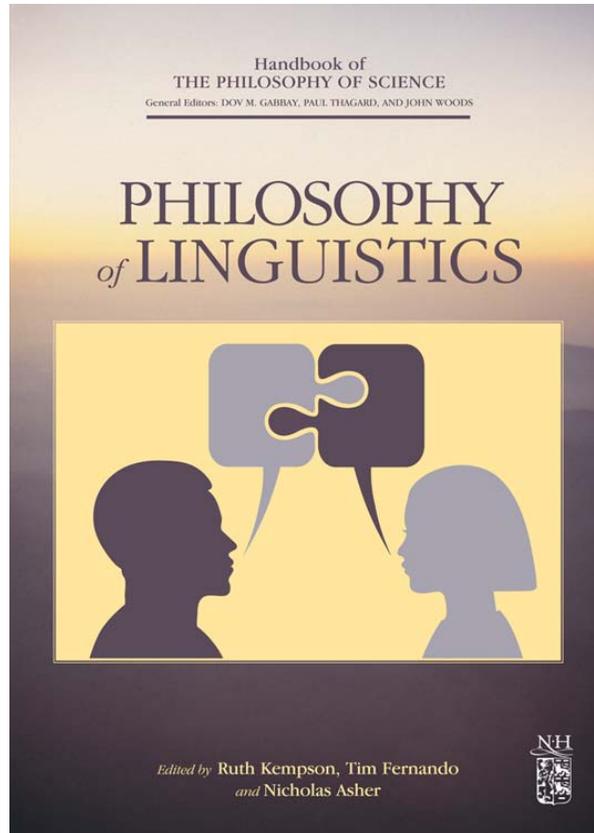


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# LINGUISTICS AND ANTHROPOLOGY

William O. Beeman

Anthropology and linguistics share a common intellectual origin in 19th Century scholarship. The impetus that prompted the earliest archaeologists to look for civilizational origins in Greece, early folklorists to look for the origins of culture in folktales and common memory, and the first armchair cultural anthropologist to look for the origins of human customs through comparison of groups of human beings also prompted the earliest linguistic inquiries.

There was considerable overlap in these processes. The “discovery” of Sanskrit by the British civil servant and intellectual, Sir William Jones in the late 18th Century set the stage for intensive work in comparative historical linguistics that continues to the present day. Jacob Grimm was not only a pioneering folklorist, but the pivotal figure in 19th Century linguistics through his discovery of regularities in consonantal shifts between different branches of Indo-European languages over historical time. His formulation, called today Grimm’s Law was not only the basis for modern linguistics, but also one of the formative concepts leading to 20th Century structuralism, particularly as elaborated in the work of Ferdinand de Saussure [1959], perhaps the most influential linguist in the 20th Century. The scholarly tradition that followed developments in historical linguistics in the Old World and Europe generally led to the development of formal linguistics as taught today in most university departments of linguistics.

Starting in the 20<sup>th</sup> Century, anthropological linguistics began to develop along somewhat different lines than formal linguistics. Anthropological linguistics today generally views language through a cultural and behavioral lens rather than through a formal, cognitive lens. Anthropological linguistics definitely concerns itself with the formal properties of phonetics, phonemics, morphemics and syntax, as well as the cognitive skills that are required for linguistic communication. However, its central questions lie in how language is used in the social and cultural life of people in different societies. It is also concerned with the broad question of how language evolved as part of the repertoire of human biological skills and behavioral adaptation.

## LINGUISTIC ANTHROPOLOGY IN AMERICA—EARLY ROOTS

Many of the concerns of linguistic anthropology are shared by scholars throughout the world in varieties of disciplines ranging from philology and literature to psychology and cognitive science. However it is almost exclusively in North America that linguistics is included as part of the basic training of all anthropologists.

Because anthropology is a “four field” discipline in North America, encompassing cultural anthropology, biological anthropology and archaeology as well as linguistics, this also broadens the concerns of anthropological linguistics to interface with these other sub disciplines.

There is a special historical emphasis in North America as well on American Indian languages. This may stem in part from the early history of anthropology as a discipline, which focused heavily on indigenous North American peoples from the nineteenth century onward.

Intellectual interest in Native American languages predates anthropology itself, dating from the very earliest colonizing efforts in North America. Roger Williams, founder of Rhode Island, compiled a small dictionary of Narragansett [Williams, 1827; 1643, 1]. In the nineteenth century, this continuing U.S. Governmental responsibility for tribal peoples led to the writing of a large number of studies by the Bureau of American Ethnology on tribal groups throughout the Americas, including many grammars, dictionaries and compilations of folkloric material in original languages.

Linguistics was arguably introduced into the formal study of anthropology by Franz Boas, who exercised enormous influence on the discipline through his own work and that of his students. Boas was interested in linguistics for a number of reasons. First, as a result of his early work in the Arctic, he made attempts to learn Inuit, and found it an exceptionally subtle and complex language. Later this insight was incorporated into his anti-evolutionary theoretical perspective: historical particularism. He separated out the concepts of race, language and culture maintaining that they were independent of each other [Boas, 1940]. He maintained that any human was capable of learning any language, and assimilating any cultural tradition. He pointed out that different societies might have some aspects of their culture that were highly developed, and others that were simple relative to other world societies. Thus the idea that a society might be “primitive” in all ways — linguistically, culturally and biologically because they were evolutionarily backward was rejected. Each society was seen by Boas to develop independently according to its own particular adaptive pattern to its physical and social environment. Language too was seen as reflective of this general adaptive pattern. Boas' views formed the basis for the doctrine of *linguistic relativism*, later elaborated upon by his students, whereby no human language can be seen as superior to any other in terms of its ability to meet human needs [Boas *et al.*, 1966].

Boas' second reason for considering linguistics important for the study of anthropology had to do with his feeling that linguistic study was able to provide deep insight into the workings of the human mind without the need for judgments on the part of informants. By eliciting data from native speakers, a linguist could build a model for the functioning of language of which the speaker him or herself was unaware. This avoided the “secondary rationalizations” that cultural anthropologists had to deal with in eliciting information from informants about politics, religion, economics, kinship and other social institutions. As ephemeral and programmatic as these ideas concerning language were, they would set the agenda for

anthropological linguistics for the balance of the century as they were elaborated by Boas's students, particularly Edward Sapir, and Sapir's student, Benjamin Lee Whorf [Mathiot, 1979].

#### 1920-1950-SAPIR, WHORF AND MALINOWSKI

The most famous linguistic anthropologist to study with Boas was Edward Sapir. Although Sapir did not concern himself exclusively with linguistic research, it constituted the bulk of his work, and remains the body of his anthropological research for which he is the most well-known [Sapir and Mandelbaum, 1949].

Sapir's interest in language was wide-ranging. He was fascinated by both psychological and cultural aspects of language functioning. The newly emerging concept of the "phoneme" was of special interest to him, and his seminal paper "The Psychological Reality of the Phoneme" [Sapir, 1933, 247-265], is an unsurpassed study showing that the phoneme is not just a theoretical fiction created by linguistic analysts, but represents a cognitive construct that is so strong that it leads individuals to assert the existence of sounds that are not present, and deny the existence of sounds that are present. In another paper, "A Study in Phonetic Symbolism" [Sapir, 1929, 225-239], he investigates the relationship between pure sounds and peoples' semantic associations with them. Taking nonsense syllables, Sapir was able to show that people associate high vowels with small sensory phenomena and low vowels with large phenomena. Only recently have acoustic phoneticians returned to this problem in investigating the psycho-acoustic abilities of individuals to judge the length of the vocal tract of other speakers based solely on the sound of their voices.

Sapir also did pioneering work in language and gender, historical linguistics, psycholinguistics and in the study of a number of native American languages. However, he is best known for his contributions to what later became known as the Whorfian Hypothesis, also known as the Sapir-Whorf Hypothesis. Sapir maintained that language was "the symbolic guide to culture." In several seminal articles, the most important of which may be "The Grammarian and his Language" [Sapir, 1924, 149-155], he develops the theme that language serves as a filter through which the world is constructed for purposes of communication.

This work was carried forward by Sapir's student Benjamin Lee Whorf, who devoted much of his research to the study of Hopi. Whorf took Sapir's notion of language's interpenetration with culture to a much stronger formulation. Whorf's writings can be interpreted as concluding that language is deterministic of thought. Grammatical structures were seen not just as tools for describing the world, they were seen as templates for thought itself [Whorf, 1956; Whorf, 1956, 87-101]. To be sure, Whorf's views on this matter became stronger throughout his life, and are the most extreme in his posthumous writings. The actual formulation of the Sapir-Whorf hypothesis was not undertaken by either Sapir or Whorf, but rather by one of Whorf's students, Harry Hoijer [1954].

Aside from their views on language and thought, Sapir and Whorf were both

exemplary representatives of the dominant activity in American anthropological linguistics during the period from 1920-1960: descriptive studies of native American languages. This work focused largely on studies in phonology and morphology. Studies of syntactic structures and semantics were perfunctory during this period.

During this same period in England a parallel interest in linguistics in anthropology was developed from an unexpected source: the well-known social anthropologist Bronislaw Malinowski. Malinowski's work in the Trobriand Islands was becoming well known. In his study, *Coral Gardens and their Magic* [Malinowski, 1935], Malinowski includes an extensive essay on language as an introduction to the second volume of the work. In this he addresses the problem of translation, taking as his principal problem the issue of the translation of magical formulas.

Magic formulas cannot really be translated, he maintains. They have no comprehensible semantic content. They do, however, accomplish cultural work within Trobriand society. They are therefore functionally situated. In order to "translate" such material, the ethnographer must provide a complete explanatory contextualization for the material. Otherwise it can make no sense. This functional theory of linguistics engendered a small, but active British school of linguistic anthropology, sometimes called the "London School" [Langendoen, 1968] whose principal exponent was the linguist J.R. Firth [Firth and Firth, 1986; 1964; Firth and Palmer, 1968], and later Edwin Ardener [Ardener, 1972, 125-132; Association of Social Anthropologists of the Commonwealth, and University of Sussex, 1971, 1-14].

#### 1950-1970—A PERIOD OF TRANSITION

In the late 1950s and 1960s a number of linguistics and linguistically oriented cultural anthropologists collaborated on a linguistically based methodology called variously "ethnographic semantics," "the new ethnography," and most commonly "ethnoscience" [Tyler, 1969]. Basing their work loosely on the Sapir-Whorf formulations, the most enthusiastic of these researchers maintained that if an ethnographic researcher could understand the logic of categorization used by people under ethnographic study, it would be possible to understand the cognitive processes underlying their cultural behavior. The more extreme cognitive claims for ethnoscience were quickly called into question [Burling, 1964, 20-28] but the technique of ferreting out the logic of categorization proved useful for the understanding of specific domains of cultural activity. Ethno-botany, ethno-zoology, and the comparative study of color categorization (Berlin and Kay 1969) proved to be enduring lines of research.

An important collateral development growing out of structural linguistic study was the elaboration of markedness theory by Joseph Greenberg [1966]. Drawing from the phonological studies of the formal linguists of the Prague School of the 1930s, Greenberg showed that some categories of linguistic phenomena are more "marked" vis-à-vis other categories. The "unmarked" member of a pair is more general, and includes reference to a whole category of phenomenon as well as to a specific sub-category of that phenomenon. The "marked" member refers

exclusively to a specific sub-category. Thus “cow” is unmarked vis-à-vis “bull,” which is marked because the former refers both to the general category of the animal and to the female, whereas the latter refers only to the male member of the species. Greenberg shows that these distinctions pervade all formal grammatical systems, as well as other semantic domains, such as kinship.

## POST-CHOMSKIAN ANTHROPOLOGICAL LINGUISTICS

In 1957 Noam Chomsky published his revolutionary work, *Syntactic Structures* [Chomsky, 1965] and from this point onward linguistic anthropology began to diverge in its purpose and activity from linguistics as an academic discipline. Chomsky’s theoretical orientation took linguists away from the descriptive study of phonology and morphology and focused activity on syntax as the central formal structure of language. Although it has been modified considerably since 1957, Chomsky’s rule-based Transformational-Generative Grammar has been the basic paradigm within which formal linguists have worked. Basing much of their work on the exploration of intuitive understanding of language structures, and often working only with English, formal linguists largely abandoned the practice of linguistic fieldwork. Ultimately, under Chomsky’s direction, formal linguistics saw itself as a branch of cognitive science. The syntactic structures detected by linguists would, Chomsky believed, be shown to be direct emanations of the neural structures of the brain.

Anthropological linguists began during the same period to direct their work away from the study of formal linguistic structures, and toward the study of language use in social and cultural context. Work in phonology and morphology was largely directed toward the investigation of historical interconnections between language groups.

One important development was a growing interest in the investigation of linguistic communication as a “uniquely human” phenomenon.

## LINGUISTIC COMMUNICATION AS BEHAVIOR

Communication in its broadest sense is behavior resulting in transfer of information among organisms, with the purpose of modifying the behavior of all participants involved in the process. Communication is basic to all life, and essential to living things whose lives are carried out in a social environment.

Anthropologists have long used complexity of communication abilities and practices as one measure of the differences between human beings and other life forms. Whereas many animals embody some form of information interchange in their primary behavioral repertoires, it has long been thought that only humans are capable of the complex form of communication known as language. The exclusiveness of this human ability has been called into question by experiments undertaken in recent years in communication with other animal species, notably chimpanzees

and other great apes. However, it is reasonable to maintain that no other species has developed communication to the level of complexity seen in human life.

## THEORETICAL MODELS OF COMMUNICATION

Although the study of linguistics in some form dates back almost to the time of writing, theoretical models of communication as a general process, with language seen as only a particular instance, are fairly recent. Both the semiotician and linguist Ferdinand de Saussure and the pragmatic philosopher, Charles Sanders Peirce provide the basis for much later work on the general structure of communication through their development of theories of the functions of signs.

Edward Sapir provided one of the earliest general formulations of a behavioral approach to communication in 1931 for the *Encyclopedia of the Social Sciences* [Sapir, 1931, 78-81]. In this article Sapir establishes that “every cultural pattern and every single act of social behavior involve communication in either an explicit or an implicit sense.” He also maintains that communication is fundamentally symbolic in nature, and is therefore dependent on the nature of the relationships and understandings that exist between individuals.

The German linguist Karl Bühler developed a field theory of language in his *Sprachtheorie* in 1934 [Bühler, 1990] which proved to be a sturdy model for mathematicians, linguists and social scientists. Bühler saw language as consisting of four elements: speaker, hearer, sign and object; and three functions: the expressive (coordinating sign and speaker), the appeal (coordinating sign and hearer), the referential (correlating sign and objects).

Claude Shannon and Warren Weaver of the Bell Telephone Laboratories collaborated in 1948 to develop a mathematical model of communication, which, though influential, eliminated any account of social and cultural factors from the communicative process [Shannon and Weaver, 1949]. Shannon and Weaver’s formulation contained six elements: a source, an encoder, a message, a channel, a decoder and a receiver. These general elements could be realized in many different ways, but a common formulation would be to recognize the speaker as the source, the mind and vocal system as the encoder, a code system such as language or gesture as the message; sound waves in air, or electronic signals as the channel; the auditory system and brain as the decoder; and the hearer as the receiver.

Shannon and Weaver also included in their model the concept of “noise” in the system. The mathematical description of noise later became known as *entropy* and was the subject of study in its own right. Information in this formulation is seen as the opposite of entropy. Both concepts are described in terms of probability. The less probable an event is within a system, the greater its information content. The more probable the event is, the smaller the information content, and the closer the event approaches entropy. The existence of a bounded system with evaluative parameters within which the probability of an event can be calculated is essential to this definition, otherwise an unexpected event will be seen as random in nature, and thus have little information content.



Figure 1. Design elements of communication (after [Jakobson, 1069])

Roman Jakobson, drawing on Bühler developed a model for communication similar to that of Shannon and Weaver in 1960 [Hockett, 1966, 1-29] using the following diagram.

In the above diagram each of what Jakobson calls the “constitutive factors... in any act of verbal communication” is matched with a different “function” of language (here indicated in italics). According to Jakobson, in each instance of verbal communication one or more of these functions will predominate. His particular interest in this article was to explain the *poetic* function of language, which he identifies as that function of language which operates to heighten the *message*.

## ANIMAL COMMUNICATION VS. HUMAN COMMUNICATION

Bühler’s work and Jakobson’s suggestive extension of it were also the basis for the study of animal communication. The semiotician Thomas Sebeok [Sebeok, Ramsay, and Wenner-Gren Foundation for Anthropological Research, 1969; Sebeok, 1977] used their model, but extended it by pointing out that visual and tactile channels are as important as auditory ones in the total spectrum of animal communicative behavior, thus the term “source” and “destination” are more inclusive than “speaker” and “hearer.”

Anthropologists have long identified linguistic communication as one of the principal elements — if not *the* principal element—distinguishing humans from other animal forms. In the 1950s and 1960s a number of researchers began to explore the continuity of animal vs. human communication systems. Most work in this early period was speculative and programmatic, but nevertheless influential in setting research agendas.

Charles D. Hockett, writing at approximately the same time as Sebeok identified 13 Design-Features of animal communication, some of which he saw as unique to human beings. Hockett called these “pattern variables,” to delineate the principal

characteristics of human language [Hockett, 1966, 1-29].

Hockett's pattern variables are summarized in Figure 2 below. Of the thirteen features the last four: displacement, productivity, traditional transmission, and duality of patterning; were seen by later researchers as embodying exclusively human capacities. They were therefore seen as constituting a test for the presence of *linguistic* abilities in other animal species.

Both Hockett and Sebeok's work have been used in evaluating the linguistic capacity of chimpanzees since the 1960's. The first of the so-called "linguistic chimps" was named Washoe, and was trained in American Sign Language by psychologists Allen and Beatrice Gardner at the University of Nevada in Reno [Gardner *et al.*, 1989]. Hockett's list was widely adopted not only by anthropologists, but also by formal linguists and psychologists. In the 1970's the list was used as a kind of inventory to measure the linguistic abilities of chimpanzees, who were being taught to communicate with humans using American Sign Language and other non-verbal techniques. Hockett's pattern variables were seen as a way to evaluate how "human" the communications of Washoe and other "linguistic primates" were. Of particular interest were the capacity for "displacement" (being able to speak about things not present or imaginary, also to lie), "productivity" (being able to generate new and original expressions), and "duality of patterning" (the ability to select symbolic elements from an array and combine them and recombine them in regular patterns. Formal linguists in particular seized on duality of patterning as a test of syntactic capacity. The Gardeners objected, pointing out that their experiment was designed merely to test the proposition of interspecies communication, not to measure Washoe's capacity for human language, but to no avail. Their research took on a life of its own as a number of researchers began to test chimpanzees under different conditions. One of the most successful of these research efforts was conducted with bonobos, closely related to chimpanzees, by Sue Savage-Rumbaugh and her husband Dwayne Rumbaugh [Savage-Rumbaugh *et al.*, 1998; Savage-Rumbaugh and Lewin, 1994; Savage-Rumbaugh, 1986].

Hockett's research also led him to speculate on the behavioral origins of human speech. This work was later carried forward by a small number of biological anthropologists, including Philip Lieberman [Lieberman, 2006], and was supplemented by work among the animal psychologists looking at chimpanzee communication.

#### 1970-1985-SOCLINGUISTICS AND THE ETHNOGRAPHY OF COMMUNICATION

The period from 1970-1990 saw anthropological linguistics concerned with the development of more sophisticated models for the interaction of language and social life. Sociolinguistics, which had begun in the 1950's was one important area of new activity embraced by anthropological linguistics. This later developed into a new activity called "the ethnography of communication" by Dell Hymes and John Gumperz, two of the pioneers in the field [Gumperz and Hymes, 1986; Hymes, 1974].

	FEATURE	CHARACTERISTICS
1.	Vocal Auditory Channel	Information is encoded vocally and decoded aurally
2.	Broadcast Transmission and Directional Reception	Information is transmitted through sound waves broadcast generally, but is received by hearing apparatus that is able to detect the direction of the source of sound
3.	Rapid Fading (Transitoriness)	Information decays rapidly allowing for transmission of new information in sequential order
4.	Interchangeability	Information that is encoded vocally is perceived as equivalent to information received aurally. Consequently, that which is heard can be mimicked or repeated by the hearer.
5.	Total Feedback	The information produced vocally by the originator of communication is also heard by that same originator, thus providing a feedback loop, and self monitoring.
6.	Specialization	Different sound patterns are used for different communicative purposes. In humans, speech sounds are used primarily if not exclusively for communication
7.	Semanticity	Sign phenomena are able to be understood as representations for referenced objects.
8.	Arbitrariness	There need be no intrinsic resemblance or connection between signs and the things for which they serve as reference
9.	Discreteness	The continuum of sound is processed cognitively into discrete meaningful patterns
10.	Displacement	Communication about object outside of the physical presence of the communicators or imaginary or speculative in nature is possible.
11.	Productivity	New and original communications can be created by communicators freely without their having experienced them previously.
12.	Traditional Transmission	Communication structures and information conveyed through communication are transmitted and acquired as a result of social behavior rather than genetic capacity.
13.	Duality of Patterning	Meaningful communication units are differentiated from each other in patterns of contrast. They simultaneously combine with each other in patterns of combination.

Figure 2. Thirteen design-features of animal communication (after [Hockett, 1966])

Sociolinguistics came to be called by Hymes “socially realistic linguistics,” since it dealt with language as it was found in the structures of social life. Much of sociolinguistics consists of seeing variation in the language forms of a particular community and showing how that variation correlates with or is produced by social and cultural divisions and dynamics in the community. These divisions can be based on gender, ethnicity, class differences or any other culturally salient division within the community. Variation can be a property of the language of a given social division (e.g. male vs. female speech, or the different vocabularies exhibited by different generations). It can also be produced by social processes that govern relations within and between divisions. Such factors as group solidarity in the face of external challenges, desire for prestige, and inter-divisional conflict can manifest themselves in linguistic behavior that contributes to the variability seen within the community.

The ethnography of communication was first seen as a form of sociolinguistics, but it quickly took on a life of its own. Termed “socially constituted linguistics” by Hymes, the ethnography of communication deals with the ethnographic study of speech and language in its social and cultural setting. In a manner reminiscent of Malinowski, language is viewed not just as a form, but also as a dynamic behavior. This “functional” linguistics shows what language does in social life. To this end, each society can be shown to have its own unique cultural pattern of language use that can be accounted for by looking at its interrelationship with other cultural institutions.

Hymes developed Jakobson’s original list of constitutive elements and functions as shown in Figure 2 above in several publications [Hymes, 1974]. The most elaborate of these used the mnemonic SPEAKING as shown in Figure 3.

### 1985–PRESENT–DISCOURSE AND EXPRESSIVE COMMUNICATION

It was not long before linguistic anthropologists began to realize that to study language in its full cultural context, it was necessary to study highly complex linguistic behaviors. These became known widely under the general rubric of “discourse.” John Gumperz, one of the pioneers in this area of study, points out that the careful scientific study of discourse would be impossible if technology in the form of audio and video recorders had not been available when they were [Gumperz, 1982]. Indeed, the study of discourse processes involves painstaking recording, transcription and analysis of verbal interaction that would have been impossible in Sapir’s day.

Discourse structures are seen to be highly patterned, with beginnings, endings, transitions and episodic structures [Schegloff, 1968, 1075-95; 1982, 71-93; 2007; Goffman, 1981; Silverstein and Urban, 1996]. They are, moreover collaborative in their production. Therefore it is impossible to study speakers apart from hearers in a linguistic event; all persons present are contributing participants, even if they remain silent. Additionally, it can be seen that all participants are not equal in every discourse event. Some participants are conventionally licensed to do more

<b>S</b>	Situation (Setting, Scene)
<b>P</b>	Participants (Speaker or sender; Addressor, Hearer or Receiver, Addressee)
<b>E</b>	Ends (Purposes–outcomes, Purposes–goals)
<b>A</b>	Act Sequence (Message form, Message content)
<b>K</b>	Key (Tone, manner or spirit in which communication is carried out)
<b>I</b>	Instrumentalities (Forms of speech, Channels of Speech)
<b>N</b>	Norms (Norms of Interaction, Norms of Interpretation)
<b>G</b>	Genres (Culturally recognized types of communication)

Figure 3. Elements of communication (after [Hymes, 1974])

than others in their communicative roles. Discourse allows for the exercise of strategic behavior, so an adroit individual can seize an opportune moment in communication and advance an agenda. Here too, strategic silence may be as effective as strategic verbal behavior [Basso, 1970, 213-230].

Within societies different social groups may have different discourse styles. These differences can impede communication between groups even when the individuals involved feel that they “speak the same language.” Deborah Tannen [1996; 1991; 1989] has been successful in bringing popular awareness to the discourse differences seen between males and females in American society. Jane Hill has likewise investigated the differences in discourse structures in different bilingual Spanish/English communities in the American Southwest. Structures in many other languages expressing hierarchy, intimacy, politeness and deference have been explored by a variety of linguistic anthropologists drawing on the pioneering work of Gumperz and Hymes [Beeman, 1986; Errington, 1988; Moerman, 1988; Ochs *et al.*, 1996; Duranti, 1994; Beeman, 1987; Inoue, 2006].

Expressive communication in the form of poetry, metaphor, and verbal art also constitute important elaborated communication genres in human life. Paul Friedrich has been a pioneer in the investigation of poetic structures in communicative behavior [Friedrich, 1986]. Deriving his work in part from a direction suggested by Roman Jakobson in his seminal paper in 1960 cited above, Friedrich concludes that the creation of poetic structures is a central feature of all linguistic behavior. The study of metaphor and symbols has been important in the study of ritual and religious life, but in this period anthropologists began to see the centrality of the creation of metaphor as a discourse process. George Lakoff and Mark Johnson’s *Metaphors We Live By* [Lakoff and Johnson, 1980] set the stage

for other research in this area. James Fernandez' investigation of tropic structures throughout cultural life bridges the gap between linguistic anthropology and cultural anthropology [Fernandez, 1986; 1991]. Expressive culture is the principal conveyer of emotion in culture, and this too has been an important subject of research in anthropological linguistics [Beeman, 2001, 31-57; Wulff, 2007; Lutz and White, 1986, 405-436; Lutz and Abu-Lughod, 1990].

Verbal art in the form of oration, narration, theatrical performance and spectacle is perhaps the most directed and complex form of discourse for human beings. Richard Bauman has written extensively on the properties of verbal art and performative aspects of culture [Bauman, 2003]. One of the most interesting aspects of this area of human communication is its "emergent" quality. Of course all communication is to some extent emergent, in that its shape and direction is continually modified by ongoing events and participants. However performance is of special interest because it usually involves a fixed body of material that, despite its fixed character, is still modified by presentational conditions. In short, although it is possible to identify the roles of "performer" and "audience," all participants are in fact co-creators of the piece being performed. Their collaborative effort gives the final form to the work, the nature of which cannot be understood until it is completed. Consequently, every performance is a unique event. This being the case, the analysis of a given performance is of less interest than the analysis of the social and communicative processes that engender it. A number of recent works have pursued the study of the use of poetry, poetic discourse and political rhetoric as performative aspects of language in social life [Duranti, 1994; Beeman, 1993, 369-393; Caton, 1990; Miller, 2007; Abu-Lughod, 1999].

## HUMOR

One aspect of verbal art that has attracted a great deal of attention in anthropology is humor. Humor is a performative pragmatic accomplishment involving a wide range of communication skills including, but not exclusively involving, language, gesture, the presentation of visual imagery, and situation management. Humor aims at creating a concrete feeling of enjoyment for an audience, most commonly manifested in a physical display consisting of displays of pleasure including smiles and laughter. Because the content of humor and the circumstances under which it is created are cross-culturally variable, humor is subject to ethnographic investigation — a project in the ethnography of speaking.

The basis for most humor is the manipulation of communication to set up of a surprise or series of surprises for an audience. The most common kind of surprise has since the eighteenth century been described under the general rubric of "incongruity." Basic incongruity theory as an explanation of humor can be described in linguistic terms as follows: A communicative actor presents a message or other content material and contextualizes it within a cognitive "frame." The actor constructs the frame through narration, visual representation, or enactment. He or she then suddenly pulls this frame aside, revealing one or more additional

cognitive frames which audience members are shown as possible contextualizations or reframings of the original content material. The tension between the original framing and the sudden reframing results in an emotional release recognizable as the enjoyment response we see as smiles, amusement, and laughter. This tension is the driving force that underlies humor, and the release of that tension — as Freud pointed out [1960] — is a fundamental human behavioral reflex.

Humor, of all forms of communicative acts, is one of the most heavily dependent on equal cooperative participation of actor and audience. The audience, in order to enjoy humor must “get” the joke. This means they must be capable of analyzing the cognitive frames presented by the actor and following the process of the creation of the humor.

Typically, humor involves four stages, the *setup*, the *paradox*, the *dénouement*, and the *release*. The setup involves the presentation of the original content material and the first interpretive frame. The paradox involves the creation of the additional frame or frames. The *dénouement* is the point at which the initial and subsequent frames are shown to coexist, creating tension. The release is the enjoyment registered by the audience in the process of realization and the release resulting therefrom.

The communicative actor has a great deal to consider in creating humor. He or she must assess the audience carefully, particularly regarding their pre-existing knowledge. A large portion of the comic effect of humor involves the audience taking a set interpretive frame for granted and then being surprised when the actor shows their assumptions to be unwarranted at the point of *dénouement*. Thus the actor creating humor must be aware of, and use the audience's taken-for-granted knowledge effectively. Some of the simplest examples of such effective use involve playing on assumptions about the conventional meanings of words or conversational routines. Comedian Henny Youngman's classic one-liner: “Take my wife . . . please!” is an excellent example. In just four words and a pause, Youngman double-frames the word “take” showing two of its discourse usages: as an introduction to an example, and as a direct command/request. The double framing is completed by the word “please.” The pause is crucial. It allows the audience to set up an expectation that Youngman will be providing them with an example, which is then frustrated with his *dénouement*. The content that is re-framed is of course the phrase “my wife.”

The linguistic study of Jokes is widespread in humor studies. Because jokes are “co-created,” they are difficult as a literary genre. They almost beg to be performed [Sachs, 1974, 337-353; Norrick and Chiaro, 2009; Norrick, 1993; Oring, 2010; 2003].

In this way the work of comedians and the work of professional magicians is similar. Both use misdirection and double-framing in order to produce a *dénouement* and an effect of surprise. The response to magic tricks is frequently the same as to humor—delight, smiles and laughter with the added factor of puzzlement at how the trick was accomplished.

Humans structure the presentation of humor through numerous forms of culture-specific communicative events. All cultures have some form of the *joke*, a humorous narrative with the dénouement embodied in a *punchline*. Some of the best joke-tellers make their jokes seem to be instances of normal conversational narrative. Only after the punchline does the audience realize that the narrator has co-opted them into hearing a joke. In other instances, the joke is identified as such prior to its narration through a conversational introduction, and the audience expects and waits for the punchline. The joke is a kind of master form of humorous communication. Most other forms of humor can be seen as a variation of this form, even non-verbal humor.

Freud theorized that jokes have only two purposes: aggression and exposure. The first purpose (which includes satire and defense) is fulfilled through the hostile joke, and the second through the dirty joke. Humor theorists have debated Freud's claims extensively. The mechanisms used to create humor can be considered separately from the purposes of humor, but, as will be seen below, the purposes are important to the success of humorous communication.

Just as speech acts must be *felicitous* in the Austinian sense [Austin 1962], in order to function, jokes must fulfill a number of performative criteria in order to achieve a humorous effect and bring the audience to a release. These performative criteria center on the successful execution of the stages of humor creation.

The setup must be adequate. Either the actor must either be skilled in presenting the content of the humor or be astute in judging what the audience will assume from their own cultural knowledge, or from the setting in which the humor is created.

The successful creation of the paradox requires that the alternative interpretive frame or frames be presented adequately and be plausible and comprehensible to the audience.

The dénouement must successfully present the juxtaposition of interpretive frames. If the actor does not present the frames in a manner that allows them to be seen together, the humor fails.

If the above three communicational acts are carried out successfully, tension release in laughter should proceed. The release may be genuine or feigned. Jokes are such well-known communicational structures in most societies that audience members will smile, laugh, or express appreciation as a communicational reflex even when they have not found the joke to be humorous. The realization that people laugh when presentations with humorous intent are not seen as humorous leads to further question of why humor fails even if its formal properties are well structured.

One reason that humor may fail when all of its formal performative properties are adequately executed is—*homage á Freud*—that the purpose of the humor may be overreach its bounds. It may be so overly aggressive toward someone present in the audience or to individuals or groups they revere; or so excessively ribald that it is seen by the audience as offensive. Humor and offensiveness are not mutually exclusive, however. An audience may be affected by the paradox as revealed in

the dénouement of the humor despite their ethical or moral objections and laugh in spite of themselves (perhaps with some feelings of shame). Likewise, what one audience finds offensive, another audience may find humorous.

Another reason humor may fail is that the paradox is not sufficiently surprising or unexpected to generate the tension necessary for release in laughter. Children's humor frequently has this property for adults. Similarly, the paradox may be so obscure or difficult to perceive that the audience may be confused. They know that humor was intended in the communication because they understand the structure of humorous discourse, but they cannot understand what it is in the discourse that is humorous. This is a frequent difficulty in humor presented cross-culturally, or between groups with specialized occupations or information who do not share the same basic knowledge.

In the end, those who wish to create humor can never be quite certain in advance that their efforts will be successful. For this reason professional comedians must try out their jokes on numerous audiences, and practice their delivery and timing. Comedic actors, public speakers and amateur raconteurs must do the same. The delay of the smallest fraction in time, or the slightest premature telegraphing in delivering the dénouement of a humorous presentation can cause it to fail. Lack of clarity in the setup and in constructing the paradox can likewise kill humor. Many of the same considerations of structure and pacing apply to humor in print as to humor communicated face-to-face.

## GESTURE AND NON-VERBAL COMMUNICATION

Because anthropology is concerned with the human soma, gesture and non-verbal communication have been especially important areas in the intersection between linguistics and anthropology.

Most human communication is vocal in nature. However anthropologists have long understood that much communication takes place using non-verbal behavioral mechanisms. These range from gesture and "body language" to the use of interpersonal space, the employment of signs and symbols and the use of time structures.

Non-verbal behavior has been seen to have many sequential and functional relationships to verbal behavior. It can "repeat, augment, illustrate, accent or contradict the words; it can anticipate, coincide with, substitute for or follow the verbal behavior; and it can be unrelated to the verbal behavior [Ekman *et al.*, 1972] (see also [Ekman and Friesen, 1975]). In all of these situations humans have learned to interpret non-verbal signals in conventional ways. However, just as words must be taken in context to be properly understood, so must non-verbal behavior be interpreted in the whole context of any given communication.

Perhaps the most important form of non-verbal communication is facial expression. Human beings are capable of interpreting an exceptionally large number of variations in facial configuration. This form of non-verbal behavior may also be one of the oldest forms of communication in evolutionary terms. Based on research

on present-day groups of primates, such common facial movements as smiles or eyebrow raises may have been postures of hostility for prehistoric hominids. Facial expression is one of the most important sources of information about affect for human beings today.

Movement of hands or other body parts in clearly interpretable patterns are likewise important forms of non-verbal communication. These are generally classified as *gestures*. Birdwhistell called the study of body movement *kinesics*. Many gestures “stand alone” for members of a particular society. Gestures of insult, of invitation, of summoning or dismissal, and of commentary appear to be universal for human society.

Edward T. Hall pioneered the study of body distance (*proxemics*) and time usage (*chronemics*) as forms of non-verbal communication. According to Hall [1966; 1959; Hall and Society for the Anthropology of Visual Communication, 1974], there are important cultural differences in body distance for different social purposes. In American society, for example, normal social conversation takes place at about eighteen inches distance between participants. In Egyptian society normal social distance may be as close as six inches. Americans who are unaware of this difference may find themselves uncomfortable in an Egyptian social conversation. Likewise Hall points out that different conceptions of time are communicative. These include the scheduling of daily routines such as meal time and meeting times; and ideas of punctuality. In some societies lack of punctuality conveys an insult, whereas in other societies rigid use of time creates discomfort.

Ekman and Friesen have developed a typology of non-verbal behavior following the work of Efron [1941]. Their categories are 1) Emblems — non verbal acts that have a direct dictionary translation well known by members of a particular culture. 2) Illustrators — body movement that accompanies speech and can either reinforce the words being said, or show a contradictory, ironic, or other attitudinal posture toward the verbal message. 3) Affect displays — primarily facial expressions conveying emotional states or attitudes. 4) Regulators — acts that maintain and regulate the back-and-forth nature of speaking and listening, usually taking place during the course of face-to-face interaction. 5) Adaptors — often unconsciously performed body movements that help persons to feel more comfortable in social interaction, to deal with tension or to accommodate themselves to the presence of others. Hall's proxemic and chronomic dimensions of non-verbal behavior fall under this category.

Gesture is certainly one of the oldest communicative behavioral repertoires in the history of humanity. Students of primate behavior note that chimpanzees and other great apes have a fairly elaborate vocabulary of gesture. Lieberman [1991] and others speculate that the brain's capacity for verbal language evolved as an elaboration of the centers controlling manual dexterity. This makes the universal use of hand gesture as an accompaniment to speech seem to be a survival from a pre-linguistic human state.

Human gestures differ from those of other animals in that they are polysemic — that is, they can be interpreted to have many different meanings depending on

the communicative context in which they are produced. This was pointed out by pioneering researcher Ray Birdwhistell [1970] who called the study of human body movement “kinesics.” Birdwhistell resisted the idea that “body language” could be deciphered in some absolute fashion. He pointed out that every body movement, like every word people utter, must be interpreted broadly, and in conjunction with every other element in communication. The richness of human communicative resources insures that gesture will also have a rich set of meaning possibilities. Contemporary students of human gesture, such as Adam Kendon [2004; 1990; Kendon *et al.*, 1976], David McNeill, [2000; McNeill *et al.*, 2007] and Starkey Duncan [Duncan and Fiske, 1985; 1977] note that gesture can often be used as an additional simultaneous channel of communication to indicate the mood or spirit in which verbal communication is to be understood. The actions of the body, hand and face all serve to clarify the intent of speakers. Often humans display several kinds of gesture simultaneously with verbal language.

Over the centuries deaf persons have elaborated gestures into a full-fledged linguistic system which is fully utilizable for all forms of face-to-face communication — including technical and artistic expression. There are many varieties of deaf “sign language,” but most share certain structural similarities. All combine different hand-shapes with distinctive movements in order to convey broad concepts. The semiotic system of these languages thus represents to some degree a pictographic communication system, such as written Chinese. Gestural languages have also been used as a kind of pidgin communication for trade between people who do not share a mutually intelligible verbal language.

#### ANTHROPOLOGY AND LINGUISTICS IN YEARS TO COME

It seems certain that the mission of linguistic anthropology will remain the exploration of human communicative capacity in all of its forms and varieties. While analysis of the formal properties of language will play a role in this work, it is not likely to have the central place in the work of linguistic anthropology that it does in linguistics. New technology will bring not only increasingly sophisticated investigative techniques for the study of language in human life, but also will provide for new forms of human communication. Some of these are already being studied by linguistic anthropologists.

Computer mediated communication in particular has taken many forms. Electronic mail (e-mail), direct “chat” via computer, and the use of electronic “bulletin boards” are only a few. Computer and satellite transmission of words and images over the planet has made it possible for people living at great distances to communicate regularly. Many thousands of such electronically constituted “speech communities” based on shared interests have already come into being. The rules for communication via these new channels are now being formulated by the communities that use them, and should provide fertile ground for research in the future [Axel, 2006, 354-384; Silverstein, 1998, 401-426; Wilson and Leighton C. Peterson, 2002, 449-467].

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