

Frederick J. Newmeyer (2005) *Possible and probable languages. A generative perspective on linguistic typology.* Oxford: Oxford University Press. x, 278.

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Linguistic Typology 2006, 10/2, 177-186.

1. Overview

The central issue of Newmeyer's new book is at the very core of language typological research: how are similarities and differences among languages to be described and how can they be explained?

In addressing questions about the crosslinguistic distribution of grammatical characteristics and its explanations, Newmeyer draws upon a vast amount of relevant literature, both formal and functional, as well as on the empirical resources of the Konstanz Universals Archive. He provides insightful histories (such as of the Comrie-Coopmans debate in the 1980-s (19-27)) and incisive critiques (e.g. of the theory of parameters (28-127)) and he offers thoughtful and clearly argued proposals. The work is an elaboration and systematic synthesis of much of Newmeyer's work in the past few years.

The five chapters of the book trace the basic argument. The first chapter, entitled "On the possible and the probable in language", raises the question of whether there are clear criteria to distinguish between what is necessary in language structure and what is only probable. Newmeyer's answer is no, the distinction is difficult to make. Chapter 2 - "Parameterized principles" - asks whether generative

theory has shown a commitment to accounting not only for possible versus impossible languages but also for probable versus improbable ones. The answer is yes, it has, almost throughout its entire history. But is it really the task of generative theory to account for both distinctions?

(Chapter 3: "Parameters, performance, and the explanation of typological generalizations") Answer: no, only for possible versus impossible languages; probabilistic patterns can generally be explained by principles of performance. If so, might perhaps all structural generalizations be explained by principles of performance?

(Chapter 4: "In defense of the Saussurian view of grammar") No; performance factors shape the evolution of language but they do not explain the architecture of the grammar itself. Finally, are grammatical rules directly linked to performance factors? (Chapter 5: "The locus of functional explanation") Answer: no, the relationship is limited and extremely indirect.

Let us now review Newmeyer's proposals regarding how to account for crosslinguistic similarities.

2. Explaining crosslinguistic patterns

2.1. Explananda

As is generally recognized in the literature, crosslinguistic generalizations that form the tool kit of language-typological research may vary in their logical structure in two ways. One is in terms of MODALITY. ABSOLUTE generalizations state that a structural feature is a necessary component of languages; PROBABILISTIC (or statistical) statements specify that a structural feature is not necessary but it is likely to be encountered across languages; and EXISTENTIAL statements say that a structural feature is merely possible. Crosscutting these modality-based subcategories, crosslinguistic generalizations may vary in their DOMAIN. UNRESTRICTED universals pertain to the domain of all human languages; a RESTRICTED universal - also called implicational or typological statement - pertains to a subdomain of human languages defined by some structural (or other) characteristic.

Based on the two variables of modality and domain, there are then five kinds of crosslinguistic generalizations. Absolute statements may be unrestricted ("In ALL languages, X"), or restricted ("In ALL languages, IF Y, then X"); probabilistic statements may similarly be unrestricted ("In MOST languages, X"), or restricted ("In MOST languages, IF Y, then X"). Existential statements ("In SOME languages, X") are necessarily unrestricted.

How are these statement types accommodated in Newmeyer's framework? He proposes that linguistic theory - in a broad sense, including theories of both competence and performance - consists of three sets of generalizations (73):

(1) Statement types of linguistic theory

- "(a) Unparametrized principles of Universal Grammar
- (b) Language-particular rules constrained by these UG principles
- (c) Extragrammatical principles that account for typological variation"

These three types correspond roughly to the three basic modalities: (a) has to do with necessary structural properties, (c) with probable ones, and (b) with merely possible ones. Restricted and unrestricted universals have a skewed distribution over (a) and (c): most unrestricted ones are in (a) and most restricted ones are in (c).

Let us take a closer look at each group.

Group (a) contains statements of the absolute kind stating what **MUST** be in a language and thus excluding impossible languages (those that do not have the necessary properties). The common characteristic of the generalizations under (a) is that they are about invariant properties of languages. This is so not only because they

are absolute rather than probabilistic but also because they are mostly unrestricted (116-119). (2) provides examples.

(2) Crosslinguistic generalizations about NECESSARY

structural properties ((a) of (1)):

- some (but not all; cf. (4)) absolute statements:

-- unrestricted ones

e.g.: Syntax is blind to segmental phonology. (14)

-- possibly some restricted ones (117, footnote 24)

e.g.: If a language has subject-verb inversion in wh-questions, it has the same in yes-no questions.

Unlike those in (a), the statements of (b) are language-specific, keyed to particular language names. Group (b) offers an inventory of the possibilities left open by the constraints of (a): they specify what MAY occur across languages. "They are parameter-settings 'detached' from the parameters themselves (which are hypothesized not to exist)." (74)

Replacing parameters with a list of language-specific rules has an obvious disadvantage: parameters are better suited to specifying a limited set of options while the list of language-specific rules is open-ended. Newmeyer nonetheless gives up the concept of parametrized principles

in favor of lists of the attested patterns for two reasons. One is that, as he shows, parameters are both much too numerous and too complex to be sufficiently distinct from language-specific rules. The other reason is that the parameters proposed in the literature have turned out to be exception-ridden (28-127). His critique of the parameters-based approach encompasses not only the macroparameters of Government and Binding and early Minimalism but also the microparameters in more recent Minimalist work such as by Kayne (57-69).

(3) lists examples of (b).

(3) Language-specific statements about POSSIBLE structural properties ((b) of (1))

- Exceptional Case Marking (as posited in Government and Binding Theory) occurs in English.

(74)

- Complements are to the left of the head in Japanese.

(74)

Like (a) and unlike (b), the third group in (1) consists of statements of crosslinguistic scope but, in contrast to (a), these are mostly about crosslinguistically variant properties. They provide a more refined picture of the possibilities catalogued in (b) by separating what is probable from what is just possible. Here are examples.

(4) Crosslinguistic generalizations about PROBABLE

structural properties ((c) of (1)):

- all probabilistic statements:

-- unrestricted

e.g.: Most languages have nasal consonants. (FJN,
p.c.)

-- restricted

e.g.: Languages with SOV order tend to be
agglutinating. (16)

- some (but not all; cf. (2)) absolute statements:

-- unrestricted

e.g.: Morphosyntactic rules cannot "count past
two". (4)

-- restricted

e.g.: Languages with specialized topic markers
are SOV. (17)

How is it decided whether a structure feature is a necessary ((a)), or probable ((c)), or merely possible ((b)) property of languages? Evidence for something being possible is easy to find: anything that occurs even if just once is, by definition, possible. The validity of possible features depends only on the particular metalanguage in which they are cast. For example, Exceptional Case Marking

is a notion specific to Government and Binding Theory that may not figure in alternative frameworks.

Distinguishing probable and necessary from merely possible and telling apart necessary from probable are much more difficult tasks. Newmeyer, following Matthew Dryer (1997), notes that we can never be certain that a structural feature is necessary in language - that is, that languages without it are impossible (3-8, 14). The reason is that our sample of languages is always limited and therefore there is never any guarantee that an absolute universal is not going to be contradicted by the next language that we look at and thus reduced to a mere probabilistic one.

While the point is undebatable regarding absolute universals, it should be noted that probabilistic statements are equally subject to disconfirmation by languages beyond the sample. Thus, on mere empirical grounds, neither absolute nor statistical generalizations can be trusted. The only way to "know for sure" that a crosslinguistic generalization is truly universal is if its necessary truth follows from a particular theory. In such a case, the universal must be true - but of course only within that theory. Its validity is as reliable as the theory itself is.

The distinction that Newmeyer draws between absolute and probabilistic universals is indeed based on their differential theoretical status (3, 116-119). As already suggested by the labels assigned to the three groups of statements in (1), the absolute statements of (a) and (b) are those to be explained by grammatical principles, while the (mostly) probabilistic generalizations of (c) are to be explained by extragrammatical principles. Let us now see how these explanations work.

2.2. Explanations

In the literature, explanations in terms of Universal Grammar (UG) and in terms of language function have generally been pitted against each other. However, Newmeyer proposes that, in order to explain all aspects of language, both UG-based and functional explanations are necessary (135-136, 226). There is a division of labor between the two: UG dictates necessary properties of languages and thus explains why some languages are impossible - those that lack these necessary properties; language function in turn explains what are probable languages versus merely possible ones.

Here is an example of each kind of explanatory argument.

(5) An explanation in terms of UG

Explanandum: Syntactic rules do not make crucial mention of phonological properties (14).

Explanans: The biologically given structure of the human brain renders phonologically-informed syntactic rules impossible.

(6) An explanation in terms of language function

Explanandum: If a language has a distinctive dual form, it also has a distinctive plural form (121-122).

Explanans:

(a) Speakers refer to multiple entities more often than to exactly two. (121)

(b) "Grammars have conventionalized syntactic structures in proportion to their degree of preference in performance, as evidenced by patterns of selection in corpora and by ease of processing in psycholinguistic experiments."

(119, cited from John A. Hawkins)

In addition to grammatical features explained by Universal Grammar and those that follow from language function, Newmeyer notes that some grammatical features may have neither a UG-based or a functional explanation. An example is an observation by Michael Cysouw, according to which no language has a distinct first-person plural

pronoun that refers exclusively to a plurality of speakers (13).

Let us now consider the nature of the UG-based and functional explanatory principles in more detail.

2.2.1. Explanations by Universal Grammar

What exactly are principles of Universal Grammar like? At first blush, one would expect Universal Grammar to contain all and only those linguistically-relevant principles that are UNIVERSAL, INNATE, and DOMAIN-SPECIFIC (i.e., not holding for cognitive domains outside language, such a vision or spatial orientation). However, Newmeyer argues that the relationship of "universal", "innate", and "domain-specific" to UG is more complex (10-15).

(a) UG and universality

On the one hand, Newmeyer points out that there may be universals that are not part of UG; such as parsing principles (9). On the other hand, he notes that some principles of UG may not be universal in the sense of being manifested in every language. For example, extraction constraints on long-distance movement can show up only in languages that have long-distance movement (10-11).¹

In terms of these arguments, universal validity is neither a necessary nor a sufficient feature of UG principles. But constraints like those on extraction that do not show up in every language may be viewed as being universally valid since if they do not apply to a language, this is for logical rather than empirical reasons: a language cannot possibly manifest constraints on long-distance movement if it has no movement at all. If so, universal validity turns out to be a necessary (although not sufficient) feature of principles of UG.

(b) UG and innateness

While all principles of Universal Grammar must be innate, there may be innate linguistically-relevant principles that are not in UG; Newmeyer's example is again principles of parsing. Thus, innateness, like universality, is a necessary but not sufficient property of UG principles.²

(c) UG and domain-specificity

Principles of UG must be domain-specific although, Newmeyer points out, some may be only partly so. This is the case if they are particular applications of domain-independent principles to language. For example, structure dependence has been shown to characterize virtually all aspects of human behavior; but, Newmeyer notes, syntax shows a "highly specific adaptation of this general preference" (11-13).

With this qualification, and if we assume that all functional principles are domain-independent, domain-specificity is both a necessary and a sufficient characteristic of UG.

In sum: UG includes all and only domain-specific principles; they form a proper subset of linguistically-relevant principles that are universal and innate.

As was seen in (2), Newmeyer attributes two additional characteristics to UG principles: they are ABSOLUTE rather than probabilistic; and MOSTLY UNRESTRICTED rather than implicational. The first of these two characteristics follows from the assumption that the grammatical characteristics dictated by UG are necessary features of languages: if so, they cannot be tendencies. The proposal that principles of UG are mostly unrestricted is less convincing: there is nothing in the nature of UG that might favor unrestricted universals over restricted ones. But the reason why Newmeyer is reluctant to allow restricted universals into UG is not because they are restricted but because he assumes that most if not all restricted generalizations are probabilistic.

While it is true that most known restricted universals hold only probabilistically, it should be noted that the same is also true for unrestricted ones: both restricted

and unrestricted universals tend to leak. For example, subjects precede objects in most languages but not in all of them and nasal consonants occur in most but not all languages. Similarly, there is no assurance that the absolute universal that Newmeyer includes in UG - syntax uniformed by segmental phonology - may not turn out to have exceptions. UG therefore might include both unrestricted and restricted universals as long as they are of the absolute kind.

Thus, Newmeyer's claim that typology is irrelevant to linguistic theory - one that heads a section in the book (103-119) and was also the title of Newmeyer 1998b - needs to be refined. What he proposes is irrelevant to linguistic theory is not restricted (=typological) universals but probabilistic ones whether restricted or unrestricted. Also, as Newmeyer himself clarifies (104), the claim is about the irrelevance of typological generalizations to the theory of competence but not to linguistic theory in a broader sense where it includes both competence and performance.

In addition to universality, innateness, domain-specificity, absolute modality, and mostly unrestricted domain, a sixth characteristic that Newmeyer posits for principles of UG is that they are very GENERAL ones -

principles "that determine grammatical architecture in its broad lines" (14); e.g. that syntax is blind to segmental phonology.³

2.2.2. Explanations by language function

Let us now turn to functional explanations. It is not clear whether functional principles contrast with UG principles on all of their six characteristics or even on any of them. Functional principles - principles of language processing - may also plausibly be universal, innate, domain-specific, unrestricted, and general. But, according to Newmeyer, the two kinds of explanations are distinct with respect to modality. The central property that he attributes to functional principles is their PROBABILISTIC, rather than absolute, modality. Individual functional principles, he suggests, may be absolute but their complex interaction leads to probabilistic generalizations.

Newmeyer attaches two additional provisos to functional explanations: they are indirect and they apply holistically rather than atomically. The HOLISTIC character of functional explanations means that functional principles can have only an overall effect on grammar (174-225). Individual grammatical patterns may not be functionally-based at all and may even be anti-functional.

The INDIRECT effect of function on language means that function is not an immediate explanans of language structure; it comes into play only in explaining language change (182-191). Furthermore, he points out that in accounting for language change, function cannot explain either the propagation or the retention of a linguistic innovation. Where function is directly relevant is in explaining innovation; and even here, many changes are not functionally-motivated.⁴

While Newmeyer's argument about the indirect nature of functional explanations is convincing, it seems that the same is true for UG-based explanations. Newmeyer points out that the way we speak a language is determined simply by the conventions of the language system rather than by language function (185). But, it should be noted, UG is an equally indirect explanation of how we speak. Grammatical conventions are explained by change: how they arose from earlier stages; and this is where both principles of language function and principles of UG - if they exist - come in. Both forces channel historical change by defining limits and fostering particular directions to it.

We might add that there is an additional commonness to UG-based and functional explanations. If we define a functional explanation as one that makes crucial reference

to the goals and means of an agent, both kinds of explanations are functional since both are based on the cognitive and communicative purposes of people and their physically-given means to achieve these goals. The only possible difference that remains is that the hypothesis of UG is about domain-specific means while what are generally labeled as functional explanations may all turn out to be domain-independent.

3. Conclusions

Newmeyer's proposals converge with other recent views in the typological literature in two important ways. One is the recognition that crosslinguistic generalizations are to be viewed as PROBABILISTIC (at best) rather than absolute (e.g. Dryer 1997, Bickel 2005). The other, related area of convergence is the idea that UG is an EMPIRICAL hypothesis. According to Newmeyer, Universal Grammar is "an empirical hypothesis that requires a vigorous defense" (15), one that comes in as a last-resort explanation "in the absence of a convincing alternative 'externally-based' account"(14).⁵

There is a growing body of research arguing that many aspects of language acquisition are derivable from domain-independent principles, thus rendering UG redundant and thus eliminable (e.g. Tomasello 2003, MacWhinney 2004,

Karmiloff-Smith 2005, O'Grady 2005). Furthermore, it is not only that domain-independent principles MAY be invoked to explain acquisition; it seems that such principles MUST be invoked. As has been pointed out by Hawkins (1988: 8) and Tomasello (2003: 321-322), children acquire not only the universal properties of their language but also the language-specific ones, where UG cannot be invoked as an explanation. If so, couldn't the same mechanisms that the child uses to learn the language-specific features be used by him to acquire the universal grammatical features?

Newmeyer's new book is a compelling text, extremely rich in content, intriguing in its questions and clear and articulate in its answers. It is fast-paced but very readable, with abundant chapter and section previews and summaries. Both "formalists" and "functionalists" will greatly profit from reading it and are likely to end up feeling that their views are not so far apart from those on the other side.

Acknowledgement

I am grateful to F. J. Newmeyer for discussions of some of the issues involved in the book and to two LT referees for their comments on an earlier version.

Notes

- 1 This type of statement, where the implicatum logically presupposes the implicans, is labeled "provision" in the Konstanz Universals Archive.
- 2 Universality and innateness are also not co-extensive: as Newmeyer points out, a universal property may not be innate (or, we might say, not directly so). For example, the fact that all languages have terms for 'mother' and 'father' is explainable by universal human experience rather than by direct appeal to innateness (11).
- 3 A recent proposal that also claims that the UG contains very general properties of language, possibly only recursion, was made by Hauser & Chomsky & Fitch 2002. For Newmeyer's criticism of this proposal, see page 168, footnote.
- 4 Newmeyer argues convincingly that UG's principles are tools of cognition rather than of communication. He suggests that language's first role in evolution was cognition (cf. the fact that apes are cognitively but not communicatively advanced); communicative use is

an overlay, a secondary development. Functional principles and the resulting typological patterns evolved under performance pressures only when language started being used for communication (167-172). (For a related idea, cf. Ulbaek 1998.)

5 On the issue of evidence for UG - such as the whether and by what mechanism languages that violate UG can be learnt, the abstractness of grammatical principles, early and rapid acquisition, and the poverty of stimulus - see 6-8 and Newmeyer 1998a: 84-94; also Hoekstra & Kooij 1988, Penke and Rosenbach 2004, and Tomasello 2004.

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