RETHINKING

LINGUISTIC RELATIVITY

Edited by

JOHN J. GUMPERZ

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and

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and Cognitive Anthropology Research Group, Nijmegen*

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I

INTRODUCTION: LINGUISTIC RELATIVITY RE-EXAMINED

JOHN J. GUMPERZ AND STEPHEN C. LEVINSON

Quelle est l'influence réciproque des opinions du peuple sur le langage et du langage sur les opinions?
The theme of the 1757 Prize Essay Competition of the Berlin Academy.[1]

1 Language, thinking, and reality

Every student of language or society should be familiar with the essential idea of linguistic relativity, the idea that culture, *through* language, affects the way we think, especially perhaps our classification of the experienced world. Much of our experience seems to support some such idea, for example the phenomenology of struggling with a second language, where we find that the summit of competence is forever over the next horizon, the obvious absence of definitive or even accurate translation (let alone the ludicrous failure of phrasebooks), even the wreck of diplomatic efforts on linguistic and rhetorical rocks.

On the other hand, there is a strand of robust common sense that insists that a stone is a stone whatever you call it, that the world is a recalcitrant reality that imposes its structure on our thinking and our speaking and that the veil of linguistic difference can be ripped aside with relative ease. Plenty of subjective experiences and objective facts can be marshalled to support this view: the delight of foreign friendships, our ability to "read" the military or economic strategies of alien rivals, the very existence of comparative sciences of language, psychology, and society.[2]

These two opposing strands of "common sense" have surfaced in academic controversies and intellectual positions over many centuries of Western thought. If St. Augustine (354–430) took the view that language is a mere nomenclature for antecedently existing concepts, Roger Bacon (1220–92) insisted, despite strong views on the universal basis of grammar, that the mismatch between semantic fields in different languages made accurate translation impossible (Kelly 1979: 9).[3] The Port Royal grammarians of the seventeenth century found universal logic thinly disguised behind linguistic difference, while the German romantics

in a tradition leading through to Humboldt in the nineteenth century found a unique *Weltanschauung*, "world view," in each language. The first half of our own century was characterized by the presumption of radical linguistic and cultural difference reflecting profound cognitive differences, a presumption to be found in anthropology, linguistics and behaviourist psychologies, not to mention philosophical emphasis on meaning as use. The second half of the century has been dominated by the rise of the cognitive sciences, with their treatment of mind as inbuilt capacities for information processing, and their associated universalist and rationalist presuppositions. St. Augustine would probably recognize the faint echoes of his views in much modern theorizing about how children acquire language through prior knowledge of the structure of the world.

There is surely some spiral ascent in the swing of this pendulum. Nevertheless it is important to appreciate how little real scientific progress there has been in the study of lexical or morphosyntactic meaning – most progress in linguistics has been in the study of syntax and sound systems, together with rather general ideas about how the meaning of phrases might be composed out of the meaning of their constituents. Thus there is still much more opinion (often ill-informed) than solid fact in modern attitudes to "linguistic relativity."

There are three terms in the relation: language, thought, and culture. Each of these are global cover terms, not notions of any precision. When one tries to make anything definite out of the idea of linguistic relativity, one inevitably has to focus on particular aspects of each of these terms in the relation.[4] This book will show how each can be differently construed and, as a consequence, the relation reconsidered. In addition the connecting links can be variously conceived. Thus by the end of the book the reader will find that the aspects of language and thinking that are focused on are selective, but also that the very relation between culture and community has become complex. Readers will find the original idea of linguistic relativity still live, but functioning in a way that differs from how it was originally conceived.

2 Linguistic relativity re-examined

The original idea, variously attributable to Humboldt, Boas, Sapir, Whorf, was that the semantic structures of different languages might be fundamentally incommensurable, with consequences for the way in which speakers of specific languages might think and act. On this view, language, thought, and culture are deeply interlocked, so that each language might be claimed to have associated with it a distinctive world-view.[5]

These ideas captured the imagination of a generation of anthropologists, psychologists, and linguists, as well as members of the general public. They had deep implications for the way anthropologists should conduct their business, suggesting that translational difficulties might lie at the heart of their discipline.[6] However, the ideas seemed entirely and abruptly discredited by the rise of the cognitive sciences in the 1960s, which favoured a strong emphasis on the commonality of human cognition and its basis in human genetic endowment. This emphasis was strengthened by developments within linguistic anthropology, with the discovery of significant semantic universals in color terms, the structure of ethnobotanical nomenclature, and (arguably) kinship terms.

However, there has been a recent change of intellectual climate in psychology, linguistics, and other disciplines surrounding anthropology, as well as within linguistic anthropology, towards an intermediate position, in which more attention is paid to linguistic and cultural difference, such diversity being viewed within the context of what we have learned about universals (features shared by all languages and cultures). New work in developmental psychology, while acknowledging underlying universal bases, emphasizes the importance of the socio-cultural context of human development. Within sociolinguistics and linguistic anthropology there has also been increasing attention to meaning and discourse, and concomitantly a growing appreciation of how interpretive differences can be rooted as much in the systematic uses of language as in its structure.[7]

2.1 The "classical" hypothesis: some historical background

Speculation about the relation between language, culture, and thought can probably be traced back to the dawn of philosophy. We cannot here give an adequate history of the ideas, which has yet to be written from the current perspective, and would in any case connect closely to the entire treatment of epistemology and ontology in two millennia of speculations about language and mind. Many early classical and medieval controversies centered on issues of translation, which have always played a central role in Christian thinking.[8] Speculations about the origin of language in the course of human cognitive and cultural development, and debate about whether language presupposes or instead makes available abstract symbolic thought, also have a long history, with celebrated controversies in the eighteenth century.[9] The process of conquest and colonialism also brought forth from its beginning many ruminations on the role of language in perceived cultural superiority.[10] Thus in a number of arenas, theological, philosophical, legal, and colonial, there have been for centuries well-rehearsed debates about the mutual dependence or independence of

language and thought, and about the relation between social systems and that interdependence.

Special conditions reinvigorated the debate in the first half of this century in America.[11] Suffice it to say here that the phrase *linguistic relativity* achieved notoriety through its use by Whorf, and that the basis of Whorf's ideas can be lineally traced through Sapir to Boas, or alternatively through (German-trained) Whitney and other early American linguists, and thus to Wilhelm von Humboldt (1767–1835), the great German educator, linguist, and philosopher.[12] From there the conventional history has it that the trail leads to Herder and the German romantics, and on back to Leibniz in opposition to the enlightenment ideas of Universal Grammar and words as mere nomenclature for pre-existing concepts.[13] The lineage is both stepwise and direct: e.g. Sapir wrote a master's thesis on a comparison between Herder and Humboldt, while Boas of course embodied the transatlantic migration of the German tradition.[14]

However, this potted history is now known to be at least partially misleading, because Humboldt also directly absorbed French eighteenth-century ideas, some of which, by the close of the century, almost sketched his own program (Aarsleff 1988).[15] Those ideas were transmitted through multiple channels to America, directly (e.g. in the person of Duponceau, an early student of Amerindian languages), and indirectly through Humboldt's correspondence in the 1820s and 1830s with Pickering, Duponceau, and others,[16] through publication of Humboldt's works in translation as early as 1885, and via Steinthal's writings to Whitney by 1867.[17]

An additional source of these ideas is the growth of early twentieth-century structuralism.[18] For example, the Saussurean notion of *valeur*, wherein an expression picks up distinctive meaning through its opposition to other expressions, has the implication that the content of linguistic expressions depends on the system in which they are embedded, rather than in the first instance on their denotation.[19] Since no two linguistic systems or subsystems are ever identical, as is easily shown by comparison of semantic fields from English vs. French, linguistic relativity more or less follows. This form of linguistic relativism is historically tied to the cultural relativism immanent in Durkheim's later sociological ideas, which still (despite protestations to the contrary) dominate anthropological ideas. Anthropologists, as indeed do many field linguists, take these kind of structuralist ideas as a *methodological presupposition*: "strive to understand the native ideas in the context of the entire local system of ideas, leaving comparison to be made between *systems*, not between isolated words or traits across systems." It is hard to quarrel with this as a methodological stance, but it is a reasonable

charge that subscribers to this doctrine have mistaken methodological prescription for theory: the result of comparison between systems may be a robust finding of universal principles governing individual traits.

The essential point here is that the ideas we associate today so especially with Whorf and Sapir have a long and distinguished lineage on the one hand, while perhaps being no more than one of two opposing perennial strands of thought, universalism vs. relativism, on the other. Nevertheless, they crystallized in a particular fashion in American intellectual life of the 1940s.[20] The idea of a close link between linguistic and conceptual categories took on a new meaning in the context of three further background assumptions characteristic of the first half of the century. One was the presumption of a (sometimes tempered) empiricist epistemology, that is, the view that all knowledge is acquired primarily through experience. The other was the structuralist assumption that language forms a system of oppositions, such that formal distinctions directly reflect meaning distinctions.[21] The third was the idea of an unconscious mental life, and thus the possibility of linguistic effects beyond conscious awareness. It was the conjunction of these background ideas together with the specific formulation of the "linguistic relativity" hypothesis, that gave that hypothesis its particular character in the history of ideas.

Sapir may have originated the phrase,[22] but the *locus classicus* (though by no means the most careful statement) of the concept of linguistic relativity is the popular articles by Whorf (1940a–b, reprinted 1956: 207–33), where the following oft-quoted passages may be found which illustrate all the central themes.

Epistemology

We dissect nature along lines laid down by our native languages. 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 by our minds – and this means largely by the linguistic systems of our minds.

(1956: 213)

Structuralism

Pattern-symbolic expressions [i.e. linguistic notations of inherent linguistic patterning] are exact, as mathematics is, but are not quantitative. They do not refer ultimately to number and dimension, as mathematics does, but to pattern and structure.

(1956: 226)

Quantity and number play little role in the realm of pattern, where there are no variables but, instead, abrupt alternations from one configuration to another. The mathematical sciences require exact measurement, but what linguistics requires is, rather, exact "patternment."

(1956: 230–1)[23]

Unconscious thought

[T]he phenomena of language are to its own speakers largely of a background character and so are outside the critical consciousness and control of the speaker.

(1956: 211)

Linguistic relativity

The phenomena of language are background phenomena, of which the talkers are unaware or, at most, dimly aware ... These automatic, involuntary patterns of language are not the same for all men but are specific for each language and constitute the formalized side of the language, or its "grammar" ...

From this fact proceeds what I have called the "linguistic relativity principle," which means, in informal terms, that users of markedly different grammars are pointed by their grammars toward different types of observations and different evaluations of externally similar acts of observation, and hence are not equivalent as observers, but must arrive at somewhat different views of the world.

(1956: 221)

Or in alternative formulation:

We are thus introduced to a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated.

(1956: 214)

The boldness of Whorf's formulation prompted a succession of empirical studies in America in the 1950s and early 1960s aimed at elucidating and testing what now became known as the Sapir–Whorf hypothesis.[24] Anthropological and linguistic studies by Trager, Hoijer, Lee, Casagrande, and others have been well reviewed elsewhere (see Lucy 1992a: ch. 3; and this volume).[25] These studies hardly touched on cognition, but in the same period a few psychologists (notably Lenneberg, Brown, Stefflre) did try to investigate the relation between lexical coding and memory, especially in the domain of color, and found some significant correlations (again see Lucy 1992a: ch. 5). This line of work culminated, however, in the celebrated demonstration by Berlin & Kay (1969) of the language-independent saliency of "basic colors," which was taken as a decisive anti-relativist finding, and effectively terminated this tradition of investigations into the Sapir–Whorf hypothesis.[26] There followed a period in which Whorf's own views in particular became the butt of extensive criticism.[27]

It is clear from this background that the "Sapir–Whorf" hypothesis in its classical form arose from deep historical roots but in a particular intellectual climate. Even though (it has been closely argued by Lucy 1992a) the original hypothesis has never been thoroughly tested, the intellectual milieu had by the 1960s entirely changed. Instead of empiricism, we now have rationalistic assumptions. Instead of the basic tenets of structuralism, in which each linguistic or social system must be

understood first in internal terms before comparison is possible, modern comparative work (especially in linguistics) tends to presume that one can isolate particular aspects or traits of a system (e.g. aspect or subjecthood) for comparison. The justification, such as it is, is that we now have the outlines of a universal structure for language and perhaps cognition, which provides the terms for comparison. It is true that the assumption of unconscious processes continues, but now the emphasis is on the unconscious nature of nearly all systematic information processing, so that the distinctive character of Whorf's habitual thought has been submerged.[28]

In this changed intellectual climate, and in the light of the much greater knowledge that we now have about both language and mental processing, it would be pointless to attempt to revive ideas about linguistic relativity in their original form. Nevertheless, there have been a whole range of recent intellectual shifts that make the ground more fertile for some of the original seeds to grow into new saplings. It is the purpose of this volume to explore the implications of some of these shifts in a number of different disciplines for our overall view of the relations between language, thinking, and society.

2.2 The idea behind the present volume

This volume explores one chain of reasoning that is prompted by these recent changes in ideas. The line of argument runs in the following way.

Linguistic relativity is a theory primarily about the nature of meaning, the classic view focusing on the lexical and grammatical coding of language-specific distinctions. In this theory, two languages may "code" the same state of affairs utilizing semantic concepts or distinctions peculiar to each language; as a result the two linguistic descriptions reflect different construals of the same bit of reality. These semantic distinctions are held to reflect cultural distinctions and at the same time to influence cognitive categorizations, an issue re-examined in part I below.

Assuming that there is such a link between linguistic structure and conceptual categories, the possibility of conceptual relativity would seem at first sight to depend on whether linguistic codings are significantly different across languages. Very little, however, is actually known about substantive semantic or conceptual universals. It is true that there are demonstrations of universal semantic principles in a few domains like color terminology, ethnobiological taxonomies, perhaps also in systems of kinship terminology. However, these demonstrations carry no necessary general implications, and the same holds for studies of grammatical meaning. These issues are discussed in part II below.

Yet, on further reflection, distinctive linguistic (grammatical or lexical) codings are not the only ways in which "meanings" or interpretations can vary systematically across cultures. This is brought out by recent developments in the theory of meaning. These developments show that "meaning" is not fully encapsulated in lexicon and grammar, which provide only schematic constraints on what the speaker will be taken to have meant in a particular utterance. These ideas are quite general across the different theories and frameworks which typify modern linguistics. For example, the same point is made in very different ways in formal semantic theories like Discourse Representation Theory[29] or Situation Semantics,[30] where contextual determination of interpretation is one of the main issues driving development away from classical truth-conditional theories. Equally, in different varieties of pragmatic theory, from Relevance Theory[31] to more conservative Gricean theories,[32] current work is addressed to explaining how almost vacuous or semantically general expressions can have determinate interpretations in particular contexts.

These changes in the theory of meaning have been prompted quite largely by the phenomena of deixis, the existence in all natural languages of a plethora of (indexical or deictic) expressions that only refer relative to a context: if you find a note on the ground that says "See you here in ten minutes from now," you will be puzzled about who *you* denotes, where the place *here* refers to, and when the countdown from *now* began. The semantics of these expressions is designed to fix a reference only when given a context by the situation of utterance. But these are simple examples. The kind of contextual information that is actually needed turns out to be deeply embedded in practices of speaking, the local conduct of social life, and the social distribution of shared understandings. All this is the subject of part III of this book.

A large part of the burden of interpretation is thus shifted from theories of context-free lexical and grammatical meaning to theories of use in context. Some important principles of the use of language may plausibly be argued to be universal (e.g. Grice's "maxims of conversation" or the turn-taking and repair systems of conversation, or even some principles of interactional politeness). Yet others seem much more clearly culture-specific. For example, the ethnography of speaking has shown how diverse can be the principles governing the production and interpretation of utterances in specific speech events – court proceedings, formal greetings, religious rituals, councils, and the like. Recent work, however, shows that we cannot always think of speech events as antecedently constructed, forming the frame or context for interpretation. Sometimes, through modulation of the verbal interaction itself, these contextual frames can be invoked, so that utterances can carry with them, or project, the context in which they should be interpreted. These

are subtle, culture-specific, processes, learnt within the social networks that utilize them.

In that case, aspects of meaning and interpretation are determined by culture-specific activities and practices. Those activities and practices are interconnected in turn with the larger socio-political systems that govern, and are in turn partly constituted by, them: particular divisions of labor and social networks provide differential access to such activities and the associated patterns of language use. All these issues are the focus of part IV, the final part of the book.

This book therefore spans a large terrain, from the classic Whorfian issues of the relation of grammar to thought on the one hand to consideration of language use in sociolinguistic perspective on the other. One key idea that supports this span is the notion of indexicality, conceived not just in terms of the contextual dependence of deictic items, but also in the broader Peircean sense, as a broad relationship between interpreters, signals, and the context of interpretation.[33] Indexicality necessarily anchors meaning and interpretation to the context of language use and thus to wider social organization. Issues of linguistic relativity are in this way directly related to the variable cultural structuring of contexts.

Another idea is more latent in the book. If new theories of language make possible new connections between meaning and context, there are also new, if still incipient, ideas about the nature of thinking and context. One line of thought explores the idea of "technologies of the intellect": by externalizing thoughts or representing them, we are able to manipulate them in quite different ways. Goody (1977) has argued that literacy makes available multidimensional scanning of what is essentially a linear medium (consider a table of figures, which can be examined from the perspective of either its columns or its rows). Another line of investigation explores how we solve intellectual tasks by embedding them in practical activities: for example, a trucker may estimate loads in a way quite distinct from the way an architect estimates spaces (Scribner 1992, Lave 1988).[34] Finally, and most relevantly perhaps, verbal interaction may be seen in the same light: as a means of externalizing thinking that allows joint solutions to many problems, including the very determination of the meaning of utterances (see Clark, this volume). These approaches have in common the idea that thinking does not proceed just according to rules and exceptions, but also by more flexible on-the-spot solutions using general principles suited to the context. These ideas are referred to in a number of the papers in this volume under the rubrics of "practice," "habitus," "strategy," and so on.[35]

Viewed in these ways, the issue of linguistic relativity shifts significantly. From an "inner circle" of links between grammar, categories,

and culture as internalized by the individual, the focus shifts to include an "outer circle" of communication and its relation on the one hand to interaction in social settings and on the other hand to individual patterns of cognition which are partly contextually attuned, and even perhaps acquired primarily through patterns of communication, in turn enabling it. Perhaps this wider perspective will help to build a bridge across the Durkheimian division that we have inherited between the psychological and social sciences.

2.3 The structure of the book

The chapters in this volume explore this series of interlocked issues. The book falls roughly into two halves: the first two sections address the classical issues of the relation between thought and language, and the extent of linguistic and cultural universals. The second two sections show how changes in our understanding of meaning require that we look at how context enters into interpretation, and how context is constituted in social interaction, and reflects properties of larger social wholes.

Part I contributes some fresh ideas about the relation of language to cognition. It seems that, despite much recent skepticism, there are indeed important language-specific effects on cognitive processing. Such claims must be hedged in various ways: perhaps the effects are confined to the process of speaking itself, not all ways of putting things imply ways of thinking, and not all thought is in a form related to language at all. Nevertheless, the debate makes it clear that we can no longer view the idea of "linguistic determinism" as a pure anachronism, not worthy of serious attention.

Part II is concerned with universals in language and culture – do these severely restrict the scope for linguistic and conceptual diversity? It seems that in some semantic domains (e.g. spatial description) where universals are expected, they nevertheless prove hard to specify or indeed to find. Yet in other conceptual domains where they are least expected (like religious ideas), they may in the end be rather self-evident. This unsettles our confidence that we know *a priori* how to apportion the explanation of behavior between the psychic unity of mankind and the divisive variation of culture. Nor in any case would the existence of enormously rich universals rule out extensive cultural difference at every level.

Part III explores how context and background assumptions enter into the determination of meaning and interpretation. Starting from the clear case of indexicals, the arguments tend to show that understanding is grounded in shared practice and mutual assumptions. Interpretive diversity can thus be generated independently of difference at the level of grammar and lexicon. The scope of linguistic relativity, thus construed as a question of differentiated meaning-systems, is now enormously widened.

Part IV takes up this idea, and explores its consequences for how we conceive of "language" and "culture." If meaning resides in interpretive practices, and these are located in the social networks one is socialized in, then the "culture-" and "language-" bearing units are not nations, ethnic groups or the like – they are not units at all, but rather networks of interacting individuals, which can be thought of in either more or less inclusive ways.

We end up then with a reconstrual of all the terms in the classic relation of language, thought, and culture.

2.4 Taking stock: some emergent ideas and future prospects

A number of important themes emerge from the volume. First, there are diverse sources of difference and incommensurability across languages and varieties. Whorf emphasized the grammatical, because he felt the unconscious repetitive, coercive patterning on the grammatical level would be reflected in a regimentation of thinking. But in this volume many other levels of linguistic patterning are considered. It is argued that the lexical level can also have deep cognitive effects, by requiring distinctions to be noticed and memorized at the time of experience, in case the need arises for later description. Recent work shows that these effects can be demonstrated and replicated across different languages and cultures.[36]

Yet there are also levels of patterning beyond the grammatical and lexical, best appreciated by switching the perspective from the language producer to the language interpreter. Here there are different patterns of interpretation, which can be invoked by complex constellations of cues across linguistic and paralinguistic levels. Here we find "transpositions" to contexts distinct from, but functionally similar to, the context of speaking. Here too we find markers of stance, or attitude, through which social relationships are signalled, and subtle contextualization cues that invoke the type of activity (banter, argument, excuse-giving, etc.) within which the utterance is to be assessed.

Thus we are led into the study of the on-line complexities of utterance comprehension, and come to appreciate the miraculous co-ordination of perspectives that is required for satisfactory communication. Serious studies of interactive discourse post-date Sapir or Whorf, of course, if only because practical recording methods were not then available. These studies show recurrent patterning on the discourse level, which may be connected to patterning at the grammatical level (e.g. through the grammaticalization of particular expressive techniques). Some of the ideas that emerge have distinct parallels to Whorf's ideas: much of the cueing of context is done through repetitive, subliminal, and subtle cues, not accessible to introspection, and which can differ systematically across

cultures and social networks. Whorf was keen to establish the relation between, on the one hand, construing reality in a certain way as required by the language one speaks, and, on the other, acting in certain ways (recollect his example of the gasoline drums marked "empty," suggesting the absence of danger and prompting carelessness with naked flame). In a similar way, utilizing interpretative strategies of particular sorts can be shown to have demonstrable consequences – these become particularly salient when speaker and addressee do not share them, and systematic miscommunication results.[37]

Another set of interesting ideas that emerge is the deconstruction of the notion of "culture" or "community." Communication relies on shared meanings and strategies of interpretation. However, this common ground is distributed in a complex way through social networks. Such networks may constitute effective "sub-cultures," nested communities within communities; but they can also cross-cut linguistic and social boundaries of all sorts, creating regional and even global patterns of shared, similar communicative strategies in specialist networks.

All of these ideas have to be set within the context of the ever-increasing set of universal cognitive constraints that are being discovered. But the sources of meaning-difference are many, and what, seen in grammatical perspective, may seem like little discrepancies can have large and pervasive communicative effects.[38] Thus neither the study of sameness nor that of difference limits the interest of the other.

Given the complexity of the issues raised, the reader will find here no new overall theory. Rather, the aims are much more modest, to introduce the reader to newly discovered, arguably relevant phenomena, to place the constellation of notions associated with linguistic relativity in the context of current theory, and thereby to enrich the original hypothesis. Nevertheless, much of the range of Whorf's interests, from semantic diversity, to cognitive processes, to the nature of culture and the constitution of society, are here reflected.

Notes

1 The prize was won two years later by J. D. Michaelis with the essay "Beantwortung der Frage von dem Einfluss der Meinungen eines Volcks in seine Sprache, und der Sprache in die Meinungen" ("A dissertation on the influence of opinions on language and of language on opinions's). See Cloeren (1988: 11).

2 Compare Boas's endorsement of Bastian's assessment of "the appalling monotony of the fundamental ideas of mankind all over the globe" (quoted Brown 1991: 55).

3 In general, in the Western tradition, from classical antiquity through the Renaissance to the present day, the view that language reflects antecedent

cognitive categories has generally been in the ascendant The deep influence of Aristotle's categories and Boethius's translations, together with his own views, are no doubt part of the explanation (see Marenbon 1988: ch. 3). On the other hand, the question whether the "modes of being, thinking and signifying" are necessarily in parallel, or whether the categories might be mismatched across reality, cognition, and language was a point of active medieval disputation (see Marenbon 1987: 136ff.). Outside the Western tradition, one may find views reminiscent of "linguistic relativity" in, for example, early Indian philosophy, where the word was in some doctrines taken to be an arbitrary conceptual construction, and determinative of cognition and conceptual categories (see Staal 1976: 121–3).

4 A point already made by Hamann in 1760; see Cloeren (1988: 11–12).

5 This aspect of the Humboldtian tradition and the Sapir–Whorf hypothesis is not fully developed in this volume. See Hill (1988) and Hill & Mannheim (1992) for recent reviews of the relevant anthropological literature.

6 Despite this, the theory of translation has not played a central role in twentieth-century thinking on the subject. See however Jakobson (1966) and Steiner (1975), and Quine's (1960) celebrated thesis of the indeterminacy of translation. There is now a burgeoning practical field of translation studies; see, e.g., Baker (1992).

7 A point made decades ago by Hymes (1964, 1972).

8 See, e.g., Kelly (1979), Steiner (1975).

9 See, e.g., Berlin (1993: ch. 6) for references; Cloeren (1988), Aarsleff (1974).

10 See, e.g. Pagden (1982) for a survey of European ideas about the American Indian, in which controversies about language difference play no small part: language was presumed to mirror social development, and the Spanish champions of the Indians like Las Casas were keen to show that the Indian languages had a systematic grammar, while their detractors tried to establish that they lacked abstractions fundamental for intellectual and spiritual development.

11 Hymes's reader (1964: Pt. III) collects together exemplary papers from this tradition, and is still the best source for the student.

12 Whorf himself paints, beyond Sapir and Boas, a different pedigree (1956: 73–8). On the Humboldtian heritage see Aarsleff (1988), Heeschen (1977, 1987), Trabant (1990), Gipper (1972), and references below. Ironically, Humboldtian scholarship seems peculiarly afflicted with the woes of translation (Kelly 1979: 27).

13 See G. Steiner (1975: 74) who cites Leibniz's 1697 tract "On the amelioration and correction of German." A now largely forgotten mid eighteenth-century intellectual figure, Johann Georg Hamann, himself the teacher of Herder, preadumbrates many of Humboldt's views (Berlin 1993). Herder's own role is now controversial: Aarsleff (1982, 1988) has challenged any connection between Herder and Humboldt's views, while Mueller-Vollmer (1990: 9ff.) ridicules this account of intellectual history: "Humboldt is made out to be a kind of German-speaking French ideologue rather than a student and follower of Herder, Kant or Fichte." A convincing case for a long-running and distinctively German tradition of "linguistic relativists" is made by Cloeren (1988). Such ideas were so much in the air that in 1757 the Berlin Academy offered a prize on the theme (see quote at head of this introduction). See also Penn (1972).

14 For this, and many further interesting details, see Hymes & Fought (1975), Koerner (1992).

15 In turn the enlightenment discussion was fed by sixteenth- and seventeenth-century Spanish thought prompted by encounters with New World peoples (see Pagden 1982). For the apparent paradox of the German lack of colonial experience on the one hand and their interest in these issues on the other, there was already an answer suggested by British critics of imperial cruelties in the 1830s: the Germans had no motive to belittle the intellectual achievements of distant peoples (see Boening 1990).

16 See Aarsleff (1988: lxiff).

17 See Koerner (1992: 174).

18 On the origins of structuralism, see Koerner (1975), Engler (1975), Hymes & Fought (1975).

19 Mueller-Vollmer (1990) claims that Herder, and especially Humboldt, actually prefigured the Saussurean concept of the sign, and it is this that distinguishes the German intellectual tradition from the eighteenth-century French one. He quotes an early Humboldt text thus: "The sensory signification of those units into which certain portions of our thinking are united in order to be opposed as parts to other parts of a larger whole... is what may be called language in the widest sense of the word" (1990: 17). On the Humboldtian, and more generally German, origins of structuralism see Koerner (1975).

20 The background to that convergence is well described in Lucy (1992a: ch. 2).

21 Perhaps especially clear in European Saussurean structuralism (for example through Saussure's metaphor of a linguistic system simultaneously dividing form and meaning like scissors cutting a sheet of paper). The surprisingly independent nature of American structuralism is described by Hymes & Fought (1975: 916ff.) who state that there is no evidence that, e.g., Sapir was aware of Saussure's work.

22 Koerner (1992: 181) (but the phrase was current in contemporary German philosophy at the turn of the century – see, e.g., Cloeren's 1988: 206–7 discussion of the ideas of Runze). We make no attempt here to characterize or compare Boas's or Sapir's views with those of Whorf – a concise summary may be found in Lucy (1992a: chs. 1 & 2). See also Jakobson (1944).

23 Whorf's views on the structure of language are much better articulated elsewhere; e.g. "it is not words mumbled, but RAPPORT between words, which enables them to work together at all to any semantic result" (1956: 67). See especially the article "Grammatical categories" ([1945] 1956: 87–101) and the surprisingly "modern" scheme for a typology of languages (1956: 125–33).

24 There has always been considerable disagreement about what Whorf "really meant." Some (e.g. Lucy 1922a) think this can be spelt out as a clear, testable doctrine; others (e.g. Schultz 1990) hold that there has been a systematic suppression of Whorf's mystical views and a failure to recognize that the texts through their very ambiguities and implicit implications articulate a protest against "epistemological monomania."

25 See also selected papers in Hymes (1964: pt. III).

26 This was not necessarily the intention of that work, which was merely to establish perceptual constraints on linguistic coding. In fact Kay & Kempton (1984) demonstrated that differential linguistic coding of colors does indeed effect perceptual judgments.

27 See e.g. Rosch (1977), on the general theory, and Malotki (1983) on Whorf's Hopi data. Many critiques have only a tenuous relation to ideas that Whorf

himself advanced, as in the case of "the great Eskimo vocabulary hoax" (Pullum 1991, see Martin 1986 for a more sober view). See also Lucy (1985, 1992a: ch. 2).

28 But see Silverstein's (1981) insistence that we have differential conscious access to different aspects of grammatical structure, a point taken up in some of the papers in this volume. Jakobson (1944) pointed out that the linguist's own categories of analysis are likely to reflect encodings in his own language.

29 Kamp (1981).

30 Barwise & Perry (1983).

31 Sperber & Wilson (1986).

32 See Levinson (1983: ch. 3), Horn (1989).

33 There is an enormous literature on the notion of indexicality, but useful reference can be made to Jarvella & Klein (1982) for the notions current in much linguistics, philosophy, and psychology, and to Mertz & Parmentier (1985) for the related but distinct Peircean notions, especially in linguistic anthropology.

34 Yet another line of thought investigates how a single task can be solved by distribution over a co-ordinated team: for example, the piloting of a ship involves single seamen each following highly specific procedures (Hutchins 1990).

35 Bourdieu (1976, 1990a: ch. 3, 1990b: ch. 3), Scribner (1992), and Lave (1988) have been influential in purveying these ideas in anthropology. Some of these ideas come originally from the work of Vygotsky; for a compendium of recent views on the implications for language, thought, and culture, see Wertsch (1985).

36 See e.g. Brown & Levinson (1993), Pederson (1995).

37 See Gumperz (1992), Young (1994).

38 See Young (1994) for an illustration of how ideologies of interpersonal relations, grammar, and contextualization strategies interact in communication, and tend to reinforce stereotypes.

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PART I

LINGUISTIC DETERMINISM: THE INTERFACE BETWEEN LANGUAGE AND THOUGHT

INTRODUCTION TO PART I

JOHN J. GUMPERZ AND STEPHEN C. LEVINSON

Language is the formative organ of thought. Intellectual activity, entirely mental, entirely internal, and to some extent passing without trace, becomes through sound, externalized in speech and perceptible to the senses. Thought and language are therefore one and inseparable from each other.

Humboldt ([1836] 1988: 54)

Human beings do not live in the objective world alone, . . . The fact of the matter is that the "real world" is to a large extent unconsciously built up on the language habits of the group...We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.

Edward Sapir, quoted at the head of Whorf
"The relation of habitual thought and behavior to language." (1956: 134)

1 The very idea: causal links between language and thinking

Might the language we speak effect the way we think? Generations of thinkers have been intrigued by this idea. Aarsleff (1988: xviii) summarized Humboldt's influential views thus: "Humboldt's entire view of the nature of language is founded on the conviction that thinking and speaking, thought and language form so close a union that we must think of them as being identical, in spite of the fact that we can separate them artificially. Owing to this identity, access to one of the two will open nearly equal access to the other."[1]

Whorf, as we saw in the introduction, brought to the idea a new and heady mix of an empiricist epistemology, an insistence on the underlying systematicity of language as a structured semantical system, and an emphasis on the unconscious influence of language on habitual thought:[2]

Actually, thinking is most mysterious, and by far the greatest light upon it that we have is thrown by the study of language. This study shows that the forms of a person's thoughts are controlled by inexorable laws of pattern of which he is unconscious. These patterns are the unperceived intricate systematizations of his own language – shown readily enough by a candid comparison and contrast with other languages, especially those of a different linguistic family. His thinking itself is in a language – in English, in Sanskrit, in Chinese. And every language is a vast pattern-system, different from others, in which are culturally ordained the

forms and categories by which the personality not only communicates, but also analyzes nature, notices or neglects types of relationship and phenomena, channels his reasoning, and builds the house of his consciousness.

(Whorf 1956: 252)

The phrase "linguistic determinism" has come to stand for these views that there is a causal influence from linguistic patterning to cognition.[3] Despite phrases like "linguistic conditioning," "linguistic legislation," "inexorable control," etc., Whorf's own considered position seems to have been that language influences unconscious habitual thought, rather than limiting thought potential (see Lucy 1992a: 129ff., Kay & Kempton 1984: 76–7).[4] Thus the phrase "linguistic determinism" should be understood to imply that there is *at least some* causal influence from language categories to non-verbal cognition; it was not intended to denote an exclusive causal vector in one direction – probably no proponent has held the view that what cannot be said cannot be thought.[5]

The idea that language could determine (however weakly) the nature of our thinking nowadays carries more than a faint whiff of anachronism; rather it seems to belong to an altogether different age, prior to the serious study of mind as an information processing device.[6] That device, in the predominant metaphor of our time, is instantiated in "wetware," whose properties are in turn dictated by the genetic code of the species. Although those properties are only dimly understood, still it is generally presumed, as Fodor (1983) has influentially put it, that the mind is "modular," composed of subsystems specialized to the automatic unconscious processing of particular kinds of information, visual, auditory, haptic, and so on. Since we can, for example, talk about what we see, the output of these specialized systems must, it seems, be available to some central information processing system, where "thinking," in the sense of ratiocination and deliberation, occurs. This picture (a close analogy of course to the computers of the day) of a single generalized central processor with specialized input/output devices is beginning to give way to a more complex version: each specialized input/output device is itself a system of modules, while "central processes" may themselves be differentiated into different "languages of thought" (propositional, imagistic, and so on)[7] – a view that the paper by Keller & Keller in this section addresses. Nevertheless the essentials of the Fodorean view are very generally held.

Thus, on this widespread view, we can expect thinking in all essentials to have universal properties, to be couched in an inner language structurally the same for all members of the species, and to be quite unrelated to the facts of linguistic diversity (see, e.g., Fodor 1983). The tenor of the anti-Whorfian assumptions can be gauged from the following quotations: "For the vocabulary of the language, in and of its self, to be a

moulder of thought, lexical dissections and categorizations of nature would have to be almost accidentally formed, rather as though some Johnny Appleseed had scattered named categories capriciously over the earth" (Rosch 1977: 519); "Whorf's hypothesis [of linguistic determinism] has engendered much confusion, and many circular arguments. Its converse often seems more plausible" (Wason & Johnson-Laird 1977: 411), and "there is no evidence for the strong version of the hypothesis – that language imposes upon its speakers a particular way of thinking about the world" (p. 442); "The discussions that assume that language determines thought carry on only by a collective suspension of disbelief" (Pinker 1994: 58).

In short, many authors find the thesis of linguistic determinism wildly adventurous or even ridiculous. On the other hand, others have recently claimed to find it sober and plausible (amongst them Steiner 1975, Lee 1991, Lucy 1992a, b, together with some other contributors to this volume). It is therefore useful to attempt to clarify the issues by dissecting the relativity hypothesis into its component parts, and in particular by isolating the "determinism" hypothesis from other linked ideas. Clearly, the hypothesis of linguistic relativity relies on the presumption of linguistic difference. Thus the discovery of universals may have a bearing on that hypothesis.[8] But the hypothesis that linguistic categories might determine aspects of non-linguistic thinking is quite independent of facts about linguistic difference.[9] Let us therefore spell out the nexus of interlinked hypotheses (where the numbers [1] and [2] refer to the premises and the number [3] to an implied conclusion).[10]

[1] *Linguistic difference*
Languages differ substantially in their semantic structure: both the intensions (the senses) and extensions (the denotations) of lexical and morpho-syntactic categories may differ across languages (and may do so independently).[11]

[2] *Linguistic determinism*
Linguistic categorizations, implicit or explicit, may determine or co-determine or influence aspects of non-linguistic categorization, memory, perception or thinking in general.

This is often said to have a "strong" and a "weak" form: under the strong claim, linguistically uncoded concepts would be unattainable; under the weak form, concepts which happen to be linguistically coded would be facilitated or favored (e.g. would be more accessible, easier to remember, or the default coding for non-linguistic cognition).[12]

The mechanisms whereby semantic distinctions may have an influence on cognition can be left open; a prior task is to show that there is indeed

some correlation. Whorf himself of course held the view that the unconscious "compulsive patterning" of grammatical oppositions would play a special role in habitual unreflective patterns of thought.[13]

Linguistic relativity
Given that:
(1) differences exist in linguistic categories across languages;
(2) linguistic categories determine aspects of individuals' thinking;

then:
(3) aspects of individuals' thinking differ across linguistic communities according to the language they speak.

Note that the conclusion here will hold even under the weakest versions of (1) and (2). Thus if there is *at least some* aspect of semantic structure that is not universal, *and at least some* cognitive effect of such distinctive semantic properties, then there must be *at least some* systematic cognitive variation in line with linguistic difference. That would seem, as Lucy (1992a: 3) puts it, to be as trivially true as the strongest version of linguistic relativity (that one's semantic inventory of concepts provides one's total vocabulary of thoughts) is trivially false.[14] Thus the central problem is to illuminate the degrees of language difference, and the ways in which semantics and cognitive categories and processes interact.

Now notice that modern views complicate this picture by apparently subscribing to various aspects of these propositions while robustly denying the conclusion in the syllogism above. For example, a common modern stance is:

(1') languages differ in semantic structure, but only at a molecular level – at an atomic level, the conceptual "atoms" (e.g. "male," "adult," etc.) are identical, and are merely assembled into some culture-specific notion like "uncle";[15]
(2') "determinism" between semantic categories and conceptual categories is in a sense trivially complete, since they are one and the same – the meanings of words are expressed in a "language" that is identical to the "language of thought." However, the directionality of the determinism runs from universal cognition to linguistic semantics (Jackendoff 1983, Lakoff 1987, Hale & Keyser 1987).

Thus although the identity of linguistic and conceptual categories in (2') alone might be thought to entail linguistic relativity, it is in fact usually associated with some claim (often implicit) like that in (1'), allowing subscribers to presume that the "language of thought" (alias: system of semantic representations) is universal. Then the conclusion in

(3) no longer follows. In schematic form we may now oppose the two views thus:

The Whorfian syllogism

(1) Different languages utilize different semantic representation systems which are informationally non-equivalent[16] (at least in the sense that they employ different lexical concepts);
(2) semantic representations determine aspects of conceptual representations;
therefore
(3) users of different languages utilize different conceptual representations.

The anti-Whorfian syllogism

(1') Different languages utilize the same semantic representation system (if not at the molecular then at least at the atomic level of semantic primes);
(2') universal conceptual representations determine semantic systems, indeed THE semantic representation system just is identical to THE propositional conceptual system (the innate "language of thought");
therefore
(3') users of different languages utilize the identical conceptual representation system.

Despite the fact that the doctrines appear diametrically opposed,[17] they are nevertheless, on suitable interpretations, *entirely compatible*, as long as one subscribes to the distinction between atomic and molecular levels of semantic representation. Then, on an atomic level, semantic representations, and their corresponding conceptual representations, are drawn from a universal language of thought, while on the molecular level there are language-specific combinations of universal atomic primitives, which make up lexical meanings (and meanings associated with morpho-syntactic distinctions) and which may have specific conceptual effects.

Most semantic analysts in practice work with an assumption of such "semantic decomposition" of linguistic expressions.[18] But it is worth pointing out that there are in fact fundamental problems with that assumption which have long been recognized (Kempson 1977; Fodor 1975; Fodor, Fodor & Garrett 1975; Putnam 1988: 5ff.), and some of those who subscribe enthusiastically to (2') might lose some of their enthusiasm if they realized that without (1'), (2') implies the strongest version of linguistic relativity.[19]

Let us take stock. Proposition (1) is evidently true, in the sense that languages clearly employ distinct lexical meanings. (1') may or may not