On the role of parameters in Universal Grammar: a reply to Newmeyer

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1 Introduction[1]

Newmeyer (2004) argues that the notion of parameter of Universal Grammar has no role to play in accounting for cross-linguistic differences in syntax, and that, instead, "language-particular differences are captured by differences in language-particular rules" (183). He tries to show that parameter-approaches "have failed to live up to their promise" (181) and that "the hopeful vision of UG as providing a small number of principles each admitting of a small number of parameter settings is simply not workable" (185).

In this paper, we defend the principles-and-parameters model of cross-linguistic variation. We propose that Newmeyer's arguments against it are based on misunderstandings either of theory or of data, are conceptually misconceived, illogical or simply false. The rule-based alternative he suggests is hard to evaluate, since few actual instances of it are offered, and none is discussed in any detail. In a couple of instances that Newmeyer discusses, his rule-based account is a notational variant of a parameter-based theory. In other cases it represents a retreat to observational adequacy.

The first part of the paper replies to Newmeyer's critique of parameters (his pp. 198-215). The second part demonstrates an example of the efficacy of the parameter-based approach, drawing on work by Platzack and Holmberg on Scandinavian.

2 Newmeyer's critique of parameters

Newmeyer begins by enumerating eight ways in which parameters might be thought to be attractive, as follows:

(1)   a.   Parameters are descriptively simple, whereas rules are (generally) not.
      b.   Parameters have binary settings (an idea which is inapplicable to rules).
      c.   Parameters are small in number; the number of rules is open-ended.
      d.   Parameters are hierarchically/implicationally related, thereby accounting for both order of first-language acquisition and typological generalizations (there is nothing comparable for rules).
      e.   Parameters are abstract entities with a rich deductive structure, making   possible the prediction of (unexpected) clusterings of morphosyntactic   properties.
      f.   Parameters and the set of their possible settings are innate (and therefore universal). Rules are not (normally) assumed to be drawn from an innate set.
      g.   Parameter settings are easily learned, while rules are learned with greater difficulty.
      h.   Parametric change is markedly different from rule-based change (such as grammaticalisation and morphological change).   (185)

Let us look at Newmeyer's attempted refutations of each of these points in turn.

a) Parameters are descriptively simple. Here Newmeyer's point seems to be that there is no justification for introducing the notion of parameter into the theory since their postulation leads to a more complex system than one which only has language-specific rules.

However, Newmeyer's theory includes rules which are equivalent to parameter settings. For example Newmeyer proposes to handle head-complement order not by a parameter with two settings, as in the classical formulations of the head-parameter, but by language-particular rules of the form (1a,b), where (1a) is operative in Japanese, (1b) in English (p. 184).

(1)   a.   Complements are to the left of the head.
      b.   Complements are to the right of the head.

Given that UG specifies that a phrase consists of a head and a single complement, as Newmeyer assumes, and given that the order cannot be left unspecified, it follows that there are only two possible rules specifying head-complement order, and each language has to pick one of them. In case head-complement order is relativized to categories (for instance,

complements can precede nouns but follow verbs in the same language, a fact noted by Newmeyer), there can only be two rules times the number of complement-taking categories; still a finite and relatively small number. Thus some of Newmeyer's language-specific rules amount to a very close notational variant of parameter settings; after all, a parameter can always be reformulated as a set of competing rules. In the case of head-complement order, what is language-specific is the choice of rule from a set of possible rules allowed by UG, exactly as in the case of parameter-setting. We conclude that the model sketched by Newmeyer is not formally simpler than standard principles-and-parameters theory.[2]

b) Binarity. Newmeyer claims that "there is little evident binarity in morphosyntax" (191). This overlooks the fact, evident from the most cursory glance at the literature on syntactic typology since Greenberg (1966), that many forms of word-order variation are best phrased, at least at the observational level, as dyads of type OV/VO, NAdj/AdjN, etc.; as discussed above, Newmeyer himself proposes a binary set of competing rules to replace the head parameter. Similarly, parameters which deal in the presence vs. absence of a property (null subjects, overt *wh*-movement, etc.) necessarily deal in binary oppositions. One example is given of a non-binary parameter: Manzini and Wexler's (1987) parameter for binding domains, where each parametrised definition of governing category is in a subset relation to the next: binding domains can be determined by Infl, Tense, referential Tense, or root Tense, for example. However, this can be trivially restated as a network of implicationally related binary parameters, as in (2):

(2) a. Is the binding domain determined by Infl? YES/NO
    b. If NO, is the binding domain determined by Tense? YES/NO
    c. If NO, is the binding domain determined by referential Tense? YES/NO.
    d. If no, is the binding domain is determined by root tense? YES/NO

We have here a further instance of a parametric hierarchy of the type discussed by Baker (2001) (on which more below), with the interesting additional property that each position on the hierarchy is related to the next

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[2] We do not necessarily subscribe to the view that head-complement order is determined by the classical head-complement parameter, but this does not affect the points being made here in relation to Newmeyer's rule-based alternative.

in terms of the Subset Principle: the highest position defines the smallest grammar, and each further position going down the hierarchy represents a superset grammar in relation to the immediately higher one. It is therefore easy to see how acquirers might proceed down the hierarchy; each step down the hierarchy is motivated purely by positive evidence moving them towards a superset grammar (see Manzini and Wexler (1987) for discussion).

More generally, the question of binarity is arguably more a matter of formulation than anything else. It may be useful to formulate parameters as binary options, since this creates the possibility of seeing a set of parameter values as a kind of 'bit string'; see Clark and Roberts (1993) for some discussion of the potential utility of this. The only really substantive claim behind a binary formulation of parameters is that the values are discrete: there are no clines, squishes or continua.

c) Smallness of number. Here Newmeyer takes on the question of how many parameters there are. He points out that there may be hundreds or even thousands of parameters, if one extrapolates from the literature on comparative syntax of the past fifteen years or so, and concludes:

> If the number of parameters needed to handle the different grammars of the world's languages, dialects and (possibly) idiolects is in the thousands (or, worse, millions), then ascribing them to an innate UG to my mind loses all semblance of plausibility. (196)

Perhaps, but noone has ever suggested that there are millions of parameters. There may be millions of possible grammatical systems, but only twenty independent binary parameters are needed to produce that order of magnitude of grammatical systems. Nearly all estimates of the number of parameters in the literature (Lightfoot (1999), Kayne (2000), Roberts and Roussou (2003, Chapter 5)) judge the correct figure to be in the region of 50-100. This is a plausible, if conservative, conjecture.

Here too Newmeyer seems to think that rules are necessary to any formulation of UG, while parameters are an optional extra. For example, he states that "I see no reason to conclude that the number of the former [parameters – AH/IR] is significantly less than the number of the latter [rules [AH/IR]" (196). Actually, there is one obvious reason: parameters allow us to collapse cross-linguistic differences into single abstract properties of grammars, while language-specific rules are just that: language-specific.

A final point here: it may seem strange that evolution endowed the language faculty with 50-100 choice points. However, if we think of parameters along the lines suggested in Roberts and Roussou (2003, Chapter 5) and elsewhere, then it may be that parameters are not really primitives of UG, but rather represent points of underspecification which must be filled in in order for the system to become operative. In that case, nothing is being added by assuming parametric variation; in fact, it may be compatible with assuming the most minimal initial state we can. This idea would provide a strong conceptual basis for our account of cross-linguistic variation, especially in the context of a minimalist conception of UG.

d) Hierarchies. Here Newmeyer discusses Baker's (2001) Parametric Hierarchy (PH) in some detail. He points out one or two empirical difficulties with it (e.g. the fact that, as formulated, it predicts that only SVO languages can be null-subject languages, which certainly appears to be false, given Irish at least). These difficulties seem to us to be difficulties of formulation, rather than difficulties with the concept of parameter hierarchy or the notion of parameter itself. But Newmeyer concludes "No hierarchy of the general form of the PH is capable of representing the parametric choices that the child is hypothesized to make" (201). This sweeping conclusion seems to us not to be justified by the observation, essentially, that the null-subject parameter is almost certainly ranked too low on the hierarchy as Baker presented it. Furthermore, there is no mention here of language-specific rules as an alternative. A moment's reflection reveals why this must be: language-specific rules make absolutely no predictions about complex patterns of relatedness of the type Baker's PH tries to make. As things stand, they predict that languages may vary without assignable limits. They may lack the empirical difficulties that beset something like Baker's PH, because, lacking any constraint on their formulation of any kind, they are able to predict everything and therefore nothing.

e) Clustering. Here Newmeyer makes two main points: that clustering effects within a single language can be predicted by language-specific rules and that the clustering effects often claimed to hold for well-known parameters such as the null-subject parameter and the head-complement parameter are illusory. He also makes some further related points regarding acquisition.

The first point concerns the capacity of language-specific rules to predict clustering effects. In this connection, Newmeyer cites the phrase-

structure and transformational rules proposed in Chomsky (1957) for the English auxiliary system:

(3) a.   AUX → TNS (M) (*have + en*) (*be + ing*)
    b.   affixal element + verbal element → verbal element + affixal element

Newmeyer states that from these rules "a host of seemingly unrelated properties follows: the fact that on the surface perfect and progressive in English are overlapping and discontinuous, the impossibility of double modals, the site for the insertion of supportive *do*, some of the possibilities of contraction, and more" (202). Aside from the fact that several of these further properties require further specification and do not fall out directly from the rules in (3), what is striking here is how a fairly robust cross-linguistic generalisation regarding the ordering of Tense, Mood and Aspect (TMA) markers is being missed. As Cinque (1999:153ff.) shows, many languages show a very similar ordering of TMA elements. The list in (4) illustrates a small subset of the languages listed by Cinque:

(4)

English	T/Mod–Perfect–Progressive–Voice
Spanish	T–Perfect–Progressive–Voice
Welsh	T–Perfect–Progressive
Modern Greek	T–Asp–Voice
Hindi	T(Past)–T(Anterior)–Progressive
Finnish	T/Mood–Perfect–Voice
Hungarian	$Mood_{SpeechAct}$–T–Mod_{Root}
Mongolian	$Mood_{SpeechAct}$–T(Past)–T(Future)–Progressive–Voice
Abkhaz	Mood/T(Past)–T(Future/Anterior)–Perfect–Progressive–Voice
Lezgian	Mood/T(Past)–T(Future)–Asp

There is a clear cross-linguistic pattern here; what seems to vary in fact involves how certain features are differently syncretised on certain positions cross-linguistically (Cinque's interpretation of the data is rather different). It is clear that English fits the cross-linguistic pattern rather well. So Newmeyer's example neatly illustrates how a reliance on language-specific rules will lead one to miss significant cross-linguistic generalisations. A parameter-based approach, on the other hand, will naturally lead one to look for similarities and differences in other systems.

Newmeyer's second point is that the well-known correlations proposed by Rizzi (1982) in connection with the null-subject parameter have been shown not to hold, and that this is to be expected since the notion of parameter argued for by Rizzi is illusory. Newmeyer's version of Rizzi's proposal is that the possibility of null thematic subjects in tensed clauses, null nonthematic subjects, 'free' subject inversion and apparent *that*-trace violations were typologically connected. The strongest possible gloss one can put on this is that any language must have all or none of these properties, irrespective of any other property of the system.[3] Gilligan's (1987) cross-linguistic survey revealed that these very tight correlations did not hold if one surveyed a typologically diverse range of a hundred or so languages. Instead, only four implicational statements survive and five language types are attested whose existence was not predicted.

Newmeyer sees the results of Gilligan's survey (which, like him, we will take at face value for the sake of the discussion) as damning for Rizzi's proposal. But consider what has actually been shown: an original very strong correlation was postulated on the basis partly of theoretical considerations and partly the close comparison of a small number of closely related languages. When a very large number of genetically and typologically highly diverse languages were compared for the 'same' properties, with no control as to the other typological features of these languages, the original correlations were shown not to hold in their original form, although four implicational statements could still be gleaned and five unsuspected language types observed. To us, this does not seem like a bad or shocking result for parametric theory, but rather a fairly promising result from the admixture of a very large amount of essentially random data into an originally carefully controlled database. The fact that any coherent patterns survived is telling, and a sign that Rizzi's observations were clearly on the right track. Finally, we can observe that the postulation of language-specific rules in place of parameters would have revealed precisely nothing either in the controlled database studied by Rizzi or in the random sample chosen by Gilligan.

Newmeyer goes on to point out that the minimalist approach to parameters, which involves seeing them as inherently connected to features of functional heads, "makes it all but impossible to predict any significant

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[3] Rizzi never actually made this strong claim, but in fact identified two "related but autonomous parameters" (1982:143), which give rise to a four-way typology. For the purposes of the present discussion we will continue to entertain the stronger hypothesis reported in the text, however, since this is what Newmeyer discusses.

degree of clustering" (208). This is clearly false: Rizzi (1982:143) identified the core property allowing null subjects with a [+pronoun] feature of the functional head Infl (this feature may or may not be referential, giving rise to the two subparameters mentioned above). In MP terms, this can easily be restated as the presence of a D-feature on T, or perhaps, following Alexiadou and Anagnostopoulou (1998), on the verbal inflection itself. The clustering of properties, and indeed the two subparameters, can then be stated almost exactly as Rizzi stated them. In this particular case, the restatement in MP terms is very straightforward, contrary to Newmeyer's claim. We will see a further example of clustering in Section 2 below.

A final point concerns first-language acquisition of the null subject parameter: Newmeyer says "[i]t is very difficult for me to imagine how the child could ever come to set this particular parameter" (206). Perhaps this is hard for Newmeyer to imagine: much of what small children achieve in acquiring language is indeed extraordinary. But they do it: the evidence from the language-acquisition literature that young children acquiring null-subject languages set the parameter very early in acquisition is unequivocal, as every study since Hyams (1986) has shown (see Guasti (2002) for an overview). Wexler (1998) enumerates the null-subject parameter among those which appear to be set at or before the time of the first multiword utterances in the course of normal acquisition. It is hard to see how this is achieved, whether we formulate the relevant grammatical properties in parametric terms or otherwise, but this is an empirical challenge linguistic theory must meet. And it seems clear that the postulation of language-specific rules in this domain will get us nowhere, once again.

f) Innateness/universality. Here the central point Newmeyer wishes to make is that there is no need for prespecified options if UG leaves a range of possibilities open and positive evidence does the rest. He states "I have never seen a poverty of the stimulus-based argument for such an assumption [of prespecified options – AH/IR] and doubt that one can be constructed" (211-2). In fact, Lightfoot (1991, 1999) argues at length for a selective theory of learning, showing the advantages such an approach has in dealing with complex learning problems and relating the idea specifically to the poverty of the stimulus.

g) Learnability. Newmeyer's central objection here is that the postulation of any parameter or parameter-setting on the part of the acquirer seems at first sight to entail a kind of regress: "parameter-setting presupposes some

non-negligible degree of prior structural assignment" (212). An objection of this general form can be made regarding almost any aspect of the acquisition of grammar: some parts of the grammar must be acquired before others. And the objection can be met in a very straightforward way, whether or not one is assuming a parameter-setting model of acquisition: some things must be learned before others, and it is part of the task of language-acquisition research to determine exactly what the "learning path" is. Very interesting progress has been made in charting the learning path connected to the parameters governing metrical phonology by Dresher (1999) and the references given there. It is untrue to claim that no progress at all has been made in this area by assuming a parametric approach: at the very least Wexler's Very Early Parameter Setting hypothesis tells us that many important parameters are fixed very early in acquisition.

h) Diachrony. Newmeyer alludes to the six properties of parametric change enumerated by Lightfoot (1991) and criticised by Harris and Campbell (1995). However, he seems to take it for granted that there must be a difference between parametric change and other kinds of morphosyntactic change such as grammaticalisation. However, Roberts and Roussou (2003) devote an entire monograph to showing how grammaticalisation can be understood as a fairly standard kind of parametric change involving categorial reanalysis. Moreover, Roberts (in preparation) shows that there are really only two kinds of syntactic change: parameter change and changes to lexical entries of lexical heads. Given the hypothesis that parameters are associated with lexically encoded properties of functional heads, this reduces to the idea that change affects lexical entries, either of lexical heads or of functional heads. The latter case is familiar parameter change, the former lexical change. There is no deep problem here for the concept of parameter, and no case for replacing it with language-specific rules.

3 Cross-linguistic correlations: a case study

As discussed by Newmeyer, the existence of cross-linguistic correlations of syntactic properties is crucial to parametric theory, since only they provide empirical evidence in favour of parameters, against language-specific rules. However, according to Newmeyer "two decades of intensive research has failed to reveal the existence of the hoped for correlations" (211). As discussed above in connection with the null-subject parameter, we don't think this conclusion is warranted. Let us consider a specific case from the

principles-and-parameters literature of a set of putative cross-linguistic correlations, and try to assess both the validity of the correlations, and their implications for linguistic theory.

As first discussed by Platzack 1987, there is a syntactic division among the Scandinavian languages between what he called Insular and Mainland Scandinavian. The Insular Scandinavian (ISc) languages are Icelandic, Faroese, medieval varieties of the Mainland Scandinavian languages, and the Älvdalen dialect in Sweden. The Mainland Scandinavian (MSc) languages are all other varieties of Danish, Swedish and Norwegian. ISc and MSc differ with respect to the following five properties (the a-examples are Icelandic, the b- and c-examples Swedish):

(5)   ISc but not MSc allows a null nonreferential subject.
    a. Nú   hafa *e*   komið   margir stúdentar.
    b. Nu   har   *(det) kommit   många studenter.
        now   have EXP   come   many students

(6) ISc but not MSc has non-nominative subjects.
    a. Honum   var   gefinn   hestur.
        he-DAT   was   given   horse
    b. *Honom   blev   givet   en häst.
         him   was   given   a horse

(7)   ISc but not MSc has so-called stylistic fronting (the fronted category is in boldface):
    a. **Fram** hefur komið að   **fiskað** hefur verið í leyfisleysi.
        forth   has   come   that fished   has   been illegally
    b. ***Fram** har kommit   att   **fiskat** har blivit olagligt.
        Forth has come   that fished has been illegally
    c. Det har kommit   fram att   det   har blivit fiskat   olagligt.
        EXP has come   forth that EXP has been fished   illegally
        'It has been revealed that illegal fishing has taken place.'

(8)   ISc but not MSc has V-to-T in embedded clauses (both are V2 in main clauses):
    a. Það er greinilegt að   Anders **talar** ekki íslensku.
        it   is obvious   that Anders speaks not Icelandic
    b. Det är uppenbart att   Anders inte **talar** isländska.
        it   is obvious   that Anders not speaks Icelandic
        'It's obvious that Anders doesn't speak Icelandic.'

(9)　　ISc but not MSc has relatively rich subject verb agreement.
　　a.　Ég　　tala/þú talar/við tölum islensku.
　　b.　Jag　talar/du talar/vi talar isländska.
　　　　'I speak/you speak/we speak Icelandic.'

The claim made by Platzack 1987 is that these differences are the result of different settings of one binary parameter. The precise formulation of the parameter has since undergone certain changes and refinements reflecting the evolution of syntactic theory; see Falk 1993, Holmberg and Platzack 1995, 2005. However, the basic idea has remained the same since Platzack 1987, and can be expressed as follows:

(10) (a)　In all the languages a finite sentence must have a nominal category in SpecIP or I.[4]
　　 (b)　In all the languages I has an EPP-feature which requires a specifier for I.
　　 (c)　ISc has a nominal Agr in I, spelled out as subject-verb agreement, MSc doesn't.

That is to say, the parameter is the feature value of Agr: nominal or non-nominal.[5] The conditions (10a) and (10b) may be universal, or more plausibly, are themselves settings of two independent parameters.

　　The effect of (10a,b,c) in the case of MSc is that the highest nominal argument invariably moves to SpecIP, or else a nominal expletive is merged there (or moved there; see Holmberg 2002), satisfying (10a) and (10b) at the same time. In ISc Agr in I will always satisfy (10a), while (10b) will be satisfied by moving some category to SpecIP, subject only to locality. Often the category closest to I is the nominative subject, in which case it will move to SpecIP, the result then being superficially identical to a MSc sentence. But if the nominative subject isn't closest to I, some other

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[4] In Holmberg and Platzack 2005, (10a) is formulated to specifically require a nominative NP in I or SpecIP in finite clauses. In Platzack (2004) and Holmberg and Platzack (2005) what is required is a person feature in SpecIP or I. In terms of a theory with valued and unvalued features (following Chomsky 2001), assume that finite C contains an unvalued person-feature [u-person] which needs a person-marked category in SpecIP or in I to get valued. ISc has a person-marked Agr in I, spelled out as agreement, but MSc doesn't, so a person-marked NP has to move to SpecIP; the facts in (5)-(9) follow as laid out in the text.
[5] Plausibly Agr is completely absent from I in MSc. This would be a special case of 'non-nominal Agr'.

category ends up in SpecIP; this is how oblique subjects as well as stylistic fronting are derived.

The Scandinavian languages are V2 languages. This means that I in main clauses moves to C. In main clauses (10b) can therefore be satisfied by moving a topicalized or focused category to SpecCP; this is how (5a) is derived. In MSc, too, I moves to C in main clauses, so (10b) is satisfied by the adverbial in SpecCP in (5b). Condition (10a) still requires a nominal category in SpecIP, though, hence the obligatory expletive.[6]

The contrast between (8a,b) follows if nominal Agr in I has the effect of attracting V to I; see Roberts 1993, Rohrbacher 1994, Vikner 1995. We return to this issue below.

The reason why we have picked this example of a parameter is that the correlation of the properties (5)-(9) has stood the test of time quite well. As noted in Platzack and Holmberg 1989, Old French, Middle English, and Yiddish exhibit the ISc cluster of properties, while Modern English exhibits the MSc cluster, as does Modern French, with some caveats to which we return below. Diachronic investigations have shown that the appearance of the Modern MSc cluster correlates rather well with the loss of agreement, particularly person agreement; see Falk 1993; on French and English, see Roberts 1993.

Notably, since 1987 the Mainland Scandinavian dialects have been subject to a significant amount of research, uncovering an impressive range of syntactic variation; see Holmberg and Sandström 1996, Holmberg and Platzack 2005, and the papers in Vangsnes *et al*. 2004. However, as regards the properties (5-9) the dialects behave as predicted by the theory sketched above in (10): there is one known dialect, the Älvdalen dialect, which belongs in the ISc camp. All other dialects, as far as we know, clearly exhibit the MSc pattern. Given the range of dialectal variation found in other syntactic domains, this is a striking generalization, which can be explained by the parameter-based theory sketched above in (10).[7]

The theory does not predict that the ISc properties will always cluster. It allows for the possibility that a language has the positive setting for

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[6] The EPP condition is suspended in the case of yes/no questions and a few other verb-initial structures.

[7] The only dialect apart from Älvdalen which has retained subject-verb agreement is the Hallingdalen dialect in Norway, which, however, only has number agreement. This is not sufficient to set the parameter the ISc way, if [person] has the pivotal role alluded to in footnote 4. There is at least one dialect where V-to-I is reported to occur in embedded clauses: the dialect of Kronoby in Finland, but where no other ISc properties are evident. See the text below on the role of V-to-I.

(10c), yet does not, have, say, oblique subjects. This is so if allowing oblique subjects depends on other parameters in addition to (10c); to start with, the language should have non-structural case.[8] Stylistic fronting, too, may depend on other parameters than (10c). Parametric theory predicts that a cluster dependent on a given parameter setting will reappear in language after language, all else being equal. But all else is seldom equal. The best chance of observing cross-linguistic correlations is in closely related languages or dialects, but even then other parameter settings may complicate the picture, masking the effects of a parameter setting.

The place of V-to-I in this connection has been subject to much controversy. One often noted problem is that Modern French patterns like MSc with respect to (5,6,7) but has V-to-I. This has generated much discussion about just how much verb-agreement is required for V-to-I to be licit; French has some subject-verb agreement, but not much (see Roberts 1993, Rohrbacher 1994, Vikner 1995b, Koeneman 2000). In recent work Biberauer and Roberts 2005 have argued that V-to-I may be triggered by other verb-inflection-related properties than agreement. They note that the Romance languages, including French, have a richer tense system than the Germanic languages, and they propose that rich tense, just as well as rich agreement, may trigger V-to-I. So while V-to-I in the ISc languages may be an effect of nominal Agr, this is not a criterial property. A further complication is that most varieties of Faroese don't have V-to-I, although they do exhibit other ISc properties. In any case, the theory in (10) is not dependent on V-to-I being included in the cluster of properties.

Now consider (5)-(9) in a rule-based theory. Assume, for the sake of argument, that UG does not specify (10a,b), and that the parameter (10c) does not exist either. Instead, the contrast between (5a,b) would be the result of ISc having, say, a language-specific rule of expletive deletion, absent from MSc. Similarly, the contrast between (6a,b) would be the result of ISc having a rule of oblique NP movement to specIP, absent from MSc (also crucially in those varieties of MSc which have a dative case). The contrast between (7a,b) would be the result of ISc having a rule of stylistic fronting, absent from MSc, and the contrast between (8,b) a result of ISc

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[8] There are dialects in Sweden which have dative case, but have not been reported to have oblique subjects or other ISc-like properties. Whether sentence-initial oblique NPs in the ISc languages are actually subjects rather than, say, fronted topics in constructions corresponding to (6a) in all varieties of ISc is a highly controversial question. Insofar as the NPs satisfy the EPP it does not matter for our purposes whether they exhibit all the canonical subject properties or not.

having a rule moving V to I, absent from MSc. The contrast between (9a,b), finally, is a matter of ISc having a paradigm of inflected verb forms absent from MSc.

The theory is observationally adequate, obviously, but makes no predictions whatsoever regarding the correlation of the properties (5-9). It implies that the properties are independent, and that any correlations are accidental. On the basis of what we know about these languages at present it seems highly plausible that the properties are not independent. A parameter-based theory roughly along the lines of Platzack 1987 can explain the correlations. One aim of Newmeyer 2004 is to argue that typological generalizations can be explained by "independently needed principles of performance" (p. 181), mainly following Hawkins 2004. As we doubt that any such principles can explain the correlations in (5-9), we conclude that the parameter-based theory has been vindicated.

4 Conclusion

We recognize the importance of distinguishing linguistic variation which is due to extragrammatical factors from variation which is parametric and thus predictable from properties of UG (see Barbiers 2005 and Adger and Smith 2005 for interesting recent contributions). Newmeyer's approach, which is to deny the existence of parameters, is ill-conceived and not likely to further our understanding of the interplay of UG and extragrammatical factors in explaining cross-linguistic variation. To pursue Baker's metaphorical correlation with chemistry a little further, one may see something like Baker's PH as a precursor to a periodic table for languages; we agree with Baker that this is an optimistic view but one worth striving to maintain. Against this background, Newmeyer appears like a 19th-century chemist arguing against the abstractions of the early conceptions of the periodic table and in favour of a return to traditional theories of the nature of the elements, humours, etc. Fortunately, chemists chose the optimistic, difficult, abstract path. We don't see any good reason why today's linguists should not follow their example.

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