
Esta guía de lectura contiene un somero resumen, casi esquemático, del artículo. Asimismo, se incluyen comentarios y cuestiones sobre los que discutir (estos se indicarán entre corchetes).

1. **Introduction (45-49)**

The simplest view of grammatical categories exhaustively assigns the grammatical formatives that make up the lexicon of a language to one of a finite, probably rather small set of grammatical categories, in a one-to-one fashion. [...] It is pretty clear that the mapping cannot be as simple as one-to-one: many lexical formatives appear to belong to more than one category.

Example:

(1) He ran round the track  
    The car rounded the corner  
    A round hole

Solutions/alternatives:

- Polisemy.
- Underspecification, abandoning the idea that lexical items are exhaustively mapped to grammatical categories.
- Prototype theory.

Roberts position:

The appearance of synchronic gradience or diachronic gradualness may be due to the fact that categorial distinctions are very fine: the signs of category change from one category to another may be very subtle and so fine-grained as to appear gradient. [...] Given the rather 'traditional' view of category-membership that I adopt here, a given lexical item may be a member of category C at one period of a language, but of category C' ≠ C at some other period of the same language.

[1][¿Cómo es posible ese cambio o esa variación? ¿Debe existir una distinción entre ambos conceptos o deben ser tratados como meros sinónimos? La ambigüedad es coexistencial a la lengua, pero ¿cómo se materializa esa ambigüedad dando pie a un cambio?, ¿qué sucede entre una lengua-1 y una lengua-12?]
The goal of this paper:
Explore a specific class of category change, known as grammaticalization, in relation to Cinque's (1999, 2004) functional hierarchy of clausal categories. R and R's approach centrally features the following three ideas:

- The diachronic movement of a given morpheme, possibly tracked over many centuries through successive reanalyses, is always upwards in the structural hierarchy of functional categories.
- Successive upward reanalysis along the functional hierarchy is thus how we define grammaticalization paths.
- The path is traversed by the loss of steps of head movement, leading to changes from Move to Merge.

2. The formal approach to grammaticalization (49-53)

Grammaticalization is usually defined as the process by which new grammatical morphemes are created. The basic mechanism of grammaticalization is the loss of movement, taking Move to be the combination of Agree and a special diacritic feature of the target:

\[
\text{XP} \quad Y+ X\mid_{Y \ P \ t_y} \mid_{Y \ P} \mid_{Y \ P \ t_y} > \mid_{X \ P} \ Y=X\mid_{Y \ P} \ Y=... Y=...
\]

Simplicity metric
A structural representation R for a substring of input text S is simpler than an alternative representation R' if R contains fewer formal feature-syncretisms than R'.

Move and Agree
A movement relation will be acquired only where the trigger experiences forces it, i.e. where it is robustly cued. If the primary linguistic evidence for the movement relation is unclear or absent, then non-movement will be assumed as the default option. Hence loss of movement is expected as a mechanism of syntactic change, driven by abductive reanalysis of input on the part of language acquirers, the reanalysis in turn being forced by the simplicity metric. [...] This may happen through phonological change, some other syntactic change, or presumptively external factors such as contact and borrowing.

... A\{f:--\} ... B\{f:val\}
(Probe) (Goal)

Probe A Agrees with Goal B only if there is no Goal B' such that B' intervenes between A and B. But now, suppose B' probes B and triggers movement of B. Suppose further that reanalysis of the movement takes place along the lines described in (2) such that B' = B. At this point, the former B can be probed by A, B can move to A and further reanalysis can take place. In this way B takes on new features, to match those of A.

- Example of Romance determiners.

That reanalysis involves the suppression of a movement relation, and that the formerly moved element is, after grammaticalization, first-merged in a higher position than previously. [...] This ‘diachronic movement’ directly reflects the properties of the formal, synchronic operation Move; as such it is upwards, local, cyclic and always targets functional heads. These are all formal properties of grammaticalization.
Markedness

**Formal markedness** relates to their approach to parametrization: they propose that this amounts quite simply to the presence of a diacritic on a functional feature, written as *, requiring PF-realisation of that feature. The functional lexicon of each language contains a random distribution of these diacritics.

**Substantive markedness** corresponds to the Jakobsonian notion of markedness, in that marked values are inherently more complex in various respects than unmarked ones. Substantive marked value corresponds to the presence of a subfeature associated with a functional head, while unmarked values correspond to the absence of such features.

A functional head with a subfeature has two chances of being associated with a diacritic, hence substantively marked values are more frequently overtly realised.

3. The Cinque hierarchy (54-58)

Each head takes the category to its immediate right as its immediate structural complement, in a standard X’ theoretic schema. Moreover, each head is associated with a marked and unmarked value of a feature.

[...] A single lexical item may be able to instantiate several categories. These incremental differences among categories, combined with the possibility of multiple exponentence for many lexical items, may give rise to the impression of synchronic gradience.

4. Grammaticalization and the Cinque hierarchy (58-66)

Grammaticalization phenomena can provide further evidence for the hierarchy, given assumptions about syntactic change.

(3) Romance futures/conditionals

\[ \text{Mod}_{\text{Necessity}} / \text{Mod}_{\text{Obligation}} \rightarrow T(\text{Future}) \]

(4) Perfects to preterits

(5) Modals

\[ \text{Mod}_{\text{Ability}} \rightarrow \text{Mod}_{\text{Obligation}} \rightarrow \text{Mod}_{\text{Epistemic}} \]

(6) The 'restructuring verbs' of Italian and other Romance languages, a class of modal, aspectual and conative verbs which give rise to various kinds of transparency effects in relation to their complement infinitives (most notably, clitic-climbing), are in fact best analysed as functional heads occupying the appropriate modal and aspectual positions in a single clausal functional hierarchy.
Conclusion

- Numerous cases of grammaticalization involving upward reanalysis in the Cinque hierarchy and, strikingly, no clear cases of 'downward reanalysis'.
- The role played by the Cinque hierarchy. It is this highly articulated structure which gives the possibility of accounting for both diachronic gradualness and synchronic gradience. The idea is that a seemingly analogue cline or curve can in fact be broken down into many small, but discrete, individual steps.
- The structural changes should be seen as structural micro-changes, and gradualness is the accumulation of these discrete micro-changes. If micro-changes involve incremental steps through the Cinque hierarchy on the part of very small classes of lexical items, then we see exactly how Cinque’s proposals may be relevant.

5. Semantic bleaching and grammaticalization

Although ‘bleaching’ is an intuitive, useful and expressive description of this process, it might be worth exploring a more precise formulation. The semantic bleaching is the process of loss of non-logical meaning. **Permutation-invariant meanings** are meanings which do not depend on empirical facts for their contribution to truth; such interpretations depend purely on set-theoretic or numerical aspects of relations among referents, not on any intrinsic properties of the referents themselves.

While grammaticalization may involve decrease in complexity in syntax, it may increase the complexity of the (formal) semantic representation. [...] The categories higher in the Cinque hierarchy are more ‘bleached’, i.e. more purely logical in content, than those lower down.

[4] [El problema que se achaca a esta propuesta y que el propio autor ya se plantea es cómo se reparte ese significado en la jerarquía. La intuición es que cuanto más arriba en la jerarquía menos contenido externo tiene y más significado “lógico puro” contiene, pero solo tenemos la intuición, nada más.]

-Cinque explicitly limits his hierarchy to the traditional core clause, or IP in classical government-binding terms.

6. Conclusion

- The combinations of Roberts and Roussou’s formal approach to grammaticalization and Cinque’s hierarchy of functional projections yields predictions about paths of grammaticalization.
- Grammaticalization involves ‘upward reanalysis’ through the hierarchy.
- The semantic bleaching are inconclusive: the is some reason to think that higher functional heads, at least modal ones, are ‘more bleached’ than lower ones, but what remains unclear is exactly how logical properties map on to syntactic features.
- The structural changes should be seen as structural micro-changes, with gradualness emerging as the accumulation of such changes, is still more consonant with this picture. It may be, then, that we are close to a convergence of views arising originally from quite distinct traditions of grammatical and historical analysis.