The development of linguistic complexity:
Evidence from the diachrony of Future periphrases in English and beyond

Common assumptions about linguistic complexity in diachrony, such as the *equi-complexity hypothesis*, have more recently been called into question (Shosted 2006, Sinnemäki 2008). Some studies suggest that there is a tendency of language systems to simplify diachronically (Trudgill 2011); others observe a tendency for complexification (McWhorter 2011). In addition, definitions of linguistic complexity may differ among scholars depending on theoretical framework or research scope. Most definitions fall under two main categories: *absolute complexity*, focusing on structural properties of languages (e.g., McWhorter 2011), or *relative complexity*, defining complexity in relation to extralinguistic parameters, such as frequency and ease of processing (e.g. Hawkins 2004). More recently, a split into two types of complexity was proposed to account for the various aspects of complexity observed in several studies: I[nternal]-complexity, concerned with phenomena related to morphological or syntactic derivation, and E[xternal]-complexity, concerned with frequency and usage (Di Sciullo 2012). However, the two different definitions of complexity appear to be contradictory in cases of grammaticalization. On the one hand, grammaticalization can lead to an increase in complexity as it leads to finer semantic distinctions being grammatically marked (Miestamo 2008). On the other hand, grammaticalization can result in simplification, following the gradual frequency boost that new grammatical categories undergo.

In this study, we propose that *the hypothesis of dynamic complexity* can resolve the above contradiction. We argue that dynamic complexity should be defined as the sum of parameters contributing to both structural and relative complexity. In addition, our hypothesis is that *dynamic complexity balances out differences provoked by changes in structural complexity*. We test the above hypothesis on the basis of the grammaticalization of future in different languages. Our point of departure is the Present-day English construction *be going to* + *infinitive*, whose development can be analyzed as a typical case of grammaticalization in which an allative verb (*go*) turned into a purposive marker and, later on, into a future tense marker/ marker of intentionality (Traugott & König 1991, Mair 2004, Tagliamonte et al. 2014). Examples like (1) demonstrate that *be going to* started having a future reading in the 15th century.

(1) *Therefore while this onhappy sowle by the vyctoryse pojmpys of her enmyes* ***was going to be*** *broughte into helle for thesynne and onleful lustys of her body.*
'Therefore, while this unhappy soul by the formidable victories of her enemies was going to be sent to hell for the sin and wicked lusts of her body.'
(Helsinki Corpus, 1482, *The Revelation to the Monk of Evesham*) (Danchev & Kytö 1994: 69)

We will argue that structural- and frequency-related processes related to language change function as trade-offs of complexity diachronically. We will test the above hypothesis against the diachrony of similar periphrases denoting future tense in other languages of the Germanic branch (for instance, the Swedish future construction *komma att*) as well as different branches of the Indo-European family, such as Greek. We will show that cross-linguistic diachronic data corroborate our hypothesis that dynamic complexity cancels out tendencies (of increase or decrease) in structural complexity found in different stages of grammaticalization of periphrastic constructions.

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