Syntactic Change From Within And From Without
Syntax: A Usage-Based Analysis

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1. The problem: The locus of syntactic change

According to a recent hypothesis, syntax is diachronically inert (Longobardi 2001). This claim is based on arguments of two different kinds: First, it seems to be an elaboration of the observation made by traditional historical linguists that syntax is a domain especially resistant to short-term change. Second, it represents a state of discussion in current generative theory. As pointed out in Lightfoot 1999 and Longobardi (2001: 277; 2003: 283-4), diachronic change is a challenge to basic assumptions of generative theory-building. From a synchronic perspective, languages compatible with universal grammar are perfectly running systems. Hence there can be no synchronic mechanism, for instance a single syntactic rule or a syntactic parameter, which carries in itself the germ of change. Change of a perfectly running system cannot be caused by properties of the system itself. For a theory of the language system, change is beyond the scope of description. Put
more simply: from this point of view, diachronic change should not exist (Lightfoot 1999, Longobardi 2001: 277), which is obviously contrary to fact. Generative theory has proposed various ways to resolve this paradox, all of which confine change to peripheral domains of language. Many authors invoke, in various ways, language acquisition as a “weak point” in the transmission of grammar, that is, as the locus of change. For Roberts (1993) and Lightfoot (1999), all modules of grammar, including syntax, are subject to possible change in acquisition. From these approaches, the so-called Inertia Theory distinguishes itself in that the “periphery”, i.e. the locus of change, is defined in different terms. If syntax is the core of the grammar, it might be reasonable to assume that change only originates in other, less central, modules of grammar. In other words, syntax can be affected by language change, but such change never originates in syntax itself. On this view, syntactic change can only arise as a consequence of semantic, phonological, etc. change.

From what has been said so far, a logical problem of Inertia Theory becomes apparent. It clearly is not an elaboration of the “pre-theoretical” observation made by traditional historical linguists that syntax is relatively resistant to change (see above). In particular, it makes no prediction about the scarcity of “pre-theoretically” defined syntactic change. Recall that it only excludes change originating in syntax, not change concerning syntax. This means that Inertia Theory, even though apparently maximally restrictive, makes no empirically testable predictions about syntactic change.
Certain claims inherent in Inertia Theory, however, are interesting. In particular, it distinguishes itself from other frameworks, for instance from classical grammaticalization theory (cf. Lehmann 1985), or from earlier generative approaches (cf. Lightfoot’s (1979) “transparency principle”) in that it excludes change induced by the language system itself. We would subscribe to this view, but for different reasons. Language systems are diachronically inert because they are *conventional objects*. Social conventions do not change by themselves. In order to alter them, special things have to happen. What is needed, then, is a theory that provides for both the relative stability of language systems as well as for their openness to change. The above-mentioned paradox of language change has already been discussed in the structuralism of the 1950s. The solution proposed by Coseriu (1978 [1957]: 68-9) is that language systems have to be constantly enacted in order to continue their existence. The necessity of continuous enactment and re-enactment opens the door for change. Put more simply, language change arises in language use.

The notion that language change arises in language use involves no restriction as to the domains where it can originate. This means that syntactic change may very well arise in the usage of the respective syntactic structure itself. As all change, syntactic change is often caused by semantic and pragmatic reasons, but sometimes it is also motivated by genuinely syntactic factors, although these do not have the status of synchronic rules. Spontaneous innovations triggered by language use can directly affect syntax without necessarily passing through other
components of grammar (e.g. pragmatics, semantics, phonology etc.). This claim will be substantiated in section 3.

Usage-based change is not unconstrained. As we are going to show, there is one very general but at the same extremely powerful principle, the principle of reference, which underlies any type of functional reanalysis (see section 2). However, this principle is not a rule with clear-cut domains of application and predictable outcomes.

Furthermore, we will discuss certain tacit assumptions on language change which prevail especially in the generative literature. For reasons outlined above, the generative tradition invokes imperfect language acquisition as the locus of change. According to this view, a necessary condition for change is a shift in the evidence available to the acquirer. Generative approaches to language change differ as to the type of evidence for which they allow. For Roberts (1993), syntactic change passes through structure simplification in acquisition, which in turn may be motivated by a previous shift in usage at a stylistic level. These processes can still be measured by the categories of traditional historical description. Lightfoot (1999), in the spirit of chaos theory, conceives of change as triggered by unpredictable probabilistic cues, which are inaccessible to large-scale historical description. That is, for Roberts (1993) and Lightfoot (1999), the shift in the available evidence can, in principle, originate in syntax itself. For Longobardi (2001; 2003), in contrast, the loss of a lexical element (that is, a change which by
definition must occur outside syntax, see above) leads to change in the available evidence, thereby triggering syntactic reanalysis.¹

Our position differs from this viewpoint in that change based on linguistic evidence is considered only one among many mechanisms of change, and not even a particularly important one (see section 3).

In order to substantiate our claims, we will discuss two cases of syntactic change, one of which is motivated by pragmatic factors, the other one by syntactic factors. Moreover, both examples represent two different types of reanalysis.

2. The rise of French est-ce que as an interrogative particle: a pragmatically motivated syntactic change

In Modern French, est-ce que is a sentence-initial particle in yes/no interrogatives (1) as well as in wh-questions (2):

(1)  Est-ce que Pierre viendra demain ?
    INT Pierre come-FUT.3S tomorrow
    ‘Will Pierre come tomorrow?’

(2)  Pourquoi est-ce que Pierre viendra demain ?
    why INT Pierre come-FUT.3S tomorrow
    ‘Why will Pierre come tomorrow?’

¹ According to Longobardi (2001), the Latin full noun casa ‘house’ developed into the French preposition chez ‘at’ via what he calls a “construct state” in which casa was used as a full noun in a prepositional phrase ‘in the house of’. What caused the reanalysis of the “construct state” as a preposition was the loss of the full noun casa (which is replaced by mansione). However, there seems to be a logical inconsistency in this argument: If the full noun casa disappeared because it was replaced by mansione, why then was mansione not available for the “construct state” and for what reason did casa survive in this construction? This state of things seems to indicate that the Romance “construct state” was itself already the product of a foregoing reanalysis and / or an entrenchment process. The construct state, then, would not be a possibility of Universal Grammar, but an idiosyncratic construction in the sense of Construction Grammar.
In Modern French, *est-ce que* is a not a free combination, even thought all of its elements, *est* ‘is’, *ce* ‘it, this’, and *que* ‘that’, exist as independent items. Rather, *est-ce que* is a particle with a non-compositional meaning. First, it does not mean ‘is it (true) that’ as it should if it were a free combination of autonomous words. Second, its elements are not exchangeable with otherwise synonymous expressions (3a). In particular, *est-ce que* is not sensitive to tense (3b). Its non-compositional character is the result of a language change which we will discuss in this section.

(3a)  
*Est-ce* que Pierre viendra ?
*be.3S that* that Pierre *come-FUT.3S*
‘Is it that Pierre will come?’

(3b)  
*Sera-ce* que Pierre viendra ?
*be.FUT.3S that* that Pierre *come-FUT.3S*
‘Will it be that Pierre will come?’

Sentence-initial *est-ce que* guarantees a relatively simple syntactic structure, because the rest of the sentence has exactly the same form as the corresponding declarative (4a). In particular, it is syntactically simpler than the interrogative inversion, another interrogative sentence type (4b), but less simple than the question marked only by a rising intonation contour (4c):

(4a)  
Pierre viendra demain.
*Pierre come-FUT.3S tomorrow*
‘Pierre will come tomorrow.’

(4b)  
Pierre viendra-t-il demain?
*Pierre come-FUT.3S-he tomorrow*
‘Will Pierre come tomorrow?’

(4c) Pierre viendra demain?
    Pierre come-FUT.3S tomorrow
    ‘Will Pierre come tomorrow?’

Compared to their competitors (4b) and (4c), est-ce que interrogatives are syntactically “optimal”: First, est-ce que indicates the sentence type at their beginning, which makes them perceptually easy to process. Second, the rest of the clause is identical with a corresponding declarative, thus being easy to produce.

In spite of this, est-ce que is relatively rare. It only covers about 5-14% of yes/no-questions in spoken French (Söll 1971: 497, Seelbach 1983: 277, Hansen 2001: 479) and even less in written French. This has to do with its restricted function. In discourse, est-ce que questions are marked interrogative devices. According to the literature, they appear at prominent places in discourse. For example, they figure text-initially, or in the conclusion, or mark a transition between discourse topics (Söll 1971: 498, Seelbach 1983: 286, Weinrich 1982: 743, Hansen 2001: 510). They are “strong” interrogatives in that, unlike questions formed with other constructions, est-ce que questions always require an answer. Rhetorical questions formed with est-ce que are exclamative speech acts with a particularly strong illocutionary force:

(5) Qu’est-ce qu’il a travaillé !
    what INT he has worked
    ‘Damn, how hard did he work!’

At the same time, however, est-ce que interrogatives are topical in that they aim at information which normally is not new to the speaker. Hansen (2001) shows that
they are often used to ask for something which is already accessible in the universe of discourse. In the following example, the point of the question is not to elicit new propositional information. Rather, it aims at the viewpoint of the addressee on this problem.

(6)  

RL : alors à / à propos / à propos des listes c, e les élections européennes
so with / with respect / with respect to the tickets er, er the European elections
ont lieu, à la représentation proportionnelle c’est en effet l’occasion pour
will be proportional elections i’t’s indeed an occasion for
chaque parti d’être représenté pour ce qui nous concerne, c’est / c’est de
each party to be represented as far as we’re concerned, er it’s / it’s in this way,
cette manière, que nous le / que nous concevons l’élection c, d’une
that we, that we see the elections er
façon toute simple
quite simply
Ch : est-ce que pour c pour la majorité pour la gauche, c’est mieux d’avoir
for er for the majority for the left, is it better to have
une liste ou deux listes de l’opposition ?
one or two opposition tickets?
well just now I’

We would like to assume that both the “strong” function of Modern French est-ce que as well as its topical character are conventionalizations of implicatures attached to its diachronic predecessor.

In Old French, as free constructions, est-ce que interrogatives were complex sentences, est-ce being the predicate of an autonomous matrix clause, while que introduced a subordinate clause (‘Is it that…?’). According to the grammar of Old French, the interrogative character of the main clause was marked by inversion of subject and predicate (est-ce que sujet ‘is it?’).
Est-ce que is attested earlier in wh-questions than in yes/no questions, where it is found only from the mid-16th century onwards (Foulet 1921: 264-5). Wh-interrogatives with est-ce que are the counterpart of cleft-constructions of the type c’est X qui/que... ‘it is X who/which ...’. In other words, the primary function of these interrogatives is to focalize the argument represented by the wh-phrase:

(7a) Focal est-ce que wh-question…

Que c’est ce qu’ele a tant chacié ? (Lancelot B)
what that is that which she has so.much chased?
‘What is it that she has been looking for so much?’

(7b) …and the corresponding cleft-construction:

C’est cela qu’ele a tant chacié.
That is that which she has so.much chased
‘It’s that what she has been looking for so much.’

The grammatical properties of free interrogative est-ce que combine three aspects. First, it strongly highlights the participant represented by the wh-element. Second, the content of the embedded que-clause is treated as presupposed, i.e., as information taken for granted by the speaker at the time of utterance. Third, the highlighted and the presupposed elements are neatly kept apart by assigning them to the different clauses of the complex sentence. These three features are what we will call the grammatical meaning of free est-ce que. By virtue of these structural properties, the construction qualified for at least two different textual functions.

In the following passage taken from the Cent Nouvelles Nouvelles, a crook promises three gentlemen to show them a church where they can see God. Arrived at that church, the three gentlemen open up the following dialogue:
(8) Où est ce que nous verrons Dieu? – Je le vous montreray (CNN 63)
where is that that we see-FUT.1p God – I him you.DAT show-FUT.1s
‘Where is it that we shall see God?’ – ‘I’m going to show Him to you.’

The point of the free est-ce que construction here is not only to highlight the wh-
element où ‘where’, but also to treat the state of affairs expressed in the
subordinate clause (‘we shall see God’) as topical information, that is, information
already accepted as valid by both speaker and hearer. The pragmatic function of
this is to remind the crook of his previous promise (‘you will see God’), made a
couple of lines before the quoted passage.

The main function of free est-ce que in Old French, however, exploits the focal
classification of the wh-element.

(9) Qui est ce, Diex, qui me descuivre ? (Trist. I, 232, cf. Schulze 1888 : 94-5)
who is that, God, that me uncover-3s?
‘God, who is it that is uncovering me?’

Interrogative sentences can be used to convey speech acts other than questions:

(10) Qu'est ce, deable ? Quex sunt ti dit ? / Qu'est ce que tu as ici dit ? (Meung
what is this, devil? what are your sayings? what is it that you have here
said?
‘What is it, devil? What are you saying? What is it that you have said?’

In (10), the est-ce que interrogative encodes not a question, but an exclamative
(the speaker knows actually very well what the other person said and merely
expresses her surprise). Still, we can observe all the effects already discussed with
respect to questions. The est-ce que sentence conveys topical information (it is the
third in a series of roughly synonymous exclamations), and it focuses on the wh-
argument. But why should a non-question carry focus on a wh-argument? The reason is that this makes the entire utterance a speech act with a strong illocutionary force. This holds also for the use of the interrogative as a question, as in (9), as can be seen from the exclamative particle Dieu! ‘God!’. In fact, marking the illocutionary force of a speech act as particularly strong seems to have been the main motivation of free est-ce que in medieval French:

Partout au XIIe et au XIIIe siècle qui est ce que, qu’est ce que expriment surprise, indignation, colère, dégoût. C’est tout au plus si les locutions s’affaiblissent à ne marquer qu’un sentiment de vive curiosité. (Foulet 1921 : 253)
Everywhere in the 12th and 13th century, qui est ce que, qu’est ce que express surprise, indignation, anger, disgust. Only exceptionally these constructions weaken so as to mark a feeling of strong curiosity.

Hence, originally, the strength of the illocutionary force is a side-effect of the focal character of est-ce que as a free construction.

To sum up, free est-ce que is a construction which grammatically separates focal from presupposed information. This structural property can be exploited to make strong speech acts, above all strong questions, i.e. questions requiring an answer. This means that a distinction is needed between the grammatical meaning of free est-ce que as such and the function it can fulfil in discourse. The relationship between both is of course not random, as the function of marking strong speech acts can be derived from the grammatical meaning by pragmatic inferencing. But as long as est-ce que is a free, non-conventional construction, this function must be compositionally computed on the basis of the various constituents, every time a speaker builds a new structure with est, ce, and que.
Diachronic reanalysis changed the originally free *est-ce que* into the particle we know from Modern French. In the outcome of this process, the discourse function mentioned, namely “strong” question, was turned into the conventional meaning of the construction as a whole. This process is motivated by the frequent use of the construction with that particular function, in the course of which the function becomes progressively associated with the construction. In the literature, this process is referred to as *entrenchment* (Langacker 1987: 59-60, Bybee 2001: 10-2, 112-7). Progressive entrenchment means that the function of the construction is no longer computed on the basis of its elements by pragmatic inferencing, but that it is directly assigned to the construction as a whole. The mechanism underlying this change is the most important principle of diachronic reanalysis: the “principle of reference”, which stipulates:

(11)  Match the sound string you hear with what seems to be its function in the situation.

(11) is designed to simplify the relation between meaning and function. It is a strategy of interpretation and understanding (for more details, see Detges / Waltereit (2002)). In this sense, it is a *hearer’s* strategy. As a consequence of this reanalysis, *est-ce que* is no longer a focal construction. In particular, it ceased to be the interrogative counterpart of the cleft-construction *c’est X qui* (7b). (For the resulting difference in interpretation of *wh*-questions, see Foulet (1921: 253).) Hence the new unitary meaning of reanalyzed *est-ce que* is (one of) its former function(s). As a consequence of this semantic-pragmatic step, the formerly
complex syntactic structure is lost and the construction is reanalyzed as an interrogative particle.

For a critical discussion of Inertia Theory and its implications, a brief look is needed at certain historical circumstances of the reanalysis sketched in the previous paragraph.

Before syntactic reanalysis, est-ce que constructions exhibit full variability of their elements. In particular, they are marked for tenses other than the present tense (12a), for persons other than the 3s (12b), and they contain pronouns other than the demonstrative neuter ce (12c) (Kaiser 1980) or even no pronoun at all (Schulze 1888: 91-94) (12d):

(12a) A quel jeu sera que nous jourons encependant (Farces, cf. Kaiser 1980: 120)
   at what play be.it.FUT.3s that we play-FUT.1P meanwhile
   ‘What game will it be that we shall play in the meantime?’

(12b) Mais quelz gens sont-ce qui y sont? (Farces, cf. Kaiser 1980: 120)
   But which people are that who there are
   ‘But who are the people (who are) there?’

(12c) Qui est celuy qui nous espie? (Farces, cf. Kaiser 1980: 120)
   who is the.1one who us spy-3s
   ‘Who is the one (over there) who spies on us?’

(12d) Dex, fait il, ki est ki la gist? (Perceval 21026, Schulze 1888: 92)
   God, says he, who is Ø who there lie-3s?
   ‘God, he said, who is it who is lying there?’

The question as to when exactly the reanalysis of est-ce que occurred is a controversial issue in French philology (see Kaiser 1980: 112-125 for discussion).

There are, however, certain indications for its progressive entrenchment from the
14th century onwards: In particular, some texts exhibit spellings as esse instead of est-ce, which is suggestive of a non-compositional analysis of the sound string est-ce que.\textsuperscript{2} Hence, it seems that phonological change from est-ce que to esse que is a (possible) consequence of syntactic reanalysis (which is itself triggered by semantic-pragmatic factors).

(13) Qu’essey qu’il a ? (Pathelin, 15th century)
what INT he has ?
‘What does he have?’

Importantly, the entrenchment of the construction as a conventional marker of interrogation and its concomitant reanalysis as a particle do not exclude a continuing use of the original free construction in contexts other than “strong” questions (in fact, this use continues till this day).\textsuperscript{3} But we can be sure that est-ce que has been reanalyzed as a particle once it is found to introduce a second, free, est-ce que construction meaning ‘is it (true) that’ as in (14). Here it is obvious that est ce que is simply used as a device to mark the interrogative character of free (ce) sera que ‘it will be (the case) that…’, since otherwise the construction would be redundant.

(14) Quant esse que\textsubscript{1} sera que\textsubscript{2} vous donrez à banqueter ? (Farces, cf. Kaiser 1980: 125)
when INT\textsubscript{1} be.it.FUT.3S that\textsubscript{2} you give-FUT.2p to banquet
‘When will it be that you will give a banquet?’

\textsuperscript{2} Note, however that these spellings concern est-ce not only as part of est-ce que, but also in other syntactic contexts.

\textsuperscript{3} This is evidenced by examples such as Qui était-ce qu’on enterrait ? ‘Who was it that they buried there?’ (Jules Romains, 1911, FRANTEXT).
As for the relationship between grammar modules, our analysis has shown a primacy of function over form. Reanalysis based on the principle of reference changes the meaning of an originally free construction. Concomitantly, this construction turns into a syntactically frozen formula. The erasure of syntactic boundaries may then be followed by the erasure of phonological word boundaries (est-ce > esse). We have thus the following ordering of grammar modules:

(15) Pragmatics/semantics > syntax > phonology

This change seems to confirm the assumption, basic to Inertia Theory, that syntactic change is caused by factors external to syntax. In particular, according to our analysis, this change cannot be explained by the rise of SVO at the expense of V2 in French. As is often argued in the literature (Foulet 1921), est-ce que interrogative sentences conform to the SVO pattern of declaratives (see above, (4a-b)), and therefore could have been favored by a general tendency to replace the original Old French V2 pattern by SVO from the 13th century onwards. However, this view is clearly contradicted by the fact that the “breakthrough” of SVO in declarative sentences was not paralleled by an analogous advance of est-ce que interrogatives. The relative frequency of est-ce que questions in Modern French is basically the same as it was in the 15th century. A major limit to a further rise in frequency was that est-ce que interrogative sentences are marked constructions with a very specific function (i.e. “strong” interrogation).

Contrary to central assumptions of Inertia Theory and generative theory in general however, the reanalysis of est-ce que is not acquisition-based. The key to the
reanalysis lies in frequency. Repeated use of est-ce que in the function of a “strong” question leads to entrenchment of the form-function-matching and finally gives rise of a new linguistic element. Frequency, however, is not a parameter of the language system or of language acquisition, but of language use.

Another critical remark concerns the role of linguistic evidence in reanalysis: According to generativist authors, reanalyses are usually triggered by a change in the comparative evidence available to children. However, what could be evidence of such type in the case of est-ce que? The “evidence” responsible for the reanalysis of est-ce que is the fact that already the free construction has frequently been used in the very function that is to become its conventional meaning. But this clearly is not comparative evidence. Still worse: the construction has been reanalyzed in spite of the existence of counter-evidence. In (14) we find est-ce que as an interrogative particle along with a free (ce) sera que ‘will it be that…’, which is evidence for the free state of the construction.

Put in more general terms, the tacit assumption underlying the generativist “reanalysis scenario” poses an empirical problem: it predicts that the free construction, i.e. the “input” to reanalysis and its “output”, i.e. the new construction, should not exist side by side in the same grammar. Yet, empirically, this constellation is rather frequent: In French, pas as a negation particle coexists with pas as a lexeme ‘step’ (to which it goes back diachronically). In the same fashion, English has going to as a marker of the near future along with the full verb to go, which is its historical ancestor. Spanish possesses a complex
preposition *frente a* ‘in front of’ as well as the latter’s lexical source, the full noun
*frente* ‘front’. Analogous examples in many languages spring to mind quickly.\(^4\)

We do not claim that comparative linguistic evidence *never* plays a role in
language change. However, change based on such comparative evidence is only
one type among others, and it requires certain additional conditions. This claim
will be substantiated in the next section.

3. **Shift of grammatical function in Spanish presentational constructions:
   a syntactic change caused by syntactic factors**

We would now like to discuss a case of syntactic change which is caused by
syntactic factors while at the same time being usage-based.

Like many languages, Spanish has a special presentational construction:

(16) hay coches en el patio
    there-is car.pl in the courtyard
    ‘There are cars in the courtyard.’

*Coches*, the only complement in this construction, is a direct object, as can be
seen from the lack of agreement (cf. (16)) and the possibility of anaphoric
substitution (see (16’), (16’’)):

(16’) El coche, *lo* hay en el patio.

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\(^4\) This is also an argument against Longobardi’s (2001) argumentation. According to him, the
construct state *chez* ‘at X’s place, in X’s house’ (< Lat. *casa* ‘house’) in Old French could only be
reanalyzed as a preposition because *casa* ‘house’ as a full noun was replaced by *mansion* ‘dwelling’. Our argument, however, implies that *chez* acquired the prepositional meaning
independent of the loss of the full noun use (cf. note 1). Similarly, German *mithilfe von* (or *mit
Hilfe von*, according to the new German spelling) ‘by means of’ is analyzed as a complex
preposition in spite of the existence of *Hilfe* ‘help’ as a full noun.
the car 3SG-ACC there-is in the courtyard
‘The car, it is in the courtyard’
(16’ ) * El coche, el hay en el patio.
the car 3SG-NOM there-is in the courtyard
‘The car, it is in the courtyard’

In (16’), lo is a direct object in the accusative case; in (16’’), however, nominative
el is incompatible with el coche because of the latter’s direct object status.

However, in certain dialects of Spanish, especially of American Spanish
(Bentivoglio / Sedano 1989: 76-7, Fontanella de Weinberg 1992: 152-4), this
construction displays agreement between haber and the complement:

(17) Habían soldados en el patio.
there-were soldier.pl in the courtyard
‘There were soldiers in the courtyard.’

Here, the complement (soldados) has changed to subject status, as can be seen
from the agreement behavior of the verb. Curiously, the choice of this variant
seems to be favored by past tense usage. In the present tense, the same varieties
favor the construction type (16), with coches as a direct object. The standard
explanation for this asymmetry is that the presentational present tense form hay is
not the regular 3s present of the verb haber, but the idiosyncratic diachronic
outcome of a fusion of ha ‘have-3sg’ and y ‘there’ in the 13th century (Penny
1991: 162). Thus, in the present tense, presentational haber/hay + NP does not
have a regular plural counterpart. However, in some dialects presentational plural
forms built on hay, such as hayn or haen, do exist, albeit sporadically (Montes
Giraldo 1982: 384). This shows that morphological considerations alone cannot
explain the scarcity of subject agreement in present tense usages.
The contradictory syntactic patterning of *haber* + noun in Spanish is symptomatic of presentational constructions cross-linguistically. Presentational constructions are specialized in introducing new participants into discourse. By virtue of their being new, these participants are focal (Lazard 1994: 4). Normally, they have the status of single arguments of the construction. This follows from the function of presentatives, which do not predicate something about a referent but simply introduce the new referent and locate it in discourse (Lambrecht 1987: 227). Cross-linguistically, the single arguments of these constructions are sometimes encoded as subjects, sometimes as objects and at times as something which is neither subject nor object (Lazard 1994, Givón 2001: 191-2). Thus, English has the presentational construction *there is:*

(18) **There are apples in the garden.**

Here, the coding properties of *there are* (agreement) point to a subject status of the only argument *apples*. Other properties however, in particular behavioral properties of this constituent, seem to deny *apples* a subject status:

(19a) **There** are apples in the garden.
(19b) => I expect *there* to be apples in the garden.
(19c) => *I expect *apples* to be there in the garden.

(20a) **He** comes.
(20b) => I expect *him* to come.

In the control construction, *there* in (19b) occupies the same syntactic slot as the subject constituent of a standard sentence (20b), while this position is excluded
for *apples* (19c). This in turn means that *apples* in (19a) does not have the full range of properties of a normal subject (cf. Lazard 1994: 12-4).

Another example is the following presentational construction of Standard French:

(21)  Il arrive des gens  
3SG arrive-3SG PARTITIVE-PL people  
‘There are people arriving’

Coding properties (agreement) and behavioral properties (post-verbal position in a strict SVO language) point to an analysis of *des gens* as a direct object, the formal subject being the expletive element *il*. The problem with this interpretation, however, is that *arriver* is not a transitive verb and therefore should not govern a direct object. In non-presentational standard sentences, *les gens* has the coding and behavioral properties of a regular subject:

(22)  Les gens arrivent  
The-PL people arrive.3PL  
‘People arrive’

What is the reason for this bizarre patterning? As already pointed out, presentational constructions are specialized for introducing new participants into discourse. New participants represent by definition focal information. Focal participants in turn are most naturally coded as non-subjects, typically as direct objects (Givón 1979: 52). At the same time however, presentational constructions normally have (for reasons pointed out above) only one argument-participant
(Lazard 1994: 3). The unmarked syntactic role of only arguments is the subject status. Thus, presentational constructions are subject to two conflicting coding constraints observable in “normal” sentences elsewhere in the language:

(23) 1. Focal information is coded as non-subject
2. Single arguments are coded as subject

Individual presentational constructions can only satisfy one of these constraints and must necessarily violate the other one (Koch 2003: 157). Returning to our construction in (16) *hay coches en el patio* vs. (17) *habían soldados en el patio* we can observe that (16) conforms to (23)-1 and violates (23)-2, whereas (17) satisfies (23)-2 but is in contradiction with (23)-1. In the change from (16) to (17), the criterion for the status of the only argument is shifted from (23)-1 to (23)-2. This change is likely to occur in constructions with singular NPs like (24) which are open to both interpretations.⁶

(24) Había un soldado en el patio
    There-was INDEF soldier.SG in the courtyard
    ‘There was a soldier in the courtyard’

The reanalysis leaves the surface of the construction unaltered. Hence it goes unnoticed as long as the argument in question is realized as a singular NP. The

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⁵ Lambrecht (1987: 227-8) discusses, under the label of presentational constructions, French all-new sentences of the type *ya un camarade d’usine qui m’a ramené en voiture* ‘there’s a pal from work who took me home in his car’. Lambrecht himself acknowledges that sentences of this type consist of two constructions, namely a) a presentational clause *ya X* ‘there is X’ with only one argument, and b) an embedded relative clause containing a further predication about the newly introduced participant.

⁶ Note that this does not mean that the construction is ambiguous. Before reanalysis, its single argument is coded as direct object. This interpretation, and only this one, is sanctioned by the traditions of the speech community until the reanalysis takes place. By “openness” we only mean that the non-subjecthood of the only argument is not overtly marked.
change consists in analyzing an opaque sound string by means of a constraint which can be observed to underlie transparent sound strings of the same language (in this case constraint (23)-2 rather than (23)-1).

(25)  
    a. Before reanalysis:  Había un soldado_{DO} en el patio  \[\leftarrow (23)-1\]  
    b. After reanalysis:  Había un soldado_{SUBJ} en el patio  \[\leftarrow (23)-2\]  

This type of reanalysis is different from the one described in section 2. It follows from a principle which we have termed the “principle of transparency” (Detges / Walsereit 2002):

(26)  

Match the sound string you hear with other sound strings of the same language.

Note that reanalyses of this type tacitly comply with the principle of reference pointed out in section 2, since the function of the construction, namely the introduction of the new discourse participant un soldado, is the same in (25a) as in (25b). Even though the grammatical structure of the two sound strings is different, their communicative function is identical. This means that the principle of reference (11) constrains the principle of transparency (26). In fact, we are not aware of any reanalysis based on the principle of transparency which violates the principle of reference. Hence, of the two principles, the principle of reference (11) is the most important one. It can be expected to underlie any kind of reanalysis in grammar (Detges / Walsereit 2002).

Whereas reanalyses that rely exclusively on the principle of reference are based on high token frequency, reanalyses of the type sketched in (25a/b) are favored by
low token frequency. They are typically brought about by speakers who are unsure as to the conventionally established grammatical structure of the construction. This is the case with constructions which are either new to the language or which have a relatively low frequency.\(^7\) Now we can also explain the otherwise mysterious fact that the reanalysis of presentational \textit{haber} + NP is strongest in non-present tense uses (Bentivoglio / Sedano 1989: 72). The reason is not the defective morphology of \textit{haber} / \textit{hay}. In spoken language, presentational constructions are most frequently used in the present tense. Hence, of all the forms of \textit{haber} + NP, the irregular present tense \textit{hay} + NP is the most solidly entrenched one. Reanalyses based on low frequency will therefore more likely occur in non-present tenses. Bentivoglio / Sedano (1989: 72) show that the tense most affected by this reanalysis is indeed the \textit{imperfecto}, which is the least frequent of the two Spanish past tenses (Berschin / Fernández-Sevilla / Félixberger 1987: 214).

Recall that according to Longobardi (2001), all syntactic change is \textit{caused}, i.e., driven by other components of grammar. Now, the change under discussion here is clearly determined by the conflicting constraints described in (23). But what is syntactic about this change? Crucially, the constraints (23) 1. and (23) 2. have a double status. On the one hand, the coding of argument configurations is idiosyncratic to individual verbs and, as such, to lexical items. For example, I

\(^7\) Strictly speaking, newness is a special case of low frequency, given that a construction which is new necessarily starts out from zero frequency. This is an argument against Koch’s (2002: 94, note 77) critique of the link between low token frequency and reanalyses based on the principle of transparency exposed in Detges (2001: 419-20).
*think that* and *it seems to me that* are projections of largely identical semantic arguments to different syntactic constructions. The choice of the construction is specific to the individual verb (*seem* and *think*, respectively). Hence, it could be argued that argument projections of this type must be specified in the lexical entry of the verb. If this line of reasoning is correct, then the constraints in (23) can be observed in the organization of the lexicon and are therefore lexical, not syntactic, in nature.

On the other hand, constraints such as (23)-1 and (23)-2 describe a property of a language’s syntax. Basically, they belong to the inventory of a language’s linking rules. More specifically, they describe the unmarked case, leaving aside special syntactic constructions such as passive, special topicalization and focus constructions, which have to be dealt with in the grammar of a language. This may be the reason why in the Chomskyan paradigm rules such as (23)-1 and (23)-2 are normally considered objects of the syntax, not of the lexicon.

### 4. Conclusion

We hope to have shown that a usage-based approach to syntactic change can provide a convincing solution to the apparent paradoxes of grammatical change. Reanalyses are not triggered by properties of the language system. Rather, they are conditioned by frequency of usage. High token frequency of a construction will lead to its entrenchment and to a reanalysis according to the principle of reference. Low frequency can entail reanalysis according to the principle of transparency. Moreover, there seem to be certain types of constructions, e.g.
presentational constructions, which seem to favor syntactic reanalysis because they are subject to conflicting coding constraints. Syntax is not inert, not even in the weak sense proposed by Inertia Theory. Syntax is exposed to possible change to the same degree as other modules of grammar are. Note that the mechanisms of syntactic change are not specific to syntax. The principle of reference and the principle of transparency apply to any kind of functional change in language, that is to syntax as well as to the lexicon. Neither is historical stability anything specific to syntax. A language’s syntax is relatively stable because linguistic conventions, be they syntactic or other, tend to self-perpetuate. Furthermore, as we have shown, syntactic change can be triggered from within syntax itself as well as from other domains of grammar. In principle, this claim is not incompatible with the generative viewpoint underlying Longobardi’s (2001) theory that syntax is the “most central”, the “core” domain of grammar in the synchronic perspective. But neither does it offer any new evidence in favor of that viewpoint.

5. References


