

Yet another player in the *re* domain: the redirectional (*send-it-somewhere-else*) reading¹

Remus GERGEL — *Saarland University*

Abstract. The paper analyzes a neglected reading which appears in the domain of iterative morphemes focusing on the English prefix *re-*. The analysis is discussed against the backdrop of the structural vs. lexical types of analyses suggested by previous research for other readings of iteratives, notably the repetitive and restitutive ones (von Stechow 1996, among others). The relationships of the different readings are discussed. The current proposal is formulated by updating Zwart's (2019) semantics, hence fully compatible with a lexical account. The relevant relation defined is called 'redirectional' and the reading observed 'send-it-somewhere-else', starting out from the most literal instances, i.e., locational and specifically path-based ones, which link up directly to, and extend, other more widely discussed notions of (counter-)directionality and reversal. Questions from the current research arise for semantics, but also its mapping with the morphosyntax.

Keywords: iteratives, *re-*, *again*, functional/decompositional adverbs, structural vs. lexical

1. Introduction

In this paper, I will focus on a reading of the English prefix *re-* that can be illustrated with the sentences in (1) and which I dub the *send-it-somewhere-else* or SISE reading for the sake of concreteness:

- (1) a. I need to receive a TCP packet destined to my application, then **re**send it to another destination on the network, while keeping the Original IP. (web-based)
- b. The plane was headed to JFK, but the local authorities **re**directed it to LaGuardia.
- c. I bought a car from Kim and I'm **re**selling it to Abby.
- d. The president **re**tweeted Jonelle's message.

The semantics of such sentences has thus far not been systematically analyzed as far as I can see. This entails that some basic work will have to be covered, some terms clarified, and then sometimes larger questions will be asked. It also entails that, with some high certainty, not all the aspects will be covered when comparing the current object of investigation with other readings or items in the so-called *re* domain. That is, notably the classical repetitive and restitutive or counterdirectional readings of e.g. *again*, German *wieder*, or of *re-* itself for that matter, among others, also in other languages, which have been studied thoroughly and often controversially in their facets for instance in Morgan (1969), McCawley (1971), Dowty (1979), Fabricius-Hansen (1983), von Stechow (1996), Jäger & Blutner (2000), Klein (2001), Beck (2005). I will also not go into many of the interesting syntactic details that surround iteratives such as *again* and *re-*, but I will summarize a few and point to further relevant literature.

¹ I would like to thank the organizers, reviewers, and audience at *Sinn und Bedeutung* 28 for the opportunity to discuss this work and feedback, thanks to Edgar Onea for a discussion, and to Kurt Erbach also for help with judgments. I remain indebted to the German Research Foundation (DFG) for support of the project *Decomposing Decomposition in Time*. The usual disclaimers apply.

The structure of the paper is as follows. The remainder of this first section introduces basic terminology and the questions to be raised, before Section two addresses the central readings of iteratives and the way they have been handled in earlier research. Section three describes and analyzes the SISE reading, while the final section offers further-going discussion and an outlook.

1.1. The area of investigation, terminology

The class to which the prefix *re-* belongs semantically is that of an iterative morpheme. This standardly translates to having a morpheme that presupposes an iteration, or a previous occurrence of an event or of a result state that precedes the one asserted. Oftentimes, such items are free morphemes. They include adverbs like *again*, particles like *back*, and sometimes (at least in their genesis) even prepositions like *against* (cf. Beck & Gergel for the relationship of such items in the historical evolution of English, where they are all related; cf. Fabricius-Hansen also for the relationship of the meanings ‘again’ and ‘against’ in the case of German *wi(e)der*; cf. Zwarts 2019 for synchronic illustration with Dutch *terug*). The morphemes clearly don’t have to be free, as the prefix *re-* shows, which includes the most prominent readings of *again* (Marchand 1960). The term ‘*re* domain’ has been used in a detailed study on Dutch by Zwarts (2019), even if *re-* itself is not the object of investigation there and the reading I am concerned with isn’t either. But it is a handy term and I adopt it as equivalent for iteratives. The specific reading I will introduce is certainly not precluded from being available in some other representatives of the class either, even if it appears to be more restricted (for instance, with *again* and German *wieder*) or not available at all, to my knowledge, e.g. at least with German’s cognate of Dutch *terug*, *zurück*, ‘back’. (There are of course multiple and independent ways to express the relevant meaning in most languages, I assume.)

A further point of taxonomy which may require clarification includes the fact that some researchers (e.g. Rapp & von Stechow 1999, Maienborn & Schäfer 2011) have also called the class of relevant adverbs (including *again* or German *wieder*) ‘functional adverbs’. The term can be somewhat misleading if one thinks of functional projections in the Tense-Aspect-Mood/modality domain and the adverbs that can accompany them there, say, in the sense of Cinque (1999); cf. e.g. Axel-Tober & Gergel (2014) for discussion among many others. There is of course a way to bring the two lines of research together, namely in terms of scope (cf. von Stechow’s 1996 original tying of interpretation to rather specific functional projections, also outside the TAM domain), but in general the two lines of research follow quite distinct objectives, notably the clausal spine vs. the narrower structure of events. The items typically studied in the two lines of research are also quite distinct, hence I will not use the term ‘functional’ in the relevant sense here.

‘Decomposition’ is another informative term that has been occasionally used to properly include the class of the *re* domain. It also includes adverbs like *almost* and prepositional phrases like *for ten minutes*. This is a potentially clearer term and it has the advantage that it can be properly defined, for instance in the sense that such items can modify subparts of predicates (Dowty 1979, von Stechow 1996, Beck 2005), but there are some limitations in importing the term for our class. The main downside is that it can mistakenly be taken to imply that the morphemes under scrutiny automatically should be able to decompose the internal structure of

Yet another player in the *re* domain

the predicates or the events they modify, which they don't always do. That this is not the case has been argued strongly e.g. by Fabricius-Hansen (1983, 2001) and Jäger & Blutner (2000), or that it may not always be the case has been suggested e.g. in Rapp & von Stechow (1999), von Stechow (2000), Beck (2005), or Gergel & Beck (2005). Hence the term as such is not neutral and I will consider 'iterative' or the '*re* domain' as the appropriate neutral labels for the time being when we want to refer to the class, so that it doesn't only include items that are necessarily decompositional.

1.2. Questions to be raised

When a reading that hasn't been previously systematically explored is claimed in an area which has seen multiple decades of research, we will naturally have to focus on what the reading is exactly and how it connects to other readings that have been discussed more systematically in earlier research. In a nutshell, the main questions to which I will seek answers are the following:

- i. What is the reading descriptively?
- ii. How can it be analyzed?
- iii. How does it relate to the previously recognized readings?
- iv. How can it throw light on the controversies related to the field and especially the structural/lexical divide?

My focus lies in showing – quite descriptively – that the reading is indeed distinct from the readings that have captured most of the attention in the field and to offer an analysis that is consistent with current research in the field, which I formulate in terms of Zwarts (2019). If one likes putting things into standard boxes, then this is done at face value in a lexicalist account in the current approach. Or in other words, in the terms introduced in the previous subsection I will not pursue a strictly decompositional approach. But I will sketch a path at the end of the paper how one could explore how far such an approach can go. Eventually I will argue that rather than trying to exclude 'the other' approach, more benefit can be gained from recognizing that connections between the readings (including the one at stake here) must exist in any approach and the key in understanding the phenomena more generally may well lie in finding the right translations or mappings between the different approaches.

2. Previously recognized major readings and their analyses

2.1. Transferring from *again*?

The literature concerning the representation of iteratives has been built starting out from adverbs like *again* and their ambiguities (Morgan 1969: 61, McCawley 1972: 24, and much literature after the Generative Semantics wave). The most prominent reading that comes to mind in connection with iteratives is the repetitive one, as available in (2a-d):

- (2) a. The Mars rover was cruising again.
- b. Alvin was happy again.
- c. Maria caught the bug again.

- d. Don cemented the backyard again.

The sentences in (2) all allow a contextualization suited for readings in which a previous eventuality of the same kind (where the term is used broadly, to include a Vendlerian state as in (2b)) is presupposed to have held. A standard, here simplified entry for the repetitive reading is given (3) (e. g. Gergel & Beck 2015:29, among many others).

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

The repetitive interpretation then clearly requires the presupposition that the predicate also held at an earlier time, while its assertion is trivial.

Not for all the sentences in (2) is a contextualization uncontroversially available in which a reading that is semantically genuinely *distinct* from the repetitive obtains. Specifically, a second prominent reading is, in most research, denied for states and activities, but only uncontroversially assumed to arise for achievements and accomplishments. For the two types of events, there is indeed agreement that such a reading obtains. In (2c), Maria need not have caught the dog previously (this being the repetitive reading), but the dog could have been on leash and then escaped before the event at issue. That is, Maria put him back in the state of captivity in which he had been before. In the same vein, in (2d), the concrete in Don's backyard might have had too many cracks and Don cemented it (even though he never cemented it before himself, so the agent expressed by the subject never performed the entire event previously).

On one view of treating the ambiguity just introduced for telic eventualities, a state which had held before had been restored or repeated in such sentences when they convey non-repetitive readings. Under such a view, the adverb must then have access to the internal event structure of the predicate so that it can target just the result state. The adverb comes with the requirement of imposing a presupposition that a similar state must have held earlier on. The reading is standardly referred to as restitutive or as an inner reading in Dowty's originally introduced terminology. But no additional lexical entry is required for *again* under this view, as the entry in (3) is general enough to also apply to stative eventualities such as the result states. But the syntax of the result state must be visible to the adverb for it to be modified accordingly.

On a second view, however, the non-controversial non-repetitive type of reading requires some kind of a reversal or a counterdirectional predicate to have held. This can be the escape of the dog, or the cracking up of the concrete in the sentences (2c-d) above. Under such a view, a simplified entry as in (4) can do the basic job (cf. Fabricius-Hansen 2001, Beck & Gergel 2015, Gergel & Beck 2015):

$$(4) \quad [[\textit{again}_{\text{COUNTERDIRECTIONAL}}]] = \lambda P.\lambda e:\exists e'[e' < e \ \& \ Pc(e')].P(e)$$

The notation Pc stands here for the earlier presupposed counterdirectional predicated to the asserted predicate P , the assumption being of course that one can find such an event. There are a number of refinements of this approach in the literature; see especially Zwarts (2019) for discussion of this line of research, out of which we will introduce the essentials that are directly required for a transfer to an analysis of *re-* in Section three. In general, the term 'restitutive' has indeed typically been used by approaches arguing for a structural account of the ambiguity

Yet another player in the *re* domain

(championed by von Stechow 1996 who has shown interesting further syntactic correlates for the Dowtian view from the syntax of the German middle field), while ‘counterdirectional’ is the term that has been used in lexical accounts such as Fabricius-Hansen’s (2001). Pedersen (2014) proposes an account close in spirit to Fabricius-Hansen’s in which scalar structure is additionally closely considered and calls the counterdirectional reading a ‘reversal reading’. Following mostly Beck & Gergel (20015), Gergel & Beck (2015), I will clumsily call the prominent non-repetitive type of major reading treated by earlier research ‘rest/cd’, simply to be able to refer to the reading itself in a manner that is independent from a particular type of analysis. Notice also that the repetitive reading entails the rest/cd one, but nonetheless a different state of the world holds for the latter to be true; hence this is generally recognized as a distinct reading both by the structural and the lexicalist camp.

Historically, the standard iteratives of English and German have developed – in simplified form, cf. Fabricius-Hansen (2001), Beck et al. (2009), Gergel & Beck (2015), Gergel (2017), Kopf & Gergel (2023) for some of the details – from being almost exclusively rest/cd to being increasingly repetitive. This applies necessarily also to the relevant frequencies of usage. If one wishes to connect the entailment relationship with the direction of development, then one might be tempted to claim that a specialization has been unfolding in the case of these main representatives of the iterative class. Presumably similar things could be claimed about Dutch *terug*, which is about to make it to repetitive readings only in some varieties, as Zwarts (2019) argues. But the inductive step, namely towards generalizing this to an invariant rule showing in the developmental direction “rest/cd → repetitive”, does not seem to be warranted, as Gergel & Puhl (2023) claim on the basis of dialect data from the Saarland region (Gergel, Blümel & Kopf discuss the intricacies of a now extinct adverb of earlier English, where the picture is also considerably more complex than in the case of the best known representatives of the class in the West Germanic languages).

We need not take a definite stand at this point with regards to the structural/lexical divide, the direction of historical development or the respect to the two major readings, as our focus lies elsewhere, but some remarks will be made from the perspective of the reading we focus on at the end of the paper.

2.2. Standard readings and the prefix *re-*

When we turn to the prefix *re-*, the picture appears to be blurred in several ways, even when we only want to describe the standard iterative readings we just observed for *again*. On a very first approximation, one may be tempted to claim that *re-* and *again* are synonymous, as some descriptive dictionaries and works have claimed. But it will become clear very quickly that the number of predicates to which *re-* can attach is considerably smaller. For instance, from the predicates in (2) above, only those of (2c) and (2d) would allow *re-*prefixation of their head verb. I use the term predicate rather than verb, even if the eventual host is of course the verb, since the restrictions have to do with the predicate and we are not purely dealing with a classical, say morphophonetic restriction of the verb. For instance, *cruise*, the verb of (2a) is not incompatible with *re-* per se (though surely not frequent), but it appears more likely to allow the prefixation when used with a syntactic object, which is not the case in (2a) above. But as the examples in (5) show, it is possible to get (even) *re-cruise* when an object appears:

- (5) a. Alpacino was re-cruising Sunset Boulevard in his new car.
b. We re-cruised the airplane to its best speed and altitude.
c. In July, they re-cruised the two blocks.

Re-cruise is as mentioned anything but a frequent verb and it is notably one that does not have very obvious or predictable objects (e.g. the sense of information density). I hence believe that such examples should make the point about the restriction and the creative power of the basic rules beyond it (cf. e.g. Marantz for a review of the literature which contains many rather common example). Notice that (5b-c) are adapted after attested examples in specialized registers of aviation and forestry (cf. <https://www.quora.com/Does-the-pilot-tell-the-passengers-when-a-commercial-plane-is-ex-periencing-serious-issues-during-flight> and <https://www.bcfac.ca/app/uploads/sites/837/2020/06/2016frp002a.pdf>). Let's also briefly consider the opposite situation, i.e. one in which a handful of rather predictable objects exists, say *snow*, *earth* etc. for a verb like *shovel*. Then alongside *Jane was re-shoveling the snow*, something like *Jane was re-shoveling at that time* is acceptable for some speakers (with context), but naturally then an implicit object must be retrievable from the respective context.

Even beyond implicit objects, the transitivity restriction is not perfect, as some intransitives also allow *re*-prefixation (Marchand 1960). The observation is usually further refined towards one referring to underlying objects (e.g. phrased in terms of unaccusativity, as Horn 1980 did in an analysis couched in the framework of relational grammar), as sentences as those in (6) are possible, while those in (7) are not.

- (6) a. The downtown store re-opened.
b. The metal re-melted.
- (7) a. *The captain re-jumped (up).
b. *Amy re-sneezed.

The most recent version of the Oxford English Dictionary (2023) essentially summarizes the central distribution and the meanings of *re*- as follows:

- (8) Prefixed to ordinary verbs of action (chiefly transitive) and to derivatives from these, sometimes denoting that the action itself is performed a second time, and sometimes that its result is to reverse a previous action or process, or to restore a previous state of things. (OED, 2023, "re-prefix" 1.a.)

But we are of course only scratching on the distributional surface. When one restricts attention to transitive predicates that do allow *re*-prefixation, further issues exist as well. For instance, a controversy exists with regards to whether *re*- truly allows both classical readings of iteratives (cf. e.g. the claim that it is essentially just the restitutive or 'internal' reading, originally going back to Dowty 1979, although some authors including those of the OED do not see this as narrowly and Dowty himself admits at least two types of exceptions – further subdivisions and possible correlations are possible, but I will not go into them here). Another interesting claim in the literature has been what Marantz (2007) reports on as the sole-complement restriction, such that for instance predicates built with ditransitive verbs would not allow *re*-prefixation. I will return to aspects of this issue briefly in section 4. I cannot summarize the breadth and depth

Yet another player in the *re* domain

of the syntactic literature here given the distinct focus, i.e., both on the area of semantics and a reading that I claim is distinct from those to which systematic attention has been devoted. But on top of the general insight from the earlier approaches, it is worth keeping in mind that the productivity of morphological processes comes in degrees and there is a multitude of factors which impact it (s. e.g. Carstairs-McCarthy 2002 for only a few) including not only token-based but also rule-based frequency (Yang 2016) and historical developments (Marchand 1960). By the latter we cannot possibly mean that processes that took place a long time ago directly influence current usage patterns, but that some of the grammatical trajectories of such processes (or sometimes perhaps even apparent ‘accidents’, when we don’t know their deeper causes) might have triggered processes that fall in place with other grammatical factors to yield new sub-rules at the intersection of structure and meaning.

3. The SISE reading, some differences from the major readings of iteratives

In this section, I consider a reading of *re-* which I term the send-it-somewhere-else (SISE) reading, propose an analysis for it, and discuss its relationship to the other (key) readings in the domain of iteratives.

3.1. SISE readings: a lexical analysis

Consider the sentences in (9) below (repeated from (1) for convenience):

- (9) a. I need to receive a TCP packet destined to my application, then **resend** it to another destination on the network, while keeping the Original IP. (web-based)
b. The plane was headed to JFK, but the local authorities **redirected** it to LaGuardia.
c. I bought a car from Kim and I'm **reselling** it to Abby.
d. The president **retweeted** Jonelle’s message.

What they convey is not repetitive, since there is descriptively no full event or predicate that is sensibly to be presupposed (i.e. of sending the packet to another destination, directing the plane to LaGuardia, etc.). The rest/cd type of reading is to be ruled out as well for the following reason. The predicates are telic, but the result state can’t be taken for granted (to have held at an earlier time) for a restitutive reading to be true, i.e. there is no previous arrival at another destination, no previous having been sold to Abby etc. On a stricter attempt to see whether a counterdirectional reading proper holds, we would need reversal events to hold and they are far from perfect, if available at all, too. There is, for instance receiving in (9a), but this can barely count as the counterdirectional to a *distinct* destination (one would have wished for resending to the original destination and the verb *resend* per se would allow such readings easily, but clearly not in the context at hand). Similarly, there is no straightforward and precise reversal of the direction to be pursued by the plane, the selling of the car or the direction of the message in (9b-d), respectively.

What holds in sentences such as those of (9a-d) is that there is a previous similar event of sending, directing, selling, or tweeting in the background (i.e. to be presupposed), but the event at issue needs to follow a path that is crucially neither the same nor the opposite, but rather one that finds an endpoint (culmination) which must be distinct from the one of origin; or else, we

have a distinct reading. It is for this reason that a term such as ‘send it somewhere else’ may serve as a convenient description.

I propose to implement the observation just introduced by extending the framework of Zwarts (2019). Naturally, I only present the framework in simplified fashion and refer the reader interested in more details (including in the specifics of Dutch *terug*, ‘back’) to Zwarts’s work and the references there.

First, we standardly assume with Zwarts that items from the *re* domain will map sets of events to sets of events (understanding any eventuality). Second, we assume the more relevant tools pertain to paths, which are generally thought of as trajectories through some physical or conceptual space. A path in the account is a function from the real-numbers interval $[0,1]$ or some subinterval thereof to a space. The idea is that themes move along paths through time and can be traced accordingly, so that $\text{PATH}(p)(i)$ reflects the location of a path at a time between 0 and 1. LPATH is the partial function mapping events to physical paths while APATH is the one mapping events to action paths, i.e. paths that are less straightforwardly localized; others also exist. As a side note, recall that predicates that are headed by a *re*-verb in general have an underlying theme indeed, so that in our case, this condition holds as strongly as it possibly can in the domain of iteratives.

A REVERSE direction models what Zwarts terms a counterdirectional/returnative reading (a subtype as it were of the rest/cd) and this looks as follows in terms of a relation between paths:

- (10) For any two paths p and p' , REVERSE (p, p') if and only if (i) $p(0) = p'(1)$ and (ii) there is a $j \in (0,1]$ and an $i \in [0,1)$ such that $p(j) = p'(i)$. (Zwarts 2019: 224)

Building on the same background, let’s approach the direction needed for the SISE readings of concern. To this end, I define a relationship between paths which I call REDIRECT as in (11) (and compare the two definitions subsequently):

- (11) For any two paths p and p' , REDIRECT (p, p') if and only if (i) $p(0) = p'(1)$ and (ii) for all $j \in (0,1]$ and an $i \in [0,1)$, $p(j) \neq p'(i)$.

The first condition of (10) and (11) is identical, ensuring that the second path starts where the first one stops. The second condition in (10) states that a non-initial position of p is identical to a non-final position of p' . That is, the path ‘returning’ is required to have at least some overlap with the original one. But for the REDIRECT relation that we need this is an unnecessary condition. It is also one that does not correspond with intuitions. On the contrary, typically we will want the redirected path not to overlap with the original one (for SISE to obtain). The condition I utilize therefore instead ((ii) in (11)) is built accordingly so that the original (presupposed) and the ‘redirected’ path be distinct. This is simple and a relatively strong condition in the version I have given here. It is conceivable, for instance, that there may be cases where it might suffice e.g., for most points to be distinct in the two paths. But it essentially captures the intuition that a theme is ‘sent somewhere else’. That is, it undergoes movement to a distinct location (or transformation to a different state). While Zwarts naturally uses the REVERSE relation to build a returnative meaning (as rendered in (12)), the SISE meaning I propose is built based on the REDIRECT relation, as I show in (13), in which the existence of a

Yet another player in the *re* domain

previous event e' is presupposed such that it will satisfy the REDIRECT relation when the latter is applied to it and the asserted event:

(12) RETURNATIVE = $\lambda E. \lambda e: \exists e' [e' < e \wedge E'(e') \wedge \text{REVERSE}(\text{LPATH}(p), \text{LPATH}(p'))]$. [$E(e)$]
(Zwarts 2019: 223)

(13) $[[\text{re}_{\text{SISE-PHYSICAL}}]] = \lambda E. \lambda e: \exists e' [e' < e \wedge E'(e') \wedge \text{REDIRECT}(\text{LPATH}(p), \text{LPATH}(p'))]$.
[$E(e)$]

This naturally applies to verbs which include a motion component most straightforwardly and of course more (though clearly not all) verbs that include optional goals into their argument grids can show the reading. For instance, the verb *re-shovel* that I mentioned in 2.2 above can have a SISE reading as well, e.g., in a contextualization such as (14):

(14) Larisa re-shoveled the snow to a different location (after it had been shoveled to the wrong place, where it potentially blocked an entry for the neighbor's cat).

Further transfer to action, more specifically transmission paths (say possession or messaging, as in the sentences in (9c-d)) above is almost trivial as well: substitute LPATH in (13) by Zwarts' action path, APATH. If further types of paths are necessary for SISE readings, they will naturally receive an analogous treatment. The key reason I see for now to keep the specifics of different types of paths in place (L, A, ...) and not to use a generalized notion of PATH instead: a prominent type of path from the counterdirectional literature (scalar ones, Pedersen 2014) is harder to get on the data available. E.g., putative degrees of reselling or retweeting are not immediately and intuitively plausible.

3.2. More on relationships between readings

A further extension can arguably be culled by extending the analysis to cases where the sense of direction is even less prominent, but in which – crucially again – a *distinct* result state can be obtained, even though the activity part did once more hold true at a previous time. This yields verbs such as *rephrase*, *remodel*, *reshape*, *reform*, etc. where the end result is a different phrasing, modelling, shaping, forming, and so on. Incidentally, the boundary between hyphenated and non-hyphenated versions of different verbs is not always an entirely clear one with respect to the repetitive/SISE distinction. While there are typically nuanced semantic distinctions between the two types of forms, the hyphenated forms can also sometimes be interpreted as SISE, and not only repetitively. For instance, in the following case, one might oscillate between a repetitive and a SISE reading:

(15) At the same time, the Byzantines re-formed their own power structures. (Chr. Wickham, *The Inheritance of Rome*, Penguin, 2009, p. 483)

In the context in which (15) occurs, the Byzantines will have formed their original power structures at an earlier time interval. But at the relevant event time they formed them specifically with a distinct result. Simply forming them once more is not informative in the

context. Such cases may be viewed as borderline, but finding potential ambiguities should not be too surprising for the area of iteratives.

Oscillations between SISE and rest/cd readings can be identified as well. They may be of a different type. Consider the verb *remove* (which is also one of the most frequent ones in Middle English when *re-* was borrowed from Anglo-Norman (and ultimately Old French, according e.g. to the OED), even if we discuss Modern English examples here only).

(16) The janitor removed the stone from the doorstep.

In principle this can yield a SISE reading, accommodating the fact that the stone in question has been placed by the janitor to a different location than where it had come from. But the difference is not as strong from a rest/cd reading as in other examples. For instance, if the object is changed from *the stone* to *the chair*, then it is quite likely the chair will be put back by the janitor more or less just to the location where it came from and where its typical place is. One factor that can drive such variability in meaning then, seems to be an underspecification (rather than say, a true scopal ambiguity) between different trajectories in relationship to the original path. If it was a path that can function as a reversal (sometimes maybe even because the exact location will not matter), then a rest/cd reading will be more likely. Conversely, if it becomes relevant that the asserted path must go somewhere else compared to the one that is presupposed (or accommodated), then a SISE reading will become prominent.

Despite such cases in which potential ambiguities and cases of underspecification may appear (though I believe less systematically than in the classical case of the repetitive vs rest/cd readings), I think that the readings can be kept apart in the appropriate contextualizations quite straightforwardly most of the time. Before concluding this subsection, let's mention nonetheless one more diagnostic through which SISE will appear as indeed distinct. Klein (2001: 268) offers an excellent paraphrase for iteratives of the repetitive and the rest/cd kind, namely along the lines of "and this not for the first time". This yields a good approximation and window for *again* words on the two classical readings, where one just has to think about what to insert for the anaphor "this" in the paraphrase of the presupposition. Is it a full event? Then it will be a paraphrase of the repetitive reading. Is it a result state? Then the rest/cd. But this is not so straightforwardly the case for SISE. Inserting such a continuation is at the very least not always felicitous; cf. the examples in (9) above, in which the anaphor fails for the respective SISE readings. While there is a sense in which at least some part of the event related to the core activity (some directing, selling etc.) has happened before, this can't be picked up felicitously by the anaphor that works well for the two other readings. The anaphor heuristic that I introduced by using Klein's paraphrase then supports a distinction, too.

Overall, I have argued in this section that the SISE reading is – as a baseline – at least as distinct from the repetitive and the rest/cd reading as the others are from one another. In fact, I believe possibly more so, due to the distinctly specified target point or result state. This is not only a matter of definition, but one that makes all the difference in the clear SISE readings (pace possibly undetermined ones – we may note from corpus experience that such cases of underdetermination always exist in real life including for the classical readings, even if the majority of naturally occurring readings can be determined; cf. e.g. Kopf & Gergel 2023 for discussion of corpus work on iteratives). I have conducted my argument in intuitive and

Yet another player in the *re* domain

analytical terms through the description and the entry offered in the previous subsection in which crucially target points of the relevant path were required that are different from the original path; or else the reading is not to be classified as SISE.

4. Further discussion

In this section, I briefly discuss the relationship of the two possible accounts – structural vs. lexical – and mention only a few additional peculiarities of *re-* as an outlook for further research.

4.1. Structure vs. lexicon?

What I hope to have shown in this paper is full compatibility of the reading which I defined as redirection (in terms of its underlying path configuration) or more specifically as SISE with the help of a lexical account, specifically building on the tools utilized in Zwarts (2019). Is a structural account of the reading therefore automatically excluded? I think it is fair to answer ‘no’ in the current understanding of the accounts of iteratives.

I have very recently come to possess Carlson & Roeper’s (1980, CR) article with a rich treatment of morphological processes in which, *inter alia*, readings of *re-* are observed that only target the activity part of the relevant accomplishments. The simplified research context is as follows. CR notice that a verb like *put* does not take *re-* affixation (**John reput the dog in the kennel*) and attribute this to its having two arguments. A contradiction arises, however, then for verbs like *redirect* or *relocate*, since these are acknowledged to also subcategorize for the goal PP (some dative PPs are claimed to behave similarly), but they are legitimate with *re-* prefixes, e.g. as in (17) (Carlson & Roper 1980: 142):

(17) John relocated the dog in the kennel.

The gist of CR’s account is based on maintaining a distinction between arguments and complements and they do not offer specific entries for *re-* on the relevant SISE reading. But they sense that the relevant presuppositions *can* be distinct in such cases from those of the standard readings of *again* quite clearly. (My claim was similar, though not entirely identical, in that the relevant readings *must* be distinct when the context is controlled.) While their claim that *again* never shows this kind of behavior (i.e. SISE) simply because it is always claimed to include all of the arguments in its scope needs to be taken issue with (for instance, speakers of earlier and sometimes Modern English have produced/ still accept the verb *sell* on SISE readings), the account CR offer can, in essence, serve as the sketch of a structural account of SISE readings, which still remains to be fully evaluated in a version that is more spelled-out in its semantic assumptions, entries, and especially interface connections, as standard phrase structure will not easily work to the exclusion of arguments, no matter how they are labeled. This is incidentally a serious, but presumably not unsurmountable challenge for close structural accounts.

Even if unsolved data exist for all iteratives which are often ignored (see CR for many cases in point, or e.g. Jäger & Blutner 2000), it may seem fair to say that the distributional picture of

re- appears to be considerably more complex than that of *again* (see below for some more data, too). Nonetheless, I'd like to suggest a picture that is perhaps more unifying than one might think with respect to the types of accounts that are typically pursued. The thrust of my suggestion is that the long-standing question structural vs. lexical is, in fact, not placed quite the ideal way. The more insightful way may be *how* the individual readings one obtains are related. (Notice that I presuppose that they must be related.) This kind of interrelatedness may be more obvious on structural accounts, where essentially one and the same entry is mechanically (or 'elegantly', depending on the point of view) attached to different constituents. But lexical accounts have in fact also sought to deepen our understanding of the phenomena in a variety of ways and especially in terms of the cognitive connections that exist between readings – whether historically (as e.g. under Fabricius-Hansen's impetus), in terms of locational/conceptual paths and possibly also semantic maps (as in Zwarts), or a variety of other ways. It is also worth noting that lexical accounts do not always lack predictive power, while they take care of descriptive accuracy. For example, von Stechow (2000) points out quite forcefully, while acknowledging some of the criticism in Jäger & Blutner (2000), that the latter account overgenerates in a number of ways, especially in view of the fact that standard modern structural accounts also have a lexical, and in this case arguably less powerful component (i.e. in determining whether a verb will be 'decomposed' or not). Finally, when one has better tools to see how the individual readings are related in different accounts, the follow-up relevant question could (and I think, should) be: How are the accounts to be translated to one another, assuming that they – in fact – describe different aspects of essentially the same connections between readings?

4.2. Outlook minutiae

While the basic semantics of iteratives may appear straightforward, there is in fact a wealth of unsolved data already existent in the available literature (in addition to the need for further empirical strengthening and nuancing which may be inherent to much of the insightful theoretical framework that I touched on – cf. e.g., the recent *Experiments in Linguistic Meaning* initiative along the lines of Knowlton, Schwarz & Papafragou 2023 on the methodological side, independently of iteratives). While this cannot be the place to review the entire set of challenging datapoints in the literature on iteratives, I will simply mention two areas (temporal texture and quantifiers) and only quite punctually. The first point below is chosen specifically because it has what seems to me to be a rather narrow domain of application, while the others are points of broader if not unlimited application. This distribution is purely for illustration purposes; it does not entail that there aren't more general points with respect to textual structure already in the literature (on the contrary) or vice-versa, that even more fine-grained/'idiosyncratic' points regarding quantification should not exist.

One of the restrictions that are quite narrow in the domain of application pertaining to *re-* as a prefix, can be illustrated with sentences such as those in (18) in contexts in which, at some point in, say, 2025 the individual subject of each of the two sentences has in fact won the presidential election in the US, respectively. (We are considering two obvious but different scenarios then for a. vs. b., where they would be 'true'):

- (18) a. Biden got re-elected.
b. Trump got re-elected.

Yet another player in the *re* domain

(18b) would feel odd in view of the actual world as we know it as a continuation of the state of affairs available in 2023 or at any rate preceding the actual election of 2024, where Biden is president (and this regardless of political opinions, and once again, assuming that in this case Trump will have won the relevant electoral contest). The likely reason for the infelicitous status of (18b) seems to be that the predicate *re-elect* requires an inference of its object or passivized subject as being the incumbent in the term directly preceding the election. This effect of adjacency in the temporal interval does not hold if we substitute *re-* with *again*. The fact that the inference appears to be cancelable (for instance, via continuations such as *for a non-consecutive term*, allowed for some speakers) indicates that it is likely to be an implicature. (Recall narrow application, it is easy to find examples of other predicates where no immediate adjacency of the backgrounded and the asserted relevant interval needs to hold.)

Finally, quantifiers are a case in point which have produced some puzzles in the research history of iteratives. Within current scope, I restrict myself here to pointing out a highly eclectic selection of data too, but this time on SISE readings of *re-*.

Echoing Jäger & Blutner's (2000) famous indefinite examples with *again* (used there to argue against a decompositional or structural view) one may of course compare the behavior with *re-* also on a SISE reading, as for instance in the following sentence:

(19) A Delaware resettled in Oregon (while most were forced to go to what is now Oklahoma).

While there has been some discussion about judgments and consequences of such sentences (cf. also von Stechow's 2000 remarks), for SISE on a lexicalist account, the placement of an indefinite in such a construction falls rather naturally as far as intuitions go.

There are, however, plenty of issues to be fixed for SISE readings naturally, too. For instance, assume that a Delaware individual already resettled to Oregon before all others did and there was no other '(re-)settling' at all that took place initially. Then one would have to invoke some such activity say, from the legal act that triggered the entire resettlement process, else accommodate it accordingly, or do some other kinds of amendments.

Finally, let me point out a reading that can also be contextualized for SISE readings including in quantificational contexts. Consider (20):

(20) *Context*: on our street a device became very quickly popular, but always only for a short time. *Target sentence*: Everybody resold their device to their neighbor.

The sentence in (20), on the contextualization given, namely one which may call a 'chain' (or more precisely and likely 'domino') reading, is acceptable, among others. First note a detail (which does not seem to bother native speakers, who find the sentence natural), namely that the chain is not necessarily perfect above, as the last person on the street will not have had another neighbor on their street (the assumed domain of quantification) to sell the device to (it is unlikely in the context set up that they will have sold it to the first person). To get at least a purer domino type of reading, let's assume e.g., that the last person on the street sold the device to a neighbor just around a corner which didn't belong to the same street. But setting this aside:

given a semantics of SISE in which the backgrounded trajectory of origin and the target of the relevant asserted path is distinct, as for instance the one proposed above, one will also have to see that two components of meaning can be serialized this way.

References

- Axel-Tober, K. and R Gergel. (2014). Modality and mood in formal syntactic approaches. In J. Nuyts, and J. van der Auwera (Eds), *The Oxford Handbook of Modality and Mood*, pp. 473–494. Oxford: Oxford University Press.
- Beck, S. (2005). There and back again. *Journal of Semantics* 22, 3–51.
- Beck, S., P. Berezovskaya, and K. Pflugfelder. (2009). The use of again in 19th-century English versus Present-Day English. *Syntax*, 12(3), 193-214.
- Beck, S. and R. Gergel (2015). The diachronic semantics of English *again*. *Natural Language Semantics* 23, 157–203.
- Beck, S., & W. Snyder (2001). Complex predicates and goal PPs: Evidence for a semantic parameter. In *Proceedings of the 25th Boston University Conference on Language Development* (Vol. 1, pp. 114-122). Somerville, MA: Cascadilla Press.
- Carlson, G. and T. Roeper. 1980. Morphology and subcategorization: Case and the unmarked complex verb. In T. Hoekstra, H. van der Hulst and M. Moortgat (Eds.) *Lexical Grammar*, pp. 123–164. Dordrecht: Foris Publications.
- Carstairs-McCarthy, A. (2002). *An Introduction to English Morphology: words and their structure*. Edinburgh: University Press.
- Cinque, G. (1999). *Adverbs and Functional Heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Fabricius-Hansen, C. (2001), ‘Wi(e)der’ and ‘again(st)’. In C. Féry & W. Sternefeld (Eds.), *Audiatur Vox Sapientiae. A Festschrift for Arnim von Stechow*, pp. 101–130. Berlin: Akademie Verlag.
- Gergel, R. (2017). Interface interactions in the English iterative cycle. *Linguistica Brunensia* 65: 51-65.
- Gergel, R. and S. Beck. (2015). Early Modern English again - A corpus study and semantic analysis. *English Language and Linguistics* 19, 27–47.
- Gergel, R. & M. Puhl (2023). Saarland nommo, ‘again’: evidence for a structural co-imprint of iteratives. Paper delivered at SaRDIS 2023, Saarland University.
- Gergel, R., A. Blümel, and Kopf, M. (2016). Another heavy road of decompositionality: Notes from a dying adverb. *University of Pennsylvania Working Papers in Linguistics*, 22(1), pp. 109-118.
- Klein, W. (2001). Time and again. In C. Féry & W. Sternefeld (Eds.) *Audiatur Vox Sapientiae. A Festschrift for Arnim von Stechow*, pp. 267-286. Berlin: Akademie Verlag.
- Kopf, M. and R. Gergel. (2023). Annotating decomposition in time: Three approaches for *again*. In *Proceedings of the 17th Linguistic Annotation Workshop (LAW-XVII)*, pages 129–135, Toronto, Canada. Association for Computational Linguistics.
- Maienborn, C., and Schäfer, M. (2011). Adverbs and adverbials. In C. Maienborn, P. Portner, and K. von Stechow (Eds.), *Semantics. An international handbook of natural language meaning*, Vol. 2 (HSK 33.2), pp. 1390–1420. Berlin & New York: de Gruyter.
- McCawley, J. (1971). Pre-lexical syntax. In J. O’Brien (Ed.), *Report of the 22nd Roundtable Meeting on Linguistics and Language Studies*, pp.19–33. Washington: Georgetown University Press.

Yet another player in the *re* domain

- Horn, L. (1980). Affixation and the Unaccusative Hypothesis. In *Proceedings of CLS 16*, pp. 134–146. *Papers from the Sixteenth Regional Meeting*, Chicago Linguistics Society.
- Jäger, G. and Blutner, R. (2000). Against lexical decomposition in syntax. In *Proceedings of IATL* (Vol. 15, pp. 113–137). University of Haifa.
- Knowlton, T., F. Schwarz, and A. Papafragou (Eds.). 2023. Proceedings of *Experiments in Linguistic Meaning (ELM)*, Vol. 2, UPenn, Philadelphia. Published by the Linguistic Society of America, <https://journals.linguisticsociety.org/proceedings/index.php/ELM/index>.
- Marantz, A. (2007). Restitutive re- and the first phase syntax/semantics of the VP. *Handout of talk given at the University of Maryland*.
- Morgan, J. L. (1969). On arguing about semantics. *Research on Language & Social Interaction* 1(1), 49-70.
- Oxford English Dictionary. (2023). “Re-, Prefix.” Oxford University Press, December 2023, <https://doi.org/10.1093/OED/1031113569>.
- Pedersen, W. A. (2014). A scalar analysis of ‘again’-ambiguities. *Journal of Semantics* 33, 373–424.
- Rapp, I., and von Stechow, A. (1999). Fast ‘almost’ and the visibility parameter for functional adverbs. *Journal of Semantics* 16(2), 149–204.
- von Stechow, A. (1996). The different readings of *wieder* ‘again’: A structural account. *Journal of Semantics* 13, 87-138.
- von Stechow A. (2000). How are results represented and modified? Remarks on Jäger & Blutner’s anti-decomposition. *ZAS Papers in Linguistics* 17, 287-308.
- Wechsler, S. (1987). Accomplishments and the prefix re-. In *Proceedings of NELS 18*, pp. 419–434. North East Linguistics Society.
- Yang, C. (2016). *The Price of Linguistic Productivity: How children learn to break the rules of language*. Cambridge, Ma.: MIT Press.
- Zwarts, J. (2019). From ‘back’ to ‘again’ in Dutch: the structure of the ‘re’ domain. *Journal of Semantics* 36, 211-240.