

**Syntactic categories and syntactic change:
The development of subjunctive periphrases in English**

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1 Categories: some analogies and discrepancies between phonology and syntax

A number of developments in the 1960's in theories of syntactic representation and of the organisation of the syntax were inspired by perceived analogies based on concepts familiar from phonology. Thus, in particular, in terms of organisation, the principle of the cycle, already established with respect to the phonology (Chomsky, Halle & Lukoff 1956), was introduced as an organising principle for the application of syntactic (transformational) rules; and, in terms of representation, the notion feature was extended to the syntax from the phonology (where it had been familiar for some time, in the form in which it was adopted into early 'generative phonology', from the work of Roman Jakobson, and developments thereof – see e.g. Jakobson & Halle 1956), in recognition that the basic sequential units in both domains could be analysed into componential elements which played a systematic role in the formulation of linguistic regularities. Both of these innovations in the syntax were embedded in the grammatical framework expounded in Chomsky (1965).

However, it can be argued that the representational innovation of feature notation has had a rather small impact on syntactic descriptions, compared with the centrality of its role in the phonology, particularly in the case of those features that are used to characterise what I shall refer to as the primary categories. Primary categories are those classifications in terms of which we can express the basic distribution of elements: they are the 'word classes' of syntax and the 'major classes' of phonology. The featural characterisation of the primary syntactic categories remained vestigial indeed (e.g. in Chomsky 1965: ch.2, §2) until its elaboration in Chomsky (1970) and (particularly) Jackendoff (1977); and even since then the role of the cross-classificatory capacity afforded by featural representation of the primary categories of the syntax has not been presented as particularly important in the description of languages.

To be sure, over the last several decades textbook treatments of syntax have attempted to justify the use of such a notation by illustrating its cross-classificatory capacity, typically in relation to the primary categories, as does e.g. Radford (1988: 146-8), in arguing for the by-then-familiar featural representations in (1):

- (1) *Chomskyan primary categories*
- | | | | |
|--------|---------|---------------|---------|
| Verb = | [+V,-N] | Adjective = | [+V,+N] |
| Noun = | [-V,+N] | Preposition = | [-V,-N] |

Radford points out that we can represent the 'supercategory' which includes verbs and prepositions as [-N], and that this 'supercategory' is invoked by a generalisation concerning complementation in English, namely that only members of the [-N] 'supercategory' can take NP complements, as illustrated by (2):

- (12) a. John loves Mary
b. John brought a present for Mary
c. John's admiration *(for) Mary
d. John is fond *(of) Mary

(where the asterisks indicate that the bracketed material cannot be omitted). And he cites the categorial distribution of gender in Italian, which is limited to nouns and adjectives (among the categories under discussion), as motivating in this case the 'supercategory' [+N].

Such arguments run parallel to those for ‘natural classes’ in the phonology: cf. e.g. ‘... a set of speech sounds forms a *natural class* if fewer features are required to designate the class than to designate any individual sound in the class’ (Halle 1964: 328). Thus far, the syntax/phonology analogy (in the sense of e.g. Anderson 1987) is exact. That is, to spell out the sense of ‘analogy’, the situation is consistent with the position that the structural properties associated with phonology and syntax are identical unless this expectation is overridden by inherent discrepancies between the alphabets of features attributed to these different ‘components’ of the grammar (given, for instance that the categories of the syntax are more highly differentiated than the phonological) or by the relationship between syntax and phonology (in that, say, the latter is interpretive of the former): this view is discussed at some length in Anderson (1985, 1986, 1992, 1997, 2003).

Radford’s arguments differ from discussions of ‘natural classes’ in phonology, however, in so far as there is no appeal in them to an equivalent, with respect to the syntax, of the phonetic substance presumed to be shared by members of a phonetic ‘natural class’ or ‘supercategory’. Thus, in a typical vowel system with the categories /i, e, a, o, u/, the ‘supercategory’ represented as [+high], which includes [+high,-back] /i/ and [+high,+back] /u/, is associated with a particular phonetic character, such as is implied by the label. As a textbook of the 60’s puts it (in its most bland form), ‘the features shared by the class members should be limited to those which have a certain degree of phonetic plausibility’ (Harms 1968: 26). This discrepancy between phonology and syntax reflects the ‘autonomist’ view of syntax espoused by the tradition adhered to in Radford (1988), and this is embodied in the ‘autonomous syntax principle’ – ‘no syntactic rule can make reference to pragmatic, phonological, or semantic information’ (1988: 31). And his presentation there of the system of features differentiating the primary syntactic categories is ‘autonomist’ in this sense (though this principle comes to be curiously unmentioned in Radford 1997). What substantive content one might attribute to these syntactic features typically is ignored, and is presumably to be assumed to be null, or it receives at best such cursory comments as Chomsky & Lasnik’s isolated and inconsequential footnote (1977: 430, note 16): ‘in more or less traditional terms, we may think of [+N] as “substantive” and [+V] as “predicable”’. In this formulation it even remains unclear what conceptual domain these labels might inhabit. Do they have any content other than being different?

On the other hand, Anderson (1989a), for instance, opposes to an ‘autonomist’ view the idea that the syntactic features that differentiate classes are notionally based, and argues that syntax and phonology are analogous in manifesting substance-based categories whose formal properties and differences therein follow from their (differences in) substance, though the categories may also of course exhibit grammaticalisation, or de-naturalisation (cf. again for the development of this view Anderson 1985, 1986, 1992, 1997, 2003). On this view, one can substitute ‘semantics’ for ‘phonetic shapes’ in the following: ‘... if we represented lexical items by means of an arbitrary feature notation, we would be effectively prevented from expressing in the grammar the crucial fact that items which have similar *phonetic shapes* [my italics – JA] are subject to many of the same rules’ (Chomsky & Halle 1968: 295). The categories of the syntax are semantically ‘grounded’, just as phonological categories are phonetically. The first of the aims of this paper is to provide evidence for this, in general terms in §2, and in relation to syntactic change in the concluding section. An understanding of syntactic change depends on the uncovering of the semantic basis for most of the changes.

Radford (1997: 63-5) adds a couple more illustrations of the appropriateness of the syntactic ‘supercategories’ which can be defined in terms of (1) to those that are invoked in Radford (1988); and, following on from recent work, he adds the feature [±F], where ‘F’ = ‘functional’. Other recent textbooks, such as Haegeman & Guéron (1999), however,

scarcely mention the cross-classificatory properties of the primary categories. And this kind of cross-classification (or ‘supercategorisation’) of primary categories plays little role in even the presentation of English syntax offered by Radford (1988, 1997), except perhaps in the case of the innovated feature $[\pm F]$ of Radford (1997), to which there is attributed at least some cross-linguistic properties (whatever one makes of the ‘functional categories’ proposed there – Radford 1997: §§2.9-10).

This situation in the textbooks does not seem to misrepresent the degree of interest shown in this area in the syntactic literature in the frameworks to which these works serve as introductions. Certainly, we can register sporadic experiments with the system of features, such as proposals for ‘cross-linguistic neutralisations’ of categories (e.g. Stowell 1981 – see Anderson 1997: 68), and Chomsky’s (1981: 51, 55, §2.7) invocation of derived ‘neutralisations’ of such, and van Riemsdijk’s (1998) ‘feature magnetism’. But little consistent appeal has been made to the notion ‘natural class’ (or ‘supercategory’) in the syntactic literature. In recent work, feature bundles representing secondary (or ‘subcategorical’) categories (number, case etc.) are invoked in agreement and ‘checking’ processes, and some syntactic features are conceded to be semantically interpretable; and this is again reflected in such textbooks as Radford (1997: particularly chs.5&10). But ‘natural classes’ of primary syntactic categories, in particular, do not figure largely in the formulation of syntactic regularities. And this contrasts, as indicated, with the situation in the phonological literature in the same general (‘generative’) tradition, wherein such ‘major class’ features as $[\pm\text{consonantal}]$ and $[\pm\text{sonorant}]$, for instance, are pervasive in formulations of a variety of phenomena, as will be apparent from inspection of any recent-ish phonology textbook.

I have been using the testimony of familiar textbooks here as a convenient way of illustrating what seems to me to be a striking discrepancy in the importance of the role which has apparently been thought to be appropriate to syntactic and phonological primary category features. Another indication of this is the fact that in the ‘minimalist program’ (as envisaged by Chomsky 1995), despite $[\pm N]$ being noted as a ‘formal feature’ (p. 230), the primary category features have apparently no substantial role to play (cf. too e.g. Lasnik 1999). And this raises interesting questions. Particularly: does this discrepancy between the ‘components’, if such there be, reflect fundamental differences between phonology and syntax, or merely atrophification of the prevalent ways of looking at syntax, or ...? As will become clear, the apparent discrepancy does not seem to me to reflect a genuine difference between syntax and phonology. However, recently the discrepancy has become even more marked in the work of most practitioners. Let us observe finally in this section how there have developed further asymmetries between the respective treatments of (categories in) syntax and phonology.

Much work on phonology in the 70’s and beyond was devoted to the elaboration of the expressive potential of phonological notations, both in relation to suprasegmental phenomena (in the representation of accent and intonation – as reflected in the work reported on in the chapters in Goldsmith (1995) by Kager, Halle & Idsardi, Odden, Yip and Selkirk) and segmental structure (one variant of which is presented by Clements & Hume in the same volume). I am concerned here with the latter area, and the discrepancy between the richly articulated internal structure for segments envisaged by (for instance) Clements & Hume (1995) and a range of phonologists in the ‘autosegmental’ tradition and the rather poorly endowed internal syntactic structure commonly attributed to the basic unit of the syntax, which I shall refer to as the (syntactic) word. ‘Feature geometry’, for instance, is not a term recurrent in the syntactic literature. The prevalent ideas of word vs. segment

structure have moved even further apart as a result of the attention paid to representation in the phonology of the 70's and 80's.

It is important to observe that the internal syntactic structure of words, whether, as commonly is the case, represented by bundles of features specifying (primary and secondary) categoriality, or represented by any more complex 'geometry', may not be reflected in the morphology, which can be relatively impoverished. Syntax is not driven by morphological considerations but by notional-categorial, which categorisation need not be reflected in the morphology. It is primarily manifested in distributional behaviour. As in the phonology, distributional behaviour reflects (particularly primary) categorisation. Our understanding of the basis for the categorial differences which underlie such behaviour is impeded by inadequate articulation of categorial structure. In this respect, as I have been indicating, accepted ideas of syntactic structure – particularly the categorial structure of the word – are primitive compared with notions of segment structure in phonology. Even so, the categorial structure of words, under-differentiated as it is, remains only vaguely delineated: the typology of features outlined in Chomsky (1995: §4.5.1), for instance, remains under-characterised and apparently open-ended.

I am going to suggest that the poverty, as well as the absence of grounding, of the apparatus generally provided for the specification of word-internal syntactic structure inhibits our capacity to understand and capture the nature of (constraints on) possible diachronic changes in syntactic categorisation. These categorisations must be semantically 'grounded' if they are to have explanatory value. And an elaboration of word structure analogous to that associated by many people with the phonology goes some way towards overcoming the 'inhibitions' imposed by impoverished abstract categorisations. Let us look at what such an elaboration might involve.

2 The syntactic structure of words

I suggest that the categorial structure of words needs to allow for at least the following set of syntactic properties:

- (3) *Requirements on syntactic categorisation*
- (a) to facilitate an account of the distributional differences among the classes
 - (b) to facilitate the expression of recurrent cross-classes
 - (c) to facilitate the expression of differences in accessibility (markedness) among the classes
 - (d) to facilitate the expression of gradient relationships among the classes
 - (e) to facilitate expression of the relationship between primary and secondary categories

Let us look at these one by one. I shall outline the responses to these demands that have been elaborated within the theory of notionally-based grammar (one account of which is to be found in Anderson 1997). The discussions will be brief, as they present little that is novel.

Crucial to a discussion of requirement (a) in (3) is the observation that the distributional properties of the syntactic classes are not semantically arbitrary. It is not arbitrary that it is a subset of a particular class that figures as typical vocatives like those in (4):

- (4) Porter! Mary! Mummy!

Nor that a subset of a different class is what figures as imperatives:

(5) Leave! Repent! Smile!

The typical vocative is drawn from that syntactic class whose prototypical members denote (what are perceived as) entities, the class of nominals; in particular (non-figurative) vocatives tend to involve animate, particularly human entities. Imperatives crucially involve members of the syntactic class, the class of verbals, that prototypically denotes (what are perceived as) events, particularly, in the case of imperatives, actions. Entities are stable and discrete, and this accounts for other aspects of the syntax of nominals: the prototypical nominal, such as *dog, hill, tree, girl*, has no argument structure, it doesn't take complements. A nominal with apparent complements (such as that in *the martyrdom of St. Agnes*) incorporates an event, i.e. verbal, representation; and this may be signalled overtly (with less or more obscurity) by the morphology (*the resignation of Bush, the death of Klinghoffer*). The discreteness of (the denotata of) prototypical nouns is also reflected in their capacity for allowing attributives (where the relationality of verbals favours complementation), which allow for further classifications of a varyingly stable character (*large dog, distant hill, deciduous tree, happy girl*). It is verbals which are prototypically distinguished by their argument structures, by the range of participants in the represented event that they imply. As event representers, prototypical verbals are associated with relationality (events involve participants, circumstances) and dynamicness.

This latter aspect, contrasted with the stability of what is denoted by the prototypical nominal, underlies the typical association of verbals with secondary categories such as tense, aspect and modality. Nominals, on the other hand, are typically associated with stable classificatory categories (gender etc.). The discreteness of (the denotata of) prototypical nominals underlies their association with number markers, while the relationality of verbals is reflected in their being the prime targets of (e.g. person-number) concord. Thus, we are also now providing some answer to (e) in (3), though I shall have more to say about the relationship between primary and secondary categories below. Here let us conclude our brief consideration of requirement (a).

I am suggesting that if we are to come to an understanding of distributional differences among syntactic categories we need to appeal to their notional content – just as, to repeat: ‘... if we represented lexical items by means of an arbitrary feature notation, we would be effectively prevented from expressing in the grammar the crucial fact that items which have similar phonetic shapes are subject to many of the same rules’ (Chomsky & Halle 1968: 295). And even non-prototypical items are interpreted as far as possible in accordance with the notional characteristics of their category. Thus, for instance, *ceremony* may not be a prototypical nominal, in that its denotatum is not obviously more stable or less relational than that of many verbals, but its usual syntax confers on it the status of a perceived entity. Requirement (a) of (3) – surely a minimal requirement – is met in principle by a theory of syntactic categories which attributes to them notional, ontological content; satisfaction of the requirement is not compatible with ‘abstract’ categories, with the ‘autonomy of syntax’.

The system of (1) is designed to meet requirement (b) of (3). And, certainly, we seem to want to allow for both a noun-adjective ([+N]) and a verb-adjective ([+V]) cross-class, as the system allows. And perhaps we don't want to provide for a verb-noun cross-class, excluded in terms of (1). The cross-class adjective-preposition is also excluded by (1), but the cross-class noun-preposition is allowed. The basis for this difference is unclear. Moreover, the motivation of the verb-preposition cross-class allegedly provided in (2) is

rather shaky. It is not enough in these cases to show gross distributional similarities. These may be contingent upon more fundamental differences. Let me spell this out.

Prototypical prepositions, or adpositions, are universally complemented by a noun phrase. Verbs in English may or may not be complemented by a noun phrase; they may be complemented by a prepositional phrase. In other languages verbs are more uniformly complemented by a noun phrase or a prepositional phrase. Anderson (1997) interprets this as showing that prototypical verbs are complemented by a phrase-type that may be manifested as either adposition-containing or not. He calls these functor phrases: the member of the functor category may be manifested by an independent adposition, or inflectionally, or only indirectly, by position of the phrase. Such a distribution takes functors outside the system of lexical categories, into the realm of functional categories, to which I shall return. This is not to deny that there are complex prepositions, which incorporate, for instance, nominal elements (*beside* and the like). But a prototypical adposition, such as *at*, is a functional category. And it does not enter into any cross-class relationships with the other categories allowed for by (1). Adpositions are not a happy lexical category (e.g. Vincent 1999).

This is in accord with a system of categories based on simplex features such as that provided in (6):

(6) *Notionally based primary categories I*

Verbal =	{ P }	Adjectival =	{P,N}
Nominal =	{ N }	Preposition/Functor =	{ }

The braces enclose the categorial representations. A feature may be present or absent. Adjectivals combine the two features that individually characterise verbals and nominals, where the verticals in (6) indicate that only the feature specified is present in the representation of that category. In lexical representations, the verticals can be suppressed, on the assumption that lexical specifications are exhaustive: in lexical entries, ‘{P}’ means ‘containing **P** and only **P**’. It is only when expressing morphosyntactic regularities that we need to distinguish between {|P|}, the class of verbals, and {P}, the class of verbals and adjectivals. Verbals and adjectivals belong to the cross-class {P}, and nominals and adjectivals to the cross-class {N}. The functor category belongs to no cross-classes.

In accordance with satisfaction of requirement (a) of (3), the features of (6), **P** (= ‘predicable’) and **N** (= ‘referentiable’), have notional content. **P** is associated with the capacity to form a (optimally independent) predication, **N** with the capacity to refer. **P** thus introduces relationality and dynamicness, and **N** discreteness and stability. Adjectivals, prototypically associated with attributes rather than events or entities, have denotata that fall between the denotata of verbals and nominals in terms of relationality vs. discreteness and dynamicness vs. stability.

Now it may be that (6) represents a stage in the acquisition of the syntactic categories of a language like English (cf. e.g. Anderson 2000, where it is assumed that the syntactic categories are not given as part of ‘universal grammar’, but must be acquired). But the system of (primary) categories appropriate to the adult system is clearly more complex. And the recognition of the distinctive character of functors is an indication of where a major complication lies. We have to distinguish between a set of lexical categories and a set of functional, of which the functor is a paradigm example. Functional categories are characterised not by their sharing some substantive property (which would be a notional interpretation of ‘+F’), but by their relative poverty of content compared with lexical

categories. This assumption underlies the system of primary categories proposed by Anderson (1997).

There the following basic system is suggested:

(7) *Notionally based primary categories II*

a. *Functional categories:*

Operative = { P }	Comparator = { P.N }
Determinative = { N }	Functor = { }

b. *Lexical categories:*

Verb = { P;N }	Noun = { N;P }	Adjective = { P:N }
		= (P;N), (N;P)

c. *Cross-classes:*

Verbal = { V> }	Nominal = { N> }	Adjectival = { P=N }
Adjective-verb = { P;N }	Adjective-noun = { N;P }	Lexical = { ; }

Here the functional categories are differentiated from the lexical in terms of their involving only simple combinations of **P** and **N** (including the null combination). The period in the representation of the comparator insists on this being a simple combination. The lexical categories all involve combination of **P** and **N**, but always involving asymmetries, as indicated in the representation for the cross-class ‘lexical’ in (7.c), where the semi-colon specifies asymmetry. In the representation for verbs in (7.b) **P**, to the left of the colon, is predominant over **N**; in the representation for the noun, the reverse is the case; and the adjective involves a combination of asymmetries, abbreviated as {P:N}.

The poverty of notional substance associated with the functional categories underlies, of course, the ‘reduced’ semantics often attributed to ‘non-contentives’, which largely comprise the functional categories, but also the variety of ways in which they can be expressed. Thus the operative category in English, associated with finiteness, the capacity as simple { |P| } to embody finiteness, can be expressed by an independent word-form, as in (8.a), or as part of a lexical category, as in (8.b):

- (8) a. John may leave
b. John left

And the determinative (where determinatives include determiners and pronouns) in Swedish, for instance, may be expressed as an independent word form or by affixation, as respectively in (9):

- (9) a. en häst ‘a horse’
b. hästen ‘the horse’

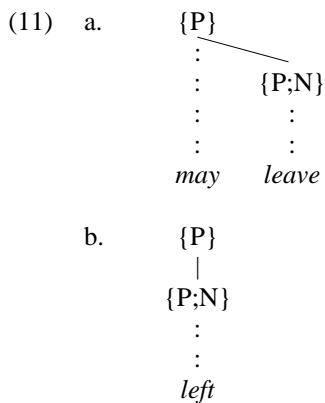
And this is also true of the comparator in English:

- (10) a. more beautiful
b. prettier

We have already noted in this section that functors show a variety of expression.

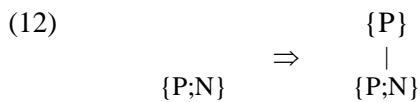
Returning to (c) in (7), we can group operatives and verbs together as verbals, now interpreted as categories showing a preponderance of **P**, {P>}, where '>' includes '>'; as in the representation for verb in (7.b), and absence of **N**. Similarly, determinatives group with nouns as {N>}. And comparators group with adjectives as showing equal proportions of the two features, with '=' generalising over ':' (in the comparator representation) and ':' (in the representation of adjectives). Of the functional categories, only the functor has no corresponding lexical category. (7.c) also offers the specification for the adjective-verb and adjective-noun cross-classes, and, as indicated, that for lexical categories. All the lexical categories have **P** and **N** in asymmetrical relationships; this underlies their varyingly strong capacities to be predicators or anaphoric antecedents (cf. Anderson forthcoming).

The functional categories are typically complemented by the corresponding lexical category. And this is true of the non-independent expressions in (8-10.b) as well as where the functional category has independent expression. So that, for instance we can represent (8.a) and (b) respectively as in (11):

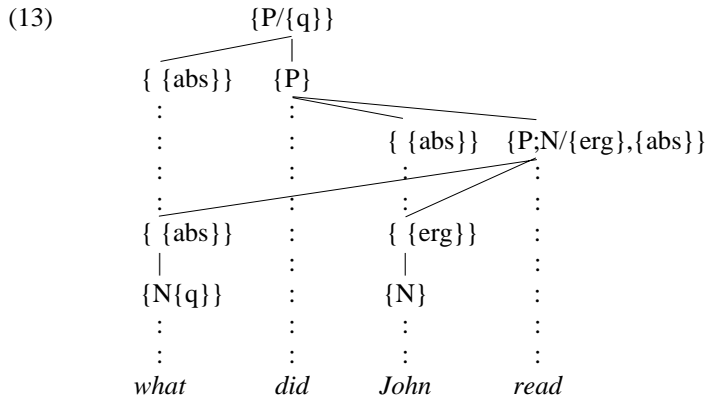


The continuous lines in these representations represent dependency arcs, with the head, the higher node, initiating the arc. The difference between (11.a) and (b) is that, while in the former the head and dependent are linearly disjoint, and *leave* can be said to be adjoined to *may*, in the latter the two nodes are linearised simultaneously, and realised as a single word: {P;N} is subjoined to {P}, and the whole configuration is realised as *left*, there being no syntactically significant linearity difference between the components of that configuration. The '>' notation itself is simply a more compact expression of a dependency relation.

(11.b) contains a complex, lexically derived category associated with application of the redundancy in (12):

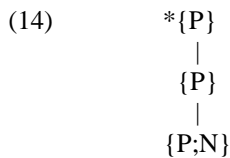


which essentially allows verbs in English to have a finite function. In Present-day English the configuration in (12) is not allowed to support the creation of further complex categories like that involving questions, which can be created only on a simplex {P}, as in (13):



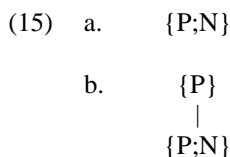
(13) assumes that *read* is subcategorised for *erg*(ative) (roughly ‘agent’) and *abs*(olutive) (roughly ‘neutral’), indicated to the right of the slash in the representation for *read*; the other two *abs* functors are not subcategorised for but are present by virtue of a requirement that every predicator must have a dependent $\{\{abs\}\}$, even if it is not subcategorised for one. The *q*(uestion) in (13) is a secondary feature that must be present in a dependent of the highest predicator in (13) if the latter’s requirements are to be satisfied. $\{P\{q\}\}$ shares its argument with the $\{q\}$ argument of $\{P;N\}$, whereas simple $\{P\}$ shares the ‘subject’ of $\{P;N\}$.

In Present-day English, then, a derived lexical representation such as (14) is not well-formed:



In Old English this was not the case, and so verbs in general ‘invert’. This has taken us away from the theme of the present section, but it introduces matter that we shall return to in §3. And it recognises an important distinction in status among categorial representations.

Some distinctions among primary categories have a basic lexical status; they differentiate between word classes or ‘parts of speech’, lexical classes with a distinctive (though possibly overlapping) membership. Other categorial differences do not encode a difference in word class; and they are realised by different forms of the same word, as with the categorisations in (15), each of which can be associated with manifestations of e.g. *LEAVE*, such as those in (11) – with (15.a) being lexically basic and (15.b) derived:



(15) are associated with different word forms – in this case, the non-finite and finite forms of the verb.

It may be that in some languages some of the distinctions drawn in (7.a-b) are not given word class status. Specifically, there are apparently languages to which we can attribute a lexical system like that in (6), but interpreted rather differently, as in (16):

(16) *Notionally based primary categories III*

- a. *Functional categories:*
 Operative = {P} Determinative = {N} Functor = { }
- b. *Lexical categories:*
 Contentive = {P,N}

These are languages which not only lack adjectives, but also are alleged to lack a basic lexical verb/noun distinction (for references, see Mithun 1999: §2.3, as well as the rather inconclusive discussion in Anderson 1997: §2.1.4). Compare Boas (1911) on Kwakiutl: ‘all stems are neutral, neither noun nor verb’. The existence of such languages remains controversial, and the issues are delicate (see again Mithun 1999: §2.3, and Jacobsen 1979, Kinkade 1983, van Eijk & Hess 1986, Demirdache & Matthewson 1995, for example). And generally, even in languages for which (16) may be appropriate, one can talk of particular items having a propensity to occur as one category rather than the other. And this is unsurprising, given the ontological basis for the ‘verb/noun’ distinction. But it may indeed be that the ontological distinction can be grammaticalised without being lexicalised.

{N} in such a language may be realised as a pronoun, or a name, as in Nootka (Swadesh 1936-8): names are grouped by Anderson (1997) with pronouns as non-complemented determinatives. The operative may similarly appear as an independent word, like the ‘copula’ in Inland Olympic Salish (Kinkade 1976: 19). But it is also the determinative and the operative that allow contentives to occur as respectively arguments and predicators, via the derived categories in (17), alternative expansions of {P,N}:

- (17) a. {P}
 |
 {P,N}
- b. {N}
 |
 {P,N}

The functional categories, including functors, provide for the variable syntax of contentives; the categories in (17) are distinguished by distribution and also usually morphologically. For we are not saying that such languages lack the syntactic categories ‘verb’ and ‘noun’, but merely a lexical class difference between such (cf. Lyons 1977: §11.2). As Mithun (1999) says of Swadesh’s famous examples illustrating the syntactic versatility of Nootka lexical items, two of which are replicated in (18), ‘there is no question that the first words ... are functioning syntactically as predicates, and the words that follows as arguments’ (1999: 61):

- (18) a. mamó-kma qo-ʔasʔi
 he-is-working the-man

- b. qo-ʔ mamo-kʔi
 he-is-a-man the-working(-one)

In such a system, however, despite the variation in derived categorisation, basic lexical categories are apparently reduced to one, the only possibility involving combination of the two features.

To the extent that such ‘contentive-only’ languages are attested, we have now introduced another requirement on syntactic categorisation: that they should facilitate the characterisation of systems of varying complexity, after the manner of (16) vs. (7) (and without appeal to ad hoc ‘neutralisations’ – e.g. Stowell 1981). But this is clearly related to requirement (c) of (3), which requires that syntactic categorisation should ‘facilitate the expression of differences in accessibility (markedness) among the classes’. For instance, the absence of adjectives from the languages just discussed, as well as others which display a robust lexical distinction between noun and verb, together with its marginal status as a lexical class elsewhere (for references see Anderson 1997: §2.3), suggest that this category is marked, relatively inaccessible. In terms of the notation of (7.b) this is expressed by the complexity of the representation of adjectives, which are the only category there to involve two asymmetrical combinations, {P;N} and {N;P}. If we assume that the presence of more complex representations in a system pre-suppose the simpler ones, then the inaccessibility of adjectives, including their ontogenetic tardiness (Anderson 2000), is accounted for. Anderson (1993) makes explicit this assumption in terms of a principle of ‘category continuity’, but I do not pursue this here. I merely note at this point the appropriateness of systems involving categorial representations of inherently varying complexity to the expression of markedness – without recourse to arbitrary meta-notations such as is proposed in Chomsky & Halle (1968: ch.9).

Anderson (1993) is principally concerned with phenomena relevant to our next requirement, (d) of (3), that syntactic categorisation should ‘facilitate the expression of gradient relationships among the classes’. The status of gradiency in syntax is controversial, though its existence, as documented by the work of Bolinger, Ross and others, is not to be doubted. It seems to be typically taken to be extra-syntactic. However, I see no point in developing a theory of categorisation which explicitly excludes it. And the framework that I am expounding here provides the apparatus for acknowledging at least the hierarchies that underlie gradiency. Consider the constructions in (19):

- (19) a. The development of that product took a long time
 b. The developing of that product took a long time
 c. *The developing that product took a long time

We seem on the evidence of (19) to have a clearcut distinction in acceptability between (19.a-b) and (19.c). And it is tempting to say that (19.c) fails because the construction following *the* is ‘verbal’ rather than ‘nominal’. And this appears to be confirmed by (20):

- (20) a. *Him withdrawal of the painting was clumsy
 b. *Him withdrawing of the painting was clumsy
 c. Him withdrawing the painting was clumsy

where only the ‘verbal’ construction of (20.c) accepts the initial *him*. But all three of (21) are acceptable:

- (21) a. His withdrawal of the painting was clumsy

- b. His withdrawing of the painting was clumsy
- c. His withdrawing the painting was clumsy

And other ‘verbal’ constructions are excluded after *his*:

- (22) *His to withdraw the painting was clumsy

The ‘verbal’ construction in (20.c) is thus apparently more ‘nouny’ than that in (22), for instance.

Notice too that the construction in (b) of (19-21) is less ‘nouny’ than that of (a). Compare the noun phrases in (23) with those in (24):

- (23) a. America’s rejection of the proposal
b. America’s rejecting of the proposal

- (24) a. The American rejection of the proposal
b. *The American rejecting of the proposal

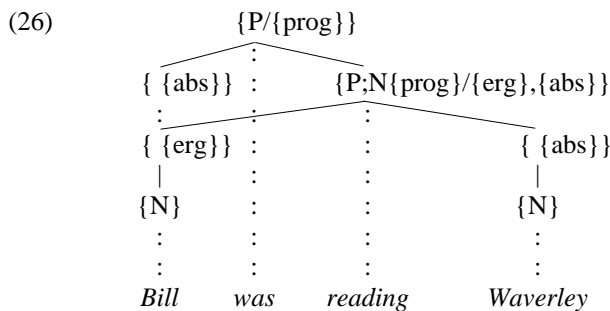
(Anderson 1997: 87; see too Levi 1978: ch.2). The ‘attributivisation’ of the pre-nominal element is resisted in (24.b).

We can associate this gradience with the respective categorial representations in (25):

- (25) a. $\{N;P\}$ = *withdrawal*
|
 $\{P;N\}$
- b. $\{(P;N):(N;P)\}$ = $\begin{matrix} \{P;N\} \\ | \\ \{N;P\} \end{matrix}$ & $\begin{matrix} \{N;P\} \\ | \\ \{P;N\} \end{matrix}$ = (*the*) *withdrawing (of)*
- c. $\{P;N\}$ = (*him*) *withdrawing (*of)*
|
 $\{N;P\}$
- d. $\{P;N\}$ = *withdraw*

It is the dependent $\{P;N\}$ in the lexicalised categorisation in (25.a) that allows for the presence of ‘verb’-like complements; but the nominal sub-configuration can be said to be transparently dominant, without our needing to spell out a measure of such (as in Anderson 1993, 1997). Conversely, the verbal element is dominant in (25.c), and this sanctions the ‘bare’ complement in (20/21.c), though the presence of the dependent nominal sub-configuration, absent otherwise in verbs (cf. (25.d)) sanctions the occurrence of the genitive inflexion; the complex categorisation here is derived, not basic, and the *-ing*-form is a form of the verb, not an independent lexical item. (25.b) is intermediate in ‘nouniness’, and this is reflected in acceptance of *the* in (19.b) (as a nominal-dominant form) but the resistance to attributivisation (as a verbal-dominant form). In this area, things are still more complex than the preceding suggests, but possible elaborations do not threaten the capacity of the notation to express gradience.

The final requirement on syntactic categorisation enumerated in (3) is that it should ‘facilitate expression of the relationship between primary and secondary categories’. In part, this seems straightforward: particular secondary categories are associated with particular configurations of primary features. As noted in the initial discussion in this section, notional grammars have the virtue of providing some basis for these associations; they are not arbitrary. The dynamic character of the denotatum of the prototypical verb favours the attachment of, for instance, aspect features to this category, as represented schematically in (26):



(26) involves a periphrasis which enables the prog(ressive) feature of the verb (which is also subcategorised for two arguments) to be expressed in (for instance) finite clauses. Again the subject of {P;N} is shared with {P}, via the unsubcategorised for {{abs}} dependent on {P}. Indeed, this argument-sharing creates the syntactic subject configuration.

However, there are other features which display a more ‘autosegmental’ behaviour. Thus, for instance, seems to be a feature of the clause, manifested at accessible points therein:

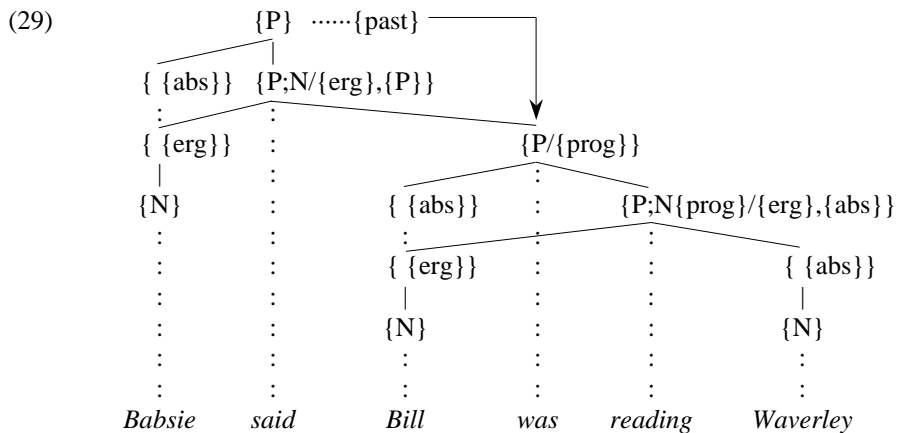
- (27) a. Bill was reading Waverley last Tuesday
 b. Bill was reading Waverley on Tuesday

Pastness is manifested in *was* and *last Tuesday* in (27.a); and *Tuesday* is to be interpreted as past in (27.b). These are past clauses. Pastness can be spread to a subordinate clause in various circumstances, as in (28.a);

- (28) a. Babsie said Bill was reading Waverley
 b. Babsie said Bill is reading Waverley
 c. Babsie says Bill was reading Waverley

In (28.b) and (c) the finite verbal in the subordinate clause is oriented with respect to the time of speaking, as is the verb in all the main clauses; the tense of these verbals is deictic, absolute. But in (28.a) *was* is not deictic, but relative; its tense is interpreted as non-past with respect to the action of the main verb, and its marking as past is spread from the main clause.

We can characterise this in terms of treating {past} as a feature of {P}, but not lexically so; rather, as an independent property of the clause, it is associated derivatively, externally, as in (29):



It is then expressible and interpretable at any accessible point within the domain subordinate to $\{P\}$, until this is blocked by the presence of another deictic tense. I am suggesting, then, that the relationship between primary and secondary categories is not as straightforward as might be thought, and that the articulation of categorial structure must allow for secondary features that are not simply (internal) properties of primary categories, just as in the phonology we must provide for ‘prosodic’ features not associated with a single segment.

Relevant to the discussion of the next section is the observation that the (29) also illustrates that the syntactic-subject configuration may involve a $\{P\}$ and a $\{P;N\}$ that are not linearly distinct, as in the upper clause, as well as distinct $\{P\}$ and $\{P;N\}$, as in the lower, and as we have encountered so far.

In the section that follows I want to look at some historical developments whose explication necessitates the complex categorial articulations that I have briefly argued for in the present section, as well as recognition of the notional basis for syntactic categorisation. These are distributional changes whose explication depends on the invocation of notionally-based categories, primary and secondary.

3 Syntactic change and notional categories: subjunctive periphrases

What I specifically want to look at here are some categorial changes involving the ‘modal’ verbs in English. I do not intend to add directly to the long debate concerning the overall categorial status at different periods of these verbs (charted in Dennison 1993: ch.11, or (more briefly) in Fischer *et al* 2000: §1.2.1.1, for instance), though at this point in the history of the debate I do not hesitate to describe them as verbal (either verb or operative), at all periods. I’m going to concentrate here on the development of certain auxiliaries, particularly *sceolde/should*, but also *would*, as ‘subjunctive equivalents’, or the heads of subjunctive periphrases, in the sense applied to the progressive periphrasis of (26). It is my contention that *sceolde/should* has participated in two such periphrasis-formations with respect to the subjunctive; crucial in both instances are similar categorial configurations. And there is a semantic motivation in both instances for the development of a periphrasis involving this verbal. I look firstly here at some developments affecting Modern English. These are the concerns of §3.1.

3.1 *should*

My startingpoint is such a set of sentences as is included in (30):

- (30) a. They're suggesting Bush resign
 b. They're suggesting Bush resigns
 c. They're suggesting Bush should resign

The form in the subordinate clause in (30.a) instantiates what is usually described as the subjunctive, marked by the lack of the third-person ending. (30.b) is for many speakers an alternative to (30.a), which may be preferred even to the exclusion of (30.a); such a (sub-) system lacks a formal subjunctive (in such constructions at least – we return to other instances below). The form is nevertheless interpreted, like that in (30.a), as irrealis, non-factual: the form *resigns* otherwise is normally interpreted as present habitual, or future if appropriately signposted (*He resigns on Tuesday*). (30.c) involves a periphrastic equivalent to (30.a) available since the Middle English period. Speakers vary in their preferences and in the attitudinal, stylistic and other differences they attribute to the members of such pairs of sentences. I'm interested in the development that eventuates in such as (30.c). Let us look first at the syntax of the subjunctive of (30.a).

The subjunctive of (30.a) – what I shall call the bare subjunctive – is limited in Present-day English to subordinate clauses (once we exclude idioms like *God save the king!*), and its occurrence involves reaction by the verb in the superordinate clause. Compare (31) with (30):

- (31) a. * They're saying Bush resign
 b. They're saying Bush resigns (regularly)
 c. They're saying Bush should resign

The verbs associated with the subjunctive are verbs which express, more or less strongly (compare e.g. *demand*, *insist* and *hint* with *suggest*), the moral necessity of the proposition given by the subordinate clause. *Say* is not such a verb; so the formal subjunctive of (31.b) is unacceptable, and the subordinate verb in (31.b) is not irrealis. The *should* in (31.c) is not part of a subjunctive periphrasis, and not merely irrealis, but as an independent modal it signals itself in this instance moral necessity – and thus, unlike the periphrastic, can have *ought (to)* substituted for it.

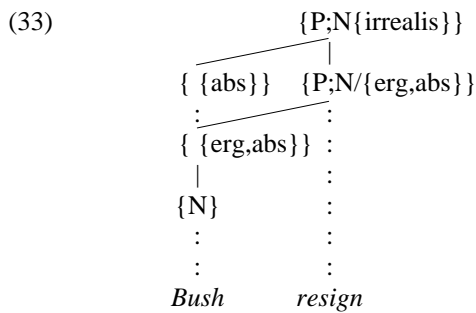
In terms of the notion of syntactic finiteness suggested in Anderson (2001a,b), the subjunctive of (30.a) is not finite, not {P}; finiteness is the capacity to head an independent clause. Of course, subjunctives have properties traditionally associated with finites; these are associated with morphological finiteness (in terms of Anderson 2001a), however, and are not a necessary accompaniment of syntactic finiteness, or vice versa. Thus, the Subjunctive, though it fails to show person-number agreement with a syntactic subject, does take an unmarked subject. The subjunctive gains its subject not by virtue of application of (12), repeated here for ease of reference, but now formulated to exclude {irrealis} and a sample of other non-finite forms:

$$(12)^* \quad \{P;N^*\{\text{irrealis/prog/passive/past}\}\} \Rightarrow \begin{array}{c} \{P\} \\ | \\ \{P;N\} \end{array}$$

A {prog} verb gains a subject by virtue of periphrasis: recall (26). (32), on the other hand, is applicable in the case of irrealis forms:

$$(32) \quad \{P;N\{\text{irrealis}\}/\alpha\} \Rightarrow \begin{array}{c} \{P;N\{\text{irrealis}\}\} \\ | \\ \{P;N/\alpha\} \end{array}$$

(32) assigns to a {irrealis} verb two nodes labelled {P;N}, the upper one carrying this secondary feature, the lower one the argument structure of the verb, abbreviated here as ‘α’. The unsubcategorised-for {{abs}} of the upper node shares the subject of the lower:

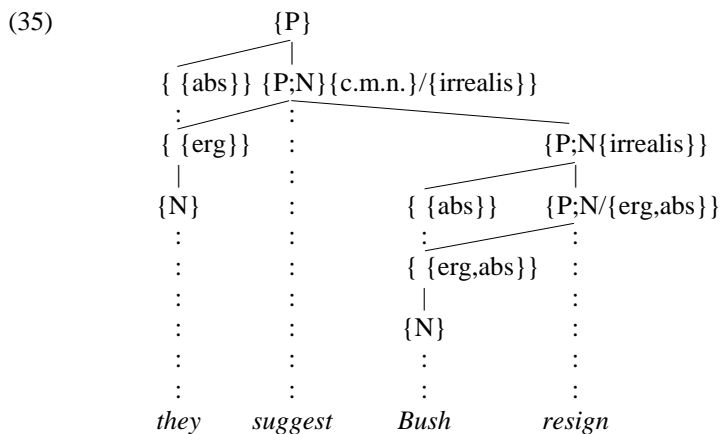


‘{ {erg,abs} }’ characterises the agentive intransitive. (94) must apply if the Subjunctive is to have the capacity of showing properties of morphological finiteness, such as the capacity to take an unmarked subject; otherwise it has no syntactic subject. On the other hand, {irrealis} may not be signalled at all, as in (30.b).

Verbs communicating moral necessity (‘c.m.n.’) impose {irrealis} on their complements – as informally expressed in (34):

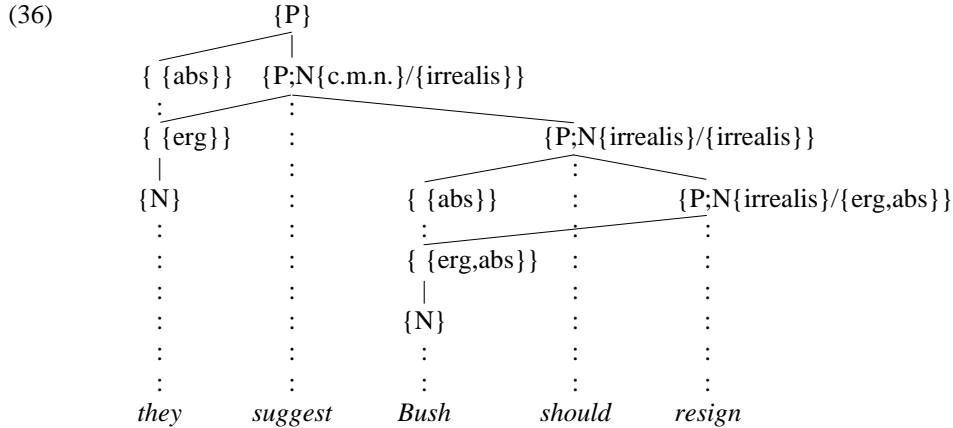
$$(34) \quad \{P;N\{\text{c.m.n.}\}\} \Rightarrow \{P;N\{\text{c.m.n.}\}/\{\text{irrealis}\}\}$$

And this is satisfied by the subjunctive form in (35):



Presence of the unmarked subjunctive is triggered by rection.

Say, however, (32) fails to apply. The periphrasis of (30.c) provides another means of equipping the irrealis verb with a subject, and indeed provides a more robust signal of {irrealis}, in the shape of the modal verbal:



Should is itself inherently {irrealis}, this feature having been inherited from the preterite subjunctive form which is the ancestor of *should*. Compare the sentences in (37):

- (37) a. Bush must resign
 b. Bush should resign

Although both of these may convey the moral necessity of such a resignation, the realisation of the resignation is more remote in the latter case (cf. e.g. Anderson 1971); {irrealis} is associated with both *should* and *resign*. The {irrealis} *should* is also subcategorised for {irrealis}, and the unsubcategorised-for {{abs}} associated with it provides the host for argument-sharing with the subject of the irrealis verb it is subcategorised for, and so creates the syntactic-subject configuration, here involving distinct {P} and {P;N}. *Should* here is also non-finite: the periphrastic use of *should* is, like the bare subjunctive, limited to subordinate clauses, under rection.

The basis for the choice of *should* as a subjunctive periphrasis in the present instance is first of all its status as an inherent {irrealis} verbal. But, even more crucial, in ensuring that it is preferred to other inherent {irrealis} items, such as some of the other modals, is the rest of its semantic character as a non-periphrasis: the rection in the case of examples like (36) is exercised by verbs communicating moral necessity, and one of the senses of non-periphrastic *should* is moral necessity, as in (31.c), or in the most obvious interpretation of (37.b). (Goossen's (1987: 131) argues that this non-tense use of *sceolde/should* has already developed alongside past-tense use of *sceolde* in Old English.) Independent *should* is the obvious choice for the process of bleaching and adaptation to a subjunctive periphrasis that is governed (rectionally determined) by verbs communicating moral necessity. The representation included in (36) exhausts the characterisation of periphrastic *should*: as a periphrasis it loses its independent semantics (such as 'moral necessity'), except for {irrealis}, and acquires non-finiteness (independent *should* is always finite) – see again Anderson 2001b. The very informal characterisation of this development given here has some evolutionary plausibility, at least. And the more explicit aspects of the synchronic description depend on the articulation of a notionally-based syntactic categorisation such as I have been advocating here. Crucial too is the treatment of auxiliary and verb as belonging

to a natural class and the treatment of the auxiliary/verb and finite/non-finite distinctions as categorially the same, differing only in whether a difference in lexical item is involved.

3.2 *sceal/sceolde*

What is striking about the history of *should/sceolde* is that what is described in §3.1 is at least the second instance of development of a subjunctive periphrasis on the basis of this verbal. I have been describing the development in §3.1 as ‘affecting Modern English’; and clearly the precise form of the periphrasis discussed there is associated with that period. But it has been argued (as in e.g. Kisbye 1971) that already in Old English there developed such subjunctive periphrases. But the extent of these is controversial, with Mitchell, for instance, apparently restricting them to constructions involving *magan* (1985: §1014). And interpretation is complicated by the rather different status of the subjunctive in Old English. Presence of the Old English subjunctive is not necessarily rectionally determined; it may occur in main clauses. Both the subjunctives and the modals signal irrealis in a variety of circumstances. Given this, there are difficulties for the present-day investigator in the evaluation of whether the meaning of a particular occurrence of a modal is sufficiently bleached to qualify it as a subjunctive periphrasis. At any rate, these developments are not my concern here, nor their transmogrification into the present situation. Rather, as indicated, I am concerned with a rather different development involving *sceolde* as a subjunctive-equivalent.

The relevant sense of the subjunctive inherited from Germanic – the ‘*dicitur*’ use – is illustrated by the familiar examples adduced by Anderson (1991: 25):

- (38) a. ... þe mon sægð þæt on an scip mæge an
 (of) which people say that in one ship can-*subj.* (be) a
 þusend manna
 thousand men
- b. ... þara he sæde þæt he syxa sum ofsloge syxtig
 ‘of-which he said that he as-one-of-six killed-*subj.* sixty
 on twam dagum
 in two days

The motivations for use of the subjunctive after verbs of saying, and in other circumstances, are apparently varying, and (again) uncertain to the modern interpreter (Mitchell 1985: §§875-8). And the *dicitur*-subjunctive is recessive (e.g. Traugott 1992: 240). But instances like those in (38) seem to be interpretable as an attempt, by signalling {irrealis}, to use the subjunctive to distance the writer from being considered to be vouching for the truth of what follows the verb of saying. Whatever the vagaries of interpretation, it seems clear that occurrence of the subjunctive here is not rectionally determined, at least: we have an independent subjunctive, in contrast (potentially) with the indicative, however inconsistent usage might have become.

Anderson (1991) points to examples such as that in (39.a) to illustrate ‘*dicitur*’ use of *sceolde*, rather than a deontic or other lexical sense otherwise found with the verb (and cf. Mitchell 1985: §2037):

- (39) a. Ða sædon hi þæs hearperes wif sceolde acwelan
 then said they the harpist’s wife died

- b. þæs Apollines dohtor sceolde
 the-forementioned-Apollo's daughter was said/supposed
 beon gydene
 to be a goddess

(39.a) seems to be parallel to the usage of (38), with use of a subjunctive-equivalent serving to distance the writer from agreement with the factuality of what is being said (a pagan myth). And the periphrasis, if that is what it is, provides a more robust signal than the already defectively expressed and variously interpreted subjunctive/indicative distinction, provided the context doesn't favour one of the non-bleached meanings of *sceolde*, rather than simple {irrealis}. Moreover, it provides a means of signalling 'dicitur' in main clauses, as in (39.b). The modal form in this case seems to be indicative, as is confirmed in the plural and by the few parallel examples with the non-past form *sceal*:

- (40) Be ðære frecnan cope ðe se mon his utgang þurh ðone mup
 about that terrible disease whereby the man his exit through the mouth
 sceal aspiwan
 is-said to-spew

(Mitchell 1985:§2038; and cf. the use of *sollen* in German).

In Old English, in which the subjunctive is not (always) rectionally determined, it undergoes, like other forms of the verb, the (again repeated) redundancy (12):

- (12)
- $$\{P;N\} \Rightarrow \begin{array}{c} \{P\} \\ | \\ \{P;N\} \end{array}$$

In this way the subjunctive is distributed through finite clauses. However, the occurrence of the subjunctive in (38), as an alternative to the indicative, is licensed by the superordinate verb of saying; this latter permits the dependent configuration of (41):

- (41)
- $$\begin{array}{c} \{P\} \\ | \\ \{P;N\{\text{irrealis,dicitur}\}\} \end{array}$$

The specification for periphrastic *sceal/sceolde* is as in (41):

- (42) {P;N{irrealis}}/{irrealis,dicitur}}

(42) provides an alternative licensing for the occurrence of {dicitur irrealis}, one which, by virtue of the head of the periphrasis also being, as a verb, eligible for (12), allows for main clause occurrence of {irrealis,dicitur}, as in (39.b). (I am regarding the Old English modals as verbs rather than operatives; but, as noted at the beginning of this section, this is not crucial to our present concerns.)

Again the periphrasis can be seen as the result of bleaching of a compatible semantic specification. The non-periphrastic uses of the modal involved fall within the range of necessity (moral or otherwise), and include weaker and stronger versions ranging from (what can be roughly paraphrased as) 'have to' through 'be required to' to 'be supposed to'. It requires little bleaching of this last to approximate to a dicitur-equivalent, an indirectly

signalled ‘be said to’. Such a reading for the modal construction is often supported by context, such as presence of a superordinate verb of saying, as in (39.a), or a parenthetical saying verb, as in (43) – or by wider environment, as in (39.b):

- (43) Sio, hi sædon, sceolde bion swiðe drycræftigu
 she, they said, was very skilled-in-sorcery

(Mitchell 1985: §2037). The suggestions made here concerning the development of this periphrasis remain relatively inexplicit, but again it is difficult to see much progress being made in this area without there being appeal to a delicate system of notionally-based categories.

3.3 *would*

In this final subsection I am concerned with the main other subjunctive periphrases in Present-day English, both involving *would*. One of these is the conditional periphrasis, the other is the periphrasis determined by verbs of volition. I look at this latter first, as its character is at first inspection reminiscent of that we attributed to the *should* periphrasis of §3.1, whereas the other patently introduces fresh considerations.

We are concerned firstly, then, with sentences like that in (44):

- (44) She wishes it would rain

The occurrence of *would* here does not reflect its full semantics, such as we find in (45) – involving ‘prediction’ (a) or ‘willingness’ (b):

- (45) a. That would be the postman
 b. She would prefer to travel alone

But it is conditioned by the superordinate verb of volition. We find the same kind of rectional determination in (46.a):

- (46) a. She wishes it rained (in Bradford)
 b. They wish it were not so

{irrealis} is signalled by morphology otherwise associated with past tense; we have what has been described as a ‘modal preterite’ (Visser 1963-73). (44) is an alternative construction to that in (46). The historical past subjunctive morphology, eventually differentiated from indicative past only in such as (46.b), no longer has a tense role (cf. e.g. Kisbye 1971: 88, 93, 98-9, Fischer 1992: 247-8). I shall refer to these forms as constituting the inflected subjunctive, as opposed to the bare subjunctive of §3.1.

We seem, then, to have another subjunctive periphrasis in (44). Moreover, the choice of *would* as a subjunctive-equivalent after verbs expressing volition is as natural as the selection of *should*, with its non-periphrastic sense of moral necessity, as subjunctive-equivalent after verbs communicating moral necessity: *would* as an independent verbal can express volition, as in (45.a). And this is reflected too in the initial verbal of the construction of (47):

- (47) Would that it would/were to rain

These grammaticalisations of *should* and *would* respect the semantic categories of the bases for grammaticalisation.

However, unlike with (30.a/c) in §3.1, the modal construction is in clear contrast with the subjunctive: it represents a future to the subjunctive's present imperfective of (46), as well as to the past of (48):

(48) She wishes it had rained

Deictic (absolute) tense is normally marked by inflexion on a finite verb; here, as shown in (48), it is displaced by the modal function of the verbal morphology to being encoded in the *have*-periphrasis, which normally marks relative tense. Most relevant to our present concerns, though, is the observation that (44) involves a contrastive periphrasis: it is in parallel distribution rather than free variation with the morphological subjunctive (on this distinction cf. Anderson 1989b). And other observations confirm the lack of exact parallelism with the *should*-construction of §1.

For the sense of *would* that we find in (44) is not confined to subordinate clauses, but also occurs in the main clause of conditionals, such as (49), to which we return below:

(49) If it were up to me, it would rain

Despite the rection, periphrastic *would* is syntactically finite. We can associate with it the categorisation in (50):

(50) {P{irrealis}/{irrealis}}.....{fut}

Would here functions as the subjunctive of future *will*.

The inflected subjunctive supplies the rest of the tense dimension of the paradigm, by virtue of (32), originally formulated for periphrastic *should*, and repeated here:

(32) {P;N{irrealis}/ α } \Rightarrow $\begin{array}{c} \{P;N\{irrealis\}\} \\ | \\ \{P;N/\alpha\} \end{array}$

This raises, however, the question of how the bare and inflected subjunctives are differentiated. We need to be able to say that and why verbs communicating moral necessity require the bare subjunctive and verbs of volition the inflected. I suggest that the difference is that the bare subjunctive is not merely irrealis but also future, unlike the inflected subjunctive, which, as we have seen, is non-future.

So, the two subjunctives differ as in (51):

(51) a. *bare subjunctive*: $\begin{array}{c} \{P;N\{irrealis\}\}.....\{fut\} \\ | \\ \{P;N/\alpha\} \end{array}$

b. *inflected subjunctive*: $\begin{array}{c} \{P;N\{irrealis\}\} \\ | \\ \{P;N/\alpha\} \end{array}$

After all, the two subjunctive forms are differentiated by tense, but not as historically. Accordingly, (34) must be modified to incorporate this:

$$(34)^* \quad \{P;N\{c.m.n.\}\} \Rightarrow \{P;N\{c.m.n.\}/\{\text{irrealis}\}\} \cdots \{\text{fut}\}$$

And periphrastic *should* is inherently future as well as irrealis:

$$(52) \quad \{P;N\{\text{irrealis}\}\} \cdots \{\text{fut}\}/\{\text{irrealis}\} \cdots \{\text{fut}\}$$

(cf. the categorisation in (36)). Verbs of volition are characterised as in (53):

$$(53) \quad \{P;N\{\text{vol}\}\} \Rightarrow \{P;N\{\text{vol}\}/\{\text{irrealis}\}\}$$

They take the inflected not the bare subjunctive.

This is obviously not the whole story. For instance, a non-future *should* occurs in subordinate clauses where there is no morphological-subjunctive equivalent: *That she should like him is surprising* – cf. Leech 1987:158. Here *should* appears to be an infinitive-equivalent rather than a subjunctive equivalent: *For her to like him is surprising*. Leech distinguishes ‘hypothetical’ (counterfactual – inflected subjunctive) and ‘theoretical’ (non-factual – bare subjunctive) irrealis; but in the cases considered here counterfactuality seems to be indicated elsewhere in the constructions involved than in the subjunctive(-equivalent) itself, such as by the presence of a superordinate volition-verb.

If the rectionally determined *should* and *would* periphrases we have considered are respectively in free variation with the subjunctive and in contrast with it, then the *would* of the conditional can be said to be in complementary distribution with it. Let us now use what space is left to look at what is involved here, in outline.

What follows ignores the complex history of the past and non-past subjunctives in conditionals, and focuses on the present-day situation.

A periphrasis involving *would* has replaced the non-temporal use of the past subjunctive in the apodosis (main clause) of (54.a), as is illustrated by the succeeding sentence in the chapter of Thackeray’s *Henry Esmond* from which (54.a) is taken, namely (54.b):

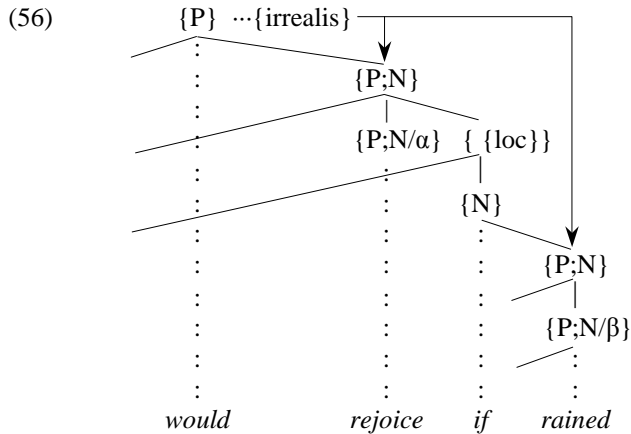
- (54) a. Had she been a Whig, he had been one
 b. Had she followed Mr Fox, no doubt he would have abjured ruffles and a periwig

(Anderson 1991: 23). Both of (54) again illustrate tense being carried by the *have*-periphrasis, with the inflexion of the *have* verb itself signalling irrealis; and they illustrate the ‘inversion’ protasis (conditional clause). ‘Inversion’ in the absence of *have* or *were* (*to*) has long been uncommon. The normal modern construction is as in (49) or (55):

- (55) a. If it rained, she would rejoice
 b. If it had rained she would have rejoiced

In all of these, however, what is striking is the agreement in irrealis between the two clauses. This suggests an analysis such as I proposed as appropriate for clausal tense and ‘sequence of tenses’ at the end of §2: recall (29).

That is, {irrealis} is attached to the node associated with the clausal head, and is manifested wherever there is a possible host within the domain of that head, as represented schematically in (56):



Here the conditional protasis is treated as an adjunct containing a clause, which may appear on either side of the apodosis. Jespersen (for example) gives some examples of more extended domains for irrealis, such as (57) (involving a covert conditional):

- (57) It would be no pleasure to a London tradesman to sell anything which was what he pretended it was

(1931: §9.3(3)).

The complementary *would*-periphrasis and the inflected subjunctive do not contrast as future/non-future in conditionals. Rather, the morphological subjunctive is indifferent to tense, so that though the most likely interpretation for (55.a) is as future, this is much less likely in (58.a):

- (58) a. If my aunt had wheels, she would be a bicycle
 b. ?*If my aunt were to have wheels, she would be a bicycle
 c. *If my aunt should have wheels, she would be a bicycle

The periphrastic forms in (58.b-c), on the other hand, prefer a future reading, as confirmed by a comparison of those sentences with (59):

- (59) a. If it were to rain, she would rejoice
 b. If it should rain, she would rejoice

This is consistent with the interpretation of periphrastic *should* given above in (52), as inherently future. The *should* of (59.b) is recessive, however, even with speakers who retain non-periphrastic *should*, as is (and even more so) the *should* which alternated with *would* in apodoses. Jespersen cites the Shakespearian (60):

- (60) You should refuse to performe your fathers will, if you should refuse to accept him

(1931: §20.3(1)). For more recent examples see e.g. Ehrman (1966: 58). This, however, draws us into historical complexities I have renounced giving attention to here.

Conclusion

I have deplored here the neglect of syntactic categorisation, and the failure to recognise its notional basis (§1), and have outlined (in §2) a system of notionally-based categories. §3 provides a preliminary analysis in terms of such a system of the status and development of various subjunctive-periphrases. These are no more exhaustive than they are definitive; but I suggest they shed some light on the major Modern periphrases involving *should* (§3.1) and *would* (§3.3) and on periphrastic use of Old English *sceal/sceolde* (§3.2), as well as on current uses of the subjunctive. And the discussion may encourage further investigation of the complex interplay between morphological subjunctive(s) and periphrasis, for we have reason to also deplore Palmer's dismissal of the subjunctive in English:

There is no need to be much concerned with the subjunctive in English. The only possible candidate for this is the simple form (identical with the infinitive) that is used in formal language after verbs of ordering, requiring, etc.

(1986: 43). The discussion here complements that of Anderson (1993), which surveys the development of a wider range of verbal categories.

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