shot in a church in a rural community in central Mexico; the second video, *Shrimp Fishing,* (see Figure 2) was shot aboard a small boat in the waters of the Northwestern United States.

Figure 1. The Rosary

Figure 2. Shrimp Fishing

Data Analysis

The aim of data analysis was to describe the similarities and differences in the interpretations of ethnographic film by undergraduate students in anthropology and professors of anthropology and to better understand the relationships between the cognitive processes involved in these interpretations. Data analysis proceeded in three stages. First, protocols collected from the "think aloud" (Ericsson & Simon, 1984) procedure were transcribed verbatim. Second, following Wineburg (1998) protocols were parsed into "conceptual unit." These units of speech ranged from monosyllabic to multi-line utterance that focused on a single idea. Lastly, the conceptual units were systematically reviewed and coded into six categories: *pauses, suspension of judgment, creation of context, expressions of certainty/uncertainty,* and *references to task*. This coding scheme accounted for 87% (n=1356) of all conceptual units.

The Findings

When anthropology students and professors viewed *The Rosary* they tended to make few judgments and frequently expressed uncertainty of the subject matter. Conversely, students tended to make few make few linkages to prior knowledge while professors made more frequent use of this strategy, implementing it is multiple ways. Moreover, where student did make judgments or tentative knowledge claims, they tended to be about objects in the film rather than about actions or intentions. For example, one student said: "…you have *what appears to be* a candle…" (italics added throughout for emphasis) rather than "this is a candle." (see Figure 3). In other cases, students qualified their claims with a question:

Figure 3. The "candle".

23 … you see this coffin…*it looks like* a coffin to me in the background
24 and *you wonder* did someone die and—is this is this like something
25 they worship?

Similarly, professors of anthropology frequently hedged their claims. "…*maybe* we're getting ready for a baptism…" or "…*maybe* this has something to do with Easter…" they say with some frequency.

Likewise, students tended to make few links to prior knowledge. In cases where they did, however, it suggests that they specific personal experience with an aspect of the context or activity being viewed as in this case of this student responding to a women in the middle of the church who makes the "sign of the cross", a ritual preformed only by those associated with the Catholic Church.

13 ...and this girl just made a motion like this is a Catholic event
14 of some kind which tells me maybe this is a Hispanic speaking
15 country…

To make a link between the women's action and the context requires, in this case, at least three pieces of prior knowledge—that the gesture the women made was the sign of the cross, that the sign of the cross is Catholic ritual, and that a large number of Catholics reside in Spanish speaking countries—and the ability to interpret (Geertz, 1973) that action in light of the activity. In this case it seems, the interpretation is limited to a matching activity where prior knowledge is mapped directly unto the activity so that the interpretation becomes self-evident.

Since making this kind of link to prior knowledge presupposes an expansive fund of knowledge, we would suspect that younger students do this with less frequency than older professors. Indeed this seems to be the case. Students made on average 7 links to prior knowledge while watching *The Rosary* compared to an average of 23 links from professors while they were watching the same video. The issue, though, is more complicated. While professors tend to make more links to prior knowledge, they also use that knowledge in ways quite different from the students. Thus, while one professor made the following comment

5 …maybe [the ethnographic context] is Hispanic or Latino or
6 something 'cause its kind of suggesting a church or Catholic
7 school or something like that…

which suggests that he knows something of what churches and Catholic schools are like and, like the student above, that a large number of Hispanics are Catholic. In other cases, though, professors extrapolated links. By this I mean that the link is not the product of a direct overlay of prior knowledge unto activity. Instead, the prior knowledge is manipulated cognitively in such a way that the manipulation serves as a mediating force in their subsequent interpretations. To explain, one professor while watching *The Rosary* remarked "…it sure does remind me of places I've been in Latin America…." As it turned out, this professor had never been to the community where *The Rosary* had been filmed but had been to other parts of Latin America and was able to extrapolate prior knowledge generated out of those experiences to aid in his interpretation of this video. While this was a frequent strategy for professors, students tended to used this strategy rarely and only in their

interpretation of *Shrimp Fishing* suggesting that that the ability to generalize, as indicated by the ability to extrapolate links from prior knowledge to activities, may be a more sophisticate interpretive strategy.

Both students and professors approach ambiguous context and action in similar ways: they approached these scenes as a puzzle, tried to figure that puzzle out, and, in most cases, admitted when they could not find a solution using structurally similar statements. When viewing a scene of children repeatedly placing flowers on a table then taking them away, one student remarked,

13 …but still its like they're doing the same thing over and over
14 again and it doesn't make sense why they are doing it…it just
15 doesn't make sense…

When viewing the same scene a professor remarks,

7 …[she's] handing stuff out now, now this stuff is being brought
8 back to the table [and] she's handing it out and they keep bringing it
9 back to the table...this is…I don't know some kind of, I'm not sure what
10 they're doing here…

Like their professors, students tended to frequently suspend judgment and express uncertainty when watching ethnographic film depicting actors and events that are unfamiliar. Unlike their professors, though, students tended to make fewer references to prior knowledge while thinking through these films. But what happens when both students and professors view ethnographic film that depicts scenes closer to home?

When viewing *Shrimp Fishing,* professors tended to think through this film in much the same way that they approached *The Rosary*. Specifically, they made few judgments but many linkages to prior knowledge, and more expressions of uncertainty. Student's interpretations, however, tended to be different from those they made while watching *The Rosary*. Typically students made many judgments, many links to prior knowledge, and more expressions of certainty.

In this study a common adverbial modifier in students' interpretation of the *Shrimp Fishing* film was the word "obviously" and its synonyms. In describing the initial activity one student comments, "…there's this guy and he is *obviously* a crab fisherman…." Later on in the film another student remarks, "…*obviously* they're *obviously* out in the ocean…" and later the second student says, "…they have some technology and it's not high tech or anything [so] *obviously* this is a small-time operation…" Both of these student were noticeably more circumspect when interpreting the *The Rosary* to the degree that words like "obviously" and its synonyms rarely showed in the data for these students. These comments are in marked contrast to the more guarded interpretations made by the professors. For example, one professor remarked, "…and you have *what looks like* an ocean, or a big lake, or a bay…" What for the students is "obvious" is less so for the professors.

Semantically, the word-choice "obviously" suggests a high degree of conviction in the student's interpretation. Indeed, this interpretive commitment is strong enough that when confronted with information that directly challenges their interpretation students are more likely to dismiss the new information in order to sustain their initial interpretations. For example, when viewing *Shrimp Fishing*, most students and professors judge the film to be about crab fishing. Structurally these activities, at least as they manifest in the Puget Sound are similar. They both use similar equipment including boats, floats, lines, and pots, they both take place in similar environments, and they both use similar crews. Indeed, they are similar enough that it becomes more interesting when students or professors do not initially suggest that the activity depicted is about catching crab. There are, however, important socio-political differences in these activities. Four minutes into *Shrimp Fishing* the fishermen pull up the first pot and the viewer has a chance to see the catch (see Figure 4).

Figure 4. Bringing up the pots

At this point, viewers who made the initial judgment that they were viewing a crab fishing operation are provided with fairly clear visual information that contradicts this judgment. Specifically they see the pots being brought out of the water and the "catch" dumped into a large bucket. When the commitment was high (as indicated by the use of words like "obviously" and its synonyms) the viewers (mostly students) tended to dismiss competing evidence. One student, for example, said,

46 …those didn't look like crab but maybe they were…
47 the video isn't, I mean, real sharp…

This student continues her viewing making several more references to crab pots, never again addressing the contrary evidence. In another case, a student said,

42 okay they're the one guy just got the pot from the other guy and
43 he's shaking it out en out come crab they don't look like crab they're
44 small crab must be…should zoom in

Like the first student, this student continued to refer to the activity as crab fishing on multiple occasions over the last two minutes of video. Like the first two students, the third was unwilling to dismiss evidence that contradicted her earlier assessment.

48 whoaa he's taking out the crab from the bottom…I thought
49 they came out from the top…[inaudible] but he shook them
50 out shook them out from the bottom. They're not very big crab
51 maybe babies? Hmmm

The same student was view a scene where one of the shrimp fishermen is sorting the shrimp into types uses the fact that he throws some of the shrimp overboard as further support for her "baby crab" hypothesis.

66 I see now he's throwing the babies overboard but keeping the
67 bigger ones they're still small though

In each case the students, when confronted with evidence that contradicted their early assumptions dismissed competing evidence as either being due to poor videography or reframing the entire activity as was the case of the student who say the sort by species activity as a sorting by size activity.

In contrast, when the commitment to the interpretation was lower (as with most professors) the interpretation was more flexible. One professor who made the initial crab fishing interpretation changes his mind once he sees the pots being emptied: "…they weren't doing crab they were doing fish…" he says. Continuing, "…dang, I wish I could see what kind of animal it is they are taking in. It sure looks like fish…" Another professor had a similar response:

62 holy…well I called that one wrong those aren't crab at all…
63 something much smaller…what could it be…little lobsters?
64 Shoot what are they called? those little French lobsters? Or
65 Crawfish? No they're not crayfish. Shrimp?

In general, then, when confronted with information that challenges an early interpretation, professors tend to deal directly with that new information and use it as bases for reformulating their prior interpretations, an activity that was rare among the students.

Both students and professors make multiple links to prior knowledge and schema when viewing *Shrimp Fishing*. Similar differences that emerged in *The Rosary* interpretation were salient here as well; when students made linkages they tended to be about concrete, specific things such as the boat or the physical environment. The more experienced interpreters not only tried to understand specific events and objects displayed—something the students did too—but they also tried to build a wider picture of a coherent set of social practices. For example, in reference to the floats the fisherman used to mark their pots, one professor remarked,

36 …the float, of course, is to tell them where his crab
37 pots are when he wants to come back but I suspect
38 also that those floats indicate to other fisherman out
39 there who's crab pots they are 'cause I use to see that
40 with my own fieldwork…

Here the link to the floats is specific but also suggests that the professor is thinking about the complex social role—as adjunct to the fisherman's memory as well as the method of social control—that the floats might play in the lives of the fisherman. Again, we suggest that this added complexity is suggestive of a developmental difference in ethnographic interpretation.

Finally, when compared to professors, students were more likely to make expression of certainty while watching *Shrimp Fishing* and when they did they tended to be about specific objects and actions. In contrast, professors tended to approach the objects and actions in both of these films as puzzles to be solved and often expressed puzzlement over their inability do solve them. For example, one professor said,

17 …well now, what's happening…this is puzzling…
18 I don't know, I don't know what's happening here…

Indeed, it may be this notion of the puzzle that separates student's interpretation from that of the professors.

Discussion

There are significant differences in the way that students of anthropology and professors of anthropology interpret ethnographic film. While both students and professors tend to make few judgments and frequent expressions of uncertainty while viewing *Shrimp Fishing* students tend to make fewer and less sophisticated uses of prior knowledge. This difference is likely related to the students' nascent understanding of the practice of ethnographic interpretation. Mike Agar (1996:35) has suggested that ethnography is an abductive process that involves the "imaginative construction" of frames that explain rich points in the data. This is, we contend, what happens when the professors demonstrate the use of related knowledge to extrapolate interpretations for which they have no practical experience. This requires the ability to determine what is relevant but also what is not. In this sense, we suggest that the ability to do so is a more sophisticated approach to cultural interpretations then is making a direct link between prior experience and action as was the practice of the students.

A second significant difference in the interpretive strategies of students and professors is seen in the level of commitment that these two groups made to earlier interpretations when viewing *Shrimp Fishing*. In their work on attribution processes Ross and Anderson (1980) suggest that people tend to increase their commitment to previous held beliefs even after exposure to mixed, often conflicting evidence and often continue holding onto a belief even after it has been discredited. This seems to be the case among the students in this study. That this only occurred during the students' viewing of *Shrimp Fishing* suggests that for students, interpretive tasks seem easier when the setting is one that they perceive as strange. Contrary to the students approach, however, the professors responded to uncertainty by continuing to question, evaluate, and often guess, readily abandoning

earlier interpretations if they could no longer reconcile them with the observed activities. In discussing a similar approach among historians, Wineburg (1998) concludes that "how [a historian] responded in the face of what he didn't know allowed him…to learn something new." (Wineburg, 1998:340)

Sailors of old used a spyglass to scan the horizon in order to get a better view of where they were heading. Those hapless enough to turn the spyglass around and gaze inward were left with a narrowly-focused, diminutive view of themselves. Anthropology students seem to us a little bit like the sailors of old when they try to turn their anthropological lens inward. In doing so they, they miss the proverbial horizon for the sea. Professors of anthropology have learned to filter the images coming through the spyglass through a lens of the Nacirema and in doing so are able to see their culture as strange; we suggest that once students see something as culturally strange it will be relatively easy to engage them in some important practices of ethnographic interpretation as evidenced by the productive practices of these undergraduate interpreters. But, making the familiar strange in the first place may be a much bigger challenge for teachers of ethnography. In future research, we hope to explore whether this is really the case and if so, why this might be.

Endnotes

(1) From Malinowski's (1922) introductory chapter in Argonauts which served for decades as *the* methodological text in anthropology to Geertz' (1973) call for an openly interpretive approach to ethnography, anthropologists have been long interested in the nature of cultural interpretation. These accounts, and most others in anthropology, however, neglect the specific cognitive processes involved in these cultural interpretations.

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