Foundations of linguistics. By DIETER WUNDERLICH. Translated from the German by Roger Lass

Reviewed by JENS ALLWOOD, University of Göteborg, and OSTEN DAHL, University of Stockholm

In this English version of Wunderlich's book, a few passages have been omitted, a number of errors have been corrected, and the bibliography has been updated. According to W's foreword (p. xi), the book 'is an attempt to outline the foundations of a science', viz. linguistics. It consists of the following eleven chapters: 1, 'Introduction'; 2, 'Knowledge and argument'; 3, 'Perception, description and explanation'; 4, 'Abstraction and deduction'; 5, 'The development of deductive argument: Logic'; 6, 'The use of deductive arguments in empirical science: Theories'; 7, 'Explication'; 8, 'On the explication of the concept "Grammatical in language L''; 9, 'On the explication of the concept of meaning'; 10, 'Systematic operations'; and 11, 'Language-families and grammar-families'.

The main question that W sets out to answer is: 'What presuppositions (in terms of philosophy/theory of science and methodology) do we need in order to argue for or against particular scientific positions in the field? Thus he says that his book 'is not so much an introduction to particular linguistic theories and methods as a general introduction to linguistic inquiry and its characteristic modes of thought and argument' (xii). Basically, writing such a 'Wissenschaftstheorie der Linguistik' seems quite a good idea. We are less convinced, though, that the way W has chosen to realize his aim is the best one. In our opinion, W gives neither a very clear picture of the general methodological background nor very illuminating examples from linguistic practice. In several chapters, such examples are especially scarce (e.g. Chap. 6, where two-thirds of a page is all we get of linguistic applications).

Another difficulty in writing a book of this kind is the choice of audience. In spite of W's declaration that he is aiming at students who have completed at least an introductory course in linguistics (xii), we find that many parts of the book, in particular its introductory sections, presuppose too much to serve as anything but a reminder for those who already know. Also, the jumps between rather elementary expositions of theories and rather advanced critical comments on these theories do not enhance the readability of the book, however valuable the latter may be to those who understand them.

A further problem concerns the delimitation of what should be treated in the book. As can be seen from the chapter headings, W wants to offer a sort of smörgåsbord of topics. Anyone who writes a book of this kind faces the dilemma of ending up either with a list of topics, held together mainly by the author's perseverance or, at the other extreme, with an integrated set of topics which is too small and biased to provide the desired coverage. The ideal is, of course, to fall somewhere in the middle: a set of well-chosen topics, the interrelations of which are clearly presented, discussed, and analysed. W's book can be said to be too close to the first extreme; it would have gained from the exclusion of some areas and a more careful integration of others.

We shall let what has been said thus far suffice as a general characterization of the book, and proceed to more detailed criticisms. To start with, consider W's use of the central term 'knowledge'. On p. 19, he says: 'Knowledge is what has already proven itself to be relatively justified, theories have yet to be justified.' This use of 'knowledge' and 'theory' is not quite standard: information which is counted as knowledge is usually taken to be justified WITHOUT QUALIFICATIONS - and furthermore true. Similarly, the difference between a hypothesis and a theoretical statement is that the latter is justified, whereas the form ~ need not be. A theory then, as a system of justified statements, already has justification.

W also says on p. 19 that knowledge is independent (or invariant) with respect to the forms in which it can be represented. But on p. 38, he says that all knowledge can be expressed in acts of assertion, which presupposes language; and that if all knowledge can be expressed verbally, then the structure of knowledge must be connected with the structure of language. These two assumptions about knowledge cannot be simultaneously true.

W's slightly confusing use of the term 'knowledge' is continued on p. 42, where he says: 'Old knowledge may turn out to be only apparent knowledge.' This suggests that what is true may turn out to be only apparently true-a confusing consequence which should perhaps be blocked by greater parsimony with regard to claims of knowledge or truth in the first place.

The term 'concept' is also used in a confusing way. On p. 165, concepts are said to be vague, ambiguous, and inconsistent, in everyday usage. Concepts are also said to have different meanings in different contexts. All these statements would normally apply to linguistic expressions, but not to concepts-unless, in a nominalistic fashion, one assumes concepts to be linguistic expressions.

The term 'argue' is used in a sense which is synonymous with 'state , : e.g., on p. 27, W says that he has argued that the social procedures in speaking are central to linguistics. But if one looks at p. 23 (the closest preceding passage where any remarks relevant to this topic occur), one finds a STATEMENT to the same effect, but no argument.

On pp. 48-9, W says that every argument is an argument ad hominem, since it is directed to people. This seems to be a dangerous pun, in view of the tendency people have to attribute depth and meaning to statements in a theoretical exposition like the present one.

W says on p. 58 'that no collection of statements about a person's utterances. gestures, reactions ... can logically imply a conclusion about his wishes, feelings, or intentions.' This is strange, since wishes, feelings, and intentions can all be taken as examples of reactions.

On p. 90, W claims that 'speaker and hearer understand utterances as realizations of sentence's belief which, in spite of being fondly held by many linguists, is totally unsubstantiated, so far as we know.

On p. 93, fn. 1, W remarks that 'linguistic competence for Chomsky is a theoretical construct and not an actual property or capability of human beings.' Here we are offered an implicit view of theoretical constructs which W has not argued for earlier. If Chomsky had seriously thought that linguistic competence had nothing to do with actual properties or capabilities of human beings, it is fairly certain that he would never have been interested in the notion.

In a book of this kind, taxonomies and classifications make it easier for the reader to get an overview, provided that they meet the usual methodological requirements on exhaustiveness, well-definedness of the domain of classification, and mutual exclusiveness of categories. But many of W's taxonomies in the book do not meet these criteria. Thus, when 'social procedures in speaking' are listed (28), one wonders why such things as the factual reference of utterances, the forms of sound-meaning correspondence, and derived manifestations should be regarded as social procedures. It is also clear that the list is not exhaustive-e.g., the contracting of social obligations is not mentioned and that the categories overlap: why should, e.g., factual reference and rational justification exclude each other?

Another example is found on pp. 299-300, where the following are brought together as types of data relevant for the setting of theoretical and empirical goals (in linguistics, presumably): grammaticality, structural analysis, meaninglessness, transfer of meaning, ambiguity, acceptability, relatedness of meaning, relatedness of expressions, acceptability in context, frequency, type and frequency of mistakes, and typical changes. Again, it is fairly evident that many other types of data could be mentioned-e.g. phonetic data, or data pertaining to real speech situations. Further, the types of data are again not analytically distinct, such as the relationship between what is meaningless, what is ungrammatical, and what is unacceptable.

When W discusses vagueness, presuppositions, and selectional restrictions (225-9), one would like, in view of the fact that these phenomena are connected in many ways, to have a discussion of their internal relations. Also, it would have been of interest to relate the discussion of meaning postulates in the section on referential semantics (206) with that in the section on conceptual semantics (238).

An individual section which we find rather unsatisfactory is §3.11, 'Language universals'. It starts: 'I turn now to the language universals hypothesis.' However, we are never informed what this hypothesis is supposed to be. Presumably, what is referred to is the existential statement that language universals exist. We would then like to know what a language universal is; but W gives no definition except the statement that 'universals serve to effect a general characterization of human language ability.' (Here the translator has not succeeded in finding a natural English translation for the German 'der allgemeinen Charakterisierung menschlicher Sprachfähigkeit dienen.') W then introduces the distinction between FORMAL and SUBSTANTIVE universals, although for some reason (unclear to us) he claims that the former 'hold necessarily and unconditionally for all languages', while the latter 'do not have to be present in all languages, ... but if they are present in a particular language, then they are so only under specific conditions, i.e. the language must simultaneously display certain other properties.' W goes on to say that 'each language thus utilizes only a part of the total set of possible structures', and refers in a footnote to substantive universals as 'substantive STRUCTURES' and 'clusters of properties in mutual relations (e.g., if a language has voiced obstruents it will have voiceless ones)'. Apparently W is identifying substantive and implicational universals. It seems, however, that he has not made up his mind whether the implicational statement 'if L has A, it has B' is the substantive universal (if so, why is such a universal not present in all languages?), or the property A referred to in the statement (but why then say that the universal is a cluster of properties in mutual relations?)

As an example of a formal universal, W mentions the assumption 'that phonological structures are always understood as temporal, whereas semantic or cognitive structures are time-independent (it is only the cognitive processes operating on these structures that occur in real time).' We fail to see why it is not possible, in both phonology and semantics, to make the distinction between structures as types, which are 'potential' and time-independent, and as tokens, which are manifest in time and space. In spite of what we have said, the most positive thing about W's book is its breadth of scope. It gives an advanced reader a glimpse of many areas relevant to contemporary linguistics. On the positive side, we can also say that W makes quite a few interesting remarks about the areas he discusses. Thus on p. 81 he notes that the Hempel-Oppenheim schema for explanations is simply a special argumentation schema in which we dispense with the persons arguing. It is comparative remarks like these, together with more analysis, that one wants in a book of this type. Unfortunately, there are not enough of them.

A section which should be of value to many linguists is that on pseudonotations (242-8); here W lays down a number of criteria for the usefulness of a notation, and then goes on to investigate how various linguists have used notational systems, finding that such systems often obfuscate more than they clarify. When reading p. 274, however, one wonders if W should not have heeded his own warnings a little more: the notation used there for representing speakers' intentions seems to meet none of the criteria listed by W.

Another good thing is W's criticism of Chomsky's failure to realize the semantic basis for many of the claims about syntax that have been made in transformational grammar (see, e.g., p. 325).

Finally, let us say a few words about formal matters. In spite of the many formalized or semiformalized passages, we have been able to detect only one error in them, viz. on p. 122, where

A & B = df (A $\supset \sim$ B)

should be (as in the German original)

A & B = df ~ (A \supset ~ B)

As for the English text, the translator, Roger Lass, has by and large succeeded in the aim which he formulates on p. xv, to produce 'a book that does not "read like a translation". We have noted a few passages, however, where the English text deviates from the German original without any clear motivation. The most glaring deviation is in the third paragraph of p. 96, where the omission of a whole sentence concerning the semantic basis of syntactic categories makes the argument a non-sequitur. There are also some unhappy choices of terms, as when 'truth-value condition' is used rather than the standard 'truth-condition' for 'Wahrheitswertbedingungen' (215), or when Austin's term 'felicitous' is re-translated as 'successful' (268) via the German 'gelingen'. ('Success' has been taken as a much more narrow notion than 'felicity' in many works on pragmatics.)

'Eine Funktion aus der Menge A in die Menge 13' is 'a function from A into B' rather than 'in 13% as the text on p. 308 has it. This mistranslation is particularly confusing in view of the fact that it occurs in a non-standard definition of the concept of 'operation'.

Our most serious formal objection concerns the absence of a subject index, something which should really be required by law in a book of this kind. It is astonishing that the Cambridge University Press neglected to include one, although one exists in the German original.

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