

Gergel, Remus

Interface interactions in the English iterative cycle

Linguistica Brunensia. 2017, vol. 65, iss. 1, pp. 51-65

ISSN 1803-7410 (print); ISSN 2336-4440 (online)

Stable URL (handle): <https://hdl.handle.net/11222.digilib/136657>

Access Date: 19. 02. 2024

Version: 20220831

Terms of use: Digital Library of the Faculty of Arts, Masaryk University provides access to digitized documents strictly for personal use, unless otherwise specified.

Remus Gergel

INTERFACE INTERACTIONS IN THE ENGLISH ITERATIVE CYCLE

ABSTRACT

This paper investigates the cyclical interaction between the adverb again and its predecessor eft ('again' in Old and Middle English) by focusing on the semantics-syntax interface in change. Building on the results of recent corpus studies it is argued that having both a structural and a lexical analysis at disposal makes correct predictions for both adverbs. Second, for the area at hand (viz. when the two adverbs are considered in tandem rather than individually), it is argued that pursuing the two-track analysis on a broader basis than had been done previously accounts for facts that so far have remained unexplained in the appearance of the adverb eft. Specifically, the paper explores the idea that two types of semantic analysis suggested for the so-called decompositional adverbs may be available not only transitioning one another, but also systematically during one and the same historical time span. Third, further new observations are made as to why again may have won the competition at the expense of a well-established adverb in the history of English. The relevant observations hinge on clearer conditions for the winning competitor at the syntax-semantics interface.

KEYWORDS

linguistic cycles; semantic change; decompositional adverbs; syntax-semantics interface

1. Introduction

The current paper is part of a larger enterprise aimed at investigating the changing properties of apparent decomposition of adverbs over time and concerned with the relationship between corpus data at different stages and issues of grammatical representations.¹ For current purposes, decompositional adverbs have the property

¹ I am grateful for comments and questions received after presentations at the 9th SinFonIJA, the

of potentially modifying the meaning of subparts of the event structures to which they attach. They are known from a wealth of synchronic literature, which traditionally has a strong focus on Modern English and German (e. g. STECHOW 1995, JÄGER – BLUTNER 2000, KLEIN 2001, JOHNSON 2004, PEDERSEN 2015). Several other languages have also interestingly been investigated from a similar perspective (see, for example, BECK 2005, PASTEL-GROSZ – BECK 2015, CSIRMAZ 2015, OH 2015, ZWARTS 2015). The basic pattern of so-called decompositionality, illustrated with *again* in (1), runs as informally paraphrased in (2).²

- (1) *Henry opened his box again.*
 (2) a. Henry opened his box and he had opened his box before.
 b. Henry opened his box and the box had been open before/the box had been closed.

The key difference between the readings in (2a) and (2b) is one of presuppositions; the assertion of the two readings is identical in each paraphrase. The first reading is described in the literature as repetitive. On it, the entire event is taken to have been iterated in the common ground of the interlocutors. The second reading is referred to as restitutive or counterdirectional (depending on the analysis; cf. the paraphrases and see below for more details of the two possible analyses). Unless otherwise specified, I use the terms ‘counterdirectional/restitutive’ interchangeably to delimit the relevant reading from the repetitive one and the term ‘decompositional’ for this class of adverbs rather descriptively, i.e. without a commitment to a particular analysis from the start. One more terminological and thematic clarification for current purposes: I use the term iterative to refer to the possible presuppositions of adverbs such as *again* more generally (cf. BIRNER 2012). This is, then, a large group of readings, incorporating the restitutive/counterdirectional and the repetitive. For *again*, one might get the impression that this covers the full spectrum of meanings. We will see, however, that the adverb *eft* available at earlier stages of the language had clear additional readings (these were notably temporal but also discursive ones).

Three points are relevant for current purposes. First, solely because an adverb appears to be able to decompose telic predicates in language X will not entail that its translation or putative counterpart in language Y will necessarily do so too.

York linguistics colloquium, and the 31st Comparative Germanic Syntax Workshop. The presentation and the contents of the paper have also profited from the reviewing process of *Linguistica Brunensia*, which is hereby acknowledged.

² There is an additional sense of decompositionality. Items that are ascribed the property of being decompositional in this second sense are apparent single word units consisting of several building blocks at the level of interpretation. See e.g. HACKL (2009) for *most* decomposing into a superlative of *many*, and GERGEL – STATEVA (2014) for a suggestion on *almost*, the latter being potentially decompositional in both senses.

Crucially, decompositionality of certain classes of adverbs is not a universal, but rather a property that requires empirical confirmation on a language-by-language and also on an item-by-item basis (see e.g. RAPP – STECHOW 1999, BECK 2005, OH 2015 for variationist synchrony). Second, this fact has direct consequences when it comes to different stages of one and the same language. If stage S_x has decompositionality for a given adverb according to certain diagnostics, this does not imply that a previous stage S_y must have displayed the same behavior of the adverb, or *vice versa* (BECK – GERGEL 2015, GERGEL – BECK 2015). And third, an altogether different alternative to the decompositional view is available for the basic analysis of potential decompositional ambiguities, namely a lexical one.

The key features of the two main analyses of decompositional adverbs are as follows. First, on the structural analysis, decompositionality is a genuine property of the adverb in question in the sense that the latter can trigger a presupposition that modifies just a sub-event of the predicate that it attaches to, namely the result state. On this analysis, an entry such as (the simplified version) in (3) is typically put to work (cf. e.g. BECK – GERGEL 2015 for recent discussion and qualifications):

$$(3) \quad [[\text{again}_{\text{rep}}]] = \lambda P. \lambda e. \exists e' [e' < e \ \& \ P(e')]. P(e)$$

The ambiguity of the adverb is derived by two distinct attachment sites at the level of Logical Form (LF). For the repetitive reading, the modification is of the entire VP denotation, while for the restitutive reading only the result state is modified.

On the competing lexical analysis, two distinct entries are proposed. In addition to the repetitive reading, a second counterdirectional entry is typically suggested, a simplified version of which is rendered in (4) below (cf. e.g. FABRICIUS-HANSEN 2001 for a proposal in this sense).

$$(4) \quad [[\text{again}_{\text{ctdir}}]] = \lambda P. \lambda e. \exists e' [e' < e \ \& \ P_c(e')]. P(e)$$

On the lexical analysis, the crucial presuppositional part of the restitutive reading relies on the existence of a salient counterdirectional event. We will see the relevance of this in the diachronic context beginning in the next section.

Questions about the best suited analysis naturally arise. For instance, STECHOW (1995) presents German word-order facts favoring a structural analysis. JOHNSON (2004) discusses vP-ellipsis issues that are well accommodated on a structural analysis. Consider (5):

$$(5) \quad \textit{The wind blew the door open and no one closed it. Finally, *Maribel did again.}$$

In (5), first a context is set up which supports a restitutive reading, as the result state of the door being closed is saliently at stake. Conversely, no repeated

closing-of-the-door event is salient in the context. However, despite the suitable context, no restitutive reading is claimed to be available. For Johnson's analysis and under modern theories of ellipsis based on deletion and identity at a structured level of representation (cf. MERCHANT 2001) this is cogent.³

FABRICIUS-HANSEN (2001) points, *inter alia*, to etymological sources. For instance, both *again* and German *wieder* develop from prepositions meaning 'against', which seems well suited to give rise to a counterdirectional reading, i.e. favoring a lexical analysis; cf. section 2 for relevant data for a lexical view of *again*.

The plot of the paper is as follows. After a discussion of the main diachronic issues of *again* in section 2, we will do the same for *eft* in section 3. Section 4 raises and attempts to solve additional issues that are related to the competition between the two adverbs.

2. The diachronic career of the adverb *again*

This section reviews key findings and issues in the development of *again*. BECK ET AL. (2009) investigate correspondence data from the 19th century and similar data of Present-Day English (PDE). A first important finding is that the incidence of restitutive readings in this time span decreases, as indicated in (6) below:

(6) Ratio of restitutive/counterdirectional *again*: 19th c: 21.1% PDE: 12.6%

A second observation is that certain predicates that are only accepted with restitutive readings by some speakers in PDE can be found on such readings in the 19th century. Consider (7):

- (7) a. 19th c.: *return again*, *connect again*;
b. PDE: %*return again*=*come back*, %*connect again*=*put back together*

(7) indicates that predicates such as *return* or *connect* are available on restitutive readings in the 19th century, but that they are only available for a subset of speakers on such readings in PDE. However, virtually synonymous predicates such as *come back* or *put together* can unproblematically receive restitutive readings in PDE as well. The way BECK ET AL. (2009) implement the changes noticed is via a visibility parameter:

3 JOHNSON (2004) does not discuss the difference between the lexical vs. structural analysis, but in fact relies on the (compatible, from the perspective of his paper) structural analysis in the context of a discussion of vP deletion.



- (8) Visibility (cf. BECK 2005):
 An adverb can modify (i) only independent syntactic phrases
 (ii) any phrase with a phonetically overt head
 (iii) any phrase
 The default setting is (i).

Beck et al.'s proposal is that *again* changes between the 19th century and PDE from setting (iii) to setting (ii). The consequence is that in the 19th century, a verb that encoded a result state could be modified restitively (in particular only with respect to the result state) by *again*, but that in the PDE, a tendency can be observed towards allowing modification of the result state only with the additional help of overtly available phonetic material for it (e.g. particles). This accounts for the fact just seen that, in PDE, verb-particle combinations are fully felicitous on restitutive readings in contexts in which synonymous verbs without overt result states would only be accepted by some speakers.

GERGEL - BECK (2015) take up the diachronic track of correspondence data and investigate Early Modern English (EModE). BECK - GERGEL (2015) model the changes undergone by *again* theoretically. Quantitatively, EModE (the 16-17th centuries) shows at 41.5% an even higher (and statistically significant) incidence of restitutive readings compared to PDE or the 19th century. A key difference when it comes to the quality of the data is that some of the data do not seem to be amenable to a parametric-structural approach. Consider (9):

- (9) a. ... *and doe looke every oure to **hear from him again***. = 'to hear back from him'
 (Robert Dudley, 16th c., PCEEC-LEYCEST,34.010.261)
 b. *Tis like people that talk in their sleep,*
*nothing interrupts them but **talking to them again** [...]* = 'to reply to them'
 (Dorothy Osborne, 17th c., PCEEC-OSBORNE,37.017.774)

However, on a lexical account the data are straightforward. That is, a counterdirectional lexical entry as introduced in the previous section will do the job. BECK - GERGEL (2015) suggest a way to model transitions between the two types of analyses which is based on constant entailments. The key idea behind constant entailments is that the structural and the lexical analysis give virtually identical truth conditions for a large number of cases and become indistinguishable in the process of change. Accordingly, EModE's lexical representation of *again* is transitioned into the LModE structural analysis.

Overall, the incidence of restitutive of *again*s declines and there are qualitative differences. An important one appears at the transition from Early to Late Modern English. GERGEL (2012) notes that the qualitative and the quantitative differences observed in the above-mentioned studies for correspondence are not an artefact of

the genre, but are largely confirmed in mixed-genre corpora, such as the Penn-Helsinki series of data bases for English (KROCH - TAYLOR 2000, KROCH ET AL. 2006, 2010), which range from Middle English to Late Modern English. What also emerges from the corpus investigation, however, is an apparent gap in the expression of related meanings before Middle English. The parsed corpus of Old English hardly contains examples of the forms of *again* annotated as adverbs. The reason is that the cognate of today's adverb was originally a preposition (cf. *against* today). And even in the early subperiods of Middle English the presence of *again* is scarce. The question of which adverb played the role of *again* at the earliest stages of the language is addressed next.

3. The trajectory of the Old and Middle English adverb *eft*

The adverb *eft* is at the center of GERGEL ET AL.'S (2016) study. The item is richly represented during Old English and productively available well into the third subperiod of Middle English. Later, i.e. Early Modern occurrences are very rare (possible archaisms). The examples (10)-(12) illustrate the basic meanings:

- (10) *Efterward me ssel þerne mete eft chywe /ase þe ox þet...*
 afterward one shall this food again chew/ as the ox that...
 (CMAYENBI111.2146) [repetitive reading]
- (11) *ðe feorðe time wes ðoa ha misde hire sune & eft him ifunde.*
 the fourth time was at-that-when she missed her son and again him found.
 (CMANCRIW1,II.62.651) [restitutive /counterdirectional]
- (12) *Eft ða þa Iulianus ... wearð to casere gecoren,...*
 afterward when Julianus was to emperor chosen
 (coelive,+ALS[Agnes]:394.1990) [temporal reading]

The development of the three meanings of *eft* is as given in Fig. 1 below, taken from GERGEL ET AL. (2016). They suggest a counterdirectional analysis for *eft*. For instance, the data shows a range of motion predicates the presuppositions of which become salient in the contexts through counterdirectional predicates. They propose that the fall in restitutive readings in M2 and M3 may be due to the rise of *again* at the time, which was predominantly restitutive. The incidence of restitutive *eft* in early Middle English (e.g. M1) however, remains unexplained and the incidence of restitutive *eft* in Middle English as a whole is increasing compared to Old English as a whole as well. Compared to the trajectory of *again*, for which restitutive readings lose ground almost continuously, this is puzzling. Notice, moreover, that



the competition between the two items is not fully parallel, but rather somewhat shifted on the time axis. Specifically, *again* begins to be visible as an adverb only somewhat later. That is, we cannot claim that repetitive readings are putatively often expressed through *again* in M1 and hence *eft* should be often restitutive. The reason why this is not a viable explanation is that it is only during M1 that *again* begins to be visible as an adverb and it is still virtually all-restitutive (*pace* its later decline in restitutive readings).

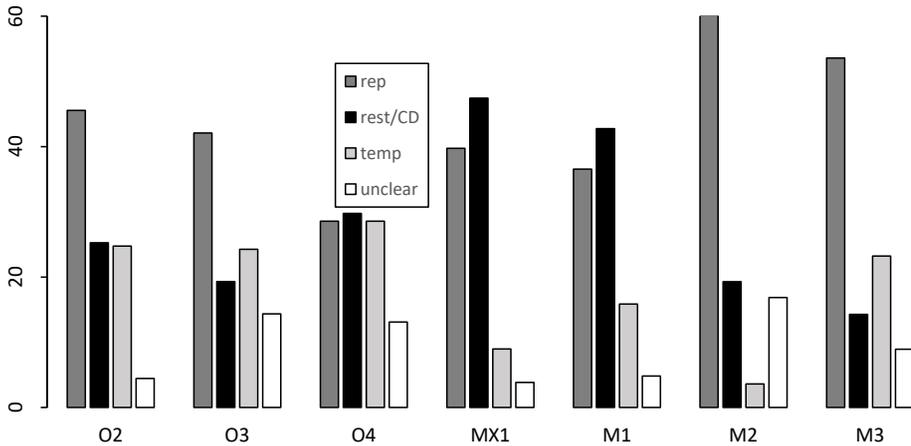


Figure 1 Readings of *eft*

4. Issues of competition

Having inspected a series of developments for two iterative items, it is time to address three key issues remaining. I list them first and then proceed to the respective discussions:

- Why did the incidence of restitutive/counterdirectional readings of the adverb *eft* rise at the beginning of the Middle English period and during Middle English as a whole?
- What are possible reasons for the disappearance of *eft*?
- What are plausible reasons for *again*'s winning the competition?

The first of the three questions above contains two sub-questions; I will treat them together given that I will propose a unified answer. Conversely, the second and the third question are intertwined, as one adverb disappears at the expense of the other. I will, however, consider the primary disadvantages of the losing and the chief advantages of the winning candidate in turn.

4.1 The rise of restitutive *eft* in (Early) Middle English

Recall the incidence of counterdirectional/restitutive readings of *eft* in Middle English: there is a rise at the beginning (i.e. M1) and an averaged rise overall in Middle English compared to Old English, while the subperiods M2 and M3 show a decrease within ME. The basic development in the subperiod M3 can be explained as follows: *again* begins to be considerably more frequent as an adverb than it had been previously and it is predominantly counterdirectional, so it clearly encroaches on *eft* territory. Let me clarify a potential confound first. The subperiod M2 is somewhat slim in terms of the amount of data and it contains a relatively large portion of lyrical texts in the data used in GERGEL ET AL. (2016), so that the M2 development is not particularly conclusive. But what crucially does not fall out from what we have said so far is why *eft* should become proportionally considerably more restitutive/counterdirectional already at the beginning of Middle English, i.e. in the subperiod M1, and during the Middle English period as a whole. After all, the long trajectory of *again* does not suggest that, the further the adverb finds itself on its diachronic trajectory, the more restitutive readings it should have (on the contrary, *again* would suggest the opposite).

What I propose exploiting is the double semantic representation of the adverb starting in Middle English. This is inspired by the proposal in BECK – GERGEL (2015) based on constant entailments for *again* at the transition from Early to Late Modern English. But what I suggest for *eft* beginning in the subperiod M1 of Middle English, is that it could have both representations concomitantly. This is consistent with the two major analyses of decompositional adverbs such as *wieder*. Following GERGEL ET AL. (2016), I assume that Old English *eft* had an essentially counterdirectional representation. Recall from section 1 that this entails an additional distinct repetitive entry. At the beginning of Middle English, however, I propose that the repetitive entry also started to be used with more limited scope, i.e. as a restitutive (on the structural analysis) and *de-facto* equivalent of the counterdirectional entry. This yields two sources for a very similar meaning of *eft*. It certainly does not mean that we control for all possible sources of repetitive and restitutive meanings at early stages of English (e.g. other words are not excluded). But the suggestion makes, in the first place, the right prediction with respect to the surge in the incidence of restitutive *eft*. Thus, the current proposal is to explain the rise in the incidence of restitutive readings at the transition from Old to Middle English due to the additional source that has become available in early Middle English.

Second, the extension to a different scope position is not surprising from the perspective of a structural analysis of such adverbs in which the same meaning is designed to be recycled with respect to different attachment sites. There is, of course, an interesting difference from the apparent trajectory of *again*. A possible appearance in the development of the latter may be that a more limited scope adverb encroached slowly on high-scope territory as the incidence of repetitive readings increased over time as discussed in section 2. But if constant entailments hold,

(all things being equal) there is no a priori reason to expect an adverb to be forced to develop into one direction or another *qua* constant entailments. Bidirectionality is precisely the prediction made.

In the remainder of this subsection, I will introduce a third piece of evidence indicative of an expansion in the underlying representation of restitutive *eft* between Old and Middle English. If an adverb is sensitive to the syntax-semantics interface in the Stechowian sense, then there is a clear prediction. Structural high instances of such adverbs are typically compatible with repetitive readings (not restitutive ones). E.g. (13) is interpreted repetitively only today.

(13) *Peter again closed the door.*

The experiment I set up for *eft* runs as follows. Amongst the restitutive instances of *eft*, are there structurally high ones to be found? If so, to what extent in Old and Middle English respectively?

Answering the questions introduced with regards to the availability of high and counterdirectional readings of *eft* requires us to introduce a quick background to the syntax of early English. (I will continue to focus on the data selections made earlier to keep the discussion consistent.) What we will aim for, are instances of *eft* that are outside of the VP. The basic empirical criterion to get started and implement the diachronic prediction is (14):

(14) An instance of *eft* is structurally high if it precedes the verb and its arguments.

Theoretically, there could of course also be high occurrences that are string-linearly sentence-final, but empirically that is not the case for the *eft* data inspected here. There is, however, an additional factor that needs to be controlled for. In Old English and also for at least the early Middle English period, pronouns could be fronted (to somewhere in the extended IP domain). This has been particularly widely discussed for subject (cf. KROCH ET AL. 2000, FISCHER ET AL. 2000, HAEBERLI 2002) pronouns, but it holds, in fact, for object pronouns as well. Both object and subject pronouns can be found structurally high in Old English and early Middle English. This is the case, of course, independently of *eft*. That is, for *eft* to dominate the VP, it will not have to dominate pronominal arguments, which are often very high in the structure. We can hence revise the criterion to (15):

(15) An instance of *eft* is structurally high if it precedes the verb and its arguments, but it does not have to precede pronominalized arguments.

The figures we obtain for *eft* fulfilling such conditions in Old English and Middle English are given in (16).

(16) Structurally high *eft* on counterdirectional/restitutive readings:

a. OE: 67/112= 59.82%

b. ME: 53/119= 44.53%

This means there was a high proportion of mismatched cases in Old than in Middle English. This is in line with the proposal that in ME, in addition to the counterdirectional reading, a restitutive one in a narrow sense was available. By a restitutive in a narrow sense (as opposed to a potentially counterdirectional) I mean an entry which is identical to the repetitive one, but which has scope only over the result state (this part is in accordance with the structural analysis sketched in section 1). Overall, then, the syntax and semantics of *eft* are more aligned in Middle English than in Old English.

4.2 Why *eft* was difficult to maintain

We cannot rule out that the multiple ambiguity of *eft* may have made it harder to keep. Polysemy, however, does not force a word to become extinct even if ambiguity is costly in processing. A more likely reason than sheer assertoric polysemy could be based on multiple meanings at the pragmatic level. These are classically implicatures and presuppositions. A tendency in language change to specifically *Avoid Pragmatic Overload* has been invoked e.g. in ECKARDT (2009). The meanings we are dealing with are presuppositional. Additionally, *eft* had temporal meanings along the lines of ‘then’, as noted in section 3, and also discourse-structuring functions. The latter could be related to the temporal ones, but were not necessarily so. Another interesting function of the marker is, for example, one of contrast. It is also possible that subtler inferences were available for *eft* and we do not know all of them. If certain pragmatic meanings are evidenced only at a comparatively late age in language acquisition, this may indicate acquisitional effort and create a bias towards disappearance of some pragmatic meanings. But this more refined version too, just like polysemy at the lexical-assertive level, cannot be a real knock-out argument for the disappearance of a highly frequent word. One of the multiple possible scenarios would have been for *eft* to live on having a specialized meaning. Some similar former counterdirectional markers are attested to have specialized on particular, e.g. more narrowly discourse-based meanings, while losing their former iterative meanings. German adversative *aber* ‘but’ is such an example (cf. also the morphologically more complex *wiederum*, ‘in turn, again, on the other hand’; the compound *abermals* ‘once more’ - ‘but’+‘times’ - still betrays an early iterative meaning).

However, the adverb *eft* had existed for centuries during the entire Old English period (it can be traced back to Indo-European roots). During Old English, it had multiple functions, including discursive ones, crucially throughout its lifetime. Three different meanings (i.e. counterdirectional, repetitive and temporal) are al-

ready available in the epic poem of Beowulf, one of the oldest vestiges of the language with respect to its word-order (PINTZUK – KROCH 1989). It is puzzling why it should have subsequently disappeared. I leave aside a fuller investigation of possible contact influences here. But while other languages may bring in new competitors, contact cannot have made *eft* worse *per se*. If anything, the close lexical and grammatical impact of Old Norse, quite visible in the grammar of Middle English (cf. e.g. KROCH ET AL. 2000), might have strengthened, rather than weakened, the status of *eft*, as the language had a cognate. The introduction of the Romance prefix *re-* via Norman French contact cannot have led to death either, as the prefix has slightly different functions and it co-exists with both iterative and discursive adverbs in several languages. The best competitor with a comparative advantage was the endemic *again* (cf. section 4.3).

While *eft* together with *again* yields the appearance of a cycle, there is no plausible one-to-one phonological parallel to the classical Jesperssonian cycle. Phonological weakening of the original marker that may have required strengthening through an additional element is not plausible from the current perspective. By contrast, this was the case with the original negative markers in English. This argument holds, although we need to distinguish it from a related one going beyond the usual account of weakening (cf. WILLIS ET AL. 2013). Even though *eft* did not require phonologically strengthened prominence, the ‘uninvited’ (i.e. phonologically orthogonal but still occasionally available⁴) support it may have received from *again* could have been welcome nonetheless, the latter (but not the former) adverb being disyllabic. This point is legitimate, but it ought to be viewed with at least one important qualification: there should be many examples of the two adverbs co-occurring. Based on the pilot study in GERGEL ET AL. (2016), co-occurring examples are, however, rare – by contrast with the case of the negative cycle (cf. WALLAGE 2013). To summarize the subsection: while there may have been disadvantages for *eft*, none of them was strong enough to lead to its disappearance after centuries of extremely stable existence in its full pattern of variation. It does not seem to suffice to put the blame on any potentially detrimental properties of *eft* and there is reasonable motivation to search for why the new competitor may have been considerably better.

4.3 Advantages of *again*

This section offers evidence that *again* was a better candidate. As noted, *again* was disyllabic and it had more prominence than *eft*. Whether this is necessarily an advantage is not an easy matter to decide. Iterative adverbs of this type are, after all, sometimes referred to as “functional” in the literature (cf. RAPP – STECHOW 1999; see MAIENBORN – SCHÄFER 2011 and references for different uses of the term)

4 In PDE, *again* receives similar “support” from *back*, even though *again* itself is disyllabic. I suggest that the primary reason is at the syntax-semantics interface.

and they indeed build a high-frequency group – i.e. both *again* in PDE and *eft* in Old English. Thus, for a type of functional item a longer form does not have to be an advantage necessarily (recall, also, that *eft* did not show any signs of critical reduction which might have rendered it more difficult to perceive).

But there are two points that are more likely advantages. First, note that *again* was a partial competitor, as it did not have the entire range of meanings of *eft*. We do not have evidence that temporal reading and the discourse uses of *eft* were available for *again* when it entered the competition with *eft*. Hence, possessing a more specialized lexical meaning (viz. less discursive) is one potential factor that may have promoted *again*. It appears uncertain, however (to me) whether this can be conclusive and sufficient.

I will next show how the test we have seen in section 4.1 for *eft* applies to the early adverbial instances on the trajectory of *again*. The goal is to ascertain the degree of potential mismatches, i.e. high occurrences on potentially low readings. Recall that *eft* seems to have improved from Old to Middle English, in the sense that it had less such mismatches. Was this good enough (in the same sense)? First, note that in Old English, *again* was not competing yet as an adverb as it was mostly a preposition (the question of restitutive vs. repetitive readings etc. does not pose itself). Hence the question is: how does *again* behave within the time span during which it co-existed with *eft* as an adverb? Consider the relevant subperiods in (17):

- (17) Structurally high *again* on counterdirectional/restitutive readings:
- a. M1: $10/48=20.83\%$
 - b. M2: $2/49=4.08\%$
 - c. M3: $1/87=1.14\%$

This is considerably better than the values for *eft* already from the beginning. What is more, *again* ‘improved’ relatively quickly during Middle English times. It is not hard to understand why *eft* may have behaved the way it did. Discourse uses, e.g. contrast meanings parasitic on counterdirectional uses of the adverb may have been conducive to high positions. But for the crucial restitutive/counterdirectional meanings, to which the test was applied, such high positions are not advantageous. This offers some interesting evidence for the tendency to grammaticalize pairings of position and meaning that keep semantics and syntax, to the largest degree available in the lexicon of a language, in tandem. While recent developments in cyclical language change (cf., e.g., GERGEL 2016, MARUŠIČ – ŽAUCER 2016, and more generally e.g. the papers in VAN GELDEREN 2016) decompose cycles, often, say, into developments with a focus on syntax or semantics, the conclusion advocated here is that it is precisely the interfaces that seem to play a key role in competition.

To summarize, the line of thought sketched in this paper aims to offer a window into the otherwise apparently random development in the landscape of iteratives.

First, we have made use of, and extended, the notion of constant entailments in language change to explain the development of *eft* at the time when *again* entered the scene. Second, we have seen a number of differences between the two trajectories inspected, but a broader generalization is that the winning tendency is not necessarily towards a particular type of meaning (as one might have thought from *again* alone, where the repetitive increases over time at the expense of the restitutive). It is rather towards the representation that happens to be more advantageous given a series of factors. From the perspective of language as an economic, or perhaps even optimal, system applied to the dynamics of change, this cannot come as a surprise. While the focus was on the syntax-semantics interface in this paper, a clear expectation arising is that the study of interacting factors under the inclusion of more areas of grammar and usage can be advantageous to understand paths of change.

REFERENCES

- BECK, Sigrid. 2005. There and back again: A semantic analysis. *Journal of Semantics* 22, pp. 3–51.
- BECK, Sigrid – BEREZOVSKAYA, Polina – PFLUGFELDER, Katja. 2009. The use of ‘again’ in 19th-century English versus Present-Day English. *Syntax* 12, pp. 193–214.
- BECK, Sigrid – GERGEL, Remus. 2015. The diachronic semantics of English *again*. *Natural Language Semantics* 23, pp. 157–203.
- BIRNER, Betty J. 2012. *Introduction to Pragmatics*. Oxford: Blackwell.
- CSIRMAZ, Anikó. 2015. Re Hungarian *again*. *Acta Linguistica Hungarica* 62, pp. 263–295.
- ECKARDT, Regine. 2009. APO: Avoid Pragmatic Overload. In: VISCONTI, Jacqueline – MOSEGARD HANSEN, Maj-Britt, eds. *Current Trends in Diachronic Semantics and Pragmatics*. London: Emerald, pp. 21–42.
- FABRICIUS-HANSEN, Cathrine. 2001. *Wi(e)der* and *again(st)*. In: FÉRY, Caroline – STERNEFELD, Wolfgang, eds. *Audiatur Vox Sapientiae: a festschrift for Arnim von Stechow*. Berlin: Akademie, pp. 101–130.
- FISCHER, OLGA ET AL. 2000. *The Syntax of Early English*. Cambridge: Cambridge University Press.
- GELDEREN, ELLY VAN, ed. 2016. *Cyclical Change Continued*. Amsterdam/Philadelphia: John Benjamins.
- GERGEL, Remus. 2016. Modality and gradation: comparing the sequel of developments in ‘rather’ and ‘eher’. In: GELDEREN (2016), pp. 319–350.
- GERGEL, Remus – BECK, Sigrid. 2015. Early Modern English *again*: a corpus study and semantic analysis. *English Language and Linguistics* 19, pp. 27–47.
- GERGEL, Remus – BLÜMEL, Andreas – KOPF, Martin. 2016. Another heavy road of decompositionality: notes from a dying adverb. *U. Penn Working Papers in Linguistics* 22, pp. 109–118.
- GERGEL, Remus – STATEVA, Penka. 2014. A decompositional analysis of *almost*: Diachronic and experimental comparative evidence. *Pre-Proceedings of Linguistic Evidence 2014*. Tübingen, pp. 150–156.

- HACKL, Martin. 2009. On the grammar and processing of proportional quantifiers: most versus more than half. *Natural Language Semantics* 17, pp. 63–98.
- HAEBERLI, Eric. 2002. Inflectional morphology and the loss of verb second in English. In: LIGHTFOOT, David, ed. *Syntactic Effects of Morphological Change*, Oxford: Oxford University Press, pp. 88–106.
- JÄGER, Gerhard – BLUTNER, Reinhard. 2000. Against lexical decomposition in syntax. In: WYNER, Adam Zachary, ed. *Proceedings of the Israeli Association for Theoretical Linguistics* 15, pp. 113–137.
- JOHNSON, Kyle. 2004. How to be quiet. *Proceedings from the Annual Meeting of the Chicago Linguistic Society* 40(2), pp. 1–20).
- KLEIN, Wolfgang. 2001. Time and again. In: FÉRY, Caroline – STERNEFELD, Wolfgang, eds. *Audiat Vox Sapientiae: a festschrift for Arnim von Stechow*. Berlin: Akademie, pp. 267–286.
- KROCH, Anthony – SANTORINI, Beatrice – DELFS, Lauren. 2004. *The Penn-Helsinki Parsed Corpus of Early Modern English*.
- KROCH, Anthony – TAYLOR, Ann. 2000. *The Penn-Helsinki Parsed Corpus of Middle English*.
- KROCH, Anthony – TAYLOR, Ann – RINGE, Donald. 2000. The Middle English verb-second constraint: A case study in language contact and language change. In: HERRING, Susan et al., eds. *Textual Parameters in Old Language*. Amsterdam/Philadelphia: John Benjamins, pp. 353–391.
- MERCHANT, Jason. 2001. *The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis*. Oxford: Oxford University Press.
- MAIENBORN, Claudia – SCHÄFER, Martin. 2011. Adverbs and adverbials. In: VON HEUSINGER, Klaus et al., eds. *The Handbook of Semantics*. Berlin/New York: Mouton de Gruyter, pp. 1390–1420.
- MARUŠIČ, Franc – ŽAUCER, Rok. 2016. The modal cycle vs. negation in Slovenian. In: MARUŠIČ, Franc – ŽAUCER, Rok, eds. *Formal Studies in Slovenian Syntax: In Honor of Janez Orešnik*, pp. 167–192.
- OH, Sei-Rang. 2015. A crosslinguistic semantic analysis of *again*. *Studies in Generative Grammar* 25, pp. 851–872.
- PATEL-GROSZ, Pritty – BECK, Sigrid. 2014. Revisiting *again*: The view from Kutchi Gujarati. In: ETXEBERRIA, Urtzi et al., eds. *Proceedings of Sinn & Bedeutung 2013*, pp. 303–321.
- PEDERSEN, Walter. 2015. A scalar analysis of *again*-ambiguities. *Journal of Semantics* 32, pp. 373–424.
- PINTZUK, Susan – KROCH, Anthony. 1989. The rightward movement of complements and adjuncts in the Old English of Beowulf. *Language Variation and Change* 1, pp. 115–143.
- RAPP, Irene – STECHOW, Arnim von. 1999. *Fast* 'almost' and the visibility parameter for functional adverbs. *Journal of Semantics* 16, pp. 149–204.
- SCHWARZ, Florian. 2016. *Presuppositions, projection, and accommodation - Theoretical issues and experimental approaches*. Ms., University of Pennsylvania.
- STECHOW, Arnim von. 1995. Lexical decomposition in syntax. In: EGLI, Urs et al., eds. *The Lexicon in the Organization of Language*. Amsterdam/Philadelphia: John Benjamins, pp. 81–118.
- WALLAGE, Philip. 2013. Functional differentiation and grammatical competition in the English Jespersen cycle. *Journal of Historical Syntax* 2, pp. 1–25



WILLIS, David – LUCAS, Christopher – BREITBARTH, Anne, eds. 2013. *The History of Negation in the Languages of Europe and the Mediterranean*. Oxford: Oxford University Press.
ZWARTS, Joost. 2015. *From 'back' to 'again' in Dutch: The structure of the 're' domain*. Ms., OTS Utrecht.

Remus Gergel

English Department
Saarland University
Campus C5.3, D-66123 Saarbrücken
Germany
remus.gergel@uni-saarland.de

