

1 Introduction



1. Language and Meaning

Language is an instrument for conveying meaning. The structure of this instrument reflects its function, and it can only be properly understood in terms of its function. To study language without reference to meaning is like studying road signs from the point of view of their physical properties (how much they weigh, what kind of paint are they painted with, and so on), or like studying the structure of the eye without any reference to seeing.

Curiously, however, this is precisely how many linguists study language. A science of language in which meaning has at best a very marginal place is an anomaly and an aberration (which in itself will present an absorbing topic of study for the future historians of linguistics); and of course not all present-day linguists approach the study of language in that spirit. Yet in university curricula currently adopted in many linguistics departments throughout the world, "formal syntax" still occupies a far more central place than semantics (the study of meaning), and semantics is still often treated as marginal.

Two twentieth-century American linguists have been particularly influential in shaping a "linguistics without meaning": Leonard Bloomfield and Noam Chomsky.

Bloomfield (unlike his great contemporary and co-founder of American linguistics, Edward Sapir) was afraid of meaning, and was eager to relegate the study of meaning to other disciplines such as sociology or psychology. The reason he was afraid of it was that he wanted to establish linguistics as a science and that he thought that meaning couldn't be studied with the same rigour as linguistic sounds and forms. Bloomfield's behaviourism made him find all references to ideas, concepts, thoughts, or mind unscientific; "mentalism" was used by him, and by many other influential linguists of his generation, as a dirty word.¹ As Randy Allen Harris, the author of *The Linguistics Wars* (1993: 27-8), put it: "Bloomfield's ideas defined the temper of the linguistic times: that it [linguistics] was a descriptive and

¹ As a close collaborator of Sapir, Morris Swadesh (1941: 59), pointed out, another confirmed behaviourist, Twaddell, "criticized Sapir as a mentalist dealing with an 'unknown and unknowable mind'".

Bloomfield
Chomsky
Linguistics
Significance

Matthews 1973 *critica di Bloomfield*

4 General Issues

taxonomic science, like zoology, geology, and astronomy; that mental speculations were tantamount to mysticism, an abandonment of science; that all the relevant psychological questions (learning, knowing, and using a language) would be answered by behaviorism; that meaning was outside the scope of scientific inquiry."

It has often been said, in Bloomfield's defence, that it wasn't Bloomfield himself but the "Bloomfieldians" or "post-Bloomfieldians" (and especially Chomsky's mentor Zeillig Harris) who sought to banish meaning from linguistics. For example, Matthews (1943: 114) points out that even "in one of his last general papers he [Bloomfield] continued to make clear that 'in language, forms cannot be separated from meanings'" (1943; in Hockett 1970: 401). But it is not unreasonable to say that what the Post-Bloomfieldians did was to take Bloomfield's largely (though not consistently) anti-semantic stand to its logical conclusion.

Matthews tries to explain why Bloomfield's successors "came to believe that forms could and should be described without reference to meaning" and "why, in adopting a theory in which the separation of form and meaning was axiomatic, they were so sure they were continuing his work". He notes that the usual explanation given is "that however central meaning may have been and however important its investigation, Bloomfield's account of how it should be described effectively closed the door to scientific study" (1993: 115). Matthews seeks to distance himself from this conclusion but in my view it is inescapable.

Bloomfield didn't "reject" meaning in the sense of avoiding any mention of it in linguistic description but he did want to exclude semantic considerations from linguistic analysis. For example, he ridiculed the idea that the grammatical category of number (singular versus plural) has a semantic basis and could be defined with reference to meaning: "school grammar defines the class of plural nouns by its meaning 'more than one' (person, place, or thing), but who could gather from this that *oats* is a plural while *wheat* is a singular? Class-meanings, like all other meanings, elude the linguist's power of definition." (1933/1935: 266)²

Bloomfield himself denied that he had ever wanted to "undertake to study language without meaning, simply as meaningless sound" (letter to Fries; quoted in Hymes and Fought 1975: 1009); but the message of *Language* was none the less loud and clear: there was no room for semantics within the "linguistic science", at least not for the foreseeable future.

We have defined the *meaning* of a linguistic form as the situation in which the speaker utters it and the response which it calls forth from the hearer. . . . The sit-

² Curiously, Bloomfield didn't pay any attention to the fact that *oats* is not a "plural" contrasting with a singular (like, for example, *dogs* contrasts with *dog*) and that it doesn't really belong to the same "form class" as *dogs* does. The "form class" to which *oats* belongs, and its invariant meaning, is discussed in Chapter 13. (See also Wierzbicka 1988.)

Rivoluzione cognitiva
→ CHOMSKY *priority della sintassi* 1. Introduction 5

uations which prompt people to utter speech include every object and happening in their universe. In order to give a scientifically accurate definition of meaning for every form of a language, we should have to have a scientifically accurate knowledge of everything in the speakers' world. The actual extent of human knowledge is very small, compared to this. We can define the meaning of a speech-form accurately when this meaning has to do with some matter of which we possess scientific knowledge. We can define the names of minerals, for example, in terms of chemistry and mineralogy, as when we say that the ordinary meaning of the English word *salt* is 'sodium chloride (NaCl)', and we can define the names of plants or animals by means of the technical terms of botany or zoology, but we have no precise way of defining words like *love* or *hate*, which concern situations that have not been accurately classified—and these latter are in the great majority. . . .

The statement of meaning is therefore the weak point in language study, and will remain so until human knowledge advances very far beyond its present state. In practice, we define the meaning of a linguistic form, wherever we can, in terms of some other science. Where this is impossible, we resort to makeshift devices.³ (Bloomfield 1933/1935: 139-40)

Thus, for Bloomfield meaning could be referred to, but not studied, and given his "anti-mentalist", behaviouristic conception of meaning, it could scarcely have been otherwise.

As Hymes and Fought (1975: 1010) put it, "Bloomfield included meaning in his conception of language structure but not in his short-term linguistic theory. . . . scepticism as to the practical possibility of incorporating meaning explicitly in linguistic analysis led to shifts . . . to reliance on distributional patterning . . . among the Bloomfieldians."

The "cognitive revolution" of the late fifties and the sixties banished (or so it seemed) the ghost of behaviourism, and made mind, and meaning, a central concern of human sciences in general, and of linguistics in particular. To quote one of the main actors of the "cognitive revolution", Jerome Bruner (1990: 1): "That revolution was intended to bring 'mind' back into the human sciences after a long cold winter of objectivism." For Bruner, "mind" is closely related to "meaning": "Now let me tell you first what I and my friends thought the revolution was about back there in the late 1950s. It was, we thought, an all-out effort to establish meaning as the central concept of psychology—not stimuli and responses, not overtly observable behavior, not biological drives and their transformation, but meaning" (p. 2). But, in his own words, Bruner's is not "the usual account of progress marching ever forward" (p. 1); for in his view, "that revolution has now been diverted into issues that are marginal to the impulse that brought it

³ Bloomfield's reference to "NaCl" as "the ordinary meaning of the English word *salt*" highlights his failure to distinguish scientific knowledge from "ordinary meaning", as do also his remarks on the names of plants and animals. For detailed discussion of these matters see Chapters 11 and 12. As for the meaning of emotion terms (such as *love* and *hate*), see Chapter 5.

into being. Indeed, it has been technicalized in a manner that even undermines the original impulse" (p. 1). What has been lost sight of is meaning.

Very early on, for example, emphasis began shifting from "meaning" to "information," from the *construction* of meaning to the *processing* of information. These are profoundly different matters. The key factor in the shift was the introduction of computation as the ruling metaphor and of computability as a necessary criterion of a good theoretical model. Information is indifferent with respect to meaning. (p. 4)

Very soon, computing became the model of the mind, and in place of the concept of meaning there emerged the concept of computability. (p. 6)

It was inevitable that with computation as the metaphor of the new cognitive science and with computability as the necessary if not sufficient criterion of a workable theory within the new science, the old malaise about mentalism would re-emerge. (p. 8)

Bruner decries the "cognitive revolution" for abandoning meaning as its central concern and for "opting for 'information processing' and computation instead" (137); and he urges "that psychology stop trying to be 'meaning-free' in its system of explanation" (20).

But if psychology has been betrayed by the "cognitive revolution", with its escape from meaning, what is one to say of linguistics, in which the promising early references to "mind" (as in Chomsky's *Language and Mind*), have led to a preoccupation with formalisms, and in which "meaning-free" syntax has for decades usurped the place rightfully belonging to the study of meaning? Oliver Sacks (1993: 48) summarizes the "hijacking" of the "cognitive revolution" as follows: "Bruner describes how this original impetus was subverted, and replaced by notions of computation, information processing, etc., and by the computational (and Chomskyan) notion that the syntax of a language could be separated from its semantics." Sacks strongly endorses Bruner's position, and comments: "From Boole, with his 'Laws of Thought' in the 1850s, to the pioneers of Artificial Intelligence at the present day, there has been a persistent notion that one may have an intelligence or a language based on pure logic, without anything so messy as 'meaning' being involved."

Unfortunately, as noted by Sacks, this persistent notion was shared by the main *spiritus movens* of the "cognitive revolution" in linguistics, Noam Chomsky, whose influence on the field can hardly be overestimated.

Despite his mentalist, anti-Bloomfieldian stand, in his attitude to meaning Chomsky remained (and still remains) a Bloomfieldian. Like Bloomfield, "he ... had a deep methodological aversion to meaning, and his work reinforced one of the key elements of the Bloomfieldian policy toward meaning: it had to be avoided in formal analysis" (R. A. Harris 1993: 59).

I agree with Harris (1993: 252) that while some "prefer to look at Chomsky's impact on linguistics as the last gasp of Bloomfieldianism", such a view is "far too narrow". But one also has to agree with Chomsky's critics that although he broke, in a way, Bloomfield's taboo on mind, Chomsky's professed mentalism proved to be as inimical to the study of meaning as was Bloomfield's behaviourism. To quote one critic (Edelman 1992: 243):

One of the most pervasive and influential approaches to these critical questions [of how language and thought are connected] was pioneered by Chomsky. In his formal systems approach, the principal assumption is that the rules of syntax are independent of semantics. Language, in this view, is independent of the rest of cognition. I must take issue with this notion.

The set of rules formulated under the idea that a grammar is a formal system are essentially algorithmic. In such a system, no use is made of meaning. Chomsky's so-called generative grammar ... assumes that syntax is independent of semantics and that the language faculty is independent of external cognitive capabilities. This definition of grammar is impervious to any attempt to disconfirm it by referring to facts about cognition in general. A language defined as a set of strings of uninterpreted symbols generated by production rules is like a computer language.

This brings us back to Bruner's remarks quoted earlier. As he points out (1990: 1), "the new cognitive science, the child of the [cognitive] revolution, has gained in technical successes at the price of dehumanizing the very concept it had sought to reestablish in psychology, and ... has thereby estranged much of psychology from the other human sciences and the humanities". The same can be said about linguistics.

In talking about a "linguistics without meaning" I do not wish to underestimate the work done in linguistic semantics over the last several decades. Nor would I question the significance of the other trends in linguistics that sought to transcend the limitations imposed upon the discipline by generative grammar. Harris (1993) and others are right to rejoice in the "greening of linguistics" of the last decade or two, with the dynamic development of functional linguistics, cognitive linguistics, pragmatics, and so on. At the same time, however, I think that the Bloomfieldian and Chomskyan anti-semantic bias is still hanging over linguistics like a dark shadow. The fact that "formal syntax" still occupies a prominent place in the curricula of many linguistic departments, at the expense of the study of language as an instrument for conveying meaning, gives sufficient substance to this claim.

In the latest version of Chomskyan linguistics references to meaning are apparently no longer disallowed. But this does not change its basically anti-semantic orientation. Chomsky no longer asserts that "if it can be shown that meaning and related notions do play a role in linguistic analysis, then ... a serious blow is struck at the foundations of linguistic theory" (1955:

141). But he none the less remains what he has always been: "a deep and abiding syntactic fundamentalist" (R. A. Harris 1993: 139). Matthews (1993: 245) sums up his comments on the place of meaning in Chomsky's recent work as follows: "Where did that leave an account of meaning? Chomsky, as always, is primarily a student of syntax, or of 'grammar' in a traditional sense. Therefore we can expect, as always, little more than programmatic statements and passing remarks."

Nor has the semantic void created by the "syntactic fundamentalism" of Chomskyan grammar been filled by the so-called "formal semantics", which also features prominently in the teaching programmes of many linguistics departments.

Despite its name, "formal semantics" (or "model-theoretical semantics") doesn't seek to reveal and describe the meanings encoded in natural language, or to compare meanings across languages and cultures. Rather, it sees its goal as that of translating certain carefully selected types of sentences into a logical calculus. It is interested not in meaning (in the sense of conceptual structures encoded in language) but in the logical properties of sentences such as entailment, contradiction, or logical equivalence or, as Chierchia and McConnell-Ginet (1990: 11) put it, in "informational significance", not in "cognitive significance". (Cf. Bruner's (1990: 4) comments on the shift from "meaning" to "information", quoted earlier.)

To quote one noted formal semanticist (of the "Montague grammar" school), "the model theoretic intension of a word has in principle *nothing whatsoever* to do with what goes on in a person's head when he uses that word" (Dowty 1978: 379). Having explained that in model-theoretical semantics the meaning of a sentence is seen as "a set of possible worlds", Dowty acknowledges that "one may reasonably doubt whether sets of possible worlds have anything at all to do with the psychological process of sentence comprehension", and he admits that "there is no sense in which a person mentally has access to 'all the possible worlds that there are'" (376).

Thus, Chomskians like to talk about "mind", but do not wish to study meaning, and "formal semanticists" like to talk about "meaning" but only in the sense of possible worlds or truth conditions, not in the sense of conceptual structures. One thing that both schools share is the great emphasis they place on being formal. This emphasis on formal models, at the expense of a search for meaning and understanding, brings to mind, again, Bruner's (1990: 65) remarks about psychology: "It simply will not do to reject the theoretical centrality of meaning for psychology on the grounds that it is 'vague'. Its vagueness was in the eye of yesterday's formalistic logician. We are beyond that now."

Despite all the promises of the "cognitive revolution" in human sciences in general and of the "Chomskyan revolution" in linguistics, now, at the close of the century, meaning (not the logician's "meaning" but the mean-

ing which underlies human cognition, communication, and culture) is still regarded by many linguists as messy and as "the weak point of language study" (Bloomfield 1933/1935: 140). This book hopes to demonstrate that it doesn't have to be so.

2. Semantic Primitives (or Primes)

To put it briefly, in human speech, different sounds have different meanings. To study this co-ordination of certain sounds with certain meanings, is to study language.

Leonard Bloomfield (1933/1935: 27)

How is it possible to admit that to study language is to study the correlations between sound and meaning and, at the same time, to try to keep linguistics maximally "meaning-free"? Bloomfield's own reason for this contradictory position is quite clear: he wanted linguistics to be a serious and rigorous discipline—"a science"; and it was not clear at the time how, if at all, meaning could be studied in a rigorous and "scientific" manner. In fact, even today, many defenders of the central role of meaning in linguistics don't seem to mind if meaning is spoken of in a loose, vague, *ad hoc* way, without any coherent methodology. On this point, I must say that I agree with Bloomfield: if we really want to study, in a rigorous way, correlations between sounds and meanings (or between forms and meanings), our standards of rigour and coherence in talking about meaning should be just as high and exacting as in talking about sounds and forms.

As I have tried to demonstrate for a quarter of a century, the key to a rigorous and yet insightful talk about meaning lies in the notion of semantic primitives (or semantic primes).

To take an example. Two prominent researchers into child language and the authors of a very valuable study on the acquisition of meaning, Lucia French and Katherine Nelson (1985: 38), start their discussion of the concept "if" by saying: "it is difficult to provide a precise definition of the word *if*". Then, after some discussion, they conclude: "The fundamental meaning of *if*, in both logic and ordinary language, is one of implication."

Two common assumptions are reflected in these statements. First, that it is possible to define all words—including *if*—and second, that if a word seems difficult to define, one had better reach for a scientific-sounding word of Latin origin (such as *implication*). In my view, these assumptions are not only false, but jointly constitute a stumbling-block for semantic analysis. One cannot define all words, because the very idea of 'defining' implies that there is not only something to be defined (a

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definiendum) but also something to define it with (a definiens, or rather, a set of "definienses").

The elements which can be used to define the meaning of words (or any other meanings) cannot be defined themselves; rather, they must be accepted as "indefinita", that is, as semantic primes, in terms of which all complex meanings can be coherently represented. A definition which attempts to explain the simple word *if* via the complex word *implication* flies in the face of the basic principle of sound semantic analysis put forward more than two millennia ago by Aristotle (1937: 141^a):

First of all, see if he [the analyst] has failed to make the definition through terms that are prior and more intelligible. For the reason why the definition is rendered is to make known the term stated, and we make things known by taking not any random terms, but such as are prior and more intelligible . . . accordingly, it is clear that a man who does not define through terms of this kind has not defined at all.

It could be argued that what is clear to one person may not be clear to another, and that therefore no absolute order of semantic simplicity can be established. To this, however, Aristotle had an answer: what matters is not what is more intelligible to particular individuals, but what is semantically more basic and thus inherently more intelligible:

For, as it happens, different things are more intelligible to different people, not the same things to all . . . Moreover, to the same people different things are more intelligible at different times . . . so that those who hold that a definition ought to be rendered through what is more intelligible to particular individuals would not have to render the same definition at all times even to the same person. It is clear, then, that the right way to define is not through terms of that kind, but through what is absolutely more intelligible: for only in this way could the definition come always to be one and the same.

The "absolute order of understanding" depends on semantic complexity. For example, one cannot understand the concepts of 'promise' or 'denounce' without first understanding the concept of 'say', for 'promise' and 'denounce' are built upon 'say'. Similarly, one cannot understand the concepts of 'deixis', 'demonstration', or 'ostension' without first understanding the concept of 'this', on which they are built; and one cannot understand the concept of 'implication' without first understanding the semantically more basic concept of 'if'.

When someone shows me a child who understands and can use the word *implication* but has not yet learned to understand and to use the word *if*, I will admit that everything is relative in semantics. Until such time, however, I will maintain that Aristotle was right, and that, despite all the interpersonal variation in the acquisition of meaning, there is also an "absolute order of understanding", based on inherent semantic relations among words.

This is, then, one of the main assumptions of the semantic theory, and

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semantic practice, presented in this book: meaning cannot be described without a set of semantic primitives; one can purport to describe meaning by translating unknowns into unknowns (as in Pascal's (1667/1954: 580) mock-definition "Light is the luminary movement of luminous bodies"), but nothing is really achieved thereby.

Without a set of primitives all descriptions of meaning are actually or potentially circular (as when, for example, *to demand* is defined as 'to request firmly', and *to request* as 'to demand gently'; see Wierzbicka 1987a: 4).

Any set of primitives is better than none, because without some such set semantic description is inherently circular and, ultimately, untenable. This doesn't mean, however, that it is a matter of indifference what set of primitives one is operating with, as long as one has some such set. Far from it: the best semantic descriptions are worth only as much as the set of primitives on which they are based. For this reason, for a semanticist the pursuit of an optimal set of primitives must be a matter of first importance. "Optimal" from what point of view? the sceptics ask. From the point of view of understanding. Semantics is a search for understanding, and to understand anything we must reduce the unknown to the known, the obscure to the clear, the abstruse to the self-explanatory.

* As I pointed out in my *Semantic Primitives* (Wierzbicka 1972: 3), constructors and students of artificial languages often place great emphasis on the arbitrariness of "primitive terms". For example, Nelson Goodman (1951: 57) wrote: "It is not because a term is indefinable that it is chosen as primitive; rather, it is because a term has been chosen as primitive for a system that it is indefinable . . . In general, the terms adopted as primitives of a given system are readily definable in some other system. There is no absolute primitive, no one correct selection of primitives."

But the idea that the same applies to the semantics of natural language is a fallacy, and a recipe for stagnation in semantic research. There is of course no reason why linguists shouldn't invent arbitrary sets of primitives and "define" whatever they like in terms of such sets. But it will do little to advance our understanding of human communication and cognition. To quote Leibniz:

If nothing could be comprehended in itself nothing at all could ever be comprehended. Because what can only be comprehended via something else can be comprehended only to the extent to which that other thing can be comprehended, and so on; accordingly, we can say that we have understood something only when we have broken it down into parts which can be understood in themselves. (Leibniz 1903/1961: 430; my translation)

Semantics can have an explanatory value only if it manages to "define" (or explicate) complex and obscure meanings in terms of simple and self-explanatory ones. If a human being can understand any utterances at all

(someone else's or their own) it is only because these utterances are built, so to speak, out of simple elements which can be understood by themselves.

This basic point, which modern linguistics has lost sight of, was made repeatedly in writings on language by the great thinkers of the seventeenth century such as Descartes, Pascal, Arnauld, and Leibniz. For example, Descartes wrote:

Further I declare that there are certain things which we render more obscure by trying to define them, because, since they are very simple and clear, we cannot know and perceive them better than by themselves. Nay, we must place in the number of those chief errors that can be committed in the sciences, the mistakes committed by those who would try to define what ought only to be conceived, and who cannot distinguish the clear from the obscure, nor discriminate between what, in order to be known, requires and deserves to be defined, from what can be best known by itself. (1701/1931: 324)

For Descartes, then, as for Leibniz, there was no question of "choosing" some arbitrary set of primitives. What mattered was to establish which concepts are so clear that they cannot be understood better than by themselves; and to explain everything else in terms of these.

This basic principle was applied first of all to lexical semantics, and was phrased in terms of the definability of words. For example, Pascal wrote:

It is clear that there are words which cannot be defined; and if nature hadn't provided for this by giving all people the same idea all our expressions would be obscure; but in fact we can use those words with the same confidence and certainty as if they had been explained in the clearest possible way; because nature itself has given us, without additional words, an understanding of them better than what our art could give through our explanations. (1667/1954: 580)

Similarly, Arnauld:

Our first observation is that no attempt should be made to define all words; such an attempt would be useless, even impossible, to achieve. To define a word which already expresses a distinct idea unambiguously would be useless; for the goal of definition—to join to a word one clear and distinct idea—has already been attained. Words which express ideas of simple things are understood by all and require no definition . . .

Further, it is impossible to define all words. In defining we employ a definition to express the idea which we want to join to the defined word; and if we then wanted to define "the definition," still other words would be needed—and so on to infinity. Hence, it is necessary to stop at some *primitive words*, which are not defined. To define too much is just as great a failing as to define too little: Either way we would fall into the confusion that we claim to avoid. (1662/1964: 86-7; emphasis added)

Chomsky, despite his claims that generative grammar was a continuation of "Cartesian linguistics" (see Chomsky 1966), has always omitted any mention of this central thread in the Cartesian (as well as the Leibnizian)

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theory of language and mind. (See also the references to the "Cartesian conception" of language and cognition in Chomsky's more recent writings, e.g. in Chomsky 1991a).

My own interest in the pursuit of non-arbitrary semantic primitives was triggered by a lecture on this subject given at Warsaw University by the Polish linguist Andrzej Bogusławski in 1965. The "golden dream" of the seventeenth-century thinkers, which couldn't be realized within the framework of philosophy and which was therefore generally abandoned as a utopia, could be realized, Bogusławski maintained, if it was approached from a linguistic rather than from a purely philosophical point of view. The experience and achievements of modern linguistics (both empirical and theoretical) made it possible to approach the problem of conceptual primitives in a novel way; and to put it on the agenda of an empirical science.

Leibniz's theory of an "alphabet of human thoughts" (1903/1961: 435) could be dismissed as a utopia because he never proposed anything like a complete list of hypothetical primitives (although in his unpublished work he left several partial drafts, see Leibniz 1903). As one modern commentator wrote, having pointed out the difficulties involved in the proposed search: "In these circumstances it is understandable that Leibniz should consistently avoid the obvious question as to the number and type of fundamental concepts. The approach would be more convincing if one could at least gain some clue as to what the table of fundamental concepts might look like" (Martin 1964: 25).

The best clues as to what the table of fundamental concepts might look like come from the study of languages. In this sense linguistics has a chance of succeeding where philosophical speculation has failed. This book, which is based on linguistic research undertaken (by colleagues and myself) over three decades, does propose a complete (if hypothetical) table of fundamental human concepts capable of generating all other concepts (see Chapter 2). Crucially, this list purports also to be a table of lexical universals—a point which will be discussed in the next section.

3. Lexical Universals

In the theory presented in this book it was hypothesized, from the start, that conceptual primitives can be found through in-depth analysis of any natural language; but also, that the sets of primitives identified in this way would "match", and that in fact each such set is just one language-specific manifestation of a universal set of fundamental human concepts.

For example, it was expected that the concepts 'someone', 'something', and 'want', which are indefinable in English, would also prove to be inde-

finable in other languages; and that other languages, too, will have words (or bound morphemes) to express these concepts.

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This expectation was based on the assumption that fundamental human concepts are innate, in other words that they are part of the human genetic endowment; and that if they are innate, then there is no reason to expect that they should differ from one human group to another.

It was also based on the experience of successful communication between native speakers of different languages. Since the indefinable concepts—the primitives—are the fundament on which the semantic system of a language is built, if this fundament were in each case different, speakers of different languages would be imprisoned in different and incommensurable conceptual systems, without any possibility of ever reaching anyone outside one's own prison. This is contrary to human experience, which points, rather, to the existence of both differences and similarities in the human conceptualization of the world; and which tells us that while cross-cultural communication is difficult, and has its limitations, it is not altogether impossible.

The assumption that all languages, however different, are based on isomorphic sets of semantic primitives is consistent with that experience.

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 Until recently, this assumption was based largely on theoretical considerations rather than on empirical studies of different languages of the world. This situation, however, has changed with the publication of *Semantic and Lexical Universals* (Goddard and Wierzbicka 1994b)—a collection in which conceptual primitives posited initially on the basis of a mere handful of languages were subjected to a systematic study across a wide range of languages from different families and different continents. The languages investigated in this volume included: Ewe (of the Niger-Congo family in West Africa), Mandarin Chinese, Thai, Japanese, the Australian languages Yankunytjatjara, Arrernte (Aranda), and Kayardild, three Misumalpan languages of Nicaragua, the Austronesian languages Acehnese (of Indonesia), Longgu (of the Solomon Islands), Samoan, and Mangap-Mbula (of New Guinea), the Papuan language Kalam, and—the only European language beside English—French.

This first large-scale attempt to test hypothetical conceptual primitives cross-linguistically did not answer all the questions, but except for one or two grey areas requiring further investigation, the studies included in the volume did strongly support the hypothesized set of primitives. In most cases, words (or bound morphemes) for the proposed primitives (e.g. 'I' and 'you', 'someone' and 'something', 'where' and 'when', 'big' and 'small', 'good' and 'bad', or 'do' and 'happen') could be readily identified.

In his discussion of "universalism" in semantics, John Lyons (1977: 331–2) stated that as far as he could see, no one advocates the most extreme form of "semantic universalism", that is, the position that "there is a fixed set of semantic components, which are universal in that they are lexicalized

→ Tesi dell' universalismo semantico

in all languages". But it is precisely this strongest universalist hypothesis which was tested in *Semantic and Lexical Universals*, and which also underlies the present book.

While the theory presented in this book is radically universalist, two provisos must be entered: first, that I fully accept the Humboldtian view that despite the presence of universals, on the whole the semantic systems embodied in different languages are unique and culture-specific; and second, that the presence of "embodied" (that is, lexicalized) universals does not mean perfect equivalence in language use. Both these points require some elaboration.

Humboldt
 As all translators know to their cost, every language has words which have no semantic equivalents in other languages, and every language draws semantic distinctions which other languages do not. For example, translating the classic texts of the Hindu cultural tradition into European languages one must face the fact that these languages do not have words coming even near in meaning to key Sanskrit terms such as *nirvana*, *brahman*, *atman*, or *karma* (see Bolle 1979: 219–58). But even comparing languages which are genetically, geographically, and culturally very close, for example French and English, one constantly encounters examples of profound lexical differences. For example, the French word *malheur* has no counterpart in English, as pointed out by the English translator of Simone Weil's meditations on this concept, who finally in desperation decided to use, throughout his translation, the totally inadequate English word "affliction" (Weil 1972: 63).

In a sense, most words in all languages are like the French *malheur*, that is, unrenderable (without distortion) in some other languages. More than that, every language has words which are intimately bound up with one particular culture and which have no equivalents in any other languages. (See e.g. Wierzbicka 1991b, 1992a). At the same time, all languages also have words which—unlike *malheur*—do appear to have semantic counterparts in all other languages. The hypothesis explored in this book (and in the work which led to it) is that in every language the set of such readily "translatable" words coincides with the set of this language's indefinables.

Within a particular language, every element belongs to a unique network of elements, and occupies a particular place in a unique network of relationships. When we compare two, or more, languages we cannot expect to find identical networks of relationships. We can, none the less, expect to find corresponding sets of indefinables.

It is this (limited) isomorphism in the lexicon (and, as we shall see, also in grammar) that gives substance to the notion of universal semantic primitives.

For example, the English words *big* and *small* correspond in meaning to the Russian words *bol'soj* and *malen'kij*, even though in English, *small* has

* Universalismo tabulicula
* Innatismo
* Telahismo

also a special relationship with *little*, and even though in Russian, *malen'kij*—formally a diminutive—has a special relationship with diminutive adjectives such as *belen'kij* ('white' + DIM) or *kruglen'kij* ('round' + DIM). Whatever the differences in "resonance" (see Section 8.7) between *small* and *malen'kij* are, these differences cannot be shown through definitions; and so, from a definitional point of view, they constitute a "perfect" match (in the systems of English and Russian indefinables, they occupy the same slot). Similarly, regardless of any differences in "resonance" (and use), the Japanese words *ookii* and *tsurai* constitute a perfect semantic match for *big* and *small*, and the Japanese words *ii* and *warui*, for *good* and *bad*. (See Onishi 1994.)

Furthermore, it is only the postulated isomorphism of exponents of conceptual primitives which allows us to compare different semantic systems at all. For any comparison requires a *tertium comparationis*, a common measure. The hypothesized set of universal semantic primitives offers us such a common measure and thus makes it possible to study the extent of semantic differences between languages.

So the theory presented here combines, in a sense, radical universalism with thoroughgoing relativism. It accepts the uniqueness of all language-and-culture systems, but posits a set of shared concepts, in terms of which differences between these systems can be assessed and understood; and it allows us to interpret the most idiosyncratic semantic structures as culture-specific configurations of universal semantic primitives—that is, of innate human concepts.

4. Innate Concepts and Language Acquisition

Acquiring language consists in large part of learning how to map or translate from one representational system (the child's prelinguistic conceptual notions) into another (language).

(Bowerman 1976: 101)

As mentioned earlier, the idea that fundamental human concepts (semantic primes) are universal is closely linked with the notion that these concepts are innate. It is heartening to see, therefore, that over the last twenty years, child language acquisition studies have not only increasingly viewed language learning as, above all, a quest for meaning, but have also increasingly assumed that the child embarks on this quest not as a passive *tabula rasa* but as an actor equipped with some innate basic concepts.

To quote Bowerman (1976: 112–13), "the child is now commonly viewed as coming to the language-learning task well equipped with a stock of basic concepts that he has built up through his interactions with the world . . . Some early concepts undoubtedly develop autonomously (i.e. indepen-

dently of language), particularly those which are universal (e.g. object permanence)." Bowerman quotes with approval Macnamara's (1972: 5) statement that "it is inconceivable that the hearing of a logical term (by which he means words such as 'and', 'or', 'more', 'all', and 'some') should generate for the first time the appropriate logical operator in a child's mind. Indeed the only possibility of his learning such a word would seem to be if he experienced the need for it in his own thinking and looked for it in the linguistic usage about him."

What is particularly interesting in Bowerman's (1976) discussion of the problem of innateness is her clear perception of the link between a child's first concepts, language universals, and semantic primitives.

The view that a central process in language acquisition is the child's search for links between cognitive and linguistic concepts and linguistic forms and operations has been strengthened and encouraged by recent developments in linguistics. Many linguists now argue, on grounds quite independent of child language, that the most basic elements of language are not abstract syntactic configurations like grammatical relations, but rather a universal set of prime semantic concepts that combine according to general and language-specific constraints to yield both words and sentences. (102)

The linguists to whom Bowerman refers at this point are generative semanticists, that is, representatives of a school which flourished briefly in the late sixties and early seventies but has now long ceased to exist (see e.g. R. A. Harris 1993). But the idea of a universal set of semantic primes was neither due to that school, nor linked in any way with its fate. On the contrary: as I argued at the time (e.g. Wierzbicka 1967a,b, 1972, 1976b), it was a lack of a strong commitment to that idea which made the position of the generative semantics school—suspended in mid-air between Chomskyan "meaning-free" syntax and genuine semantics—untenable.

The notion of innate and universal semantic primitives which underlies this book corresponds, in some ways, to Slobin's (1985) "semantic space" of "prelinguistic meanings", in which "core concepts and clusters of related notions can be identified" (1163). Slobin's central claim is that children construct "similar early grammars from all input languages. The surface forms generated by these grammars will, of course, vary, since the materials provided by the input languages vary. What is constant are the basic notions that first receive grammatical expression, along with early constraints on the positioning of grammatical elements and the ways in which they relate to syntactic expression" (emphasis added).

Slobin explicitly relates his innate "basic concepts" to Sapir's "absolutely essential concepts . . . the concepts that must be expressed if language is to be a satisfactory means of communication" (1949: 93).

Supporting, in principle, Slobin's "BCG" (Basic Child Grammar) hypothesis, Bowerman (1985: 1284) writes: I argue that the BCG hypothesis does

Bruner

18 General Issues → Readiness for meaning

contain a fundamental insight into early language development: that children's starting semantic space is not a *tabula rasa*, passively awaiting the imprint of the language being learned before taking on structure. Rather, children are conceptually prepared for language learning." At the same time, Bowerman (1985) argues that "the initial organization of semantic space is not fixed but flexible", that the child's "semantic space" does not "define a single, privileged set of semantic notions that strongly attracts the grammatical forms of the input", and that "one important factor that can influence the meanings children adopt is the *semantic structure of the input language*" (1284).

But there is no reason why the initial organization of the child's "semantic space" should not be flexible in the way Bowerman describes it and yet fixed in its minimum core of "absolutely essential concepts", as stipulated by Sapir. There is also no conflict between the tenet (which I will defend in further chapters of this book) that the universal innate concepts play a particularly important role in grammar and the perfectly plausible idea that from early on children pay a special attention to language-specific semantic distinctions, drawn by, and perhaps grammaticalized in, their native language. But to explore such issues in a meaningful way we need a coherent semantic theory, and a rigorous semantic methodology. (See Chapter 7.)

The converging perspectives of current theoretical reflection on language acquisition and the linguistically based search for innate and universal semantic primitives is perhaps best expressed by Bruner (1990: 72): "the case for how we 'enter language' must rest upon a selective set of prelinguistic 'readiness for meaning'. That is to say, there are certain classes of meaning to which human beings are innately tuned and for which they actively search. Prior to language, these exist in primitive form as protolinguistic representations of the world whose full realization depends upon the cultural tool of language."

Given the attention that Chomsky's writings on language continue to receive in the world market of ideas, it is perhaps worth mentioning here Chomsky's new theory on the acquisition of concepts, according to which most concepts (including, for example, 'chase', 'persuade', 'murder', or 'table', and perhaps even 'bureaucrat' and 'carburettor') are innate. Speaking of the semantic complexity of most concepts, Chomsky (1991b: 29) writes: "Barring miracles, this means that the concepts must be essentially available prior to experience, in something like their full intricacy. Children must be basically acquiring labels for concepts they already have, a view advanced most strongly by Jerry Fodor."

This theory, which Chomsky (1987: 33) himself acknowledges many find absurd, ignores the fact that the meanings of most words differ from language to language, that they are "cultural artefacts", reflecting aspects of the cultures that have created them.

In my view, what can be reasonably expected to be innate is not culture-specific concepts such as 'bureaucrat' or 'apparatchik', 'table' or 'boomerang', 'persuade' or 'kow-tow', but only those which show up in all languages, such as 'person' and 'thing', 'do' and 'happen', 'where' and 'when', or 'good' and 'bad'. All the other concepts must be acquired via "the cultural tool of language".

Incidentally, the idea that the meanings of most words are innate rather than construed within a culture out of innate primitives, is used in Chomsky's writings (as well as in Fodor's; see Chapter 7), as an argument against lexical semantics: words are very difficult to define, but there is no need for linguists to try to define them, because they are simply labels for unanalysable innate concepts. "Ordinary dictionary definitions do not come close to characterizing the meaning of words" (Chomsky 1987: 21); none the less, they "can be sufficient for their purpose because the basic principles of word meaning (whatever they are) are known to the dictionary user, as they are to the language learner, independently of any instruction or experience" (ibid.).

This effectively absolves the linguist from the need to study the meaning of words or to take an interest in lexicography. Even the general principles of word meaning ("whatever they are") are clearly too hard to study. Here again, Chomsky's mentalism is as inimical to the study of meaning as was Bloomfield's behaviourism.

5. The Universal Syntax of Meaning

In what has been said so far, the emphasis was very much on the elements: the primitive concepts, the indefinable words. But to say anything meaningful we need more than words: we need sentences in which words are meaningfully put together. Similarly, to think something we need more than "concepts": we need meaningful combinations of concepts. Despite its obvious limitations, Leibniz's old metaphor of an "alphabet of human thoughts" is still quite useful here: conceptual primitives are components which have to be combined in certain ways to be able to express meaning.

For example, the indefinable word *want* makes sense only if it is put in a certain syntactic frame, such as "I want to do this". In positing the elements I, WANT, DO, and THIS as innate and universal conceptual primitives, I am also positing certain innate and universal rules of syntax—not in the sense of some intuitively unverifiable formal syntax *à la* Chomsky, but in the sense of intuitively verifiable patterns determining possible combinations of primitive concepts.

For example, the meaning of the sentence "I want to do this" is intuitively clear to any native speaker of English, and cannot be made any

clearer by explanations, or by abstract elaborations. In particular, no explanations in terms of "agents", "actors", "volition", "action", "deixis", "self-reference", "subjects", "predicates", "objects", "clauses", "deletions", or any other technical terms and theoretical constructs can bring anyone a millimetre closer to understanding this sentence. On the contrary, it is our understanding of technical terms and theoretical constructs which has to rest, ultimately, on our intuitive understanding of simple sentences such as "I want to do this" or "I want you to do this".

If one wants to explain the meaning of a sentence such as "I want to do this" to a non-native speaker, the best one can do is to point to a semantically matching sentence in their own language. For example, to a Russian one could offer the following equation:

I want to do this = *ja xoču èto sdelat'*

where *ja* matches with *I*, *xoču* (1st Sg) with *want*, *èto* with *this*, and *sdelat'* with *do*, and where the combination *ja xoču* matches *I want*, the combination *èto sdelat'* matches *to do this*, and the whole combination *ja xoču èto sdelat'* matches the whole combination *I want to do this*.

This is, then, what the universal syntax of meaning is all about: it consists in universal combinations of universal conceptual primitives (see Chapter 3). From a formal point of view, the grammar of the Russian sentence differs a great deal from that of the English one. For example, the word *xoču* can be analysed into two parts, the verbal stem *xoč-* and the inflexional ending *-u* (first person singular, present tense), whereas the English word *want* (which in combination with "I" conveys the same meaning) is not similarly analysable; and the order of the elements *èto* and *sdelat'* is different from that of *do* and *this*. But formal differences of this kind don't detract in the least from the overall semantic equivalence of the two sentences, which is based on the equivalence of the primitives themselves and of the rules for their combination.

Thus, the theory posits the existence not only of an innate and universal "lexicon of human thoughts", but also of an innate and universal "syntax of human thoughts". Taken together, these two hypotheses amount to positing something that can be called "a language of thought", or *lingua mentalis*, as I called it in the title of my 1980 book.

Researchers into early child utterances have often noted how similar these utterances are, across languages and cultures (see e.g. Slobin 1985: 1189, 1243; Bowerman 1976: 139). The hypothesis of an innate and universal *lingua mentalis* as a basis of all future language development can, I think, go a long way towards explaining this. Of course, it will be said—and justly so—that it is, above all, the social needs of infants which explain the commonalities of infants' early speech and communication (see e.g. Halliday 1975; Donaldson 1978). But the semantic and the social point of

view on language acquisition are fully compatible. What the child needs and wants to convey is messages such as 'I want something', 'I don't want to do this', 'I want more' (e.g. "more juice!"), 'I want you to do something', 'I don't want you to do this', 'there isn't (any)' (e.g. "allgone"), 'I want to know something', 'I see something bad' (e.g. "yukky"), and so on.

Messages of this kind, which rely not only on conceptual primitives such as WANT, DO, or NOT, but also on their "canonical" combinations, can indeed be called "social"; but being "social" doesn't make them any less meaningful. On the contrary, social interaction relies, to a considerable extent, on expressing and interchanging "social meanings" (such as, for example, 'I want you to do something' or 'I don't want you to do this').

Edelman (1992: 239) writes: "The syntax and semantics of natural language are not just special cases of formal syntax and semantics, the models of which have structure but no meaning. . . symbolic structures are meaningful *to begin with*." Arguing against Chomsky's "language acquisition device", Edelman charges that it "ignores the fact that language serves to convey the thoughts and feelings of individuals who already think independently of language" (243), and he points out (with reference to Margaret Donaldson's (1978) critique of the Chomskyan position) that "a child first makes sense of situations and human intentions and *then* of what is said. This means that language is *not* independent of the rest of cognition" (245).

I, too, believe that language is not independent of the rest of cognition, and that meaning underlies language, not the other way around. Presumably, children "make sense" of what is said in much the same way as they "make sense" of non-verbal behaviours such as crying, smiling, frowning, beckoning, and so on. (See e.g. Wierzbicka 1993a, 1994g, 1995b.) Doesn't beckoning, for example, mean 'I want you to come here now'? And what could "making sense" mean if not interpreting people's observed behaviour in terms of meaningful "mental representations" such as 'I want you to come here' or 'I don't want you to do this'?

As Slobin (1985: 1243) put it, a child appears to be able "not only to scan linguistic input to *discover* meaning, but also to scan linguistic input for the means of expressing highly accessible, prelinguistic meanings". I believe that simple sentences formulated in lexical universals (such as "I want to do this" or "I feel something bad") allow us to give substance to such widely shared intuitions and claims about a child's "pre-linguistic meanings". More generally, my hypothesis is that in a latent state, the innate mini-language of universal semantic primitives constitutes the basis of a child's "readiness for meaning".

But while child language acquisition can undoubtedly be a fertile field of study for anyone interested in pre-linguistic semantic structures, at the moment the best avenue for studying the "universal syntax of meaning" is

clearly cross-linguistic semantic investigation.⁴ Preliminary evidence suggests, for example, that patterns such as "I want to do something", "I know this", "Where are you?", or "I can't move" are universal (that is, attestable in all languages). Facts of this kind are as important for the study of the innate conceptual system (or the "prelinguistic readiness for meaning"; Bruner 1990: 72) as the presence in all languages of words for 'I', 'you', 'where', 'want', 'think', or 'know'.

Just as attempts to separate syntax from meaning, and to absolutize syntax, have failed as a path to understanding how natural language works, how it is used, and how it is acquired, so too any attempts to separate meaning from syntax and to absolutize the lexicon would lead nowhere, for syntax and meaning are inextricably bound. To quote Oliver Sacks (1993: 48): "it is increasingly clear, from studying the natural acquisition of language in the child, and, equally, from the persistent failure of computers to 'understand' language . . . that syntax cannot be separated from semantics. It is precisely through the medium of 'meanings' that natural language and natural intelligence are built up."

6. The Natural Semantic Metalanguage (NSM)

I believe that the strongest support for the hypothesis of a language-like innate conceptual system comes from its proven merits as a working tool in the investigation of languages and cultures.

As pointed out earlier, any meaningful comparison requires a *tertium comparationis*, that is, a common measure. If by investigating as many diverse languages as possible we can establish a hypothetical shared core of all natural languages, we can then treat this shared core as a language-independent metalanguage for the description and comparison of all languages and cultures. Without such a language-independent metalanguage, we would be for ever condemned to ethnocentrism, for we could only describe other languages and cultures through the prism of our own language (whether colloquial or technical) (see e.g. Lutz 1985).

But if we can identify the shared core of all natural languages and build on this basis a "natural semantic metalanguage", we can then describe the meanings conveyed in any language, as if from inside, while at the same time using sentences from our own language, which—if at times unidiomatic—are none the less directly intelligible to us. To put it differently, the shared core of all languages can be seen as a set of isomorphic mini-

⁴ In principle, data from language acquisition studies are very important to semantic theory. The difficulty is that to be directly relevant these studies should be conducted within the framework of a coherent semantic theory, and should be so devised as to test specific semantic hypotheses. In the past, this usually hasn't been the case.

languages, which can be used as language-specific versus universal Natural Semantic Metalanguage (NSM).

If we try to explain the meaning of Russian or Japanese providing them with *ad hoc* English glosses (using first we inevitably distort their meaning and impose on them a perspective inherent to the English language. On the other hand, if we use full-blown English glosses we were to provide a gloss in the NSM, that is, in the English version of the Natural Semantic Metalanguage, no such distortion would be necessary, for the English version of NSM can match exactly the Russian or the Japanese versions. For example, as pointed out earlier, the Russian NSM formula *ja xoču èto sdelat'* matches semantically the English NSM formula *I want to do this*.

The idea that all languages share an identifiable core is by no means new. Wilhelm Humboldt emphasized that in both lexicon and grammar, there is a "midpoint around which all languages revolve" (1903–36, v. 4: 21). Nor is it a novel idea that for semantic descriptions of different languages a special "intermediary language" is needed—and not just an artificial system of abstract features (like the Markerese of Katz and Fodor 1963) but a more language-like semantic metalanguage. The notion of "jazyk posrednik", 'language-intermediary', of the Moscow semantic school (see Žolkovskij 1964), is particularly relevant here.

What is new in the present theory is the assumption that an effective metalanguage for the description and comparison of meanings can be found in the common core of natural languages, and that it can be, so to speak, carved out of them. Incorporating this assumption, the NSM theory combines the philosophical and logical tradition in the study of meaning with a typological approach to the study of language, and with broadly based empirical cross-linguistic investigations.

Unlike various artificial languages used for the representation of meaning, the Natural Semantic Metalanguage, carved out of natural language, can be understood without further explanations (which would necessitate the use of some other metalanguage, and so on, *ad infinitum*), and thus offers a firm basis for a genuine elucidation of meaning.

As Ana Agud (1980: 457) put it in her *Historia y teoria de los casos*, "ninguna lengua formal puede ser, en última instancia, más precisa que el lenguaje natural que es su último metalenguaje", i.e. "no formal language can be, in the last instance, more precise than the natural language which is its ultimate metalanguage".⁵

⁵ See also the following recent statement by Harré and Gillet (1994: 27–8): "Another important consequence of the second cognitive revolution is the priority that must be given to ordinary languages in defining what are the phenomena for a scientific psychology. We will endeavor as far as possible to present and understand cognition in terms of the ordinary languages through which we think, rather than looking for abstract representations of them. That

The need for a universally based metalanguage in human sciences has been well illustrated by the recent interdisciplinary debates on the nature of human emotions. (For detailed discussion, see e.g. Wierzbicka 1992c, 1994h). For example, it has been repeatedly pointed out that if we try to explain key emotion terms of other languages (such as the Ilongot *liget*, or the Ifaluk *fago* and *song*) by using English words and combinations of words such as “anger/passion/energy”, “love/sadness/comparison”, or “justified anger”, we are imposing an Anglo cultural perspective on other cultures. For from an Ifaluk point of view, *fago* is a unified concept, not a mixture of the concepts encoded in the English words *anger*, *love*, *sadness* (for which Ifaluk has no equivalents).

The uncritical use of culturally shaped English words (such as *anger*, *shame*, *depression*, *emotion*, *mind*, or *self*) as “culture-free” analytical tools, and the reification of the concepts encoded in them, has been strongly criticized (in my view, with good reason) in recent anthropological literature (see e.g. Rosaldo 1980; Lutz 1988; Kondo 1990; see also Wierzbicka 1993b). But to move from “deconstruction” to constructive rebuilding of the metalanguage of human sciences, we need to go beyond conceptual relativism and reach for conceptual universals.

7. Semantic Invariants

In recent decades, semantics has suffered at the hands not only of its enemies but also of some of its friends. As I will argue in detail later (see in particular Chapter 4), especially harmful to its progress has been the doctrine of “family resemblances” and the associated attacks on the notion of semantic invariant—a corner-stone of effective semantic analysis.

One of the main tenets of this book is that words do have meanings, and that these meanings can be articulated. If they haven’t been successfully articulated in the past, for example, by the proponents of semantic “features” and “markers”, it is not because words do not have any constant meanings but because the methodology was inappropriate.

Of course, meanings can change, and they may vary from one dialect, sociolect, or “generatiolect” to another. But semantic change as such is not gradual; only the spread of semantic change is. (One meaning may gradually disappear, another may gradually spread, but both meanings are determinate, and the difference between them is discrete.) In any given speech community, meanings are shared. These shared meanings constitute the

is radical because it resists the idea that a new formal calculus must be devised to represent thought. Such calculi lie at the heart of the artificial intelligence project, the methodological principles of Chomsky and the transformational grammarians, and the assumption of formalists of all kinds.”

basis of communication, and the mainstay of culture; to a large extent, they are also the vehicles by which culture is transmitted.

It should go without saying that to be able to fully understand cultures different from our own, we must be able to grasp the meaning of words encoding culture-specific concepts. For example, to understand Japanese culture, and to interpret it to cultural outsiders, we need to grasp the meaning of key Japanese words such as *amae*, *on*, or *wa* (see Wierzbicka 1991b; also Chapter 8); and to be able to understand Malay culture, we need to be able to grasp the meaning of key Malay words such as *mahu*, *halus* or *lah* (see Goddard 1994c, forthcoming c). The use of the Natural Semantic Metalanguage allows us to state such meanings in a precise and illuminating way. It allows us to go beyond the vicissitudes of language use and to capture, and reveal, the semantic invariant of a word.

8. Methodological Issues

Summarizing the results of the cross-linguistic investigations reported in *Semantic and Lexical Universals* (Goddard and Wierzbicka 1994b), I wrote (Wierzbicka 1994b: 445): “Hunting for semantic and lexical universals is not like pearl-fishing. Primitives do not present themselves glittering and unmistakable. Identifying them is an empirical endeavour but one that calls for much interpretative effort.” In this section, I will briefly survey the main methodological problems arising in the process of identifying universal semantic primitives and building a Natural Semantic Metalanguage. (For more detailed discussion, see Goddard 1994a; Goddard and Wierzbicka 1994a.)

8.1. Polysemy

Polysemy is extremely widespread in natural language, and common everyday words—including indefinables—are particularly likely to be involved in it. A semantic primitive cannot be identified, therefore, simply by pointing to an indefinable word. Rather, it must be identified with reference to some illustrative sentences. For example, the English word *want* has at least two meanings, as illustrated below:

- (A) I want you to do something.
- (B) This house wants painting.

Of these two meanings only A is proposed as a semantic primitive.

The NSM theory does not claim that for every semantic primitive there will be, in every language, a separate word—as long as the absence of a

separate word for a given primitive can be convincingly explained (in a principled and coherent way) in terms of polysemy. The notion of different grammatical frames plays a particularly important role in this regard.

For example, if in the Australian language Yankunytjatjara (see Goddard 1994b) both the concepts THINK and HEAR, posited here as primitives, are expressed by means of the same verb, *kulini*, this is not seen as a counter-example, because (as Goddard shows) these two meanings of *kulini* are associated with different grammatical frames, and so this verb is demonstrably polysemous. Of course polysemy must never be postulated lightly, but neither should its presence be denied on dogmatically a priori grounds: each case has to be examined on its merits, with reference to some general methodological principles. (For detailed discussion, see Chapter 6; also Goddard 1994a, 1991a).

8.2. Allolexy

If one word (or morpheme) can be associated with two different meanings, one meaning can often have two or more different lexical exponents. By analogy with "allomorphs" and "allophones", such different exponents of the same primitive are called in NSM theory "allolexes".

To start with some relatively trivial examples, in English, *I* and *me* are allolexes of the same primitive concept (in Latin, EGO, in Russian, JA). Often, the allolexes of a primitive are in complementary distribution; for example, in Latin the three forms *hic*, *haec*, *hoc* are all exponents of the same primitive THIS, and the choice between them depends on the gender of the head noun.

Often, the combination with another primitive forces the choice of one of a set of allolexes. For example, in English, a combination of the primitives SOMEONE and ALL is realized as *everyone* or *everybody*, and a combination of ALL with SOMETHING is realized as *everything*. In these particular contexts, *-one* and *-body* can be seen as allolexes of SOMEONE, on a par with *someone*; and *-thing* can be seen as an allolex of SOMETHING, on a par with *something*.

The notion of allolexy plays a particularly important role in the NSM approach to inflexional categories (first articulated by Cliff Goddard at the 1992 Semantics Symposium held in Canberra). Consider, for example, the following sentences:

- (A) I am doing it now.
- (B) I did it before now (earlier).
- (C) I will do it after now (later).

By themselves, the forms *am doing*, *did* and *will do* convey different meanings, but when combined with the temporal adjuncts *now*, *before now*, and

after now, they are in complementary distribution and can be seen as allolexes of the same primitive, DO.

This is why NSM sentences can be said to match, semantically, across languages, even though the inflexional categories in these languages differ. For example, the Chinese NSM sentence adapted from Chappell (1994: 138)

Chū-shǐ hòu, wǒ shuō-le xiē shénme
 happen after I say-PPV CL something
 'After this happened, I said something.'

can be matched with the English NSM sentence:

After this happened, I said something.

even though the English word for HAPPEN, in contrast to the Chinese one, is marked for past tense: when combined with *after*, the form *happened* can be seen as an allolex of HAPPEN, on a par with *happen*.

8.3. Obligatory or Semi-obligatory Portmanteaus

The notion of allolexy is closely linked with that of semantic portmanteaus, which I will illustrate with a simple example from Russian. The expression *like this*, common in both everyday English and in English NSM sentences, is normally rendered in Russian by means of the word *tak*, which expresses a combination of the two primitives LIKE and THIS.

Ja sdelal èto tak
 I did this like-this

Since, however, Russian does have separate exponents for both LIKE and THIS (*kak* and *èto*), the use of an obligatory, or semi-obligatory, portmanteau for their combination does not present a problem for the NSM theory. It would present a problem if the postulated primitives did not have their own exponents usable in other contexts.

8.4. Valency Options

The notion of valency options (developed in Chapter 3) refers to different combinability patterns available to the same primitive. For example, the primitive DO can occur in the following combinations:

- (A) *X did something.*
- (B) *X did something to person Y.*
- (C) *X did something with thing Z.*

Obviously, "doing something to someone", or "doing something with something" implies "doing something". None the less, sentences B and C

cannot be analysed in terms of A and something else. It has to be recognized, therefore, that in each case the difference in meaning is due to the sentence as a whole, not to the predicate as such, and that the three sentences share in fact the same predicate (DO), albeit they realize different valency options of this predicate.

8.5. Non-compositional Relationships

Semantic primitives are, by definition, indefinable: they are Leibniz's ultimate "simples", Aristotle's "piora", in terms of which all the complex meanings can be articulated, but which cannot be decomposed themselves. They can, of course, be represented as bundles of some artificial features, such as "+ Speaker, - Hearer" for 'I', but this is not the kind of decomposition which leads from complex to simple and from obscure to clear. As pointed out earlier, the meaning of a sentence like "I know this" cannot be clarified by any further decomposition—not even by decomposition into some other meaningful sentences; and "features", which have no syntax and which are not part of natural language, have no meaning at all: they have to be assigned meaning by sentences in natural languages, rather than the other way around.

This means that, from a compositional point of view, elements such as 'I' and 'you' are semantically simple and have no identifiable part in common. At the same time, intuitively, these two elements are clearly related. Their relationship, however, is non-compositional.

A semantic system is not like a bag full of marbles, each of them perfectly round, self-contained, and independent of the others. Rather, it is a system "*cù tout se tient*", to invoke (in a new context) Saussure's famous phrase. In this system, there are elements which "belong together" and which have the same combinatorial properties, such as 'I' and 'you', or 'good' and 'bad'. Elements of this kind are intuitively related, but this doesn't mean that one of them can be defined in terms of the other.

In the universal semantic system there are many different kinds of non-compositional relationships. For example, the elements I, YOU, THIS, HERE, and NOW, are all mutually related, although they do not all have the same combinatorial properties. We can acknowledge this relationship by putting on them all one label, "deictic", but doing this—while useful—has nothing to do with semantic decomposition.

The primitive THE SAME has a non-compositional relationship with the primitive LIKE, and also with the primitive ONE. The first is highlighted in sentences such as the following one:

This fish is like that other fish, but it is not the same fish.

The second relationship is reflected in the colloquial phrase "one and the same", and in the apparent paraphrase relation between sentences such as A and B below:

- (A) These two shoes belong to one pair. ≈
- (B) These two shoes belong to the same pair.

But close as the elements within each pair may be, neither THE SAME and LIKE nor THE SAME and ONE can be identified or defined in terms of each other. For example, in the sentence

I have one son and two daughters.

'one' has clearly nothing to do with 'the same'; and in the sentence:

They came at the same time.

'the same' has nothing to do with 'like'.

Non-compositional semantic relations of different kinds are real and important, and they offer an interesting field for research (see Goddard and Wierzbicka 1994a). But they must not be confused with compositional relations, which can be revealed by definitions (such as, for example, that between *asleep* and *awake*, or between *dead* and *alive*).

8.6. Recurrent Polysemies

Non-compositional semantic relations are often reflected in recurring polysemic patterns involving two, or more, different primitives. Of course, no natural language will ever be found in which the word for 'I' will be the same as the word for 'you', or the word for 'big', the same as the word for 'small': since the combinatorial possibilities of both elements within each pair are the same, polysemy of their exponents would lead to intolerable confusion. Other non-compositional relations, however, are often reflected in recurring polysemic patterns.

For example, in some languages the word for THE SAME is the same as the word for ONE, or the word for THIS is the same as the word for HERE; there are also languages in which the word for WANT is the same as the word for SAY, or where the word for DO is the same as the word for HAPPEN. This doesn't mean, however, that in those languages people do not distinguish the concept ONE from the concept THE SAME, or the concept WANT from the concept SAY; or that they have no words to express some of these concepts. They do have words for all of them, and if some of these words are polysemous (and mean, for example, (1) 'one', (2) 'the same', or (1) 'want', (2) 'say'), the different meanings of such polysemous words can be easily distinguished on the basis of distinct grammatical frames associated with each of them. (For examples and discussion, see Wierzbicka 1994b).

8.7. Resonance

Since every language embodies a unique semantic system and reflects a unique culture, the exponents of universal semantic primitives in different languages often “feel” different (to both native speakers and to linguistic experts on these languages). For example, it is easy to believe that in the Papuan language Kalam, where the words for KNOW, THINK, SEE, and HEAR all share the same verbal formative *ny* (Pawley 1994), these words “feel” somehow different in meaning from the corresponding English words (which are formally unrelated to each other). Or if the word for FEEL is polysemous between ‘feel’ and ‘stomach’ (as is the case with the word *tjuni* in the Australian language Yankunytjatjara, see Goddard 1994b), it is easy to believe that this word “feels” different from the English word *feel*, or from the Acehnese word *rasa* (a borrowing from Sanskrit; Durie *et al.* 1994).

Differences of this kind are real and important, and they are acknowledged in the NSM notion of “resonance” (first articulated by Goddard at the 1992 Semantics Symposium in Canberra). They must not be confused, however, with semantic differences *sensu stricto*.

8.8. Canonical Sentences

Most sentences uttered in any one language cannot be translated into other languages without some loss, and/or addition, of meaning. The NSM theory hypothesizes, however, that there are also some kinds of sentence which can be translated—without loss and/or addition of meaning—into any language whatsoever. These are sentences formulated in “local representatives” of universal semantic primitives, according to the universal syntactic rules (that is, rules for combining the primitives). Sentences of this kind include, for example, the following ones:

You did something bad.
I know when it happened.
I want to see this.
These people didn't say anything about this.
If you do this, I will do the same.
This person can't move.

Sentences of this kind are regarded in NSM research as “canonical sentences”, which can be used to test the validity of the Natural Semantic Metalanguage (as developed until now), and to seek any weak points which may need revision.

For practical reasons (to make the testing more effective in working with native speakers) it is often useful to include in the set of canonical sentences

some which are not composed exclusively of primitives. For example, if we want to check whether a language has words for the primitives ONE and TWO, it is practical to use sentences like the following:

I have two sons and one daughter.

even though the concepts of ‘son’ and ‘daughter’ are not universal, and the words glossed as ‘son’ and ‘daughter’ may not match semantically across language boundaries (for some languages may distinguish a man’s son or daughter from a woman’s son or daughter).

The notion of a canonical sentence both in the strict sense (primitives only) and in the broader sense (primitives with a controlled admixture of non-primitives) has proved to be a valuable tool in cross-linguistic semantic research (see Goddard and Wierzbicka 1994b). In the future, this notion may also prove useful in the cross-cultural study of language acquisition and cognitive development; and may answer, in some measure, the call frequently voiced by child language researchers “for a more powerful cross-linguistic methodology” (Johnston 1985: 996).

9. Past, Present, and Future of NSM Semantic Theory

Since its inception in the mid-sixties, the basic assumptions and goals of the NSM theory have remained unchanged: the search for universal semantic primitives, the avoidance of artificial “features” and “markers”, the rejection of logical systems of representation, the reliance on natural language as the only self-explanatory system for the representation of meaning. At the same time, the theory has not stood still; on the contrary, it has been constantly developing. These developments could be said to have gone in six main directions:

1. the proposed set of primitives has considerably increased;
2. the search for primitives came to be identified with a search for lexical universals;
3. the search for lexical primitives came to be combined with a search for universal syntactic patterns (that is, for universally available combinations of primitives);
4. the pursuit of, first, primitives and then their combinations grew into a broader programme of building a full-scale “natural semantic metalanguage”;
5. the theoretical underpinnings of the whole enterprise became gradually more and more clearly articulated (as discussed in Section 8); and
6. the range of domains, languages, and cultures to which NSM theory was applied, and against which it was tested, expanded substantially.

These developments cannot be discussed here comprehensively; a few brief comments on each of them, however, are in order.

1. NSM theory started as a search for lexically embodied indefinable concepts, or semantic primes, identified as such by trial and error, within one language (any language). The first tentative list of primitives identified in this search was published in my book *Semantic Primitives* in 1972. It included fourteen elements.

As the proposed primitives were tested against an increasing range of semantic domains, most of them (on present count, eleven of the fourteen) proved themselves effective tools in semantic analysis. But at the same time it became increasingly clear that the minimal set of fourteen was insufficient. (See Wierzbicka 1989b.)

A major impulse for their expansion was the Semantic Workshop held in Adelaide in 1986, and organized by Cliff Goddard and David Wilkins, where Goddard proposed a number of new primitives for further investigation. (See Goddard 1986a, 1989a.) As the consecutive expanded sets were tested in semantic analysis, the process repeated itself, and expansion continued. (For the current head count, see Chapter 2.)

The process of expansion greatly facilitated semantic analysis of numerous semantic domains and made it possible to formulate semantic explications that were much more readable and intuitively intelligible than those based on earlier, leaner sets. The theoretical "cost" of this expansion lay in the need to abandon the Leibnizian principle of mutual independence of primitives. In the early versions of the NSM theory, if the elements appeared to be semantically related (as, for example, 'good' and 'want', or 'the same' and 'other'), it was assumed that at least one of them must be semantically complex (on the grounds that if two elements share a common part they must have parts, and therefore cannot be semantically simple).

This assumption was never strictly adhered to, however. For example, I, YOU, and SOMEONE were regarded as primes from the outset, even though they are intuitively related (for every "I", and every "you", is a "someone"). In time, the assumption of mutual independence of primitives was rejected altogether, and it was recognized that primitives can be intuitively related (as "I" and "someone" are), without being compositionally related and without being decomposable (that is, definable).

2. The first proposed primitives were identified, by trial and error, on the basis of a handful of European languages. With time, through the work of experts on many diverse languages, the empirical basis grew considerably, including, among others, languages as diverse as Chinese (see e.g. Chappell 1983, 1986a,b), Ewe (Ameka 1986, 1987, 1990, 1991), Japanese (Travis 1992; Hasada 1994), Malay (Goddard 1994c), the Austronesian language Mangap-Mbula (Bugenhagen 1990), or the Australian languages Yankunytjatjara (Goddard 1990, 1992a,b) and Arrernte (Wilkins 1986;

Harkins 1992). This expansion culminated in *Semantic and Lexical Universals* (Goddard and Wierzbicka 1994b), mentioned earlier.

A priori, one might have expected that the process of testing a hypothetical set of primitives across a wider range of languages would lead to a reduction of the proposed set (as one proposed primitive after another would fail to show up in this or that language). On the whole, however, this has not happened. On the contrary, the list of primitives has shown a tendency towards gradual expansion.

3. For a long time, research into the syntax of the proposed primitives lagged behind that into the primitives themselves—a point commented on by several reviewers (e.g. McCawley 1983). This delay, though unfortunate, was dictated by the nature of things: one can hardly investigate the patterns of combination of primitives before one has some idea of what the primitives are. The first article devoted primarily to the syntax of the primitives was my "Lexical Universals and Universals of Grammar" (Wierzbicka 1991c). The Symposium on the Universal Syntax of Meaning held in Canberra in July 1994 (organized by Goddard and myself) launched a major programme of research in this area across a number of languages.

4. The building of the Natural Semantic Metalanguage was, and continues to be, a gradual process. In contrast to more speculative semantic theories, NSM constantly seeks confirmation—or disconfirmation—in large-scale descriptive projects. For example, in my *English Speech Act Verbs* (Wierzbicka 1987a) I attempted to analyse the meaning of more than 200 English verbs; and more recently, in a series of articles on another conceptual domain (see e.g. Wierzbicka 1990c, 1992e, 1994c) I have similarly sought to analyse at least 100 English emotion terms.

It is through descriptive projects of this kind that the inadequacies (as well as the strengths) of successive versions of NSM became apparent, and that future directions of development could be seen more clearly. Perhaps the most important direction had to do with the growing simplification and standardization of the syntax of explications, linked directly with the search for universal syntactic patterns.

5. The theoretical underpinnings of NSM research were gradually articulated more clearly, and its methodology formulated more explicitly, as important theoretical concepts like "polysemy", "allolexy", "valency option", "non-compositional relationship", and "resonance" were gradually clarified and more rigorously articulated (see Section 8; also Goddard 1994a; Goddard and Wierzbicka 1994b). The Symposium on Semantic and Lexical Universals held in Canberra in February 1992 and organized by Cliff Goddard and myself played an important role in this regard.

6. Over the years, the range of domains to which NSM research addressed itself has continued to expand, including not only lexical semantics (as in, for example, Goddard 1990, 1991a; Travis 1992; Hasada 1994;

Ameka 1990; Wierzbicka 1985, 1987*a*), but also the semantics of grammar (e.g. Ameka 1990; Chappell 1986*a,b*, 1991; Wierzbicka 1988) and pragmatics (e.g. Ameka 1987; Goddard 1986*b*; Harkins 1986; Wierzbicka 1991*a*; Wilkins 1986). Furthermore, this research has expanded into more direct comparison of cultures, via their lexicon, grammar, conversational routines, and discourse structure (e.g. Ameka 1987; Goddard 1992*b*, forthcoming *c*; Harkins 1994; Wierzbicka 1991*a*, 1992*a*; Wilkins 1992). Most recently, NSM research has moved into yet another direction, leading to the development of a "theory of cultural scripts", which offers a framework for comparing cultural norms operating in different cultures, a framework based on universal semantic primitives and universal syntactic patterns (e.g. Wierzbicka 1993*e*, 1994*a,d,e*, forthcoming *c*; Goddard forthcoming *b*; Goddard and Wierzbicka forthcoming).

But while all these developments are (as it seems to those involved) significant, NSM theory still has a long way to go. The pursuit of semantic primitives needs to be finalized, the study of the syntax of primitives needs to be more fully developed, the scope of cross-linguistic testing of both primitives and their syntax needs to be substantially widened, language-specific versions of the Natural Semantic Metalanguage need to be built, the NSM-based analysis of culture and cognition needs to be extended to new areas, the theory of cultural scripts needs to be further fleshed out, and so on. This book therefore constitutes an open invitation.

2 A Survey of Semantic Primitives



A. OLD PRIMITIVES

1. Introduction

The set of primitives presented and discussed in this chapter has evolved in the course of nearly three decades of research by myself and colleagues—and it is still evolving. Some of the primitives proposed here are better established than others. Of the fourteen primitives posited in my *Semantic Primitives* (1972) ten have survived nearly a quarter of a century of critical assaults (by myself and others), and (with one exception: PART) the position of these original members of the set can be regarded as particularly strong. This old guard includes the "substantives" I, YOU, SOMEONE, and SOMETHING, the "mental predicates" THINK, WANT, FEEL, and SAY, and the demonstrative THIS.

But the main divide runs between those elements which were tested across a wide range of languages in the project reported in *Semantic and Lexical Universals* (Goddard and Wierzbicka 1994*b*), and those which were not included in that project, and which must, therefore, be regarded as less well established. Accordingly, the present chapter, surveying the primitives, is divided into two parts, called, for convenience' sake, "Old Primitives" and "New Primitives". The set of old primitives includes the following elements:

"substantives"	I, YOU, SOMEONE, SOMETHING, PEOPLE
"determiners"	THIS, THE SAME, OTHER
"quantifiers"	ONE, TWO, MANY (MUCH), ALL
"mental predicates"	THINK, KNOW, WANT, FEEL
"speech"	SAY
"actions and events"	DO, HAPPEN
"evaluators"	GOOD, BAD
"descriptors"	BIG, SMALL
"time"	WHEN, BEFORE, AFTER
"space"	WHERE, UNDER, ABOVE
"partonomy and taxonomy"	PART (OF), KIND (OF)