checklists of criteria: for instance, criteria for grammatical knowledge (37–8); for grammatical judgments (70); for grammatical problems (86); for grammatical hypotheses (161); for grammatical concepts (217); and for data serving as evidence for a hypothesis (287).

Philosophers of science will find less in CLI. Botha tries to avoid evaluating approaches to the philosophy of science, just as he tries to avoid evaluating linguistic theories, and as a result the references to the philosophical literature are something of a hodge-podge. One cannot, of course, maintain a purely descriptive, ‘objective’, stance at every level; if Botha will adopt no point of view as an analyst of English or as a linguistic theorist, then he will have to have one as a metatheorist, or a metametatheorist, or... Indeed, as a metatheorist, Botha is a great deal more normative than he would have us believe; when, for instance, he reports that ‘Peter Achinstein claims that those objects which are called theories usually have five properties’ (132), Botha is about to suppose that theories do, and should, have these properties, which become part of his definition of the term THEORETICAL. Botha also falls back on a set of undefined analytic primitives borrowed from philosophy – CONCEPT, PROPOSITION, ARGUMENT, and the like – as if these can be taken as ‘given’ in the context of foundational discussions.

Within linguistics, Botha provides little help on many fundamental, and even celebrated, issues; among them, the problem of the individual versus the group with respect to the notion of COMPETENCE; the distinction between internal and external evidence (drawn by Botha as a distinction between ‘objects within the grammarian’s linguistic reality’ (302) and those outside it); the question of when a corpus can be said to be comprehensive; the difficulty of deciding whether lines of evidence are independent; the analysis of exceptions, counterexamples, anomalies, and ‘recalcitrant data’ (425).

The twelfth and final (but far too short) chapter of CLI integrates the preceding analysis and summarizes it in a diagram (437) relating LINGUISTICS, comprising a GRAMMAR and a GENERAL LINGUISTIC THEORY, to LINGUISTIC REALITY, comprising LINGUISTIC COMPETENCE, a LANGUAGE ACQUISITION DEVICE, and CLASSES OF PRODUCTS OF LANGUAGE USE.

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(Received 22 May 1984)


Anyone who has read Newmeyer’s work Linguistic theory in America (1980) will undoubtedly welcome another introductory book by the same author entitled Grammatical theory. Its limits and its possibilities. While the former book offered a diachronic survey of twenty-five years of linguistics, the latter focuses on linguistic theory in its contemporary setting. Newmeyer describes its aim as follows:

My goal here is to put forward the best case I can that an explanatory account of the workings of language must include, as a central component, a formal grammar (xi).

The book has five major chapters. Each chapter may also be seen as a self-contained unit, since each deals with some specific aspect of the theory discussed, and the criticisms levelled against it. The chapters are organized as follows:

1. The generativist approach to linguistic analysis.
2. The data base of grammatical theory.
3. Grammatical theory and language variation.
4. Formal grammar and extragrammatical principles.
5. The applicability of grammatical theory.

In Chapter 1 the focus is on the autonomy hypothesis and the modular approach to language. Newmeyer shows that several authors mistakenly assume that ‘a generativist would handle all the facts about a particular construction in terms of one specific rule’ (27) whereas complex linguistic phenomena are explained by the intersection of various principles from syntactic,
semantic and pragmatic rule-systems. In fact these systems again may be modular (cf. Chomsky, 1981).

In the second chapter Newmeyer argues convincingly for the validity and reliability of introspective data. He also discusses some alternative views on what should count as linguistic data, and focuses at length on the use of experimental data obtained by elicitation tests of various types. It is rather surprising that he pays very little attention to the view that advocates the use of corpus-data. I certainly would not want to suggest that such a corpus-based approach (which may also rely on computerized data) would be preferable; but it might be worthwhile considering the arguments put forward in its defence in more detail, especially so since corpus-based analyses have a widespread following among traditional descriptivist linguists. (On a more fundamental issue regarding the interaction of data and theory see below.)

The third chapter discusses the notion ‘ideal speaker-listener’ and its relation to language variation. Newmeyer, however, fails to point out the considerable amount of research currently going on into dialect variation. Several recent studies in the generative tradition have shown that dialect variation may be related to parametric variation between the standard language and its dialects. Research has been going on dealing, for example, with Trentino dialects of Italian, Swiss and Bavarian dialects of German, Flemish dialects of Dutch, etc., which has led to several revealing insights.

In Chapter 4 Newmeyer returns to the autonomy hypothesis and shows how approaches which take as their starting point the communicative function of language are inadequate. It seems to me, though, that the lengthy review of Givón’s On understanding grammar might have been slightly shorter. Especially so since a large section deals with Givón’s inaccurate use of the notion ‘presupposition’. The last chapter of the book focuses on the applicability of generative linguistics. Of course the choice of this topic for the book is a matter of personal preference on the part of the author, but it seems to me that the issue is of secondary importance. At the present stage of grammatical theory one cannot really expect too many definitive results in the field of applied linguistics, as Newmeyer himself points out.

In general the focus of the book is at times slightly blurred by the diverse type of arguments brought to bear both from inside and outside linguistic theory. One issue, however, that to my mind ought to have been put much more centrally in the book is the general scientific nature of the generative enterprise. As late as p. 41 Newmeyer draws attention to the fact that grammatical theory explicitly tries to be scientific. At this point he does bring in the evaluation of theories and explanations within theories. Perhaps some illustration here might have been useful. This also links up with the point raised on p. 124:

A theoretical model is not a model of the data. The relation between a theoretical model and the data is typically extremely indirect because the complex phenomena of the real world owe their behaviour to the interaction of many systems, each embodying its own theoretical model.

To borrow an example from geology, it takes literally dozens of interacting theoretical models to explain the succession of strata one might find in an outcrop – some chemical, some physical, and at least one metaphysical (the principle of uniformitarianism). None of the models employed is in any sense a model of the succession of strata (124).

With respect to the relation data-theory one example may be worth discussing. In Lectures on government and binding (1981) Chomsky posits three types of empty categories:

1. (i) NP-traces: John was hit ec
   (ii) wh-traces: Who did Mary hit ec
   (iii) PRO: I want ec to see John.

Later it is proposed (Chomsky, 1982) that empty categories are cross-classified according to the features [ + /— pronominal], [ + /— anaphor]. On the basis of such a cross-classification four categories are theoretically possible, and the fourth such category, missing from the Lectures on government and binding, is identified as the empty subject of pro-drop languages such as Italian: a non-lexical pronominal pro:

(iv) pro: ec parlo italiano.
    I speak Italian.

According to the feature analysis we find the four empty categories in Table 2:
SHORTER NOTICES

<table>
<thead>
<tr>
<th>anaphor</th>
<th>pronominal</th>
<th>empty category</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>-</td>
<td>NP-trace (i)</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>PRO (iii)</td>
</tr>
<tr>
<td>-</td>
<td>+</td>
<td>pro (iv)</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>wh-trace (ii)</td>
</tr>
</tbody>
</table>

Table 2

The empty categories

Thus the introduction of pro is not merely the result of the analysis of the data; rather it emerges from the theory as such, supplying the missing element in the paradigm.

The example above also illustrates how progress is made in the generative framework. Changes in the theory are not ad hoc and random, but are motivated by the theoretical constructs, interacting with relevant data.

In fact the constant changes inside the theory are another reason for objections being raised from outside the generative field. However, these constant changes are what one may and has to expect given the nature of the enterprise (cf. Newmeyer's own observation on p. 135). Those who think that the changing nature of the Grammatical Theory is an objectionable feature ought in fact to reconsider their view of the enterprise as such. A very clear outline of the sort of developments occurring inside the generative framework can be found in Van Riemsdijk and Williams (forthcoming) or, at a more formal level, in Muysken and Van Riemsdijk (forthcoming).

The objections that I have raised here against Newmeyer's approach should not give the impression that I wish to deny the value of the work. The book will be a great asset for those teaching or studying grammatical theory. Some background knowledge is, however, required to put the discussion in its proper perspective, and I would not recommend it for the very beginner, who might benefit more from a book like Smith and Wilson (1979).

The tone of Newmeyer's book is non-aggressive and he praises contributions made by non-generative linguists such as Dwight Bolinger. Newmeyer has introduced a wide range of examples and quotations to illustrate his points. The references are extensive and diverse, including many from less well-known authors and journals. All in all, this is a book that I warmly recommend to anyone in the linguistic field. Both advocates and opponents of theoretical linguistics will find it full of insights.

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(Received 8 June 1984)