Complexity and Paradox: Engaging Diversity through Language
Simon D. Levy

Department of Computer Science
Washington and Lee University
Lexington, VA 24450

levys@wlu.edu
Introduction

Language is the most complex of all human activities. Its complexity is both local and global. Within a given language community, a literally infinite number of expressions can be produced and understood by language users from an early age. (Chomsky 1965) Even a single idea can be communicated in an immense variety of ways, each of them expressing a different attitude toward the topic, toward the listener, toward some third party, etc. Across the many language communities of the world we find a breathtaking variety of ways of “saying the same thing”, to the point where efforts to describe all of human language in terms of a finite “Universal Grammar” seem hopelessly naïve. (Langendoen and Postal 1984) To complicate matters even further, researchers have suggested that “saying the same thing” may not even be a coherent idea: languages may differ so strongly in their conceptualizations of time, kinship, and other fundamental concepts that it makes as much sense to see thought as the product of language as it does to see language as an expression of thought. (Whorf 1939)

In an earlier presentation at this conference (Levy 2005) I argued that a comparison of human languages with formal (computer-programming, mathematical) languages can provide science students with an entrée to some of this remarkable diversity. In the present paper I expand on that theme, using examples from a recent undergraduate linguistic anthropology seminar. Participants will learn how a critical study of sociological and anthropological linguistic scholarship can inform our efforts to gain an unbiased view of linguistic – and hence human – diversity.

Language and Gender

The issue of gender in language is really two distinct, but related issues: (1) the ways that languages encode gender grammatically; (2) the different ways that men and women use language in everyday conversation. To further complicate matters, each of the issues can be studied from the perspective of both objective facts and popular misconceptions.

With respect to grammatical gender, languages exhibit remarkable amount of diversity. At one extreme are languages like Hungarian and Finnish that do not distinguish gender even in pronouns (no he/she distinction). At the other extreme are languages like Dyirbal (Dixon 1982), an indigenous language of Australia with five distinct genders for nouns, going well beyond the simple masculine/feminine contrast seen in familiar European languages. It might be difficult for a speaker of a two-gender language to imagine what a fourth or fifth gender might represent. Lakoff (1987), however, describes a complex system of metaphor by which Dyirbal extends “ordinary” categories like male/female to encode other distinctions. For example, myth plays a strong role in classifying nouns: in Dyirbal myth, the moon is the husband of the sun, so the moon is placed in the same gender class as men, and the sun in the same class as women.1

---

1 Contrast this classification with the masculine/sun feminine/moon schema of European tradition.
Diversity Through Language 3

On more familiar territory, subjective attitudes toward grammatical gender in English reveal a good deal of paradox and complexity. Many of us were taught to use the masculine singular pronoun in the absence of information about the referent: *Some student left his book here, but I don’t know who*. English teachers, “language mavens”, and other pedants typically cite this usage as traditional, and deride the use of the neutral third-person plural (*Some student left their book here*) as a vulgar, modern innovation. As noted by Bonvillain (2001), however, this usage of a plural form with a singular meaning is found in writers such as Jane Austen and William Shakespeare, and is probably far older than the prescriptive *he*. Bonvillain also cites psychology experiments conducted by MacKay (1983) showing that this supposedly gender-neutral *he* strongly biases subjects toward a masculine interpretation of an otherwise gender-neutral occupation like *botanist*. Together, these facts point to a masculine bias that not only contradicts historical reality, but also undermines efforts to diversify gender representation in the professions.

This paradoxical inversion of the historical facts by popular opinion can also be found in attitudes towards gendered language usage. Inoue (2004) describes the reaction to so-called women's speech in Japan – specifically, the innovative use of the *teyo* and *dewa* particles by Japanese schoolgirls during the period of modernization in the late nineteenth century. The language mavens of the time (mainly Japanese newspaper editors) derided such speech as coarse and vulgar, associating it with servants, prostitutes, and other socially stigmatized groups – despite the lack of concrete evidence to support such claims. As Inoue notes, the “double irony” of such attitudes emerged in the second wave of modernization of the 1980's, when Japanese women began entering the workforce in large numbers: a similar group of self-appointed language experts began to praise these once-stigmatized features of women's speech as traditional and laudably feminine, in contrast to the vulgar way of speaking being adopted by working women.

**Language, Ethnicity and Social Status**

Complexity and paradox are no less prevalent in popular misconceptions about dialect. When a dialect is associated with a socioeconomically disadvantaged group, there appears to be ample opportunity for misunderstanding and bad choices.

Recall, for example, the controversy surrounding the teaching of Ebonics (African-American vernacular) in California schools in the mid 1990's. As Rickford (1999) indicates, by the time this controversy arose there was a solid body of research showing that Ebonics is not a weaker or less expressive form of Standard English. On the contrary, Ebonics has a more complex set of grammatical distinctions for verbal tense and aspect (including five different present-tense forms) than the standard dialect. Even if that had

---

2 The closest corresponding phenomenon in English might be the frequent use of words like *what-ever* and *totally* in the “Valley Girl” speech of the 1980's.
not been true, the primary goal of teaching Ebonics was to help underachieving African-American students to read and write successfully in Standard English, through comparison with the way that they spoke at home and in other informal situations. The program was based on research showing that knowledge of Ebonics drastically reduced the presence of Ebonics forms in students' writing. (Taylor 1991) Tragically, this sort of subtle paradox was not consistent with the goal of selling newspapers or boosting Nielsen ratings, and the popular media succeeded in portraying Ebonics proponents as Bay-Area radicals trying to replace the teaching of “correct English” with ghetto slang.

Language, Culture, and Thought

Most educated persons are by now familiar with the notion of biodiversity, and the well-documented threats to it all over the planet, from global climate change, industrialization, and other mainly human-created sources. Fewer people are familiar with the corresponding threat to linguistic diversity. According to Dalby (2003), approximately half of the approximately 5,000 distinct languages currently spoken will be gone by the end of the 21st century. If language is the key to the culture and thought of a community – or if, as Whorf (1939) more radically suggests, language strongly determines how people think about the world and act in it – then this loss will be as lamentable as the loss of actual biological species.

Not surprisingly, then, a good deal of effort has been made to document the languages of geographically or culturally isolated communities. Investigating such groups has forced linguists and anthropologists to confront the central paradoxes of language: do our culture and thought determine the way we speak, or does (as Whorf argues) the way we speak determine how we think and act? Does our inability to say something indicate an inability to think about it, or even to learn to think about it? Can linguistic diversity be so extreme as to undermine long-cherished notions about the fundamental nature of human language?

These questions have come to the fore recently because of the work of linguists in documenting the language of the Pirahã, a small community of hunter-gatherers living in northwest Brazil. As Everett (2005) has established, the Pirahã language has no words for numbers or counting. A Pirahã speaker truly cannot say I have three children, or otherwise refer to numbers of things in anything but the vaguest terms (many, few, etc.). Nor does Pirahã appear to have embedded/recursive clause structure: instead of saying, e.g., I heard the man who was talking, a Pirahã speaker would say I heard the man; he was talking. In addition, despite the fact that innumeracy strongly disadvantages the Pirahã in their bartering exchanges with Portuguese-speaking Brazilians, Everett reports complete failure in his attempts to teach them to count: they appear to lack not the ability, but rather the interest, in learning this outsider skill.
Everett's characterization of Pirahã has triggered a major controversy within the linguistics (and to a lesser extent, anthropology) community. Although many of the world's languages lack words for counting beyond one or two, Everett's interpretation of the innumeracy of the Pirahã contravenes the standard Whorfian view, in which lack of a concept of counting would derive from lack of a language for counting. Further, Everett's claim that Pirahã lacks embedded clauses stands in direct opposition to another well-established tradition in modern linguistics, which sees recursion as the defining property of human language, setting it apart from animal communication (Hauser, Chomsky, & Fitch 2002). Everett has taken pains to point out that these cultural and linguistic features in no way imply cognitive inferiority; on the contrary, the Pirahã are extremely skilled at a variety of difficult tasks, and other features of their language are much more complex than the corresponding features of most European languages. What is interesting from the perspective of this conference, however, is the scholarly disruption and anxiety that can be result when a pattern of human behavior appears to differ too much from the expected norm.

Conclusions

Human languages show a remarkable amount of diversity, both locally (in our own communities) and globally (in parts of the world that most of us will never visit). This diversity arises in part from the complex differences in the ways in which different languages express similar concepts. Ignorance or misinterpretation of this complexity can lead to gross misunderstanding and bad choices on the part of otherwise well-meaning and educated people. The persistence of this problem suggests that scholars of language need to do a much better job in educating the public about what language is really like.

References


