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The interpretation of nonconfigurationality

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Abstract

Among the many concepts developed by generative grammarians, nonconfigurationality stands out as especially provocative. Attributed to Kenneth Hale, and made famous through its invocation in Chomsky's *Lectures on Government and Binding* [The Pisa Lectures (1981) Foris, Dordrecht], nonconfigurationality names a fundamental distinction in language structure, one that closely follows the rise of modernity itself. Recent generative work reveals a great deal about the position of modern subjectivity with regard to the interpretation of nonmodern languages. Analysis of this work helps to show some of the links between structural patterns in language, conceptual ideologies, and cultural interpretation.

Keywords: Configurationality; Generative grammar; Politics; Indigenous languages; Interpretive approaches; Colonialism

1. The interpretation of configurationality

Many concepts in recent formal linguistics stand out as potential subjects for broader critical analysis. None appear more suggestive in this respect than *configurationality* and its theoretical twin, *nonconfigurationality*. Introduced in the late 1970s and early 1980s by the leading generative linguists Noam Chomsky and Kenneth Hale (see especially Chomsky, 1981 and Hale, 1983), these apparently technical terms of art point in an especially precise way at fundamental aspects of language structure, while at the same time marking out a conceptual nexus in which many aspects of modernity and cultural history are also implicated.

Under the name *configurationality,* generative linguists raise the possibility that the apparently rigid Phrase Structure (PS) rules in languages like English, which had

Abbreviations: AUX, auxiliary particle; ERG, rrgative case; NEG, negation; NONPAST, tense marker; PAST, tense marker.

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been taken to be characteristic of Universal Grammar (UG), turn out to be partially or wholly absent in many of the world's languages. With respect to these basic constituent structures, nonconfigurational languages appear to "allow nearly everything" where English-like languages allow a very limited range of options. Since the English-like mechanisms have been thought to characterize UG itself, the fact that so many languages seem to lack these structures poses a significant problem for generative grammar. Furthermore, what constitutes an "English-like" language, and the notion of a typological "split" between English-like and non-English-like languages, no less than the nature of the configurational component within language itself, remain significant and live topics in the study of language in general and in generative grammar. On examination these topics are not easy to separate from considerations of subjectivity, colonialism, and modernity, or from other broad patterns in linguistic history.

Configurational languages are said to be ordered in terms of constituents whose syntactic functions are determined by their placement in PS; nonconfigurational languages do not depend on PS for determining syntactic function. Constituency has been a fundamental notion of generative grammar since the first phase of the Chomskyan revolution: Postal (1964), for example, argues strenuously that constituency should be seen as the basic notion of syntax itself, and is what separates generative from descriptive approaches. In this sense, a "constituent" refers to a basic logical object, particularly a Noun Phrase (NP) or Verb Phrase (VP) (and many others over the course of generative history), which is supposed to be the formal object on which the syntactic computer conducts its operations and which relies on the key sense that such a Phrase is headed by the part of speech from which it derives its name, so that an NP is headed by a noun, etc. The nature of syntax is therefore called into question by the existence of nonconfigurational languages, since close examination of their ordering patterns reveals a disregard for the linear, left-to-right (that is, first-spoken to latest-spoken) determination of the parts of speech on which English, for example, depends. English speakers depend on linear ordering rules to identify grammatical correctness, and they are no less central to methods by which generative grammarians identify functions like "transformations," in no small part because it is difficult to identify which part of speech is heading which constituent.

Configurationality is introduced into the generative discourse at the end of the period (the mid- and late-1970s) which can reasonably be considered the nadir of Chomsky's influence in linguistics, in part because of the near-total reliance of his approach on modern languages and especially English (see Harris, 1993). As has been noted by many observers, most generative grammar, especially in its first decades, focused almost exclusively on Western and modern languages like English, French, Italian, German and so on, and to a much lesser extent on some dominant Asian languages like Mandarin and Japanese.[1] This fact has long been a crux of ideological, institutional and theoretical pressure in linguistics, and some of the main and most powerful extensions of and alternates to generativism arise (directly or

[1] See, for example, Linell (1982), Huck and Goldsmith (1995, 1998).

indirectly) from considerations of its parochialism (see, for example, the Role and Reference Grammar approach of Van Valin and LaPolla, 1997).

Hale, who died in 2001, was a colleague of Chomsky's from the early 1960s, a gifted polyglot who was fascinated by the details and structures of non-modern languages (and no less by the people who speak them).[2] Where Chomsky is reputed to speak few languages other than English, Hale was widely known for his multilingualism, and was said to have some level of competency in hundreds of languages, many of them spoken by indigenous cultural groups (such as Warlpiri and other Australian languages; Navajo and other Amerindian languages; and many others). Within the generative institution, which is to say at MIT and among the increasing number of linguistic faculty worldwide trained there (and therefore in the Chomskyan tradition), there existed and continues to exist a deep ambivalence about the nature of linguistic data and the kind of data from which one should draw analyses. It is not unreasonable to say with Van Valin that "Chomskyan syntax grew out of the study of English, and this is still reflected in many of the theory's crucial assumptions, e.g. the necessity of a universal phrasal category headed by V and excluding the subject" (Van Valin, 1999, p. 373), and to suspect with him that a grammar based on languages not much like English might look very different from grammars based in English. Interestingly, nonconfigurational patterns are found widely in languages of the world, although rarely in languages associated with modern cosmopolitan cities, so that there is a high likelihood that a "modern" grammatical theory, if confined to English, might tend to consider configurational patterns as basic.

As Chomsky inaugurated what can be understood as the third phase of his linguistic career (in which the first phase is known as the "Standard Theory," extending through his 1965 *Aspects of the Theory of Syntax*, and the second is known as the "Extended Standard Theory"; see Huck and Goldsmith, 1995, 1998; Newmeyer, 1996a; Harris, 1993, for the history), both his supporters and critics had called into sharp question the near-exclusive focus on modern languages in generative grammar, in no small part because investigators of non-modern languages seemed to consistently find a range of properties in them that modern languages seem not to display. Since the majority of the world's extant 6500 or so languages can be said to be non-modern (despite the fact that the majority of the world's language *speakers* use one of the 100 or so modernized languages), it seemed incumbent on Chomsky and his supporters to expand his theory so as to encompass some of these phenomena that English does not seem to display. Out of this was born the theory variously known as Government-Binding (GB) and Principles and Parameters. The most relevant idea of GB theory for this discussion is the notion that the language organ is composed of many optional (typically, binary) parameters, so that individual languages include on/off settings for each given parameter. While each language displays parametric variation from others (so that English differs from French with respect to some particular parameter settings), languages that are not much like

[2] See the "Tribute to Ken Hale on the Occasion of His Retirement," 1999, at http://web.mit.edu/linguistics/www/ken/.

English are said to have widely varying parameters from English, while certain constraints or principles are known that may be honored across a wide number of different languages.[3] (This is not to say that it is entirely clear what sort of phenomena might belong in various parameters, or what the nature of a general parameter might be.)

From early in his career, Hale had been working closely with indigenous languages, including those of Native America and Australia, where one of the leading descriptive (non-Chomskyan) linguists of his generation, R. M. W. Dixon, had presided over a revolution in the study of native languages. Hale thus spent the 1970s tentatively assembling an argument that would allow some sort of extension of Chomskyan principles to the structures being uncovered in Australian and other indigenous languages. These papers circulated at MIT in manuscript in the 1970s, so that Chomsky (1981) explicitly attributes the configurationality concept to Hale:

> Hale (1978) has suggested that languages fall into two major typological categories: configurational and non-configurational. ...In the latter ... the full range of syntactic configurations is lacking in various degrees, and order of constituents is typically fairly free, though there may be preference rules, which we will disregard. He has also suggested that in non-configurational languages there are no empty categories, hence no transformational rules in the syntax, assuming trace theory. Hale suggests that Japanese is essentially of the non-configurational type; in fact, as has often been noted, there is little if any reason to suppose that rules of the type Move-α apply in Japanese. (Chomsky, 1981, p. 128)[4]

Chomsky then indicates that a task of generative linguistics is to generalize the GB framework to "accommodate a language of [the non-configurational] type." Move-α, of course, is the kind of unitary operation that Chomsky continues to say characterizes UG, and so if there were a major typological distinction between two types of languages in the world, it would be critical for Chomsky to show that UG mechanisms operate in both kinds of languages. In fact, it is curious to reflect on the role played by such mechanisms in Chomsky's characterization of what "language itself" is or can be, if an entire language such as Japanese or Warlpiri does not use the cardinal principle of UG. What can UG be if languages are free to ignore it altogether? How can such languages be understood in light of Chomsky's insistence that UG "makes available only a finite class of possible core grammars, in principle" (1981, p. 11)—since whatever occupies the role of "core grammar" in a non-configurational language is somehow beyond the bounds of UG? How can we reconcile these claims with Chomsky's insistence that studying UG somehow means studying the "human language faculty," if many human languages exist independently of it altogether?

[3] For more on the parametric view and its elaboration into nonmodern languages, in addition to Chomsky (1981) see Baker (1988, 1996).

[4] What Chomsky refers to here as "Hale (1978)" is a prepublication version of what is now known as Hale (1981), itself a relatively hard-to-obtain Indiana Linguistics Club publication—all of which indicates the circuitous route by which Chomsky (1981) became the first published discussion of non-configurationality, despite the concept's being due to Hale.

2. "Classical" Nonconfigurationality

In generative theory, nonconfigurationality is identified as a collection of properties, all of them related to the lack of configurational structures but nevertheless most interesting as a group. The thrust of Hale (1983) is therefore to ask if and whether there is a

> unified explanation for the concurrence in Warlpiri of certain properties ... which distinguish it observationally from languages of another type, to which the label 'configurational' has been applied and which includes, among others, English. To put the question another way, is there a parameter, clearly definable within a general theory of language, from which the observed differences between the two linguistic types follow straightforwardly? (p. 5).

By "certain properties" Hale refers to some of the most fundamental aspects of linguistic structure, so that it is no accident he chooses a language as far from English as is Warlpiri. The properties in question are "(i) free word order, (ii) the use of syntactically discontinuous expressions, (iii) extensive use of null anaphora" (p. 5).

To speakers of many modern languages these are odd properties indeed. English, French and Spanish, for example, depend on strict word order, so that the following two sentences differ radically in meaning:

(1) Jim bit John

(2) John bit Jim

English follows rigid Subject Verb Object (SVO) order, so that whatever noun occupies the first position in the sentence takes on the role of Subject by definition. In a nonconfigurational language, on the other hand, meaning is not (or not largely) determined by word order, and thus many alternate word orders are possible:

(3) Ngarrka-ngku ka wawirri panti- rni.
man ERG AUX kangaroo spear NONPAST
The man is spearing the kangaroo.

(4) Wawirri ka panti-rni ngarrka-ngku.

(5) Panti-rni ka ngarrka-ngku wawirri.

In sentences (3)–(5), Hale's original Warlpiri examples (Hale, 1983, pp. 6–7), it is easy to see exactly the kind of "freedom" he refers to. In (3) the apparent S of the sentence (the man) appears first, O (the kangaroo) appears second, and V appears last (to spear). In (4) O appears first, V second, and S last, thus creating order OVS; and in (5) the order is VSO. Note that in no case does any morpheme change; every word and particle appears identically in all three of the permutations (and, indeed, in the other possible orders). Thus on a first generalization, the word order of

Warlpiri is "free" in the specific sense of lacking a rule about what order in which to speak words. Indeed, Hale stresses that these ordering options are not merely possible, but that "free word order is amply exemplified in any sufficiently large body of Warlpiri narrative or conversation. Moreover, to an extraordinary degree, it is true of Warlpiri that sentences containing the same content words in different linear arrangements count as repetitions of one another" (Hale, 1983, p. 5). This is not an "alternate" order to English SVO (such alternate orders exist in many world languages), but a different way of implementing word order itself, and it has thus justly remained a central focus within generative theory (e.g. Grafstein, 1989; Hale, 1992; O'Grady, 1987; also see Mithun, 1987).

The second of Hale's properties, "syntactically discontinuous expressions," can be understood as special case of free word order. It refers to instances in which two words that seem connected by a formal (categorical) relation do not occur next to each other. The canonical case is an adjective appearing next to a noun that the adjective does not modify, while the noun it does modify appears elsewhere in the construction. The configurationality accounts center on examples of what appear to be split Noun Phrases (NPs), where determiners do not appear next to (or, classically, to the left of) the nouns they modify. Hale's example (6) is said to typify word ordering patterns in Warlpiri:

(6) Wawirri kapi-rna-panti-rni yalumpu.
kangaroo AUX spear NONPAST that
I will spear that kangaroo. (Hale, 1983, p. 6)

"Here again," writes Hale, "the relative linear order of words, apart from AUX, is free. This sentence receives, as its foremost reading, an interpretation in which the discontinuous pair *wawirri* 'kangaroo' and *yalumpu* 'that' form an expression corresponding to that represented by the single syntactic constituent *wawirri yalumpu* 'that kangaroo' in (7):"

(7) Wawirri yalumpu kapi-rna-panti-rni.
kangaroo that AUX spear NONPAST
I will spear that kangaroo. (Hale, 1983, p. 6)

In recent work the existence of discontinuous expressions itself has suggested major revisions in generative models (see the surveys in, e.g. Huck and Ojeda, 1987, and Kiss, 1995a); nevertheless the conceptual distinction between discontinuous constituents and free word order must be understood as a consequence of applying English-like categories where languages do not seem to produce them organically.

The third of Hale's properties, "extensive use of null anaphora," also results from looking for English-like structures in languages that do not obviously display them. Hale uses the term to refer to constructions in which an argument (i.e. subject or object of a verb) is not represented by an overt nominal expression in PS. It is exemplified in the sentences of (8) below:

(8) a. Ngarrka- ngku kapanti- rni.
man *ERG AUX* *spear NONPAST*
The man is spearing him/her/it.
b. Wawirri ka panti-rni.
kangaroo *AUX* *spear* *NONPAST*
He/she is spearing the kangaroo.
c. Panti-rni ka.
spear *NONPAST* *AUX*
He/she is spearing him/her/it.

> In (8a), the object argument is non-overt, in the sense that it is not represented by a nominal expression in phrase structure. Similarly, the subject is non-overt in (8b), while in (8c) both the subject and object are non-overt. In each such case, the non-overt argument is understood as having definite reference, just as do the English pronouns in the corresponding (rough) translations. That the arguments are taken to be third person singular is a function of the morphology of the auxiliary, in which the person markers are phonologically null. (Hale, 1983, p. 7)

So "null anaphora" means that Warlpiri speakers often do not need to refer to persons, places and things in order to entail them semantically as they speak. In the examples, it is clear that Warlpiri speakers have available to them a wide range of options for using the same words, leaving out or adding elements. It is critical to generative theory that the dropped elements are taken to be in a structural sense "equivalent to" the elements that are present in parallel constructions—although this seems to beg the question, usually handed off to "pragmatics," of just what purpose is served by dropping lexical items if a construction has the same meaning (or even the same structural reading) as one with more items.

What enables these three nonconfigurational properties, on Hale's account, is found by examining the relationship between PS and Lexical Structure (LS). Hale expresses this relationship by turning to a core parameter in Chomsky's GB architecture, the Projection Principle. The Projection Principle is another core principle of generative theory that is difficult to explain without elaborating the entire framework; at the same time, its occurrence is largely restricted to the explicit discussions of configurationality (such that although the Projection Principle occupies almost the entirety of Chomsky, 1981, it occurs only twice in Chomsky, 1995, and there only in retrospective looks at GB theory). It is, then, a principle meant to capture the specific phenomena found in nonconfigurational languages, although expressed in terms of Japanese (not a "classically" nonconfigurational language). Hale explains it this way:

(9) *The Projection Principle:*

> Representations at each syntactic level (i.e., Logical Form, and Deep- and Surface-Structure [the core levels in GB theory]) are projected from the lexicon, in that they observe the subcategorization properties of lexical items.

The subcategorization properties of a lexical item, say a verb, include, for example, the argument array which the verb selects. (Hale, 1983, p. 25)

Now a Configurationality Parameter can be stated in terms of the Projection Principle:

(10) *The Configurationality Parameter* (CP):
(a) In configurational languages, the Projection Principle holds of the pair (LS, PS).
(b) In nonconfigurational languages, the Projection Principle holds of LS alone.

We can see that despite its formal expression, this parameter appears to restate the typological facts about configurationality, again situating them in the larger space of facts about heavy case-marked versus analytic languages. In some languages, PS is restricted by "subcategorization properties" of words: that is to say that a verb, for example, demands that its subject precede it in many environments in English. In Warlpiri, by contrast, PS is not restricted by the properties of the verb (or any other part of speech): as we have seen, in Warlpiri words occur in many different orders, and are free to drop out with a great deal of frequency.

To illustrate the lack of configurational principles in Warlpiri constructions, Hale looks more closely at parts of speech, where the typological picture unfolds in a somewhat unexpected way:

> Verbs and nominals constitute the major morphologically defined parts of speech in Warlpiri. It is a striking property of Warlpiri, and of a great many other Australian languages, that the nominal category covers a range of semantic functions which are typically apportioned to a variety of parts of speech in other languages. Speaking loosely, Warlpiri verbs typically denote actions, stances, or processes, while the class of nominals subsumes the rest, including functions often ascribed to verbs in other languages. (Hale, 1983, p. 33)

Thus not merely in some apparently "exotic" languages like Warlpiri, but actually in "a great many other Australian languages," words that seem to be syntactically functioning as nouns (that is, especially on the generative conception of syntax) also seem to be functioning semantically as verbs, and vice versa; another way of stating this problem is to say that the hard line between nouns and verbs is not as pronounced in Australian languages as it is in English (see Austin and Bresnan, 1996). This is interesting to add to the earlier point that Warlpiri PS rules are more "permissive" (p. 7) than are English PS rules. Hale appears to be attempting to manage the rejection of significant parts of what we take for granted to be grammar, and in some way reconciling this with the presumption that PS-rule-like mechanisms operate in all languages at some level.

The phenomenon that Hale finds most relevant to the question of the relationship between the various nonconfigurational features is what he calls the "predicative interpretation" of some nominals, which contrasts with the "argumental" interpretation of nominals. Both interpretations can be found within the same constructions, as in example (11):

(11)	Ngarrka-	ka-	rna	nya-	nyi.
	man	*PRES*	*1subj*	*see*	*NONPAST*

The word *ngarrka* "man, adult male" in this sentence is in the absolutive case. It can be interpreted in any of the English senses (12)–(14):

(12) I see the/a man.

(13) I see him (as a man).

(14) I see him (and he is a man).

In (12), *ngarrka* is fulfilling the Object role as traditionally understood in English, which is what Hale calls "argumental" since the noun is interpreted as an argument of the verb. In (13) and (14), *ngarrka* functions as a predicate, which is to say that it assumes grammatical functions and fulfills roles that in English require several grammatical helping words, carefully assembled in PS order.

In other environments in Warlpiri, the predicative use of nominals is broken out from argumental use, so that ultimately this construction ends up "shouldering ... a large portion of the expressive burden typically assumed, in languages like English, by adverbial constructions and dependent clauses" (p. 33). Although a widespread reliance on this construction is said not to be typical of nonconfigurationality, Hale writes:

> I hope to have pointed the direction toward a conception of Warlpiri, and of non-configurational grammar generally, according to which nothing special has to be said about the interpretation of PS nominal expressions, in the 'core' or 'unmarked' case, at least. The basic idea is this: (a) the type of expression, i.e., open or closed, will determine whether a nominal is to be interpreted argumentally or predicatively; (b) the general principles of coherence and completeness will force a PS nominal to be interpreted in one way or another; (c) the principle of consistency will exclude certain interpretations while allowing others. If the program to reduce the mechanisms of grammar to this extent succeeds, then it is conceivable that the essential differences between configurational and nonconfigurational languages resides indeed in the CP, as articulated in (10) above. Moreover, it is at least conceivable that the configurational type constitutes the marked member of the opposition. (p. 37)

Appeals to non-grammatical principles such as "consistency" and "coherence" beg the question: they ask us to assume the English-like interpretations are available, necessary and/or required in non-PS constructions. But unless we speak these languages in the truest sense—and it is interesting here to note just how much emphasis Hale places on his level of intimacy with Warlpiri during this discussion—this question becomes a true cultural-interpretive catachresis.[5] In this sense, not just

[5] For catachresis and aporia, both of which could be said to apply here, see Spivak (1999); some more relationship between these threads of discussion is traced out in Golumbia (1999, 2001). By Hale's "emphasis" I refer to the remarks made in a footnote in Hale (1983) about the characterization of Warlpiri nominals in general: "I must say that I enter into this discussion with some trepidation. My claim that the argumental and predicative uses of PS nominal expressions are real and must be distinguished rests on ... years of contact with Warlpiri and many hours of listening to oral essays on ethnoscientific matters in which, it seems to me, these richly varied nominal usages are evident in great abundance" (p. 31).

the lack of reliance on PS rules, but the "unusual" definitions of parts of speech in many Australian and many non-modern languages, raise the deepest questions of language interpretation. These questions rise again and again as a sort of return of the repressed in reinterpretations of the subject matter of nonconfigurational languages.

Hale summarizes the initial interpretation of configurationality by noting that he is not trying to draw a hard-and-fast typological distinction, or that at least if he is, it is not the one between English-type languages and Japanese-type languages that exhibit a limited set of nonconfigurational properties. After all, it is not exactly that anaphora, null anaphora, relatively free word order or discontinuity are altogether unfamiliar in English; we are in fact aware of a wide range of anaphoric expressions in all languages which have been objects of linguistic interest for many years, and no doubt there are many examples of discontinuity and loose word ordering in English constructions.[6] But as Hale notes, there does seem to be something remarkable from an English perspective about the texture of the Warlpiri examples he provides, taken together, in which exactly the same words are rearranged in nearly every possible order, and then nearly every element is optionally dropped. It does seem as if a big chunk of what we in the West call "grammar" itself simply does not apply in Warlpiri, which is to say the assumption that proper meaning depends on linear ordering of elements.

What exactly are configurationality and nonconfigurationality? Are they properties, collections of properties, emergent phenomena—that is, does something additional happen when certain properties are combined in a language? Hale writes that the CP "determines what superficial characteristics a language *may* exhibit, not characteristics it *must* exhibit. Only in this weak sense does the CP explain the congruence in Warlpiri of the nonconfigurational properties mentioned in the introduction" (Hale, 1983, p. 42; emphasis in original). In this respect, it seems, configurationality is in fact the property in question: it is the tendency of languages to follow linear PS order and to draw part-of-speech distinctions based on "fit" with PS rules. In so far as languages display nonconfigurationality, they function without reliance on linear ordering principles, at a variety of remarkably deep levels. Thus "Japanese, for example, sometimes held to be nonconfigurational, does not exhibit the predicative use of nominals in the Warlpiri sense. In that language, case marked nominals are regularly interpreted argumentally, which suggests that they are consistently closed structures and, therefore, necessarily subject to the rule Assign a Grammatical Function (GF)" (Hale, 1983, p. 41).[7] Furthermore, in "Navajo, for example, also possibly nonconfigurational (Hale, 1981), while some flexibility of word order is observed, it is not free in the Warlpiri sense because linear ordering, in concert with verbal inflection, signals the proper assignment of grammatical functions to overt nominal expressions" (p. 41).

[6] See, for example, Fox (1987) on anaphora in English and McCawley (1987) on discontinuity in English.

[7] Assign a GF is another formulation that plays a key role in GB theory (Chomsky, 1981) and its management of case, but has not been carried forward into the Minimalist Program (which instead refers to "feature checking" and its relatives) (Chomsky, 1995, 1998, 1999, 2001).

The philosophical and conceptual challenge of nonconfigurationality rests in understanding how it is that languages can function without the linear ordering rules on which languages like English seem to rely. One way to understand this idea is in terms of PS itself; generative grammar has long rested on the idea that PS consists of constituents that exist in hierarchical relationship to each other. Thus for an example sentence such as (15a), "John went to the store," the hierarchical structure can be (partially) represented as (15b):

(15) a. John went to the store.
b. [VP [N John] [VP [V went] [PP to the store].

In this sentence the head is the VP which hierarchically dominates both the main Noun Phrase NP, "John," and the Prepositional Phrase (PP), "to the store." In addition, on Chomsky's theory, the NP "John" hierarchically dominates (or "C-Commands") the O of the sentence (the store, located in the PP). But in a nonconfigurational language, there is no way to determine any such hierarchical relationships, and so a language like Warlpiri is said to have a "flat" structure which can only be represented as:

(16) [N John] [V went] [PP to the store].

What makes this odd is that it is, in theory, the necessity for filling the empty argument "slots" in the structure in (15b) that makes phenomena like anaphora interpretable.[8] In Japanese, Hale demonstrates, some of these hierarchical relationships do apply (in particular Condition C of the Binding Theory), creating a much more limited but still clear adherence to the CP. Thus, although in Warlpiri surface word order is free, and therefore Condition C can be violated in PS, in Japanese word order is free but for situations where free word order would violate Condition C with regard to PS. Hale suggests that this may in fact be the "unmarked type" (Hale, 1983, p. 45) of language, "but there are possible cases in which satisfaction at PS, with grammatical results, is in complete and utter defiance of the (assumed) C-command relations at LS—one of these is Samoan and another is Navajo" (Hale, 1983, pp. 45–46). Because "the CP itself does not determine any particular relation between LS and PS in nonconfigurational languages" (perhaps Hale should have written here, in *any* language), "there is a large potential for variation among languages in the manner in which these entities relate to general principles of grammar" (Hale, 1983, p. 42). This is exactly the core point: many languages display a disregard for PS levels, a fuzziness about the role of parts of speech, and looseness in

[8] These facts are what make it possible to construe configurationality as being fundamentally an issue of grammatical relations, which is to say the fact that in English the Subject can be said to "dominate" (i.e. C-Command) the Object, and in nonconfigurational languages there seems to be, at the very least, a radically alternate approach to the implementation of these relations (see Austin and Bresnan, 1996; Baker, 1991; Bruening and Rackowski, 2001; Jelinek, 1984; Laughren, 1989; Marácz and Muysken, 1989a, 1989b). For more on the need for "flat" representations in nonconfigurational languages see Hale (1981, 1983, 1989) and Baker (2001).

word order—and some degree of such disregard may in fact be the "unmarked" or most common type of language. This means that "use PS rules" cannot be assumed to be the "default" setting for UG: PS rules must rather be a possible type of expression of UG—in computer terms, software that *can be run* on the hardware (like a lot of other software, and without much dependence on the core operating system principles of the hardware in question). The limit cases of nonconfigurational languages like Warlpiri suggest that a high degree of variation indeed is possible in the kinds of software that the "language hardware" can run. The range of this software is explicitly what Chomsky has always meant by UG, so it is a dangerous object to manage in the generative literature. Nonconfigurational languages suggest not merely that configurationality may be an *optional* part of language; they also suggest that a heavy reliance on configurational rules obscures operations that occur without those rules; that a syntactic theory built on configurationality may heavily distort the functions of UG (which a more comprehensive approach like RRG seems to support; see Van Valin and LaPolla, 1997); and, speculatively, that when we assume maximum configurationality in language structure—an ideology which is not at all limited to linguists in modern society—we severely limit our understanding of the possible functions, limits and meanings of language itself.

3. The reinterpretation of nonconfigurationality

The nonconfigurationality discussion remains a touchstone in recent syntactic theory, and the particular shape it takes is of no small relevance to the issues at hand. To begin with, no putative "true" nonconfigurational language has been discussed in Chomsky's writings, which focus on English and to a lesser extent on other modern European languages. As we have seen, Chomsky (1981) takes Japanese to typify the properties of a nonconfigurational language. The significant strand of proper generative work that addresses configurationality head-on takes Japanese as a significant target for inquiry, and in particular develops a "scrambling" analysis (Miyagawa 1997, 2001; Saito, 1985, 1989; Saito and Fukui, 1998; Takano, 1998; although see Farmer, 1980, 1989 for an alternate view) according to which certain aspects of Japanese syntax are "reduced" to principles that are evident in configurational languages, thus implying that UG encompasses nonconfigurational phenomena somewhat comfortably. But this line of reasoning, already in development at the time of Hale (1983), manages exactly the phenomena that have already been identified as *configurational* in Japanese. At the same time, a less prominent strand of work, fueled in part by Hale's own contributions, continues to look at the phenomena in "less" configurational languages, though again tending to look away from the deep problems presented by Warlpiri and toward the admittedly more configurational language Navajo. In these works one sees the emergence of a line of thought that raises important questions about the cultural status and philosophical role of PS itself, as well as questions about the way in which intellectual inquiry in the West is structured by prominent cultural constraints. In general, these works continue to develop typologies in which the "most" nonconfigurational properties function without what appear to be core properties of UG.

One of the most encompassing views of nonconfigurationality along these lines is found in Baker (2001). According to this view, there are at least three types of nonconfigurationality, typed according to their apparent "likeness" to English-type configurationality:

> it is clearly not the case that all nonconfigurational languages have essentially the same basic syntax. Rather, there seem to be at least three distinct types (and possibly more). This should not be a surprise, since these languages are typologically quite different in other respects as well. In particular, Mohawk is a pure head marking language in the sense of Nichols (1986, 1992): it has very rich agreement morphology and no overt Case marking. Warlpiri, on the other hand, is a dependent marking language, with a well-developed and syntactically significant system of Case morphology. ... Japanese is also a low agreement, dependent marking language, but it has a rather typical head final syntax and a discernible unmarked word order (SOV)—unlike Warlpiri and Mohawk (Mithun, 1987; Hale, 1992). Furthermore, while available data are fragmentary at best, one can begin to discern what look like non-accidental correlations between the anaphora patterns [in nonconfigurational languages] and these broad typological classifications. For example, German and Hindi seem to work rather like Japanese in these respects. On the other hand, at least some other Case-poor head marking languages have been found to show the same kind of neutralization of Condition C asymmetries as Mohawk. (Baker, 2001, p. 417)

Baker's three types of nonconfigurationality include the "Japanese type," which has one basic word order and in which alternate "orders arise as a result of moving the object to some position higher than the subject, as a normal instance of Move-α" (p. 418). Note that this conclusion neatly answers Chomsky's concern (Chomsky, 1981, p. 128) that Move-α might not apply in Japanese-type languages and in Japanese in particular and to which Chomsky (1981) devotes at least four sustained passages totaling nearly a quarter of the book's 360 pages. These languages, some "nearly" like English, are found throughout the world, and constitute the most common type of "modern" language other than the analytic, PS-reliant type.

In an historical sense those writers who assess the range of phenomena throughout world language that can be called nonconfigurational almost always consider the so-called "scrambling" phenomena in Japanese (and related phenomena in German, Hindi, Hungarian and other largely modern languages) to be examples of configurationality, with clear underlying phrase structure. But again, "Japanese ... sometimes taken to be non-configurational, does not exhibit the predicative use of nominals in the Warlpiri sense" (Hale, 1983, p. 41), and "Japanese is evidently a language of the type [where both PS and LS are relevant], and, perhaps, this is the unmarked type" (p. 45). It is languages that do not follow PS rules, rather than ones that lack obvious surface PS, that are supposed to be the target in discussions of nonconfigurationality. It is interesting that to the degree that the "central" generative grammarians have taken on the issue, it is languages that mimic nonconfigurationality

via this pattern rather than ones that clearly do exhibit it which have become the analytic target.

In fact this pattern is maintained today: core generative grammarians (today, authors such as Chomsky, Lasnik, Kayne, Burzio, Rizzi, Marantz, Fox, Pesetsky, Jackendoff, Saito, among many others) tend not to focus on nonmodern languages. When the properties associated with such languages do come into generative focus, they tend to be seen through the "filter" of a more modern language that exhibits a surface version of the property in question, but often one which other theorists have identified as critically lacking the features that, in fact, do characterize the target property. This applies not only to nonconfigurationality but to phenomena like incorporation, noun classifiers, obligatory evidentials, large phonemic inventories, and others.

The main exception to this rule is Hale himself. Hale's original argument is that little is proven if languages like Japanese are shown to rest on transformational rules, since the postulated quality of nonconfigurationality itself is not found there. Seen from above, so to speak, it seems interesting that there is such a persistent strain in generative grammar dedicated to showing that "Japanese, a nonconfigurational language under Hale's conception, is just as hierarchical in structure as configurational languages such as English" (Miyagawa, 2001, p. 294) to quote a recent work in a volume dedicated to Hale himself that cites Hale (1983) in support of what is in fact the opposite of Hale's original claim.

Another profound exception to generative grammar's resistance to exploring native languages is Baker, whose work focuses on incorporation and polysynthesis, two more of the complex phenomena that are found with some frequency in native languages worldwide, and almost not found in modern languages (see Baker 1988, 1996), and which deserve treatment at least as extended as does nonconfigurationality. Briefly, both incorporation and polysynthesis relate to a looseness or elaborateness in word structure that is most familiar from North American Native languages, which are famous for having extremely "long words" in which every part of speech can be included (see Baker 1988, 1996; Mithun, 1984, 1986; Russell, 1999, 2000; Sadock, 1985, 1986; Van Geenhoven, 2001; also see Bybee, 1985; Raffelsiefen, 1992). The most important aspect of these morphological phenomena is that they represent another level of proliferation of rule-like structures found in LS (and which, in many cases, are freed from overt PS rules, although there are often ordering rules for incorporated elements). If we take together the phenomena *nonconfigurational*, *polysynthetic* and *heavily incorporating* we use terms that pick out at least a substantial typological minority of the world's languages (if not a sizeable majority of them), and yet remain beyond the purview of mainstream generative linguistics, and no less beyond the purview of mainstream linguistic ideology (in which at best they are uniformly portrayed as aspects of "traditional" culture and "endangered" languages).

Running through the typological discussions of nonconfigurationality we find a fascinating pattern. At one edge there is a lot of interest in modern languages that display nonconfigurational properties—that is, languages that clearly are not nonconfigurational in the "proper" sense, but languages that are largely configurational

but have some area of "fuzzy" part discrimination and/or free word order. This must be called a cultural pattern, because the phenomena are found not randomly, but exactly in language areas where social modernization is *partially* imposed. Thus fully modernized social areas are described as configurational, especially French, Spanish, English and Italian. Slightly less configurational are Russian and Mandarin (Kiss, 1995b). Partially configurational languages—languages that are largely PS-bound but include some component of non-PS construction—include large language families like Japanese, Hindi, German (Fanselow, 2001; Marácz and Muysken, 1989b), Hungarian (Choe, 1989; Horvath, 1995; Kiss, 1995b, 1995c), Northern Germanic languages like Swedish and Icelandic (see Faarlund, 2001) and Finnish (Vilkuna, 1995), Basque (Levin, 1989), Korean (Choe, 1989, 1995), many East Asian and South Asian languages, Turkish, Romanian, Somali, Bulgarian, and some Bantu languages (all Kiss, 1995b, p. 5) and of course many indigenous languages that are at least partially nonconfigurational (see Baker, 2001, pp. 410–411). One suspects this pattern could be fleshed out to include not-fully-modernized languages like Welsh, Gaelic, variants of Romance and German, Brazilian Portuguese, and so on. There is a even a historical trend, according to which much of premodern (pre-print mechanization) Europe appears to be mildly nonconfigurational, and then (via a process widely known as the loss of case marking; for a recent survey see Faarlund, 2001) becomes fully configurational only with modernity—a pattern which would make configurationality an historical oddity in remarkable ways. It is interesting to note that the languages not descended from Indo-European in Europe largely fall into this group (the Finno-Ugric group including Finnish and Hungarian), as well as Germanic languages (see Müller, 2000), and the vernacular varieties of South Asian languages (as well as, potentially, Sanskrit itself; see Marácz and Muysken, 1989b; Staal, 1967). It seems not at all an accident that so many of these languages are known within modernity and, generally, are ideologically disfavored by configurational-language speakers. It is not the rule, but minority groups often speak languages with "less" configurationality than is found in the local dominant language, and in fact the "looser" structure of the minority group's language is often enough an explicit target for racism, insult, and scapegoating—that is, for constituting "the Other."

In the middle, typologically speaking, are those languages that display a significant degree of nonconfigurationality and/or a related phenomena like incorporation. Here we find geographically- and culturally-widespread but clearly nonmodern languages like Quechua, Cree, Navajo, Mohawk, Inuktitut, other Algonquian languages, African languages, as well as indigenous, tribal and regional languages the world over.[9] Again there is a kind of logic to this pattern that suggests what a more formal survey might find: that to some degree, the amount of contact with modern processes of standardization and most especially print mechanization

[9] So "the class of languages that have been called nonconfigurational includes most Australian languages; various American Indian languages, including Salish and Uto-Aztecan, Muskogean, Iroquoian, Algonquian, and Klamath/Sahaptin/Nez Perce; certain South American languages, notably Quechua, various New Guinean languages, South Asian languages such as Malayalam, Hungarian, Japanese, and perhaps even German" (Baker, 2001, pp. 410–411). It seems certain that this list would be supplemented quite extensively on a more rigorous typological survey.

correlate inversely with the "rule-boundedness" and elemental discreteness of languages—a surprising finding, should it be borne out, and suggestive in any case. Here is where some adventurous generative work continues to be done, focusing especially on languages that are one step removed from Warlpiri-style freedom: Navajo, Choctaw, and Mohawk especially. Here is where sensitive linguists seem to continually find a falling-away of nonconfigurational features as modernity encroaches (see, e.g. Pensalfini, 2000a, 2000b).

At the far edge of the typological spectrum we find limit cases of nonconfigurationality. It is clear that for some writers, describing a set of linguistic phenomena that fall into this limit area—that is, a pervasive use of constructions not based at all on PS rules, etc.—becomes an important focus for assembling a theoretical argument and no less a nexus for personal and cultural interpretive force. One could argue that Hale (1983) is such an instance, attempting to create generative rules for among the "freest" of languages known to the writer; in this light Hale (1989) reads like something of a retreat, explicitly treating Navajo (in which "word order is quite rigid, and no one has argued that Navajo lacks a VP constituent," Speas, 1989, p. 301), and writing that the Hale (1983) formulation makes "'languages seem more different than ought to be possible' in that it had them differing in relation to the Projection Principle, a *fundamental* aspect of the grammars of all languages" (Hale, 1989, p. 293, emphasis in original). In fact, summing up the later discussion, Hale writes that

> it would be mistaken, I feel, to propose a typological distinction which too drastically opposed languages with nonconfigurational structures to languages which, for the most part, lack them. For one thing, it has been suggested that Slave, a northern relative of Navajo, is configurational in respect to its PS-LS relations; this sort of variability within a language family, it seems to me, should not be surprising. And, for another thing, within Navajo itself, there are constructions which must be considered configurational. (Hale, 1989, p. 300)

This seems remarkable because what is at stake is not the presence of configurational structures (as we have seen, most languages have both kinds of "structures"), but the absence of them that seems to make languages seem different. In many cases, nonconfigurationality refers directly to the absence of a configurational rule: to call this a "feature" or "structure" is to obscure the raw difference at which Hale (1983) does point—languages that largely rely on PS rules for interpretation and demand discrete parts of speech, versus languages that function largely without PS rules and seem (from our interpretive perspective) to have very fuzzy parts of speech. The remark that a neighboring language to Navajo is configurational seems overdetermined: the question at hand is how nonconfigurational Navajo is, and the status of its relatives would not seem to bear on that question at all. It seems as if there is a strong urge to find configurationality, to show that languages have difficulty doing without it, or perhaps that theory does not need to worry too much about it—why should this be? What would the danger be in thinking that languages "are more different than ought to be possible"?

Here even Warlpiri seems not to be the true limit case. Heath (1986) describes Nunggubuyu, an Australian language of Arnhem Land that is "more radically nonconfigurational than Warlpiri, particularly in lacking clear evidence for a subject-VP split" (Heath, 1986, p. 376). The critical phenomena in question, in addition to the discontinuous constituents, free word order, and extensive use of null anaphora familiar from Warlpiri, include "extremely complex" morphology and morphophonemics:

> many affixes have no simple gloss; rather they combine with other affixes to produce composite categories. ... Some nominal affixes, especially noun-class prefixes, are likewise involved in intermorphemic dependencies which make it impossible to gloss individual morphemes. Furthermore, many categories (especially for verbs) have several allomorphs which would likely confuse readers. For these reasons some of the examples below are given in a rough 'English' transposition like *he-went to-the-sea,* where each hyphenated string represents one Nunggubuyu word (Nunggubuyu word order is preserved, but the hyphens usually do not correspond to Nunggubuyu morpheme divisions). (Heath, 1986, pp. 376–377)

Since Heath is less dedicated to the generative program than are Hale or Baker, he feels free to include mechanisms in Nunggubuyu "grammar" that transformational approaches rule out, and to draw what seems the reasonable conclusion about how the structure of Nunggubuyu is assembled for its speakers. Asking whether "such units as NP, VP, and Sentence exist in Nunggubuyu," Heath concludes that "there is no evidence for VP, that NP is generally best considered in terms of appositional concatenation, and that Sentence is needed but that its relationship to Predicate Nuclei (and Inflectional Phrase) is somewhat loose." To Heath, "the syntax and lexicon [of Nunggubuyu] are obviously sharply distinct from those of strongly configurational languages like English and the other European languages," and it is a mistake to assume that these languages types have similar underlying structures: "If the underlying structures are like English, what is it that produces such unusual features as NEG-indexing (including subjects), case-spreading (from head noun to relative clause and within relative clauses from predicates to noun), noun-class harmony in whole/part expressions, and so forth? Why are there no adjectives or adverbs (in the English sense)? Why do quantifiers take the unusual form they do?" (Heath, 1986, p. 407).

Heath writes that "an alternative theoretical approach to nonconfigurational languages is to accept the absence of tight multi-word phrasal units as a point of departure" (pp. 407–408). In many ways this seems the reasonable approach: it seems true to the typological data, true to the ways speakers use their languages, true to the languages especially prior to contact with more PS-bound European-style languages, and true to a more general sense of the history of complex case markings in world languages (which have faded away for reasons we do not fully understand). This is a conclusion toward which the existence of not just nonconfigurationality but polysynthesis, as well as other phenomena found in nonmodern languages, push us.

On its face, one would think a theory of UG would need to account for not just PS-dominated but also heavily nonconfigurational languages. In a review of the provocative Huck and Ojeda volume on discontinuous constituency (Huck and Ojeda, 1987), Hudson writes that "discontinuity is by definition found in constructions where constituent structure, as standardly conceived, breaks down as a means of showing grammatical relations. .... The constituency approach is fundamentally unsuitable for showing grammatical relations" (Hudson, 1991, p. 135). This seems exactly the right moral; however fascinating a phenomena PS-based configurationality is, it cannot be the sole base for "the human language capacity," because so many fully-functioning human languages manage to do so much work without it.

It should be a core interest of philosophy and linguistics, especially as understood in a postcolonial frame, to understand how "language itself" is constructed, in so far as such an object exists. As such one would think there would be a high level of interest in discovering what is possible in language through interaction with and understanding of languages not familiar to modern researchers. The discovery of nonconfigurationality would seem to be of remarkable interest to linguists and philosophers; perhaps because of the technical nature of the literature it is not surprising that few outside of generative grammar know of it. At the same time there is something curious and overburdened about the cultural situation in which these phenomena emerge. For example, there seems to be a direct relationship between the configurationality/nonconfigurationality split and the worldwide loss of case marking that has been observed emerging from seats of empire since at least the European Middle Ages. For reasons that cannot be entirely determined, almost all the dominant languages of the world's cosmopolitan centers have shifted both toward English (and other modern languages) and toward PS rules and away from LS rules. One could say suggestively that PS-rule dominated languages only become the norm after the advent of printing and electronic communication, enabling the standardization of language types. This may account as well for the pronounced emphasis in formal linguistics on the analysis of PS-dominated languages, since they reflexively reinforce the impression that language itself operates via PS rules, despite significant evidence to the contrary.

Of course, it may be accidental that the only historical period in which the world has been dominated by analytic, PS-dominated languages is the modern one, while the remainder of human history sees varying degrees of occupation by humans speaking languages with more- and less-heavily-case-marked systems, high levels of polysynthesis and incorporation, and an apparent disregard for word order and parts of speech. But if we assume for the sake of argument that this is not so a number of otherwise inexplicable social forms seem refractory. How is it that languages as complex as Navajo can be taught to children without any formal language instruction whatsoever, while "good" PS-bound English requires up to 18 years of formal education to "get right" and then, in the opinion of many experts, nevertheless fails much of the time? How is it that this 18-year block of formal language instruction makes it nearly impossible for modern Westerners to learn nonconfigurational and/or polysynthetic languages—isn't the whole point that this modern language represents "language itself," does everything language does, and so provides a key into the universal system that characterizes linguistic intelligence?

The literature on nonconfigurationality clearly raises the alternate possibility—that the phenomena found in nonmodern languages are in fact the universal phenomena, and that modernity has (perhaps unwittingly) been constructed in an ever-tightening assumption about the universal applicability of PS rules. This is not to say every culture does not put emphasis on "speaking correctly," but it is to say that the persistent and widespread enforced print standardization (and mechanization, speaking especially of the need to pass identical tokens of identically-meaningful language in computers) reflexively create an illusion that language is "machine-like" (see Harris, 1980, 1987), regular, rule-bound, and perhaps even that there is one right way, one linear direction, in which to do things. The predominance of English-only movements in the U.S., the harmful impacts of English- and modern-language instruction in colonized and nonmodern areas (Skutnabb-Kangas, 2000), the violent means by which indigenous languages had to be suppressed in modernity, all suggest that the human language faculty *tends to* create nonconfigurational structures and practices. In a high level of conscious interaction with language itself, communities and language groups use language for social, expressive and communicative purposes that are not directly related to the apparently logical flow of information via PS rules (which is to say that the equation between information flow and logical PS rules is illusory: information flow happens without regard for logical form, which is what languages without PS rules show). It seems no accident that to those of us raised in the most specialized, rule-based language environment find nonconfigurational and polysynthetic languages nearly impossible to grasp or to speak, while their speakers learn English easily; what we learn in the formal instruction must not be configurationality, but the rejection of nonconfigurationality. Thus it is also no accident that nonconfigurational languages are often said to be ambiguous or overly abstract or not abstract enough or overly poetic, etc., by English speakers; this introduces the possibility that the human language faculty functions perfectly well in such ambiguous environments, unless the ability to manage such ambiguity and morphophonemic complexity has been formally turned off.

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