

## Auxiliary selection in French and Italian

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**INTRODUCTION** Auxiliary selection is a well-known phenomenon in perfect tense formation that relates to the ability of some languages to choose between ‘have’ or ‘be’. It has been a central theme in academic literature since Perlmutter’s (1978) unaccusative hypothesis and has piqued the interest of many linguists in the domain of Romance languages, particularly Italian and French (Van Valin 1990, Sorace 2000, Sorace and Legendre 2003, Bentley and Eythórsson 2004). A particularly influential theory is the Auxiliary Selection Hierarchy (ASH) proposed by Sorace (2000). Whereas the verbs that select ‘be’ and ‘have’ are located at the two extremes of this hierarchy, the so-called *peripheral verbs*, the ones that are most sensitive to auxiliary selection variation, are located in the middle of the hierarchy. *Accroître* ‘increase’, *diminuer* ‘decrease’, *passer* ‘pass’ ‘go to’, *monter* ‘mount’, *changer* ‘change’, *paraître* ‘appear’ are only some of the examples of ‘double auxiliary’ verbs. Consider *monter* in the following examples:

(1) **Le ton a monté** et j’ai alors constaté que [...]  
ART tone have.AUX.3Sg rise.PTCP and I.have.AUX.1Sg then notice.PTCP that [...]  
The tone rose and I then noticed that [...]

(2) **Le ton est monté** et lorsque l’une de nous émettait [...]  
ART tone be.AUX.3SG rise.PTCP and when ART-one of us make.IPFV.3Sg  
The tone went up and when one of us made [...] (FrTenTen(17))

Legendre and Sorace (2003:7-8) argue that one of the classes exhibiting “regular alternations” is that of verbs denoting ‘indefinite change’ in a particular direction”, like *salire* (it.) *monter* (fr.) ‘go up’, and that “the strength of preferences is a function of the (+/-) inherent telicity of the verb”. Moreover, “*monter* (and *descendre*) select *être* or *avoir* for most speakers depending on the agentivity of its subject”, in their view. Despite the progress made in the state of the art by ASH, the parameters that license either ‘be’ or ‘have’ auxiliation with peripheral verbs remain unclear. Moreover, while the agentivity of the subject has been widely identified as a relevant parameter for auxiliary selection, less attention has been devoted to the interpretation of subjects liable to an agentive interpretation by metonymy.

**METHODS** To address these challenges, we decided to combine chi-square analysis and corpus analysis by using ItTenTen (16) and FrTenTen (17) via Sketch Engine (cf. Jakubíček et al., 2013) as primary corpus. A sample of verbs with double auxiliation were analyzed by means of a battery of tests, combining semantic and syntactic parameters. The semantic parameters considered are the subject’s human trait, animacy, agentivity and the *non-volitional internal cause*. Among the different syntactic contexts considered, we looked at locative, temporal and aspectual adverbials, adverbial arguments, adverbials of quantity and adverbials of manner. Then, given that several verbs have besides their intransitive construction a transitive construction, we identified when a direct object complement could be assumed as implicit in order to understand the subtle line separating the two interpretations. At a later stage we examined the data with CHAID (Kass 1980). This nonparametric test provides a way to observe how the different features (semantic and syntactic parameters) contribute to the selection of the auxiliary by creating a decision-tree in which every segment contains similar sentences according to the features. This enables us to see not only the factors that influence the selection

of auxiliaries, but also to predict which auxiliary a given verb is expected to select. Spreadsheet and decision trees are not in the abstract because of their dimension: they are available upon request.

**RESULTS** One of the first results comes from examining the concepts of internal and external causation not only at the general level of intransitive verbs, but also specifically with respect to peripheral verbs. Besides the agentivity parameter usually considered in studies on auxiliary selection, we identify as relevant the concept of *non-volitional internal cause* (Mateu 2009). The Italian verbs examined in our study demonstrated how the distinction between agentivity and internal cause, in conjunction with verb semantics and subject's animacy and human trait, can explain auxiliary selection. Verbs are more likely to show double auxiliatation when they are characterized by non-agentive, but causative subjects. However, other factors prove to be at work, namely the availability of a resultative reading. It has gone largely unnoticed that the auxiliary alternation interferes with aspect. A preliminary comparison using CHAID reveals that agentivity is a stronger predictor of auxiliary choice for Italian peripheral verbs than for the French verbs. The lists below show the importance of the parameters in the sorting of sentences into homogeneous segments: at the top of the list, we found parameters having p-values lower than 0.05, and at the bottom, we found parameters that are not statistically significant ( $p > 0,05$ ).

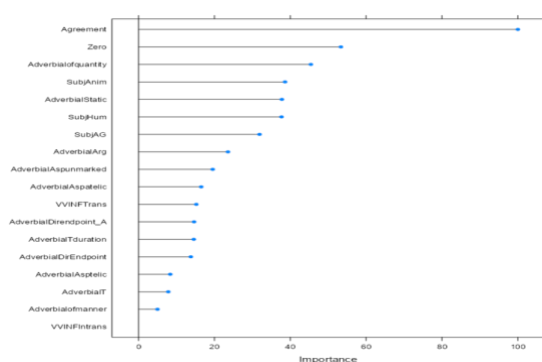


Table 1 – Parameters ranked in order of importance (French)

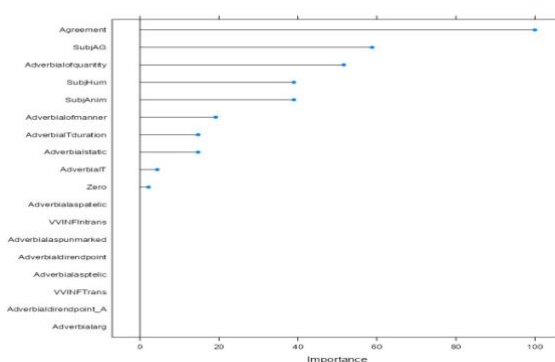


Table 2 – Parameters ranked in order of importance (Italian)

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