The Impact of Failed Changes

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While successful linguistic changes often grow to their completion in time in the form of an S-curve (Bailey 1973, Kroch 1982), unsuccessful changes can be described by an increase toward a peak and a decline after. Kroch (1989) develops a two-parameter logistic model of successful changes, LG(a[1], a[2]), that provides a tool to trace relations between successful changes (the 'Constant Rate Hypothesis'): related successful changes share parameter a[2], but not a[1]. In this study, we develop a model of "failed changes". We will show that, despite their own failure, failed changes may have impact: they may fuel another related change that is successful. In order to maximally profit from Kroch's results, we study two failed changes that are closely related to successful changes: the rise and fall of do-support in *positive affirmative* clauses in Middle English (Ellegård 1953), and the rise and fall of the inherent reflexive *sick* 'himself' in Middle Dutch (Postma 2004). These unsuccessful developments are connected to a related change that was successful: do-support in negative and interrogative clauses, and the replacement of *hem* 'him' in reflexive contexts by *sich* 'himself'. The successful and the unsuccessful developments of *do* and the s-reflexive are drawn together in figure 1 and 2 respectively. In figure 1 the black curve is the failed change and the red and blue curves represent successful changes (data adapted from Ellegård). In figure 2, the green curve is the (unsuccessful) rise of the reflexive *sick* (SE), and the red s-curve the successful change of reflexive use of *hem* to the SE-reflexive.
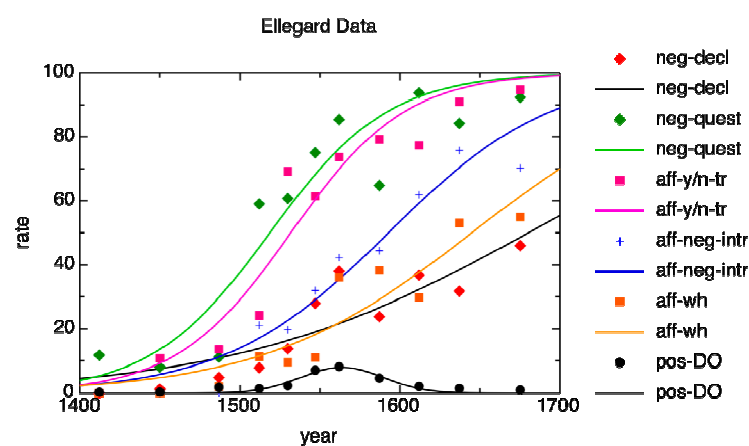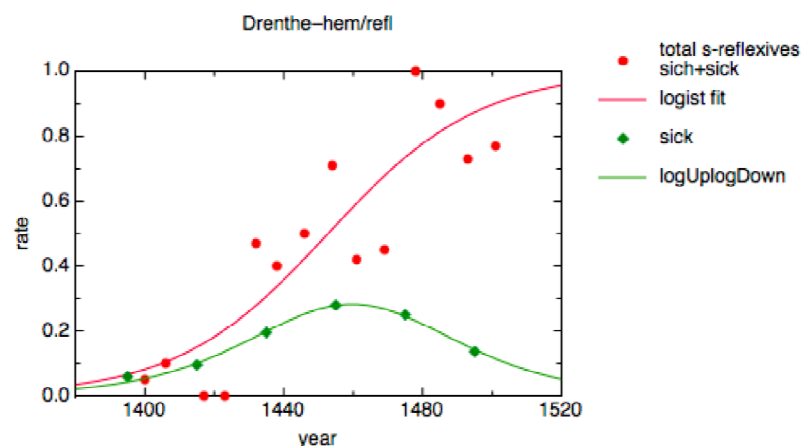

Fig 1.

Fig 2.

Kroch shows that the black curve of positive *do* and the red and green curves of NPI-do are fundamentally non-related in LG: they have fairly distinct a[2]-parameters. This is correct. However, what Kroch cannot capture is that the time position of the peak coincides with the time position of curving point of the S-curve. A similar relation holds in the Middle Dutch *sick/sich* case. Moreover, while Kroch was agnostic about the precise type of S-curve (logistic function, Lorentz cumulative function, Gauss-

cumulative function) and choses the logistic model for practical reasons, we are able to show that only the logistic model is able to derive the algebraic relation between successful and failed change. Finally, the succesful change identifies two parameters of the failed change.

Two interpretations of the proposed model are discussed:

1. the failed change is a kind of resonance phenomenon outside the empirical range of the successful change. This interpretation sheds light on the fact that that the failed change has its peak when the successful change has its strongest impetus. This takes the failed change as an accidental side effect of the successful change.

2. the failed change is an off-grammatical change by an innovating peer group that *induces* a secondary grammatical change in the language community. This interpretation explains that the successful change does not increase exponentially towards 100%, but flattens when the peer group's activity dies out. It also captures the relation between the peak and the inflection point. This interpretation takes the successful change as an L1 accomodation of the L2 change, whose failure is necesssary. In figure 2, for instance, the red curve is proportional to the cumulative counterpart of the green curve and approximates the data closely.

In evaluating the pro and cons of both interpretations, we use an additional phonological effect in the borrowed reflexive as evidence of the initial off-grammatical nature of the change. This change is visible in both *sick* and *sich*: the reflexive's vocalisation changed from written /y/ to written /i/. This can be explained by the fact that *sick* and *sich* were borrowed from German dialects, which use a high lax short vowel in *sick/sich* that are interpreted by the Dutch ear as tense [i]. This results in the imperfectly borrowed form [ziX], which is morphologically and moraically off-grammatical and was replaced by [zIX] along with the completion of the s-reflexive. We may interpret this as an argument for the L2 interpretation. Similarly, we argue that positive affirmative *do* is an off-grammatical side affect of older causative *do* from which it has developed (Ellegård (1953). Bleached do relaxes to a pure polarity use in 50% of the cases cross-linguistically (Jäger 2006). We argue that the restriction to the polarity use is triggered by a certain type of anaphoric tense relation (either causative or polarity). The causative and polarity readings of do-construal can be seen as a main clause parallel to the intentional cq polarity reading of subjunctive readings in Romance (Stowell 1993, Quer 1998). From this perspective, the (failed) positive do-cases are outside the grammatical scheme and must be due to adult or L2 innovations that fueled the polarity use of do-support.

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