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# On Representing Syntactic Change: Towards a Theory of Diachronic Syntax<sup>1</sup>

This paper discusses different approaches to diachronic syntax inherent in the difference between the functionalist syntactic theories (such as Role–and–Reference Grammar) and generative theories (such as Minimalism). It is shown that functionalist and generative theories make different predictions with respect to the possibility and relative frequency of particular syntactic changes, as well as with respect to the diachronic stability of certain syntactic features in linguistic families. Moreover, the Principle of Diachronic Stability, suggested by the author, predicts that semantically and pragmatically motivated syntactic features behave differently in the history of languages. This principle can be formulated only in a theory such as Role–and–Reference Grammar, which takes into account semantic and pragmatic factors that shape the syntax of a language.

Syntactic theories differ not only in how they represent the synchronic syntactic structure of languages, but also in their predictions about the nature and scope of syntactic change. These differences are rarely stated explicitly, because of the general disregard for the problems of diachrony in contemporary linguistics. However, functionalist and generativist theories of syntax make different predictions with respect to possibility, and cross–linguistic frequency, of particular kinds of syntactic change, as well as with respect to its formal representation. In this paper we shall compare the diachronic predictions of functionalist theories, represented by Role–and–Reference Grammar (or RRG, cp. Van Valin & LaPolla 1997), with generativist theories (e. g.

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Chomsky's Minimalist Program)<sup>2</sup>, and examine how the empirically attested instances of syntactic change bear with their predictions. We shall argue that functionalist theories in general, and RRG in particular, offer better conceptual tools for assessing the true nature of syntactic change, and make better predictions about what is actually encountered in the history of languages.

## A) On the goals of a theory of diachronic syntax

Any theory of diachronic syntax should be able to answer the following questions:

1. What exactly changes when syntactic structures change? In syntax, it is difficult to establish correspondences between two synchronic stages of language, such as exist between the forms of linguistic units: Fr. se taire is "the same verb" as L tacēre because there is a mapping of segments that constitute those two words, and the identity of meaning; se taire is a "transformation" of tacēre in a very straightforward sense. But in what sense is the structure of the Fr. sentence Je me tais a "transformation" of L tacēt? There does not seem to be any equivalent in syntax to the notion of "sound correspondence" in historical phonology, and the regularity of sound change is based precisely on that notion. Does this mean that syntactic change is not regular in the sense that sound change is? If so, does this mean that syntactic reconstruction of unattested languages is impossible (cp. Lehmann 1974, Watkins 1976, Lightfoot 1980, Matasović 2000)?

2. Which syntactic changes are possible, and which are impossible? For theories that lay much emphasis on the innateness of Universal Grammar (UG), changes affecting the structures of UG will be impossible (cp. Lightfoot 1979); on the other hand, if UG is an 'epiphenomenon' of the communicative functions of language, every aspect of the syntax of a language can in principle be subject to change. However, for functionalist theories, it is still possible that

Cp., e. g., Radford 1997. The distinction between functionalist and generativist theories is not as sharp as one tends to find in the literature. I would define generativist theories as those that explicitly claim: 1) that syntax is autonomous, i. e. that one does not need semantic or pragmatic notions in order to define the basic concepts of syntax, and 2) that there are (at least) two levels of syntactic representation, whereby one level is derived from the other by transformational or movement rules. On the other hand, theories denying the claims 1) and 2) are functionalist theories. Note, however, that claims 1) and 2) are logically independent of each other, so that it is possible to deny one of them, and still accept the other. Also note that, by this definition, we would regard not only Minimalism and Government-and-Binding theories as generativist, but Relational Grammaras as well (cp. Blake 1990); on the other hand, theories such as Lexical-Functional Grammar (Bresnan 2000), Cognitive Grammar (Langacker 1987), and Role-and-Reference Grammar (Van Valin & LaPolla 1997) would be regarded as functionalist. Note also that »generativist« theories are not the same thing as »formalized« theories: Lexical-Functional Grammar is formalized but functionalist, and Relational Grammar is generativist, but formalized to a much lesser extent. For a general and very readable comparative introduction to contemporary syntactic theories see Van Valin

<sup>3</sup> Cp. Ambrazas 1990: 11–22.

some kinds of changes are more likely than others, while from the generativist's point of view, every change not affecting the UG is equally probable (Kroch 2001: 726<sup>4</sup>); this is so because in generative theory syntactic rules (or parameters) are arbitrary, and unaffected by functional or communicative factors

For example, functionalist theories would claim that demonstratives are more likely to turn into definite articles than into aspect markers on verbs; this is so because of their similar function (establishing reference viz. marking definite reference), and because it has been empirically established that demonstratives and definite articles occupy adjacent positions in the universal hierarchy of operators, valid in all languages, so that a reinterpretation of one for the other is a priori probable (cp. what is said below about the Natural Serialization Principle). Interestingly, this prediction is fully supported by an examination of the patterns of development of demonstratives in Indo-European languages (Matasović 2001: 93), and is fairly common in African languages as well (Creissels 2000: 243)<sup>5</sup>. Thus, for example, the Romance definite articles have developed from Latin demonstratives (ille viz. iste), and the Classical Greek definite article was still used as a demonstrative pronoun in Homeric Greek. Similarly, the work by Bybee, Perkins, and Pagliuca (1994) has proved the existence of cross-linguistically recurrent patterns of development in the systems of modal, tense, and aspectual operators on verbs. Such patterns of diachronic development can be predicted by a theory which treats those operators as functionally similar, and represents them in a way that makes their diachronic interchangeability very likely.

- 3. What is the relation of syntactic, morphological, phonological and semantic changes? Syntactic theories that presuppose the autonomy of syntax will predict that syntactic structures will change independently of the change of meaning; if syntax is not autonomous, however, interdependence of semantic and syntactic changes is to be expected. For example, L locare meant 'to lend' in Classical Latin; it was a ditransitive verb taking an argument in the nominative (Source), another in the accusative (Theme), and the third argument in the dative (Recipient), thus locare aliquid alicuī. However, in Proto–Romance this verb broadened its meaning, so that in French louer means both 'to lend' and 'to borrow'; the syntax of this verb was affected accordingly: in French louer can be construed as louer quelque chose à quelqu'un, but also as louer quelque chose de quelqu'un. It could be argued that the driving force of this change was the semantic simplification of the meaning of a verb, and that the syntactic change is just a consequence of this.
- 4. What is the interaction between the process of language learning and syntactic change? Since all syntactic theories are expected to come up with a

<sup>4 »</sup>There are no grammatical constraints, apart from those embodied in UG, on possible changes«.

<sup>5</sup> Another attested source of definite articles are possessive particles or clitics (in the third person).

<sup>6</sup> This problem is called "embedding" by Weinreich et al. (1968).

model of the acquisition of syntax, we should expect that model to provide for the possibility of syntactic change. Moreover, functionalist and generativist theories are likely to make different predictions about the interaction of language acquisition and change: whereas the generativists will emphasize the imperfect acquisition of the mother tongue, and the consequent inability of the child to set the correct parameters for the grammar it is acquiring as the major driving force behind syntactic change, the functionalist theories will emphasize the role of language contact, and the change in patterns of communicative interaction within a linguistic community.

- 5. Is there a categorial difference between abrupt changes affecting the underlying grammatical structure, and slow and gradual changes spreading from the lexicon, and affecting one unit at a time? More precisely, is syntactic change S–curved by nature, as claimed by Lightfoot (1979, 1991)? Generativist theories that lay much emphasis on underlying »parameters« defining the overall typological properties of a language will probably predict that every syntactic change is S–curved: gradual and slow until it affects a parameter, then abrupt and quick. Functionalist theories are likely to deny the existence of such abrupt, »parametric« changes (Chung 1977): since language is a tool for communicating and expressing ideas, abrupt changes of syntactic structure would disrupt the very nature of language as a communicative system<sup>7</sup>.
- 6. Does it make sense to ask about causes of syntactic change? If the syntactic component of a language is largely arbitrary as claimed by the generativist school then the changes affecting it are also likely to be so; if, on the other hand, the syntax of a language is structured according to some functional principles, reflecting the communicative and cognitive properties of human social interaction, then changes affecting it are likely to be governed by the same principles.

### B) Criteria of adequacy for theories of diachronic syntax

The principal question in any science is how to choose between two theories accounting for the same data, or trying to answer the same questions. We propose the following criteria of adequacy for a theory of diachronic syntax:

Cp. Labov 1994: 10: "If language had evolved in the course of human history as an instrument of communication and been well adapted to that need, one of its most important properties would be stability. No matter how difficult a language was to learn, it would be easier to learn if it were stable than if it continued to change, and no matter how useful a system of communication was, it would be more useful if it could be used to communicate with a neighbouring group without learning a new system. The fact of language change is difficult to reconcile with the notion of a system adapted to communication, unless we identify other pathological features inherent in language that limit this adaptation." One such "pathological feature" is the way language is used as a tool of social integration within speech communities (cp. Matasović 2001: 17); namely, it is very probable that one of the primary functions of language is social integration, and one of the reasons different languages had evolved in the first place, was to emphasize the identity of different groups of early hominids. The tendency to individualize the speech of one's social group or tribe is probably the major force behind language change in general.

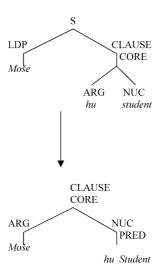
1. simplicity: natural and common syntactic changes should have a simple representation; typologically less common changes should have a more complex representation. A simple change of valence of a single verb should have a simpler representation than, e. g., the overall shift from head to dependent–marking patterns on the clause level. In general terms, the simpler representation of a change is always preferable, other things being equal.

2. typological adequacy: different types of syntactic changes, affecting different aspects of syntactic structure, should have different representations. Harris & Campbell (1995) reduce all syntactic change to just three types: reanalysis, extension, and borrowing. To this one can object: (1) borrowing is not on the same level as reanalysis and extension; by this criterion one classifies a syntactic change as to whether it has external or internal motivation<sup>8</sup>, while reanalysis and extension are types of changes with different structural descriptions; (2) both reanalysis and extension actually involve, by Harris' and Campbell's own definition (1995: 51), different kinds of changes that could affect different syntactic levels, and/or projections (or modules): reanalysis affects constituency, category labels, grammatical relations, and hierarchical structure (head-dependent relations), while extension affects morphological marking and word order. The basic distinction between extension and reanalysis may as well be in order, but we need a more fine-grained typology of syntactic changes; this will become apparent if we look at syntactic change from the viewpoint of a theory such as Role-and-Reference Grammar, in which different aspects of syntactic organization are represented in different "projections". Within such a theory, the notions of extension and reanalysis are much more difficult to define, and it is not always easy to see what different kinds of reanalysis (or extension) have in common. For example, some cases of reanalysis can involve just the change of category labels and constituent structure, as in the Hebrew example below, while others can involve a reanalysis of elements in the constituent projection as elements in the operator projection (e. g., when full verbs are reanalyzed as auxiliaries, like in the history of English modals, or when nominal adjuncts are analyzed as negative markers in French, cp. below). Such an approach can lead to interesting questions, e. g. whether it is possible for elements in the operator projection to be reanalyzed as elements in the constituent projection.

In Hebrew, nominal predicates contained no copula; the equivalent of the sentence »Moshe is a student« was »(As for) Moshe, he – student«; however, the demonstrative hu was reanalyzed as a copula, taking as its subject the constituent that had previously been the (topicalized) element in the left detached position (cp. Trask 1996: 134):

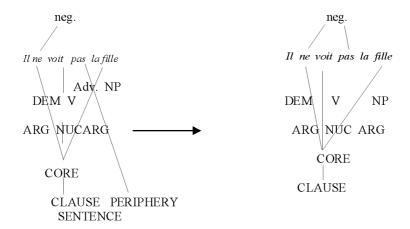
<sup>8</sup> Cp. Gerritsen & Stein 1992 for a discussion of internal and external factors in syntactic change.

<sup>9</sup> Cp. Van Valin & LaPolla 1997, Matasović 2002, where the basic concepts of Role-and-Reference Grammar are explained.



That hu is no longer a demonstrative is shown by the fact that one can say, e. g., ani hu student »I am a student«.

In the history of French, the adjunct *pas*, which originally meant something like \*a bit\*, literally \*a step\*, was reanalyzed as a negation operator:



The point of the preceding two examples is that in some theories (e. g. in Minimalism), the depicted changes will be represented as instances of the same process, namely reanalysis; in other theories, especially in RRG, they will be viewed as two very different kinds of reanalysis: in the Hebrew example, only the constituent projection is concerned, whereas in French, an element in the constituent projection is reanalyzed as an operator.

From the point of view of RRG, different types of syntactic change can affect:

- the inventory of syntactic templates
- the inventory and arrangement of operators
- the focus structure projection (potential focus domain)
- the lexical representation of verbs
- the linking algorithms (e. g. the case assignment principles)

As can be seen from the study of actual changes, most syntactic changes involve several modules of the grammar (as represented in RRG); the central role played by syntactic templates in RRG enables us to say that syntactic change generally affects them, and that the imperfect learning of the inventory and arrangement of syntactic templates is the *spiritus movens* of syntactic change in language transmission between generations.

3. predictive power: a theory of diachronic syntax should make empirical predictions about the kinds of changes that are possible, impossible, and more or less likely; it should also be able to predict the directionality of changes for which there is evidence that they are unidirectional.

The existence of a class of unidirectional syntactic changes is predicted by RRG's *Natural Serialization Principle* (NSP)<sup>10</sup>; we could assume that NSP cannot be violated by syntactic reanalysis. For example, in an exclusively suffixing language, such as Proto–Indo–European (PIE), new aspect markers and nuclear directionals cannot be grammaticalized as suffixes, since operators with broader scope are already coded by verbal suffixes. Therefore, they must develop into prefixes (which originate usually as adverbs). We can observe exactly such a development in the history of various Indo–European languages:

Lithuanian has perfectivizing prefixes (pa–, nu–, už– which were formerly directionals that developed from adverbs):

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imperfective: perfective:

rašyti 'write' parašyti
daryti 'do' padaryti
pirkti 'buy' nupirkti
augti 'grow' užaugti
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Perfective prefix ro- in Old Irish is of similar origin (PIE \*pro):

imperfective (preterite): perfective:

bert »he carried« robert »he has carried« cechain »he sang« rocechain »he has sung« rogáid »he has prayed«, etc.

<sup>10</sup> Cp. Van Valin & LaPolla 1997: 51. NSP predicts that the order of operators in languages is highly restricted, so that, for example, in no language can a sentence operator, such as I(llocutionary) F(orce) be placed nearer to the Nucleus (usually, to the verb root) than a nuclear operator, such as ASP(ect). That is, in an exclusively suffixing language, suffixes expressing aspect will always be nearer to the root than suffixes expressing illocutionary force (e. g. questions).

In Slavic, perfective prefixes also develop from adverbs turned into directionals, e. g. in Croatian:

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gledati »watch« po-gledati »watch« (pf.)

učiti »learn« na-učiti »learn« (pf.)

voljeti »love« za-voljeti »love« (pf.), etc.
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The NSP thus helps us understand why prefixes began to develop in an exclusively suffixing language: this is the only possible pattern of development of new aspect markers, unless the NSP is to be violated.

On the NP level, the NSP predicts that, e. g., DEIC operators (demonstratives) can be freely reanalyzed as DEF operators (articles), as indeed they have been in a number of well documented cases (see above); however, definite articles cannot be reanalyzed as NASP markers (numeral classifiers), if NUM, QNT, and/or NEG operators<sup>11</sup> with narrower scope intervene.

Syntactic theories can make not only true, but false diachronic predictions too; for example, any syntactic theory that posits VP as a universal unit in syntactic description is likely to claim that VP will behave as a unit with respect to syntactic change as well. Therefore it appears that Minimalism, and other brands of generativism, would predict that word order changes involving the relative position of S and VP (whether OV or VO) will be as frequent as the changes involving the relative position of the constituents composing VP, namely V and O. However, this is not the case: the changes from SOV to SVO or VSO, and from SVO and VSO to SOV, are well attested<sup>12</sup>, but the changes from SOV to OVS (or vice versa) are completely unattested. If one takes seriously the claim that syntactic theories make diachronic predictions, then Minimalism clearly makes a false prediction here, whereas RRG and other functional theories that do not accept VPs as basic units of syntactic description do not make any prediction with respect to the diachronic behavior of VPs. They do, however, explain why changes from SOV to OVS are unattested: this is because OVS is a typologically disfavored language type, because subject-final languages would violate the universal that topical constituents tend to precede the focal constituents. Since subjects are topical by default, subject final languages would contradict this universal, and so languages are unlikely to change into such a typologically disfavored state.

#### C) The non-autonomy of syntax

For RRG and similar (functionalist) theories, syntactic change is not autonomous: it is a result of semantic and pragmatic changes – changes of meaning of linguistic units and changes in the use of discourse patterns:

<sup>11</sup> Numerals, quantifiers, viz. negations.

<sup>12</sup> For example, Romance languages developed from SOV (attested in Classical Latin) to SVO, and a similar development is attested in the Germanic languages. The change of VSO (via SVO) to SOV is attested in Ethiopian Semitic (e. g. in Harari, cp. Matasović 2001: 142 and Hetzron ed. 1998).



The fact that syntactic change is governed by pragmatic and semantic factors enables us not only to better understand its nature, but also to make specific predictions that can be (at least in principle) empirically tested. Needless to say, such predictions must be ruled out if syntactic change is considered to be autonomous.

We have argued elsewhere (Matasović 2001: 63) that the difference in diachronic stability of various syntactic features can be accounted for by a single principle, called The Principle of Diachronic Stability. That principle makes specific reference to semantically and pragmatically motivated syntactic features, and is therefore fully consistent with RRG's approach to syntactic description

The Principle of Diachronic Stability (PDS):

»Semantically motivated syntactic features are diachronically stable; pragmatically motivated features are unstable«.

This principle should be taken as a hypothesis to be verified by the examination of a large number of languages with attested histories, and by examining the variability of particular syntactic features within language families. It accords well with Van Valin's thesis (1997) that there is a greater range of cross–linguistic variation with respect to pragmatically motivated syntactic features, than with respect to semantically motivated features.

A feature is said to be diachronically stable if it is unlikely that a language will change with respect to that feature; we can conclude that a feature is diachronically stable if genetic groupings of languages (language families) tend to be uniform with respect to the presence/absence of that feature. Such an approach to the examination of diachronic stability is undertaken by Nichols (1992, 1995).

Semantically motivated syntactic features are those that involve semantic concepts in their specification, i. e., that must involve meaning in their definition.

Pragmatically motivated syntactic features are those that are sensitive to discourse organization patterns, and the concepts such as the information flow, presuppositions, illocutionary force of the utterance, and the like.

First, we determine two sets of syntactic features, which we call SM (semantically motivated) and PM (pragmatically motivated). What is semantically motivated will depend on the type of syntactic theory selected; for example, the grammatical relations and how they are coded (clause alignment systems) will be derived from the constituent structure in some theories (e. g. Minimalism), primitive notions in others (e. g. Relational Grammar), and semantically

motivated in others (e. g. RRG, since they involve the semantic notions, such as "actor" and "undergoer".

Second, we look at how uniformly the presence or absence of the selected features are distributed in genetic groupings of languages (language families). Until an independent large—scale examination of language families for that purpose is carried out, we can use the results reached by Johanna Nichols (1992, 1995), as well as our own informal knowledge of various languages.

Third, we check how the diachronically stable and unstable features match the predictions of the PDS.

Semantically motivated features:

I Clause alignment in languages is a semantically motivated feature, since it must be defined by using the semantic macroroles of actor and undergoer. Language families tend to be remarkably uniform with respect to the basic patterns of clause alignment. In Indo–European, only Hittite and some Modern Indo–Iranian languages (such as Hindi) show partially ergative clause alignment, all other languages being accusative; similarly, it can be stated that the Afro–Asiatic, Turkic, Uralic, Niger–Kordofanian, Nilo–Saharan families are generally accusative, while, for example, Northwest Caucasian, Pama–Nyungan, Mayan, Chukchi–Kamchatkan, and Eskimo–Aleut families have ergative clause alignment as a rule. Truly mixed families (with respect to clause alignment), such as Austronesian, are quite exceptional.

II The presence/absence of gender systems (and gender agreement) is a semantically motivated feature, since noun classes (or genders) are never completely arbitrary, but always have a semantic  ${\rm core^{13}}$ . Language families either have gender systems (e. g. Indo–European, Afro–Asiatic, Dravidian, Niger–Kordofanian, Algonquian, Pama–Nyungan, etc.), or they don't (Turkic, Mongolian, Uralic, Eskimo–Aleut, Mayan, Austronesian, etc.). In languages with gender systems, gender concord is very rarely completely lost; among hundreds of Indo–European languages, only Armenian and a handful of Modern Iranian languages have lost it, and even in English it survives on the discourse level (anaphoric pronouns he, she, and it agree in inherent gender with the coreferent nouns). On the other hand, in a genderless family such as Uralic, a gender–like system (which is not fully grammaticalized) has evolved only in a single language, Selkup. Therefore, gender systems (or lack thereof) seem to be diachronically extremely stable, as predicted by the PDS.

III The opposition of semantic and pragmatic pivots is a semantically motivated feature, since languages with semantic pivots do not allow non-actors (a semantic term) to occur as pivots (in passives). According to Nichols (1992: 174), language families tend to be uniform with respect to the direction of valence-changing processes they allow (i. e. they either have passives, or they don't). It can also be shown that languages with pragmatic pivots renew their passive constructions even when old ones are lost because of phonological or

<sup>13</sup> Cp. Corbett 1991, Matasović 2001: 103–112.

morphological change. Thus Latin synthetic passive (amor) had been lost everywhere in Romance, but a new analytic passive was subsequently coined to replace it (the type seen in French je suis aimé, Italian sono amato, etc.).

Pragmatically motivated features:

I Word order is a pragmatically motivated feature, since it tends to be affected by discourse organization (in most languages); it is diachronically highly unstable, especially subject to change under areal influences. In Indo–European languages we find almost all arrangements of basic syntactic elements: VSO (in Celtic), SOV (in Hittite, Latin, and Modern Indo–Aryan), SVO (in English, Slavic<sup>14</sup>, and Baltic), V–second (in German). Most Germanic and Romance languages changed from SOV (in Proto–Germanic and Latin) to SVO (or V–second), while Celtic changed from SOV (attested in Celtiberian) to VSO. If we compared the relative order of other constituents within groups of closely related languages (e. g. the relative order of nouns and adjectives), we would find even more variation than with respect to the basic types (SOV, SVO, VSO, etc.).

II The syntax of questions is pragmatically motivated, since it involves the pragmatic notion of illocutionary force; even in very closely related languages like Croatian and Russian, French and Italian, or English and German, the syntax of questions is rather different; thus it appears to be also a diachronically unstable feature. Let us look more closely at some examples of how closely related languages differ in the way they form unmarked yes/no questions.

In French, the unmarked syntactic patterns for yes/no question are inversion and fronting:

Jean est venu. »John has arrived«: Est-ce que Jean est venu?

Il est venu. »He arrived«: Est-il venu?

In Italian, on the other hand, neither of these patterns is possible; yes/no questions are formed by inversion only when subjects are expressed; with pronominal subjects, the question is marked by sentence intonation only:

Gianni e arrivato »Gianni has arrived«: E arrivato Gianni?

E arrivato. »He has arrived«: E arrivato?

In English, yes/no questions are formed by inversion of the auxiliary verb, or with do-support (for sentences in past tense and in the simple present).

He is coming: Is he coming?

He has arrived: Has he arrived?

He comes here regularly: Does he come here regularly?

He came here yesterday: Did he come here yesterday?

In German, only the first pattern is possible:

Er ist gekommen: Ist er gekommen?

Er kommt: Kommt er?

<sup>14</sup> Even within the closely related Slavic languages, there is variation; for instance, in Upper Sorbian the unmarked pattern seems to be SOV.

Finally, even within Slavic, there are several patterns for forming yes/no questions  $^{15}$ :

- by changing the sentence intonation; this pattern is possible in all Slavic languages, but it is not equally common in all of them, and the interrogative intonations are different.
- by simple inversion; this pattern is unmarked only in Slovak and both Upper and Lower Sorbian, while in other Slavic languages it is highly marked:

Slovak: Dušan ide do kina

Ide Dušan do kina?

 by putting the question particle before the questioned sentence; this pattern is common in Polish, Czech, Ukrainian, Bielorussian, and, to a lesser extent, in Slovenian:

Polish: Ewa idzie do kina.

Czy Ewa idzie do kina?

In Croatian, this pattern is possible only with the complex question particle  $da\ li^{16}$ .

Eva ide u kino. Da li Eva ide u kino?

- by inserting the clitic li after the first word of the questioned sentence; this pattern is common only in Bulgarian, Macedonian, Croatian, and Russian, and sporadic elsewhere; however, even with respect to this pattern, Slavic languages differ: in Croatian, li must be placed after the verb in sentence-initial position, whereas in other languages, any word can be placed after li:

Croatian: Eva ide u kino. Ide li Eva u kino? \*Eva li ide u kino?

Bulgarian: Toj dojde. Dojde li toj? Toj li dojde?

Russian: Vse priexali. Vse li priexali?

This restriction in Croatian has to do with another typological difference within Slavic, which is also pragmatically motivated; namely, Croatian generally avoids focused constituents in preverbal position, while most other Slavic languages do not.

It is important to note that there is no *a priori* reason why the syntax of questions should be more likely to change in a language than, for instance, its clause alignment system<sup>17</sup>. If syntax is a wholly arbitrary set of rules, one

<sup>15</sup> Cp. Dalewska-Greń 1997: 400-410.

<sup>16</sup> This pattern is actually recent in Croatian. It probably developed under the influence of Serbian, and some normative grammarians do not accept it.

<sup>17</sup> Outside Indo-European, there is evidence that syntax of questions is very unstable, e. g., in Semitic (cp. Hetzron, ed. 1998); within the closely related Ethiopian Semitic, Tigrinya attaches a particle (-do) to the main object of a question, Amharic uses rising intonation or sentence-final question words such as wäy, Ge'ez suffixes -nu or -hu to the first constituent of the sentence, and Harari adds a special affix (-i: n) to the main verb. It is also worth noting

would expect children in each generation to be equally creative, or equally sloppy in their acquisition of parameters, with respect to both the rules determining the proper way to pose yes/no questions, and the rules affecting the core arguments of transitive verbs. The fact that this isn't so requires an explanation, and such an explanation is provided for by the PDS.

III. The pro-drop parameter is a pragmatically motivated feature, because it involves the pragmatic notions of discourse participants: the speaker, the addressee, and the person or thing spoken about. It seems reasonable to assume that the mention, or avoidance of explicit mention, of the discourse participants, are subject to pragmatic factors such as politeness, and the speaker's presuppositions about what is known or believed by the addressee.

Closely related languages often differ dramatically with respect to the prodrop parameter<sup>18</sup>, and the change of this parameter is well attested in the history of several languages. Within Romance, Spanish, Romanian, and Italian are pro-drop, while French is not; the modern Germanic languages are not pro-drop, but their medieval ancestors were all pro-drop; Sanskrit was prodrop, while most Modern Indo-Aryan languages are not, e. g. Hindi and Marathi. Similarly, most Modern Irish dialects and Welsh are not pro-drop, but Old Irish and Old Welsh were. The situation in Irish is particularly interesting, since the change of the parameter was a rather complex one. Namely, in Old Irish the independent pronouns could not be used with finite verbs; thus it was impossible to say \*mé biru in claideb »I carry the sword«, only biru in claideb was grammatical; the independent pronouns were used only in topicalized constructions with a relative clause, thus is mé beires in claideb »It is I who carries the sword«. In Modern Irish, the obligatory use of independent pronouns with finite verbs depends on the verb, the person, tense, and the dialect; thus we have scríobhaim an litir »I am writing the letter«, without an independent pronoun, but also scríobhann sibh an litir »you (pl.) are writing a letter« and scríobhann sé an litir »he is writing a letter«; \*scríobhann an litir is ungrammatical.

It could be argued that the loss of the pro-drop feature can be accounted for by the morphological loss of the verbal inflexions in all of the mentioned languages, and that is doubtlessly true, but the fact remains that morphological changes rarely affect the semantically motivated syntactic features.

It seems, therefore, that the PDS predicts quite correctly the actual patterns of syntactic variation in genetically related languages, and seems to accord

that the syntax of wh– questions is also rather unstable within Semitic; thus some Arabic dialects have their wh– words fronted (e. g. Yemen Arabic), while other leave them in situ (e. g. Cairo Arabic), cp. Hetzron, ed. 1998: 302–303.

<sup>18</sup> Pro-drop languages allow the subject of the verb to be unexpressed, while non-pro-drop languages require the obligatory use of independent pronoun with finite verbs. Our use of the term "pro-drop parameter" is just a *façon de parler*, and does not imply that we accept the principles-and-parameters approach to syntax.

fairly well with the frequency of attested syntactic changes<sup>19</sup>; however, the validity of the PDS should be tested against a larger, and carefully constructed sample of languages, so our conclusions must remain preliminary.

It is difficult to see how a principle such as PDS could be reconciled with the basic assumptions of generative grammar: that syntactic change is autonomous, unpredictable, and that all kinds of syntactic change are equally probable. Although our results should not be taken as definitive until they are tested against a much larger set of data, and backed by a thorough typological investigation, we believe they still present a case against the generativist approach and in favor of functionalism. Thus we see the two–way relationship between syntactic theory and diachronic syntax: not only do syntactic theories differ in the way they approach syntactic change and represent it, but empirical research into the nature of syntactic change can be used as a powerful tool for evaluating different syntactic theories.

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There are other semantically and pragmatically motivated syntactic features that cannot be examined here in detail; for example, the way possession is expressed in a language is semantically motivated, because possession is a semantic category; language families are remarkably consistent with respect to this feature, i. e. possession is usually expressed either by possessive genitive (dependent-marking pattern), or by possessive suffixes on the head noun (headmarking pattern in the sense of Nichols 1992). In Indo-European we find the head-marking pattern only in Old Hittite, while in some Balkan languages it might evolve if possessive clitics should become suffixes (in the type seen in Macedonian ženata mu »his wife«). Case-assignment rules (at least for core arguments) also seem to be fairly stable diachronically, and should probably be considered a semantically motivated feature. On the other hand, focus structure is a pragmatically motivated feature, since it involves the pragmatic notions of topic and focus. It is also highly unstable: both Italian and French do not allow preverbal focus, but Latin allowed it. While Old Irish appears to have had free focus structure, Modern Irish has rigid focus structure (constituents in narrow focus have to be clefted). In Mingrelian (a Kartvelian language), clefted constructions are focal, but in closely related Laz, they are topical. Thus it appears that closely related languages often have different restrictions on focus structure. Another possible pragmatically motivated feature showing great diachronic variability is the syntax of negation: just consider the different ways sentence negation is expressed in Germanic languages. However, all contentions expressed in this footnote are highly speculative and must remain so until further study.

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# O prikazivanju sintaktičkih promjena: prema teoriji dijakronijske sintakse

U članku se prikazuju razlike u pristupu dijakronijskoj sintaksi kojima se odlikuju funkcionalne sintaktičke teorije (poput Gramatike uloga i referenci, engl. Role-and-Reference Grammar) i generativističke teorije (osobito Chomskijev Minimalistički program). Pokazuje se da funkcionalističke i generativističke teorije imaju različita predviđanja o tome koje će sintaktičke promjene u jezicima biti osobito česte, odnosno koja će sintaktička obilježja u jezičnim porodicama biti dijakronijski stabilna. Štoviše, Načelo dijakronijske stabilnosti, koje predviđa – po autorovu mišljenju ispravno – odnos između dijakronijski stabilnih i nestabilnih obilježja, moguće je formulirati samo u teoriji koja uzima u obzir semantičke i pragmatičke faktore koji utječu na sintaktičku strukturu jezika; takva je teorija Gramatika uloga i referenci.

Key words: diachronic syntax, principle of diachronic stability, Role–and–Reference Grammar Ključne riječi: dijakronijska sintaksa, načelo dijakronijske stabilnosti, gramatika uloga i referenca