Summary of the *Anthropology Newsletter*'s 1996-97 Alfred P. Sloan Foundation sponsored theme on the "Unknown and Unknowable in Anthropology," published September 1997, p 1. ©American Anthropological Association.

View from the Last Citadel--Limits to Knowledge in Anthropology

By Susan Skomal, Editor

> *The way anthropology actually gets done is by imaginatively transforming the unknowable into the as-if-known, which can be done in a variety of ways*. --Richard Shweder (December 1996 *Anthropology Newsletter*, p 5).

Of all the "ologies" of modern science, anthropology--the "last citadel of the unknown"--long ago set itself the most ambitious of tasks, "to bring order out of that vast chaos of action and thought which has so long resisted analysis and synthesis" (William McGee, *American Anthropologist* 1, 1897, p 271). A century after McGee's prophetic words were published, the *Anthropology Newsletter* has devoted its 8th annual theme to documenting the many ways scholars throughout this diverse and sometimes fractious field continue to grapple with the challenges of the unknown and unknowable. With the generous support of the Alfred P Sloan Foundation, 9 editions of the *AN* have provided a forum for a lively discussion of the limits to knowledge in anthropology. Over 50 articles have addressed a wide range of topics, including conception, childhood, aging, morality, genetics and IQ, AIDS, cultural patrimony and even limits confronting practitioners under contract. [See Index to theme articles, p xx.] This final consensus article was developed during two meetings of the Sloan Foundation Project Advisory Committee, which involved: Kim Hopper (Nathan Kline Inst), Elinor Ochs (UCLA), Robert Paynter (U Mass-Amherst), Karl Schwerin (U New Mexico-Albuquerque), Alan Swedlund (U Mass-Amherst), and Lionel Tiger (Rutgers), with active participation by School of American Research officers Douglas Schwartz (President and CEO) and Duane Anderson (Vice-President).

Creating Knowledge

Tackling its own unknown, the *AN* challenged readers to explore the usefulness of Sloan Foundation President Ralph Gomory's tri-partite taxonomy of knowledge as it applies to the discipline of anthropology. In addition to identifying the *known* and seeking to learn the *unknown*, Gomory suggests that scientific inquiry be strategically concerned with those aspects that are *unknowable* ("The Known, the Unknown, and the Unknowable," *Scientific American*, June 1995, p 120). This, he suggests, will allow researchers to recognize misconceptions and may even help develop methods to model unpredictability.

Gomory's taxonomy provides a useful basis on which to begin discussion, yet the range and variety of views expressed by anthropologists contributing to this year's theme demonstrate that by its very nature, the science of humanity routinely deals with more dynamic patterns of knowing. We consider, for example, whose view of knowledge we are examining, what it means to know and the process of transforming the unknown to

the known, as well as the many domains of knowledge itself.

Knowledge creation may be viewed in two ways. The first, familiar to students as the "scientific dialectic," includes discussion and debate of the evidence by two or more parties, where acceptance of scientific outputs are often largely by a consensus on the weight of the evidence. This is the form of knowledge production most applicable to Gomory's tri-partite taxonomy. The second form of knowledge, or "anthropological dialectic," views knowledge creation as a sociocultural experience, where something must be recognized by more than a single individual to qualify as a cultural object or known. In this case, emphasis is also on transforming or revealing parts of the knower's experience. Anthropology would, moreover, consider the scientific dialectic as a subset of sociocultural knowledge creation.

Contributions by Greg Urban and James Chatters illustrate this contrast between the individual and social experience of knowledge creation. Urban notes that although telling one's own dream to a group constitutes a cultural event, the dream itself does not become a cultural object until retold and circulated throughout a social group (February 1997).

Chatters experienced paradoxical knowledge in his encounter with Kennewick Man (January 1997). Allowed to study the skeleton at first, his access or "permission to know" was revoked by the Native American community once tests demonstrated its antiquity. As an individual researcher, Chatters was in the process of generating scientific knowledge. Once his knowledge of the evidence was shared with the public, however, the evidence itself was contested, effectively halting further study in the Western, scientific tradition. In this case a group confronted an investigator's scientific knowledge with indigenous knowledge, arguing the former was unnecessary. Knowledge is thus invariably a sociocultural phenomenon, in terms of its construction, its validation and sharing.

Transforming Knowledge

More critical to an understanding of what, why and how humans believe and behave the way they do, are the relationships *between* the three states of knowing outlined by Gomory. "Transforming the unknowable into the known is what cultural process is all about, which is why the unknowable must occupy us all the time," wrote Richard Shweder (December 1996 *AN*, p 4). Contributions to this year's theme are vivid testimony to the fact that anthropological research comes from diverse places with diverse problems. Our task is to make sense of the diversity.

Linguistic anthropology offers a key for illustrating the complex process used by anthropologists to transform the unknowable into the known, which in turn reflects the diverse ways that people around the world solve the problem of converting the unknowable into the known. "Known," "unknown" and "unknowable"--all derived from the English root, "to know"--represent but three of the myriad modalities possible. Just as language represents the multiple codes, styles and registers of its speakers, knowledge as a sociocultural phenomenon has many modalities. In addition to knowing in the present tense, one may, can, should or must know; just as one does *not* know, one may not, cannot, should not or must not know. Other

vectors that influence the state of knowing involve the experiencers (*who* knows), objects of knowing (*things* we are trying to know), source (*who* makes it possible to know), location (sociohistorical location of the fact of knowing), goal of knowing and instruments we use to gain knowledge. Finally, as Sandra Morgen notes, the very position of the knower in anthropological inquiry may significantly determine what is knowable (May 1997). People from culturally different positions bring present constraints and past life history to the process of sorting what should and should not be known, what is of more or less importance when converting the unknown to known, and what codes and practices will be used to socially construct knowledge.

Constructing Knowledge

Whereas Gomory's tri-partite model affords a useful tool for stimulating thought, the linguistic model pushes us to observe three-dimensional complexity and processes of knowledge construction through both time and space. Contributors to this year's theme dealt with such processes as creating and reproducing knowledge, slippage between knowledge communities, re-creating, losing and withholding knowledge, as well as questions that are unaskable and contested.

Slippage

Imperfect communication, or slippage, results in lack of congruence even between complementary viewpoints. A fact of life, it is always present. Yet, because it is most often unmarked, slippage amounts to *un*recognized *un*knowing. A particularly clear example is between the communities of North American anthropologists and Ecuadoreans. Women in Ecuador who were unable to answer Lynn Morgan's questions about when life begins insisted that such issues are beyond human understanding (March 1997). Slippage is also about *mis*knowing, or the misunderstandings that occur between individuals of the same culture, community or even family.

The NAGPRA cases about the right to study Native burials and objects of cultural patrimony bring the issue of slippage to the fore. As documented by Amy Dansie and Donald Tuohy (January 1997), what is considered inherently knowable by one community (the archaeologists, in this case) may be regarded as wholly unknowable by another (here, the Native American community). Martin Sullivan neatly demonstrates how confrontations over remains and objects demonstrate slippage (January 1997). Surprisingly, both sides hold similar values, yet each acts to subvert the others' curiosity through socially constructed secrecy--scientific curiosity thwarted by NAGPRA on one hand, and spiritual curiosity thwarted by education, collecting and curatorial practices on the other. Obviously such confrontations are about more than slippage, when the power of the state becomes involved in the resolution of competing knowledge construction practices. Nonetheless, some recognition of the construction of parallel unknowabilities might help ameliorate some of these situations.

In cases challenging the Native American Graves Protection and Repatriation Act (NAGPRA) this slippage can have significant consequences for all participants. When one community's point of view comes to dominate the practice of anthropology, the result is ignorance for all. For instance, looking for insight on the

life of a prominent African American male scholar from his material record, archaeologist Robert Paynter found it impossible to "read" ethnic identity when using only his white male vocabulary (May 1997). Morgen offered a clear analysis of how anthropology's vision of interesting unknowns and unknowables--particularly about gender, race and sexuality--has altered with the inclusion of a broader range of social and cultural communities within the practice of anthropology.

Re-creation

Rather than a single discrete event, knowledge may be viewed as a continuous process of producing, reproducing and replicating information. Urban's observation that knowledge is constructed through collaborative interaction over time is borne out in Martha Loustaunau's cooperative work on a joint health care project, where "we both discovered a lot of things we alone (and even together) didn't know" (January 1997, p 39).

When ineffectively communicated, information risks becoming only partial knowledge, as illustrated in E J Sobo's call for publishing and disseminating the results of anthropological research as widely as possible (October 1996). Knowledge re-creation is also a collaborative effort between researchers and those whom we study. John McCall advocates the practice of heuristic anthropology, in which anthropology "makes room" for indigenous voices in its representations and listens seriously to what they say about their own societies to "form a bridge between our rationalities and theirs" (October 1996, p 44).

Loss

Loss of knowledge is sadly a common phenomenon in anthropological research, resulting all too often in ignorance. Implications for linguistic studies are raised by Jane Hill, who warns that with 50% of the world's some 6500 languages moribund, "when languages die, memories die with them" (January 1997, p 11). Miriam Chaiken confronts the loss of knowledge within an East African community. Her historical research found that erstwhile commonly held views on health and nutrition--knowns--had been forgotten, thereby rendering them unknown and in need of rediscovery (October 1996).

Withheld

By following the letter of the law in the Kennewick Man case, the US Army Corps of Engineers opted to curtail further scientific study in deference to Native American claims against knowledge produced by the scientific community. Dansie and Tuohy's research on the Spirit Cave mummy has likewise been halted pending interpretation of NAGPRA by the Nevada Bureau of Land Management. Both cases involve knowledge that might be produced, but is legally prohibited.

Anthropological research performed under contract is likewise often withheld for ethical and professional purposes. In common with agreements offered anthropologists by many public agencies and private corporations, James Waldram's new contract with the Correctional Service of Canada stipulated that access to all data derived from his interviews with prison inmates were subject to control by prison authorities (September 1997). Rather than risk being labeled a "professional rat," Waldram chose to discontinue his work

with the Service.

Unaskable and Contested

Application of NAGPRA has raised a host of issues affecting the construction of knowledge throughout the anthropological community. From the anthropologist's perspective, the Native American community in the Kennewick Man case is withholding information that could contribute significantly to the scientific understanding of the peopling of North America. To the Umatilla involved in the case, however, acquisition of such knowledge constitutes an assault on cultural essentials. Not only does the study involve desecration of a sacred object, but using the information to answer questions about ancient migrations from Asia is tantamount to heresy in many Native American systems of belief. Inasmuch as some Native cultures believe that their people have always lived in the Western hemisphere, anthropological queries in this case are both unaskable and contested.

Many articles addressing the theme were in fact grappling with unaskable types of anthropological knowledge, some of which involve issues of privacy, confidentiality and consent--an aspect of the modalities *should not, cannot, must not* and *may not*. Studies of children by Marjorie Goodwin and Blythe Roveland (April 1997) identify a dimension of professional unaskability with direct implications for the teaching and practice of anthropology itself. By their absence in our literature, children's lives and perspectives have been deemed unworthy of attention, for historically, students have been actively discouraged from subjects not considered career enhancing. As a further example, not only has the discipline been reluctant to sanction studies of Hitler, it has chosen passively not to study such bodies of data as white American cemeteries until quite recently--thereby tacitly viewing non-European remains as objects, while holding their own as sacred.

Social values--within both our own scientific community and those we study--therefore serve as powerful guardians of the status quo. Yet, as these articles demonstrate, it is through contestation that an unaskable question is transformed into potentially knowable.

Yet another vector on the chart of knowledge modalities is isolated by Jonathan Marks who reminds us of our duty to contest bad knowledge. In his call for scientific responsibility with regard to testing cognitive ability, Marks asserts that "[A]cknowledging professional standards and censuring those who fail to meet them is. . . an obligation of any endeavor in its aspirations to professionalism" (February 1997, p 5).

A final reflection of the unaskable, withheld and contested modalities contributing to unknowns and unknowables, concerns the tools anthropologists use to collect data. Natural scientist Michael Robinson observes that the limits to knowledge are often determined by our human senses (December 1996). Just as the invention of microscopes and telescopes increased our ability to focus on hitherto unknown phenomena, development and application of other methodologies and tools--not the least of which is the human brain--are bound to help convert unknowables to unknowns and knowns. This perspective is also reflected in Bernard Siegal's intriguing call for research on the validity of inference from analogy (October 1996), in which he advocates pursuing alternative ways of knowing by approximation that which we cannot approach directly.

Theorizing Knowledge

Taken as a body, contributions to this year's theme represented the depth and breadth of the discipline dedicated to the study of ourselves. They raised abstract epistemological issues, considered general theoretical problems and addressed specific empirical topics. Siegel's comprehensive historical overview covered a century of theoretical development, ranging over such issues as the sexual division of labor and loss of estrus to generalizations about gender and power relations (October 1996). Subsequent pieces dealt with specific issues including the nature of mind and consciousness and limits of our basic equipment--the human brain.

Two ends of the "equipment" spectrum were considered in James Donovan and Lee Drummond's epistemological contributions. Dealing more with soft tissue limitations, Donovan notes that those anthropologists who follow the rational scientific approach tend not to inquire into the limits of the knowing process, inasmuch as the process of knowing cannot in itself be known. There are, he asserts, rational limits built into rational inquiry (March 1997).

Like Robinson, Drummond considers limitations on the other end of the equipment spectrum--what we might call the human "hardware," in this case brain form and function that determine our distinctive form of human consciousness. As the ultimate exercise in cultural relativity, Drummond suggests that anthropology "offers the best hope of solving the enigma of extraterrestrial intelligence" for, "whatever they are, they aren't much like folks" (December 1996, p 48). In this case, our knowledge is limited because we don't know whether there are others "out there," or even what their machinery of knowing might look like.

Yet another theoretical issue was raised by Margaret Conners and Janet McGrath, who call for AIDS research "to bridge the gap between structural level forces related to poverty and power and interpersonal/individual actors" (March 1997, p 4). In this context, something is considered effectively known only if it can be used to affect a situation--or ameliorate human suffering.

Formulating Knowledge

Even the process of translating knowledge into a useful format has implications for anthropological research. Teresa O'Nell's work with depression among American Indian people on the Flathead Reservation highlights the problems and contrast between psychiatric and anthropological methods of formulating diagnoses. Rather than evidence for clinical depression as biomedically defined in the DSM4, O'Nell found that "Flathead depression was a moral idiom that tied an individual to tribal history, American Indian identity, and the give and take of social responsibility" (February 1997, p 17).

Implications for a Fractious Discipline

Gomory's three-part taxonomy has proven a decidedly useful device for focusing anthropology's attention on what it does and how it does it. This year's theme has taught us how much we do know, what we have yet to know, and what may be fruitfully addressed in the future. Turning the gaze on ourselves, we gain insight on teaching, practice and ethics. Above all, the exercise has taught us much about the historical

divisions still operating within the discipline that were explored in alternative form as part of last year's theme, "Science in Anthropology."

Teaching Knowledge

Now that we know so much more, how do we teach these lessons learned? This collection of articles could be effectively used in the classroom to concretize the anthropological dimensions of knowledge outlined in the linguistic model. They might also be assigned as part of a project-oriented syllabus focusing on childhood, health or cultural patrimony issues. The Advisory Committee, for example, was particularly struck by the many dimensions of knowing reflected in issues surrounding implementation of NAGPRA. Understanding this diversity of knowledge has helped, moreover, to clarify many of the dilemmas raised since the law was passed in 1990.

Promoting Knowledge

By virtue of their visibility and emphasis on issues, the Advisory Committee hopes that these essays on knowledge in anthropology will serve to promote increased cross-discipline collaboration. Following Urban and Hill, anthropological knowledge itself risks becoming moribund if it continues to be a predominantly individual experience. It is through the process of working collaboratively and sharing actively within a group that knowledge becomes a sociocultural project. The real challenge ahead is to work across epistemologies, such that the process of contestation serves to pull anthropological research in different productive directions.

Ethics of Knowing

To a yet-to-be-limned (but doubtlessly large) extent, unknowables in anthropology amount to unaskables, or "things-that-should-not-be-investigated" for sacred, secular, legal or ethical reasons. The last are especially salient in the list of unresolved and still problematic constraints on knowing. Most articles included (at least glancingly, or by implication) some acknowledgment of an ethical component. Indeed, by directly challenging the notion that knowledge is standpoint- or culturally-neutral, anthropology forcefully ushers ethics into the act of knowing. But how to accommodate this presence remains a nettlesome item of unfinished business. Shweder has drawn our attention once again to the need for a disciplinary optic of "multiple perspectives" on the engaged act of "moral reasoning." Not least among the objects of that inquiry should be our own methods of knowing. As a first step, the various--and not notably compatible "codes" of conduct that have been promulgated and revised in recent years--could themselves be subjected to a rigorous analysis as micro-cultural documents, and their practical implications for working/would-be knowing anthropologists spelled out concretely.

The There There

Anthropologists might well be described as having an insatiable desire to know. It is noteworthy that all contributions published in the AN dealt with issues of knowing. Whereas few authors addressed unknowables directly, none endorsed wholeheartedly the value of *not* knowing. Moreover, authors want to

know about real things and people--situated knowledge, not abstractions. As if to answer the dilemma posed in last year's theme "Science in Anthropology," responses to this year's have taken sides with Oakland, not Gertrude Stein, by declaring that anthropologists are interested in studying the there there--what we see is not *all* in our minds. But how we know it--and the multiple perspectives we are able to bear in knowing it more fruitfully (Shweder)--matters when determining how the "we" and the "there" interact.

Anthropology's marked concern with evidence may account for our hesitancy to deal with unknowable issues--but our other foot in the humanities makes it necessary to do so. Viewed against the backdrop of this year's theme, contestation (and fractiousness) among anthropologists appears to be focused more on matters of evidence. Because we are an eclectic discipline, with diverse perspectives and different methodologies for gaining and implementing knowledge, it should come as no surprise that anthropology is best diagramed as a conglomeration of modalities. As these pieces suggest, because anthropological knowables are culturally determined, an unknown at any particular sociohistorical moment marks a developmental moment in the dialectic between knower and known. Both Stein and Oakland are transformed in the process of knowers grasping "theres," and slippage is the tribute we pay in recognition of that fact.