

The Shadow of Benjamin Lee Whorf: Continuing Issues in Linguistic Relativism

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Abstract

The systematic relationship of language and culture was first described about 1750 by Giambattista Vico. The idea, labeled linguistic relativism, underwent development in nineteenth-century Europe. In the U.S., descriptions of northern American Indian languages stimulated considerable interest in the language-culture relationship. Sapir, Whorf and others perceived that language not only relates to culture, but may direct it. In both strong and weak forms, linguistic relativism has stimulated research, theorizing, and controversy over several decades. While not all aspects of the Sapir-Whorf hypothesis have been supported by research, a large body of the ideas can potentially be applied to the understanding of problems in intercultural communication, including culture-based instruction in “foreign” languages.

Introduction

The relationship of reality to experience has always been a concern of Western philosophy. The role of language in the process has attracted the attention of leading European and American scholars in the twentieth century—including the position that language specifies much or all of culture-based perception, thought, and experience. Ironically, it was an American chemical engineer, Benjamin Lee Whorf, who brought this theory to prominence, if not to fulfillment. Whorf died in 1941 at age 44, leaving tantalizing fragments of data and argument which have continued to challenge scholars of culture, language, and cross-cultural communication over the past five decades.

The "Sapir-Whorf Hypothesis," as this complex body of ideas has come to be known, has generated observation, experimentation, praise, denunciation, and reformulation by scholars of descriptive linguistics, cultural and linguistic anthropology, sociology, psychology, social psychology, grammar, philosophy, religion, and poetry over the past fifty years, including the pronouncement of its "disrepute" in 1964, its "demise" in 1978, and its "revival" in 1982.

It is the purpose of this paper to trace the modern history of the doctrine of linguistic relativism, called "linguistic determinism" in its strong form, and to propose some implications for cross-cultural communication research and practice, as well as instruction in other languages.

Some Eighteenth-Century Roots of Linguistic Relativism

Choosing a valid beginning-point for this investigation is necessarily arbitrary. Such an inquiry must acknowledge the work of Giambattista Vico (1668-1774), Immanuel Kant (1774-1804), Johann Gottfried von Herder (1774-1803), and Johann Wolfgang von Goethe (1749-1832), who found their evidence in myth and poetry (Friedrich, 1986, 4). Some of their influence reached Whorf in a form enhanced by other European scholars along the way.

Nineteenth-Century Extensions of Linguistic Relativism

Europe in the 1800s was an environment for rich and productive investigation of language, especially the inductive discovery of Indo-European, the "mother" of modern languages used in Europe, portions of the Middle East, and India. The possibility of such a language genesis had been seen by Sir William Jones as early as 1786 (Ellis and Beattie, 1986, 82). This investigation necessitated the creation of methodologies for examining phonology and grammatical structure. Such methods made possible the comparative analysis of languages, a major activity of philologists. Of the several dozen contributors from this era, at least two deserve special attention as seminal to the modern development of linguistic relativism. One is Karl Wilhelm von Humboldt (1767-1835). Noted as a diplomat and educational reformer, he had a lifelong interest in language, and conducted field studies of Basque and the Kawi language of Java. His assertions about the relationship of language and culture, published posthumously in 1836, foreshadowed the thoughts of twentieth-century American investigators. (*Encyclopedia Britannica Micropedia*, 1982, 202). Humboldt said that man perceives the world essentially through the medium of language, and that cultures have taken differing directions under the influences of their languages. While the relationship of language and culture had previously been suggested, von Humboldt was the first to state firmly the case for strong linguistic relativism. He perceived language as having an ongoing "inner" pattern of

grammar and meaning which the user imposes on the "outer" behavior of language in use. Thus, language is not merely a set of utterances, but the underlying principles or rules which make thought possible. This view formed the basis for what became known as structuralism, further developed by the Swiss, Ferdinand de Saussure (1857-1913). Saussure reiterated Humboldt's "Inner" and "Outer" dichotomy, calling these concepts *parole* (language behavior) and *langue* (the system underlying the behavior) (*Encyclopedia Britannica Macropedia*, 1982, 10, 994).

The heritage of these two European scholars and their contemporaries included:

1. Commitment to a structural approach for studying, describing and comparing languages.
2. A standardized methodology (orthography) for analyzing and recording the phonetics and grammar of a language in order to compare and contrast languages.

Of course, both structural and descriptive methodologies would later need to undergo modification as they encountered the very different linguistic environment of North American Indian languages, but the stage was set for the transport of linguistic relativism to the New World.

The Contribution of Franz Boas

The beginnings of relativist thought in North America can be traced to a German-educated immigrant, Franz Boas, who came to the United States in 1886 and spent most of his academic career at Columbia. Boas' professional activities were prodigious, and he has been called the founder of modern anthropology (*Encyclopedia Britannica Macropedia*, 15th ed., 1982, 2, 1155). He soon became aware of the urgent task of recording and systematically describing the dozens of American Indian languages before more of them disappeared as the consequences of war, disease, and migration. His influence led to the organization of a major project which resulted in the publication of the massive *Handbook of American Indian Languages* in 1911 by the Smithsonian Institution. Not only did this publication firmly establish linguistics as part of cultural anthropology, but it also provided the data for expansion of the concept of language which had been based on Indo-European data. While Boas is clearly a part of the stream of relativist thinking, it should be noted that he was not a committed relativist. In his introduction to the *Handbook*, he concludes his discussion of language and thought by stating "It does not seem likely . . . that there is any direct relationship between the culture of a tribe and the language they speak, except in so far as a certain state of culture is conditioned by morphological traits of the language." (Boas, 1911, 67). Clearly this appears a limited endorsement of the relativist position. But he goes on to examine the unconscious (or subconscious) levels of human psychology. He writes in the section on unconscious character of linguistic phenomena that

Of greater positive importance is the question of the relationship of the unconscious character of linguistic phenomena. . . . It would, for instance, seem very plausible that the fundamental religious notions—like the idea of the voluntary power of inanimate objects, or of the anthropomorphic character of animals or of the existence of powers that are superior to the mental and physical powers of man—are in their origin just a little conscious, as are the fundamental ideas of language. (Boas, 1911, 67–68).

Boas thus deals with some of the vexing problems of language-culture relationship by consigning them to the unconscious mind. He also raises the “chicken-egg” dichotomy concerning whether culture defines language or language directs culture by stating that the form of the language will be molded by the state of the culture. The controversy about this issue was to be raised repeatedly over the next decades because of Whorf’s early insistence that culture was language-driven. This dispute partially clouded rational analysis of the relationship of language and culture, when more significant ideas needed examination. Whichever came first, the experience of the individual language user would be the same.

The Contributions of Edward Sapir

Like Boas, Edward Sapir (1884–1939) was European-born, but came to the U.S. as a child. He attended Columbia as a graduate student in philology, where he encountered Boas and developed an intense interest in American Indian languages. His chief contribution in this field was the classification of Indian languages into six families, a system which is still generally accepted. (*Encyclopedia Britannica Micropedia*, 15th ed., 1982, VIII, 891).

A wide-ranging intellect in both literary and philosophical traditions, Sapir was familiar with European linguistic thought going back to Vico. He learned anthropology and social science methodology from Boas, and seems to have been ideally educated to examine linguistic relativity, but he devoted little of his career to it (Friedrich, 1986, 11–12).

Sapir’s first published comment on the subject appeared in 1929, when he wrote “The fact of the matter is that the ‘real world’ is to a large extent unconsciously built up of the language habits of the group . . . ” (Sapir, 1929, 209). He expanded on this theme two years later when he stated:

The relation between language and experience is often mis-understood. Language is not merely a more or less systematic inventory . . . of experience . . . but is also a self-contained creative symbolic organization which not only refers to experience largely acquired without its help but actually defines experience for us by reason of its formal completeness and because of our unconscious

projection of its implicit expectations into the field of experience. (*Science*, 1931, 578.)

Sapir goes on to say that the force of his claim can only be realized when the body of similar Indo-European languages is contrasted with North American and African languages, which differ dramatically not only from the Indo-European group as a whole but also among themselves.

Despite these pronouncements and others like them, Sapir did little focused research on the subject. In fact, the Sapir-Whorf hypothesis may be something of a misnomer, in view of Sapir's reservations about the strong determinism which Whorf came to embrace. Sapir later turned his attention to individual psychology, but meanwhile he had directed Whorf, his part-time graduate student, to the comparison of European and Indian languages, an activity which led finally to the hypothesis that language structures culture and directs experience (Rollins, 1980, 69).

The Contributions of Whorf to Linguistic Determinism

Benjamin Lee Whorf (1897-1941) was the first American-born exponent of determinist language philosophy. From an old Massachusetts family, he graduated in 1920 from MIT as a chemical engineer and spent all his working life with the Hartford Fire Insurance Company. Concurrently, he pursued a strong avocational interest in American Indian Languages. He was later to credit his interest in language influence to his experience in investigating industrial hazards, including the often-cited example of "empty" containers filled with volatile gases, which workers described and treated as though the dangerous barrels were entirely empty. (Carroll, 1956, 134).

Intent on expanding his understanding of Mexican Indian languages, he began in 1928 to publish papers about Aztec and Mayan. In the same year he was awarded a Social Science Research Council Fellowship to study in Mexico. After his return to Hartford, he learned of Sapir's new course in American Indian Languages at Yale and began commuting to New Haven for evening courses. He focused on Hopi and developed a grammar and a dictionary, using printed sources and informants in the area. In 1938 he lived for a time with the Hopi and was struck by the differences in world view he perceived between them and Western society, attributing this to differences in language perspective. It was from this insight that Whorf's version of linguistic determinism emerged.

Whorf died before he could synthesize his ideas. He left behind a miscellany of correspondence, notebooks, a penciled outline for a book, 28 published writings ranging from journal articles to letters to newspaper editors, plus 15 unpublished manuscripts of varying lengths and stages of completion. The easiest direct access to his ideas is through a slim volume of his work introduced and edited by John Carroll in 1956.

A present-day examiner of Whorf's Hypothesis is thus confronted with either attempting still another interpretation of his ideas, or drawing from the remarkable number of published analyses, reformulations, critical essays and conference proceedings which have appeared since the early 1950s. Since the intent of this writer is to apply portions of Whorf's work to problems of cross-cultural communication, the latter course has been chosen.

The first analysis to be cited grew out of a year-long series of meetings during 1950-1951, sponsored by the Rockefeller Foundation and involving 15 nationally prominent scholars from anthropology, linguistics, philosophy, and psychology. The section of their report titled "Language, Thought and Culture" was prepared by Paul Henle.

Henle notes that after Whorf completed his stay with the Hopi in 1938, he was impressed by the contrast between Hopi and any European language he knew about, as well as the similarity among European languages as a group when contrasted with Hopi. (Sapir had anticipated this in his 1931 statement.) To facilitate comparison, Whorf grouped the European languages under the label of SAE (Standard Average European).

Henle proposes that the central problem as presented by Whorf is, "What is the relationship between the mechanisms of language such as vocabulary, inflection and sentence structure on the one hand and either perception and organization of experience in the broad patterns of behavior on the other?" (1958, 4). What correlations of these factors must be found to support all dimensions of the theory?

The first, and most generally cited, is vocabulary. This is also the most self-evident. People have words for the things they need to talk about. The more important a thing is to a culture, the more language categories will be generated. Frequently cited examples are snow words in Eskimo languages, topographical words among desert dwellers, and automobile words among North Americans. Sapir extended this concept to his claim that a vocabulary is a "complex inventory of all the ideas, interests and occupations that take up the attention of the community" (1958, 4). Henle finds ample evidence to support this level.

Henle's second level of analysis concerns language and perception. The question here is whether a vocabulary item constitutes a psychological perceptual set directed toward perceiving stimuli in terms of available words. Simply put, we may perceive what we have language for and not be aware of things we cannot name. Henle finds limited evidence to support this view. But he infers from work by psychologists on perceptual sets that this level can be supported, though not so evidently as the vocabulary aspect.

Henle next turns attention to the relative presence or absence of inflection in a language as an influence on thought. "Since grammatical forms are less subject to change than vocabulary, such an influence, if it exists, would be far more pervasive than that of vocabulary."

The conclusion of the conferees was that there is an influence related to amount of inflection, and that it operates to call attention to some aspects of experience while minimizing others. (1958, 8).

Henle uses the term “forced observation” to describe how inflection operates on thought. American English conjugates verbs extensively, emphasizing the importance of precise identification of an event in the past, present, future or hypothetical time by changing the verb form. Chinese, from a different perspective, does not conjugate verbs and imparts a time sense by context or inference. Arabic does conjugate for past and present, but uses a different means of expressing the future.

Hopi has a still different approach. It has been described as a “timeless” language. As Henle quotes Whorf, “Nothing is suggested about time except the perpetual ‘getting later’ of it.” While lacking tenses, Hopi inflects for “validity forms” requiring the speaker to indicate whether (he, she) is reporting a past event, reporting a future expectation, or uttering a timeless truth. Still another such “forced observation” is whether the speaker actually witnessed an event or is repeating the account of another (Henle 1958, 9).

The final element of Henle’s analysis concerns syntax, or statement form. He notes that in SAE generally, there are two model statements: the subject-predicate model like “The book is red” and the actor-action type such as “John eats apples.” In both cases, the subject is an enduring item, recognizable over time, and in the actor-action type there is no report of change in the actor as a consequence of engaging in the act. That is, there is no indicated interaction between doer and deed. Thus SAE narrative tends to freeze the situation into a non-dynamic report. The subject-predicate is pervasive in SAE and emphasizes a linear, cause-and-effect idea. By contrast, Harry Hoijer observes that the actor-action model is absent from Navaho syntax. An individual is associated with an action, rather than being the author or cause of it. There is a sense of being involved in a process more complex than the event. Hoijer notes that this style is consonant with the Navajo view that a process may be influenced by engaging in song and ritual directed at changing or maintaining it.

The inference, says Henle, is to suggest a high-level relationship between the structure of statements and abstract cultural perceptions. Henle and his group were impressed by some of the comparisons made by Whorf and Hoijer, but said that there is not yet enough evidence (he was writing in the early 1950s) to examine the nature of the relationship between language structure and culture (1958, 23–24).

The Rockefeller-sponsored group provided an important early reference point, beginning as it did a decade after Whorf’s death. Their call for further research was to be answered, partly as a result of the prominence they gave to the matter.

Ethnoscience and Linguistic Relativity

One of the contributions of the Boas *Handbook* was to include color-naming words of some tribal languages. This was also an interest of a number of field researchers. Hoijer, working with Navaho, found that there were five linguistic points along the color spectrum, just as in English, but that the colors themselves were not the same. The Navahos have two shades of black, while English has one; English distinguishes between blue and green, while Navaho does not (1954, 23). Since common sense would suggest that the eye receives objective stimuli from nature without regard for the viewer's language or culture, the relation of color terms to perception was one obvious focus for laboratory research.

Experimental psychology was reaching its peak in the 1950s and 1960s, and "ethnoscience" was developed in the attempt to confirm (and in some cases, to reject) both relativism and determinism. The best, and certainly the most readable, summary of the encounters between scientific method and linguistic relativism is provided by Roger Brown, himself an active participant (1979, 127-153).

Brown begins by describing the environment of linguistic and communication scholarship in 1950 and after at Harvard, Yale, and MIT, where fields of structural linguistics, psycholinguistics, communication theory, and concept formation were being developed. Carroll's edition of Whorf's writings appeared in 1956 and challenged the attention of all these scholars. Linguistic relativism was taken as axiomatic, Brown says, but not quite in the deterministic form proposed by Whorf:

The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary the world is presented in a kaleidoscopic flux of impressions which has to be organized in our minds – and that means largely by the linguistic system in our minds. We cut nature up, organize it into concepts and ascribe significances as we do, largely because we are partners in an agreement that holds throughout our speech community and is codified in the patterns of our language. (1979, 128)

Brown was struck by Whorf's metaphor of nature as a formless body which each language, by means of lexicon and grammar, "cuts up" or "dissects" in an arbitrary manner. Brown's colleague, Eric Lenneberg, concluded that Whorf's ideas could be subsumed in two major headings:

1. Structural differences between languages will, in general, be paralleled by non-linguistic cognitive differences, of an unspecified sort, in the native speakers of the two languages.
2. The structure of anyone's native language strongly influences or determines the world view he acquires as he learns the language. (1975, 465)

Brown and Lenneberg interested themselves in whether the cognitive dimensions referred to in the first hypothesis could be tested *within* the English language, and in laboratory settings, since neither of them was inclined to undertake field study on

Indian reservations. The “semantic domain” they chose was color identification, partly because of its emphasis in prior field descriptions.

Brown’s article describes in some detail the structure of their subsequent laboratory experiments and the response over the next few years. The main conclusion from the data was that colors which can be named with a single word require a shorter response time than do colors that require the respondent to formulate a phrase to name them. Brown does not claim that this finding had much bearing on Lenneberg’s first hypothesis regarding cognition. The work did lead to refinement of color-research methodology, and in 1956 Lenneberg and Roberts did a field study among the Zunis and reported some confirming data for the cognitive hypothesis (31).

But clearly the more important effect of Brown and Lenneberg was to stimulate a body of increasingly competent research. Brown observes that the putative end of ethnoscience applied to color recognition came with Eleanor Rosch Heider’s 1972 study using data from seven linguistic groups. Heider concludes, “far from being a domain well-suited to the study of language on thought, the color space would seem to be a prime example of the influence of underlying perception-cognitive factors on the formation and reference of linguistic categories” (cited in Brown, 1979, 152).

Criticism of color research as the key to proving the existence of determinism had already become prevalent and Berling wrote more sweepingly in 1964 that “The entire question of the linguistic relativism hypothesis has fallen into disrepute” (26).

Concurrent with the rise and decline of ethnoscience was the appearance of a larger and much more diffuse research activity directed consciously or implicitly toward various aspects of linguistic relativism. Among the examples Friedrich cites are descriptive and comparative studies of semantic features underlying sets of words for plants and animals, kinship and class, perception, patterns of ritual, life histories, and time cycles. He especially notes comparative studies of poetry and myth with attention to meter and metaphor. The linguistic relativism hypothesis is so complex, he believes, that while it has apparently been being neglected, it may be under study in many different ways and may be ready for still another formulation. Friedrich is thus very supportive of the concept and claims that the burden of proof has shifted from advocates to critics because “there is so much evidence by now that we could probably speak of a theory; the burden of proof rests with those who claim that natural languages do *not* somehow constitute and engender fundamentally different points of view” (1986, 14-15).

Fishman had previously reinforced this perspective in an article titled “Whorfianism of the Third Kind: Ethnolinguistic Diversity as a World-wide Social Asset.” He writes of his excitement at the “revival” of Whorfian views and points to the desirability of cultural diversity based on language as an enriching property of human experience (1982, 1-14).

Analysis of the Literature

In the three hundred years since Vico, what can be said with some confidence about linguistic relativism, strong or weak?

1. It is a magnetic idea which has attracted attention and focused scholarly activity perhaps as much as any theme in the history of language study.
2. It has proven much more amenable to descriptive field observation than to experimentation.
3. It has polarized into advocates and critics almost all who have encountered it.
4. The "strong" form of determinism, which Whorf employed effectively to gain attention, has mellowed into a general acceptance of relativism, with the possibility that determinism may be present in some matters, such as time perception.
5. While there have been fluctuations in attention, linguistic relativism as a broad concept has continued to expand and has reached a popular audience in its simpler forms.
6. Relativism is an appealing explanation for many occurrences in cross-cultural communication and it may be ready for examination in arenas of application.
7. Whether language directs culture or the converse appears to be of minor importance as a practical matter. Linguistic, behavioral, and cognitive differences between participants in cross-cultural encounters must be adapted to in any case, and language is an observable aspect of these differences.

Collectively, this 70-year outpouring of thought from some of America's most important social and cultural scholars must mean *something* now for students of cross-cultural communication, beyond out-of-context textbook quotations from Sapir and Whorf. Just as it took dozens of people to bring linguistic relativism to its present development, many more scholars are needed to continue investigating and testing aspects of its usefulness. In the spirit of encouraging such a development, this author proposes the following ideas.

Whorfianism and Other-Language Learning

Since the eighteenth century, liberal higher education in the U.S. has included the teaching of other languages. These were initially Latin and Greek, with the rationale of professional applications in law, medicine, religion, and the arts and humanities. Language instruction at the colleges was continued from prior study in lower schools. With the coming of Ph.D. degree programs, reading knowledge of two languages, including Latin, Greek, and later German, was a requirement which anticipated research using original sources. As Romance languages became an alternative, the classic languages faded away. By the 1960s the Ph.D. language requirement was itself being

replaced by a broader “research tool” competence. In secondary education generally, “foreign” languages had become esoteric electives.

But in the better liberal arts colleges, the language requirement has continued, largely bereft of pre-college underpinnings or anticipated graduate-school requirements. Too old to acquire new languages as they had once assimilated their first language, college students study vocabulary, grammar and syntax in the same way as they undertake other academic subjects, and with the same array of outcomes.

There is some disagreement among psycholinguists as to the critical period for language acquisition. One school maintains that it is the first six years, ending as brain lateralization is achieved around age seven (Scovel, 1988). Another group disregards this, indicating that this acquisitive ability can extend into early adolescence. Explanations from recent research include the onset of puberty and the sheathing of the corpus callosum connecting the brain hemispheres as marking the end of the language acquisition period (McLaughlin, 1985).

There seems little disagreement, however, with the idea that traditional college students must *learn* another language, rather than *acquiring* it, as they did their first languages. In this population, there will be a range of individual ability, but all will have passed the critical period for language acquisition. While generally agreeing to the educative values of other-language learning, few students, instructors, or administrators have reported satisfaction with the present system of classroom language instruction.

Would it be possible to develop an approach for a general population of undergraduates who do not need advanced performance and competence such as that provided by language-immersion programs, but who must be educated in the realities of globalism and cultural pluralism? American higher education has little to lose by experimenting with how to refocus some of the resources now committed to traditional language instruction into culture-based programs.

Some generalizations about the language-culture relationship can form a beginning point. These include ideas of what language embodies:

1. A map of social order among language users. From the extreme case of Japanese, in which social hierarchy involving gender, occupation, age, and status of the participants must be expressed in vocabulary, inflection, and non-verbal ritual to the extreme case of English, from which such distinctions are virtually absent, language is a strong indicator of social relationships in a culture.
2. A sense of time, based on the extent to which a language subdivides events into past, present, future and hypothetical. European languages regard time as a nominal concept that can be elaborately segmented by verb inflection. Sino-Tibetan languages speak of these distinctions, but indirectly through syntax and context, rather than inflection. In these languages, time is not a part of “forced observation” as described by Henle.

3. A sense of causality in the way a language requires, allows, or has limited means for expressing the relationship of actors, actions, and outcome. In a Germanic language such as English, Dutch, or German, these matters are clearly defined and identified through sentence structure and inflection. They reflect a "monochronic," precise, linear description of happenings. This precision is achieved at the cost of not being able to describe directly a process with multiple interactions and indeterminate outcomes. The Athapascan languages of North America represent an almost opposite view. How a language deals with such matters probably mirrors the underlying thought processes of users.
4. A sense of rhetorical values. Western cultures place strong faith in their languages as investigative tools, problem-solving methods, and means of expressing truth and falsity. Exactly what is said is very important. Argument and debate are essential means of getting at the truth. Confrontation and adversary proceedings are regarded as essential to the operation of social, legal, political, and economic systems. By contrast, the Confucian-influenced Eastern cultures emphasize harmony and the avoidance of confrontation, with much of the meaning of communication embedded in the context, relationships, and environment of the verbal interchange. Except in the case of Japanese, this dimension has not been very thoroughly examined as a language-related matter, but as a cultural value about language and communication it clearly belongs among ideas to be considered.

Morphological Description and Language Learning

Still another promising approach to language-culture learning as preparation for learning a second language and also for understanding those who use that language is the morphological (also called typological) approach. Here the languages for which a sufficient description is available are arranged into formal groupings according to certain common grammatical characteristics. This system developed in nineteenth-century Europe. Interest in it was revived in the U.S. with the coming of new information from American Indian Languages. The morphological classification complements the genetic (language-family) approach, but looks at current data within a language rather than identifying its lineage.

The original typological classes were labeled Isolating (or Analytical), Agglutinative, and Inflecting. A fourth classification, Polysynthesizing, was inserted to accommodate some North American Indian languages and others which did not conform to any of the existing types.

Always assuming the general relativity of language and thought, it would be educative to the language learner to understand the structural perspective of the new language and how it could be compared or contrasted with the grammatical features of

one's first language. The morphological classifications are not "pure" types, but a recognition of the predominant style of a language. A brief description of these classifications may be helpful:

Isolating—This type is associated with mainland Asia and Central Africa. Most "words" have one syllable and do not involve independent meaning until used in a sentence. There is little inflection or conjugation of verbs. A class of words called "particles" is employed to add grammatical detail. Word order in sentences is the predominant means for determining the grammatical functions of words. Most isolating languages are intoned. Vietnamese is currently the purest form of an isolating language.

Agglutinative-Agglutination, or "sticking together," is widely used as morphological structuring. Turkish and Japanese employ it extensively. Many words can stand alone; they are also combined to create clusters of meaning, but not entire statements. These clusters are treated as words in sentences but without inflection or verb conjugation. Vocabulary and structure are both of importance.

Polysynthesizing—This class is associated primarily with North American Indian languages. The Welsh language also employs polysynthesis. It is characterized by sentence-like words created through agglutination. Syntax is not a predominant element in the word-sentences and there is thus considerable freedom and fluidity that permits description of a happening as a process, without assigning actors, actions, outcomes, or time features. College students are not likely to encounter polysynthesizing languages in the curriculum, but may find the idea useful for contrast with other types.

Inflecting—Predominantly associated with European languages of Latin and Germanic roots but found throughout the world. Inflecting languages emphasize precise internal agreement of elements within a sentence by altering the case endings of nouns and pronouns, the conjugation of verbs, and the form of adjectives, articles, and adverbs into a single congruent pattern. Thus structure is the dominant feature.

Information about language-culture relationships and morphological classification can be used as part of a general introduction to language before beginning a more detailed study of a particular language.

In summing up the importance of the twin linguistic characteristics of genetics and morphology, Robins states:

These two systems . . . involve the two most important aspects in which language must be seen to be properly understood: as products of a continuous historical process and at the same time as self-sufficient systems of communication in any one period. A component of culture itself, language is able to reveal more than any other human activity and achievement, what is involved in mankind's distinctive humanity (*Encyclopedia Britannica Macropedia*, 15th Ed., 10, 1982, 662).

Summary

The writer strongly emphasizes that the following is a first approximation, rather than a finished plan for utilizing some elements of linguistic relativity to enrich the study of a language. Given the usual four-semester college requirement, the first semester could be devoted to linguistic education, beginning with general and descriptive concepts such as those previously cited and narrowing gradually toward the language to be studied and the concurrent non-verbal system for engaging in it.

There are several problems that must be dealt with if the proposed idea is to have a chance of succeeding. One is the assembly of instructional materials gleaned from reports of the relationship of language and culture. The first stage would illustrate this phenomenon generally in several world languages from different families and morphological classifications. Then the focus should narrow to a target language, such as German, Russian, French, or Chinese, using contrasted examples in English. Some instruction in the target language could be introduced at this time, or deferred to the second semester. The second year of the usual two-year language requirement could continue in the conventional manner.

The second most evident challenge is how to staff the instruction. In larger universities, it would be desirable to involve interested specialists from linguistics, cultural anthropology (especially anthropological linguists), psycholinguistics, and intercultural communication whose interests include language. Where foreign-language instructors with linguistic backgrounds as well as language competence are available, they would obviously be involved. The planning and execution of such an experiment would necessarily be a team effort. Students should be selected from volunteers already enrolled in beginning sections of a language. If initial efforts prove rewarding to students and faculty, expansion to additional languages could occur. It would be desirable over time to shift instruction entirely back to the language departments. A dual track including traditional instruction and the new approach should continue to be available.

This paper concludes with a 1968 statement from a presentation to the Teaching English as a Second Language section of the Modern Language Association:

I believe that the most direct access to communicating with people from another culture is more through cultural identity than the formal systems or labels of the language. All of these must be acquired in time, but cultural awareness will unlock the language with less trauma for all concerned (Ellingsworth, 1968, 3).

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