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4 Reversive constructions in Latin: the case of *re-* (and *dis-*)

Abstract: This paper proposes a cognitive account on *re-* and *dis-* verbs based on the scrutiny of the Plautine corpus and Cato's *De agricultura*. *Re-* and *dis-* exhibit significant differences as to the manner in which they come to a reversive function, and these differences can be traced back to the basic conceptual import of the two prefixes: while *dis-* is schematically connected with the idea of separation into two parts, *re-* basically refers to a rearward/reditive trajectory, connecting a point that has already been reached to the starting point. On the basis of this description, I analyze the semantic network of *re-* and *dis-* and the role of their conceptual structure in the spread from spatial to reversive values.

Keywords: counter-directionality; reversives; prefixation; cognitive morphology; semantic networks; Latin

4.1 Introduction

Every human being frequently talks about changes of states and locations, in particular about the actions of doing or undoing something, going inside or outside a place, being or not being in a certain state/condition. This very general consideration may account for the frequency in everyday language of so-called "reversive" verbs, that is, verbs denoting – usually by means of additional morphology – motion in the opposite direction (relative to some base verb), or change from a reference state (conveyed by the lexical base) to some prior state of affairs (cf. Cruse, 1986). In this paper, I look at the crucial role played by prefixation in forming such verbs in Early Latin. Very specifically, I propose a cognitive linguistic account of the meaning of the verbal derivatives with *re-* in order to understand the path through which it comes to express a reversive function (e.g., *recludo* 'to open' vs. *claudo* 'to close'). Then I compare the abstractive path of *re-* towards the reversive function with that displayed by *dis-* (e.g., *discingo* 'to ungird' vs. *cingo* 'to encircle, gird'). Although sharing some semantic features, *re-* and *dis-* exhibit significant differences in their development of a reversive sense, and these differences can be traced back to the underlying spatial concepts expressed by the two prefixes. As I argue, *re-* and *dis-* differ in image-schematic terms: the first refers to a rearward/reditive trajectory which connects a point already reached to an origin point, thus resulting in a backward motion, whereas the second is schematically connected with the idea of separation or division into two parts. On the basis of this description, I analyse the semantic network of *re-* and *dis-* in Early Latin and the role of image-schematic structure in their extension from a purely

spatial signification to their reversive function. The analysis is based on scrutiny of the Plautine corpus and Cato's *De agricultura*.

The paper is organized as follows. In section one, a cognitive account is provided on verbal prefixation, based on Langacker (1987; 1991), and, more specifically for Latin, on Brucale & Mocciaro (2017). In section two, the definition of the semantic relation of reversivity is addressed and illustrated by means of a description of the various means through which reversivity is expressed in Indo-European languages, with a particular focus on Latin preferred strategies. Section three presents the prefixes under investigation in this paper, and describes their possible etymology as well as the substantial differences they show compared to other Latin verbal prefixes. In section four, I provide an analysis of the data taken from Plautus' corpus and Cato's *De agricultura* starting from which I reconstruct the semantic network of *re-* in order to understand the path through which it comes to express a reversive function. In section five the behaviour of *dis-* is described as a benchmark with respect to *re-* in order to show a different path through which a prefix can reach the same reversive function. In the final section, I draw my conclusions and highlight some open-ended questions.

4.2 Verbal prefixation

One of the main mechanisms through which cognitive linguistics interprets the construction of meanings is embodiment. Embodiment is a crucial notion in cognitive linguistics and it is also an umbrella term which denotes several different issues. In the broad sense in which I employ it here, from a cognitive point of view the entire system of cognition is embodied, i.e., it is directly grounded in human bodily experience. Accordingly, spatial cognition is also embodied, that is, it is constructed starting from the experience of the human body (with its peculiar characteristics of form, orientation, functionality) that moves or stays in a space. Since, as we will see immediately, verbal prefixes play an important role in encoding space relations, even the basic patterns from which each verbal prefix organizes its meaning will be embodied, i.e., based either on the experience of motion/stasis of a body in a space, or on the relationship between bodily motion/stasis and the other elements in a space.

Thus, from the point of view of cognitive linguistics, verbal prefixes (as well as prepositions) are conceived as complex categories, having a basic spatial schematic meaning, structured around one or more central schemas, each of which can constitute the origin of a radial structure built on relations of similarity and contiguity

and, therefore, on metaphoric and metonymic connections (Lakoff, 1987; Langacker, 1987; 1991).[8]

Moreover, in Langacker's terms, verbal prefixes are relational predications, i.e., meaningful elements expressing a static, atemporal relation (AR) (Langacker, 1987) between two discrete entities: a participant conceived as foregrounded, the trajector (TR), and a second salient entity, the landmark (LM), which provides a point of reference for locating the TR. The notion of "atemporality" refers to the character of the relation; it is basically conceived as a spatial location which does not inherently express a dynamic component (i.e., "TR at/through/towards LM"). Dynamicity therefore rests on the presence of a verb denoting a processual relation (PR), i.e., an event (action, movement etc.) that is necessarily brought about within a time span and thus expresses temporal directionality, i.e., a sequence of sub-events along which a TR metaphorically "moves" (Langacker, 1987: 244–274).

In forming a lexical unit prefix + verb, prefixation directly attributes an AR to the verb so that the AR is included in the PR. Drawing upon Lehmann ([1995] 2002), Brucale & Mocciaro (2017) describe this phenomenon as an overlap between two conceptually distinct factors, i.e., a static location (AR) and a PR, as represented in Figure 1.[9]

The LM of the AR (i.e., its locational scope) becomes part of the PR, that is, the prefix modifies the spatial coordinates of the event denoted by the verb.

In this perspective, the values of *re-* and *dis-* may be interpreted as constituting a motivated network of meanings organized around a primary spatial component whose semantic extension is the result of the interaction among the principal mechanisms of human embodied cognition. This perspective leads to the consideration of which

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8 Verbal prefixation is a matter of word formation which can be defined as the linguistic manifestation of a general creative faculty of the human mind to construct and label new concepts by combining existing mental schemas, cf. Onysko & Michel, 2010: 2. In this sense, word formation always gives rise to more or less elaborate constructions: cf. Ungerer, 2007. Despite this cognitive-based definition, processes of word formation continue to be quite a neglected branch of study within cognitive linguistics, as noted by Onysko & Michel, 2010: 9–10. Indeed, cognitive-linguistic studies of word formation continue to use analytic models and theoretical equipment not necessarily conceived for this area of investigation. Thus, although research has dealt with word formation from the point of view of metaphoric and metonymic extensions, figure-ground alignment, schematization, conceptual integration, and form-meaning iconicity (cf. Lampert & Lampert, 2010: 31), a general account of word formation processes under this theory is still lacking. This is also because from a cognitive perspective the constitutive units of language are symbolic structures, simple or complex; in the latter case, they are the result of the syntagmatic combination between at least two elements, whether free words or bound morphemes. In such an approach, it could actually be considered unnecessary to separate word formation processes from other combinatorial processes which, since they involve the same conceptual operations, do not deserve specific treatment.

9 In Brucale & Mocciaro, 2017 the same process of verbal prefixation is called "preverbation", although the term may refer to a different notion, see Booij & van Kemenade, 2003.

spatial coordinates of the event are changed by *dis-* and *re-*, and what semantic pathways lead to their reversive function.
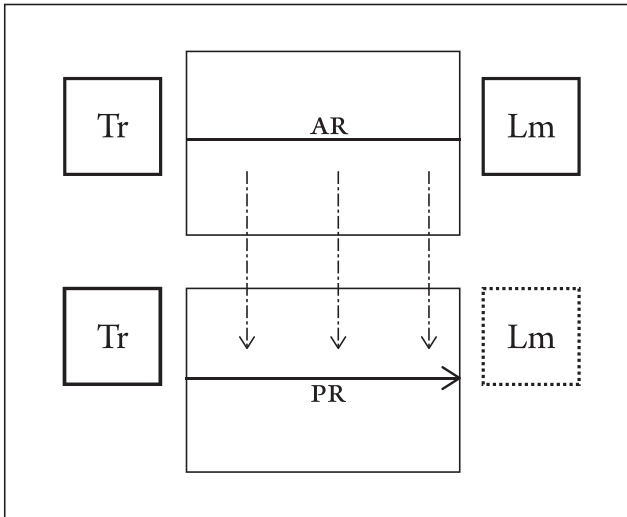

Figure 4.1: Verbal prefixation (Brucale & Mocciaro, 2017: 204).

4.3 Reversivity and reversives

Reversivity is a paradigmatic relationship of directional opposition (Lyons, 1977: 281–286; Cruse, 1979; 1986; 2002). Unlike antonyms that are typically adjectives denoting opposites states (e.g., English *cold* vs. *hot*), reversives are pairs of verbs that denote dynamic processes or actions always involving some change of state (Funk, 1990: 443). In their most basic form, reversives are intransitive verbs of motion, whose grammatical subjects denote entities that undergo a change in location, which occurs in the opposite direction with respect to a prior motion (as in *enter* vs. *leave* or *rise* vs. *fall*). But reversivity can also be expressed by transitive causative verbs: in this case, it is the direct object that is subjected to a change of location that again always occurs in the opposite direction of prior motion (*raise* vs. *lower*). Furthermore, the notion of directionality does not necessarily refer only to concrete spatial motion, but easily undergoes a metaphorical extension into more abstract domains, in which case the "location" represents a state into which the subject is figuratively transferred or from which it is removed (cf. Kastovski, 2002: 100). Lakoff & Johnson (1980) capture the generality of this connection through the conceptual metaphor 'STATES ARE LOCATIONS' (thus, 'CHANGE OF STATE IS CHANGE OF LOCATION', see representation in Figure 2 taken from Mocciaro, 2014).

A) Motion event (PATH)
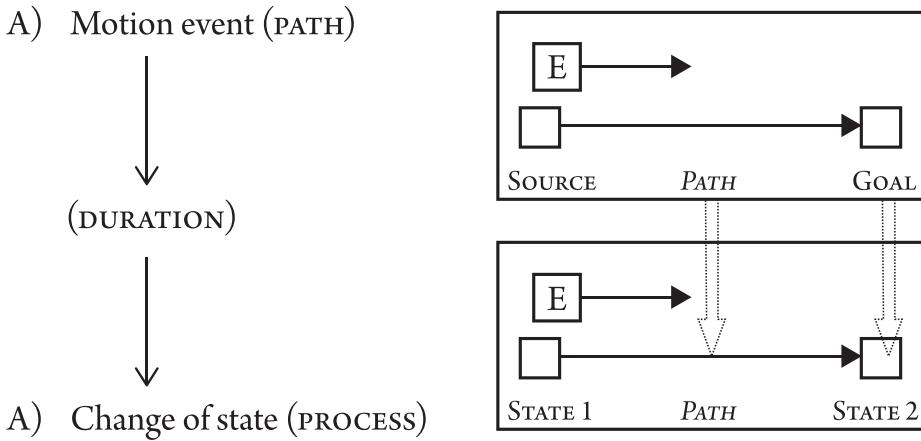
(DURATION)

A) Change of state (PROCESS)

Figure 4.2: Change of state is change of location (Mocciaro, 2014: 53).

We will therefore consider as reversives the pairing of both spatial verbs such as *enter* and *leave*, denoting motion in opposite directions, and of verbs such as *persuade* and *dissuade*, denoting "a reversal of a process brought about by the action and undergone by some affected object" (Cruse, 1979: 959). More precisely, the "reversal" does not have to do with the process or the action *per se* but the resulting states: the final state resulting from the action/process expressed by one member of a reversive pair is the initial state to be changed by the action/process in the other member, and vice versa (Cruse, 1979: 939). Reversal, in short, applies to the direction of the change of state rather than to the particular activity involved.

In Indo-European languages, reversivity can be expressed through purely lexical means or through several varieties of morphological constructions. Thus, we find lexical pairings in which reversivity is encoded in the opposition of root meanings (e.g., Italian *salire* 'to go up' vs. *scendere* 'to go down'); or where the opposition is marked on both members by means of spatial prefixes denoting directionally opposed trajectories (Greek *eisbaínō* 'to go into; to enter' vs. *ekbaínō* 'to go out; to leave'); or where one of the members of the pair is a morphologically simple verb and the other is prefixed (English *block* vs. *unblock)*. The preferred strategy in Latin for formation of reversive pairs is prefixation, of either the binary or unary kind (cf. Moussy, 1996; 1998). Opposition of root meanings is in fact more frequent in so-called "verb-framed" languages, namely those languages which, like the Romance languages, typically encode the direction of motion in the verbal root. Conversely, Latin, like English and German, is a "satellite-framed" language, since it typically encodes the direction of motion in satellites (preverbs, adverbs, post-verbal particles, and so on), while only the idea of motion is expressed in the root (sometimes associated with additional semantic specification, especially the manner in which the motion is

performed).[10] For this reason, the cases of stem opposition are very rare in Latin and do not convey spatial meaning (e.g., *emo* 'to buy' vs. *vendo* 'to sell').[11] The prefixation cases, on the contrary, are very frequent and constitute the most salient strategies through which Latin forms verbal opposites. In what follows I will analyze the role of *re-* and *dis-* in the formation of directional opposites of the abstract type. If, in fact, spatial reversives have a transparent and predictable behaviour (already observed in the literature, for example in García Hernández, 1980), the most abstract reversives have received less attention in the literature, and are more attractive because they are formed through abstractive processes that starting from diverse image-schematic configurations come to the expression of reversive function. For this reason, I will focus particularly on *re-*, which seems to carry out numerous functions in the domain of counter-directionality; only contrastively therefore will I discuss the case of *dis-*, conveying basically separative semantics and reaching the reversive function through an entirely different, abstractive path.

4.4 *Re-* and *dis-*

Although *re-* and *dis-* are best employed in expressing other functions, they occur in some reversive constructions worthy of attention for several reasons. As for *re-*, the reversive function is marginal; only a handful of *re-*verbs are used with a clear reversive value in my corpus, which, moreover, does not seem to be particularly

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10 The first distinction between VF and SF languages is found in Talmy's seminal work on the typology of lexicalization patterns, cf. Talmy, 1985, revised and expanded in Talmy, 2000. Recent studies on motion encoding, while maintaining Talmy's bipartite typology, give more attention to phenomena of variation whose understanding requires a more flexible theoretical model, e.g., Croft et al., 2010; Beavers, Levin & Tham, 2010. In particular, the study of language-specific strategies and the peculiar contexts fostering or restraining the use of a given pattern has scaled down the Talmyan notion that a language has one pattern as its dominant type, and has promoted synchronic and diachronic analyses focusing on the interaction between different patterns in event lexicalization of a given language. As for Latin, while at the level of morphology and lexicon it can be considered a typical Satellite-Framed language, its belonging to this typological group is not so clear as far as usage is concerned; for instance, unlike other SF languages, Latin tends to avoid the expression of multiple Paths and also displays peculiar behavior relative to the expression of the semantic subcomponent of Manner: relative scarcity of manner verbs almost always in non-directional uses, frequent omission of manner of motion expression, etc., cf. Brucale, 2011; Brucale, Iacobini & Mocciaro, 2011; Corona, 2015; Iacobini & Corona, 2016.

11 In traditional accounts on lexical directional oppositions *buy* and *sell* are treated as converses, i.e., opposite pairs expressing "a relationship between two entities by specifying the direction of one relative to the other along some axis", Cruse, 1986: 231. Like reversivity, converseness is a fundamentally spatial notion; non-spatial converses can thus be interpreted as metaphorical extensions of spatial notions, e.g., in *buy* and *sell* the opposition concerns the direction of transfer of goods and money, see Croft & Cruse, 2004: 166.

productive in the diachrony of Latin and the Romance languages. It is precisely this marginality, in my view, which makes the case of *re-* interesting: the analysis of its semantic network can motivate it, i.e., on the one hand it can motivate the lack of productivity of *re-* in reversive function, and on the other create a hypothesis to explain the diachronic prevalence of the iterative value. However, as regards *dis-*, it continues in the Romance languages predominantly in its reversive meaning which is less marginally represented in my corpus compared to that of re-, but still less central compared to other values. It is worth comparing it with *re-* since it comes to the same reversive function following a completely different path which starts from an ablative/separative semantics.

Even so, compared to other Latin verbal prefixes, *re-* and *dis-* show a relevant peculiarity. While most Latin verbal prefixes can be traced back to Indo-European adverbial elements which, according to the syntactic position they occupied, could function as real adverbs, prepositions or prefixes, *dis-* and *re-* do not show synchronic connections with any Latin adverb or preposition but stem from other diachronic sources. The etymology of *re-* is disputed: scholars debate whether the original form was *re-* or *red-*, the latter normally understood as its antevocalic allomorph as in *red-amo* 'to love in return' (cfr. Meillet, [1909] 1972).[12] According to Brugmann (1909), *red-* was actually prior to *re-*, and could be derived from a Proto-Italic form **wred-* connected with the PIE root **wret-*. Brugmann sees **wret-* as related to the Latin verb *verto* 'to turn' and hypothesizes that earlier it had been a neuter adjective with the meaning 'turned, reversed'. If we accept this hypothesis, we might posit that *red-* is the prefixal outcome of an adjectival element resulting from a grammaticalization process (including phonetic reduction, semantic bleaching, decategorialization, and increased frequency of use). Throughout the history of Latin *re-* is primarily used as an eminently verbal prefix and only in this form is it really productive. Meanwhile, *dis-* is a close relative of Greek *dia*(-), with which it shares prefixal uses (*distendo ~ diateínō* 'to stretch out, extend', *disto ~ diésten* 'to stand apart, to be separate, distant', *diverbium ~ diálogos* 'dialogue') and an Indo-European origin: indeed for both prefixes, historical-comparative linguistics reconstructs the same root *dis, very plausibly connected with *dwis 'twice', thus with the numeral 'two' (cf. Pokorny, [1959] 1989: 232; see also Stolz, 1904).[13] It can be placed before nouns (e.g., *discors*

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12 *Red-* is also found in *red-do* 'to give back', before *h*, as in *redhibeo* 'to give back, return', and with the linking-vowel -ĭ- in *rĕdĭ-vivus* 'that lives again, renewed'.

13 The -*s* can become silent before voiced consonants, e.g., *digero* (<*dis+gero*), undergo rhotacism if placed between vowels, as in *dirimo* (< *dis + emo*) or be assimilated in the subsequent consonant, as in *differo* (< *dis + fero*).

'discordant, unlike, different'), adjectives (*dissimilis* 'unlike, dissimilar, different') and verbs, but it is regarding the latter that it is most productive.[14]

Thus, while *ad-*, *in-*, *per-* can function as bound or unbound morphemes, *dis-* and *re-* occur exclusively as bound morphemes placed before a verb that constitutes their base (cf. Booji & van Kemenade, 2003). However, in both cases the resulting derivative word tends to lose compositionality and is stored in the lexicon as a unit.

4.5 *Re-* data

The existing literature about *re-* agrees in attributing the original spatial meaning 'back' to the prefix (cf. Darmesteter, [1875] 1967; Ernout & Meillet, [1932] 2001, Sletsjøe, 1979; Moussy, 1997 inter al.). This literature mainly concerns lexicons and etymological dictionaries and a few studies conceived from a traditional philological perspective (e.g. Lieberg, 1981; Moussy, 1997) or from a structuralist one (à la Coseriu, such as García Hernández, 1980). While identifying the existence of close relationships between the various meanings of the prefix, such literature does not attempt an explanation of how these senses are developed from an original basic sense, simply taking them as given. Thus, for example, Ernout & Meillet ([1932] 2001: 565) claim that *re-* is a "preverb marking a movement backward (*recedo*, *respicio*, *redeo*), or a return to an earlier state (*reficio*, *restituo*), and consequently a repetition (*recanto*), or also a movement in the opposite direction, which deletes what has been done (*recludo*, *renuntio*, *renuo*, *resigno*, *retego*, *revelo*, etc. [preverbe marquant un mouvement en arrière (*recedo, respicio, redeo*), ou un retour à un état antérieur (*reficio*, *restituo*), et par suite une répétition (*recanto*), ou aussi un mouvement en sens contraire, qui détruit ce qui a été fait (*recludo*, *renuntio*, *renuo*, *resigno*, *retego*, *revelo*, etc.)]"; neither is there any explanation in the list of *re-* meanings compiled by Perin in Forcellini's (et al., 1940) lexicon: *retro*, *perfectio*, *reciprocatio*, *contra*, *iterum atque iterum*, *rursus*, *inde*, *reditus ad pristinum statum*, *valde*, *longe*, *contrarietas suorum simplicium*; finally, Moussy (1997) where an original "mouvement en sens inverse" is assumed to motivate most of the uses of the prefix, but the way in which the various senses are interrelated is not specified.

The anteriority of the spatial meaning is also a postulate of cognitive linguistics which, as we saw in section 1, considers verbal prefixes as relational predications modifying the meaning of the verb in a primarily spatial sense. Depending both on

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14 There are, however, nominal formations, such as *repudium* 'a casting off, putting away', considered by Georges & Calonghi, [1950] 1999: 2377 as base of the verb *repudiare*, derived by adding *re-* to the noun *pes* 'foot' to indicate the effect of pushing 'back' against something with the foot. Ernout & Meillet, [1932] 2001: 502 reject this etymology and connect *repudium* to *pudeo* 'to make or be ashamed, to feel shame'. Adjectival derivatives are also found, such as *recalvus*, in which, according to Moussy, 1997: 232, it is possible that the prefix indicates a specific type of *calvus*, i.e., the one affected by a baldness which is located on the front and not on the top of the head.

the basic schema of the prefix and the semantics of the verb, this spatial value can undergo a shift towards more abstract values, and sometimes become totally opaque to the point of being completely indistinguishable (cf. Lehmann, [1995] 2002: 88).

4.5.1 Spatial values

It is possible to observe the most basic behaviour of the prefix when it is placed before verbs expressing spatial relations, which in my corpus are represented by intransitive motion verbs in which a TR *re*-V towards a spatial or metaphorical LM (such as *redeo* 'to go back, return', *revenio* 'to come back, return', *reverto* 'to turn back') or transitive verbs expressing induced motion in which an agent *re*-V an O (the TR) towards a LM (*recedo* 'to go back, recede', *reduco* 'to lead or bring back, to conduct back', *repono* 'to put a thing back in its former place; to replace, restore').

The analysis of the data found in my corpus shows that the spatial modification conveyed by *re*- is basically a counter-directional change, i.e., a *re*-verb encodes processes that are somehow opposite in direction with respect to a reference point. Moreover, in the spatial domain of counter-directionality *re*- expresses either a simple rearward trajectory (as in *recedo* 'to go back, recede', *repello* 'to drive back; to reject, repulse, repel', *replico* 'to fold or roll back, to bend or turn back') or a more complex reditive path (as in *redeo* 'to go back', *repono* 'to replace, restore' *reverto* 'to turn back'), as we shall see in due course.

Re- expresses a purely locational sense 'rearward' with transitive bases whose TR moves back with respect to a starting point, as an effect of the *re*-verb movement. This is the case in (1) in which Plautus represents the movements back and forth that the TR performs due to the shove through the opposition between *re*- and *pro*-, in (2) where Cato describes the process of preparation of the scion for grafting a vine plant, and in (3) where Daemones invites Labrax to approach (*accedo*) and Labrax replies that he will do so if Daemones will ensure that the torturers of slaves who are on the scene recede.

(1) *qui*   *scelestus*   *sacerdotem*
    REL.NOM.M.S   wicked:NOM.M.SG   priest:ACC.F.SG
    anum   *praecipes*   ***reppulit***
    old.woman:ACC.F.SG   hasty:NOM.M.SG   drive.back:PRF.3SG
    propulit   *perquam*   *indignis*   *modis.* (Plaut. *Rud.* 672)
    drive.forth:PRF.3SG   extremely   shameful:ABL.M.PL   way:ABL.M.PL
    'The ruthless monster shoved the poor old priestess back and forth in extremely outrageous fashion'.[15]

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15 The translations of the Latin passages proposed here are mostly drawn from online materials available on Perseus (http://www.perseus.tufts.edu/hopper/collection?collection=Perseus%3Acol lection%3AGreco-Roman) and Loeb Classical Library (https://www.loebclassics.com). When such translations were too obsolete or opaque I translated them myself, in order to make them closer to the source text.

(2) *eos*   *in*   *terram*   *demittito*
DEM.ACC.M.PL in(to) ground:ACC.F.SG send.down:IMP.FUT.2SG
***replicato**=que*   *ad*   *uitis*   *caput,*
bend.back:IMP.FUT.2SG=and at/to vine:GEN.F.SG head:ACC.N..N.SG
medias   *uitis*   *uinclis*   *in*
middle:ACC.F.PL vine:ACC.F.PL bond:ABL.N.PL in(to)
terram   *defigito.* (Cat. *Agr.* 41.4.2)
ground:ACC.F.SG fasten:IMP.FUT.2SG
'Drop them to the ground and bend them back toward the vine stock, fastening the middle of the vine to the ground with forked sticks and covering with dirt'.

(3) DAEM. *agedum*   *ergo,*   ***accede***
           move:IMP.PRS.2SG=INTERJ therefore go.to:IMP.PRS.2SG
           huc   *modo.*
           to.this.place just.now
    LAB. *iube*   *dum*   ***recedere***
           order:IMP.PRS.2SG just   go.back:INF.PRS.
           istos   *ambo*   *illuc*   *modo.* (Plaut. *Rud.* 785–6)
           that:ACC.M.PL both to.that.place just.now
'DAEMONES Proceed, then. Just step this way.
LABRAX Well, just you tell two brutes there to recede the other way'.

Moreover, especially with verbs of induced motion, the rearward movement may also produce the removal of the TR which, with its back position with respect to the LM, is moved away from the scene. This is the case in (4) and (5) where the removal is also conveyed by the contextual presence of phrases expressing the semantic role of Source (*ab sulcis* in 4, *his foribus* and *hac <muliere>* in 5).

(4) *umbram*   *ab*   *sulcis*
shade:ACC.F.SG from   furrow:ABL.M.PL
remoueto   *crebro*=que   *fodito.* (Cat. *Agr.* 33.3.2)
move.back:IMP.FUT.2SG frequently=and   dig:IMP.FUT.2SG
'Keep the furrows clear of shade, and cultivate frequently'.

(5) *eum*   *ego*   *meis*   *dictis*
DEM.ACC.M.SG I:NOM.SG my:ABL.N.PL say:PTCP.PRF.ABL.N.PL
malis   *his*   *foribus*   *atque*
bad:ABL.N.PL DEM.ABL.F.PL door:ABL.F.PL and.also
hac   *<muliere>* . . .   ***reppuli**,*
this:ABL.F.SG woman:ABL.F.SG drive.back:PRF.1SG
reieci   *hominem.* (Plaut. *Bacch.* 632a–633)
throw.back.PRF.1SG man.ACC.M.SG
'I drove the fellow away from this door and from this woman, and packed him off through my harsh language'.

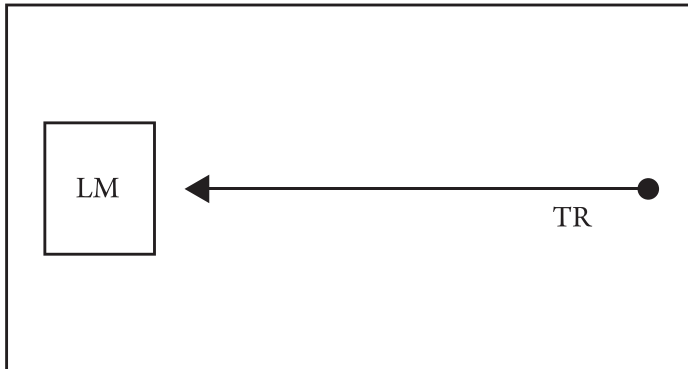The "rearward" value of *re-* can thus be represented as in Figure 3:

Figure 4.3: Image schema defining the 'rearward' meaning of *re-*.

In a group of motion verbs (mostly intransitives, except *redigo* 'to drive, lead or bring back', *reduco* 'to lead or bring back, to conduct back', *remitto* 'to send back, let go back', *repono* 'to replace, restore') the spatial value of *re-* is 'back to the previous place', i.e., it is typically found expressing a reditive (or returnative) relation, in which a TR brings about a counter-directional change of location towards a LM further specified as a 'previous place'. Thus, we are not dealing with a simple rearward trajectory, but, with a proper 'return'. A proper return can be defined as a complex event presupposing a movement away from a place (the TR is no longer in a place) and denoting a movement back to that place (the TR is in that place "again", cf. Lichtenberk, 1991: 499–500). Within this situation, the *re*-verb expresses an action which reverses the effect of another action that took place in the opposite direction. The entire situation can be thus represented as in Figure 4, where the dotted arrow symbolizes the first phase of the "return" situation (F1), while the continuous arrow depicts the value of the *re*-verb (R).
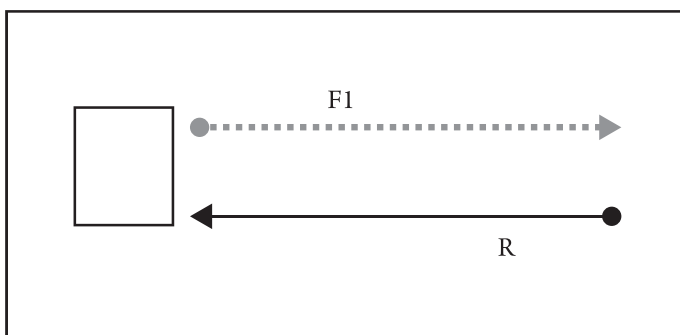

Figure 4.4: Image schema defining the reditive meaning of *re-*.

It is worth-noting that this spatial trajectory has a necessary iterative, that is aspectual, implication: if the TR goes to a place where it has already been, this necessarily implies that the TR goes to that place *again*, *one more time*, *anew*, entailing, in other words, the repetition of the action of going. Therefore in the reditive semantics of the prefix, the spatial and iterative value are closely inter-related and generate an interpretation of *re*-verbs which is ambivalent with respect to space/aspect values, as in (6)–(9):

(6) ALC. *nam* *quid* *ille*
    in.fact why that:NOM.M.SG
revortitur *qui* *dudum* *properare*
turn.back:PRS.3SG REL.NOM.M.SG a.short.time.ago hasten:INF.PRS.
se *aibat?* . . . *ecastor* *med*
REFL.ACC say:IMPRF.3SG INTERJ I:ACC.SG
haud *invita* *se* *domum*
not unwilling:NOM.F.SG REFL.ACC house:ACC.F.SG
recipit *suam.*
take.back:PRS.3SG POSS.3SG.ACC.F
SOS.*Amphitruo,* *redire* *ad*
    Amphitruo:NOM.M.SG go.back:INF.PRS at/to
navem *meliu=st* *nos.* (Plaut. *Amph.* 660–64)
ship:ACC.F.SG better=be:PRS.3SG we:ACC
'ALCUMENA What in the world is he back for so soon after saying he must hurry off! . . Bless his heart, I have no objection to his coming home again.
SOSIA Maybe it is better for us to go back to the ship, Amphitruo'.

(7) *omnia,* *qui* *usus erit,* *in*
all:ACC.N.PL REL.NOM.M.S use:FUT.PRF.3SG in(to)
suo *quidque* *loco*
POSS.ABL.M.3SG every:ACC.N.SG place:ABL.M.SG
reponito. **(**Cato *Agr.* 68.1.5).
put.back:IMP.FUT.2SG
'Put back in the proper place all the things you used'.

(8) *cura* *quam* *optume*
take.care:IMP.PRS.2SG as.much.as best:ADV
potes./ *bene* **ambula**
can:PRS.2SG well walk:IMP.PRS.2SG
et **redambula**. (Plaut. *Capt.* 900)
and walk.back:IMP.PRS.2SG
'Take care of everything the best you can./ Have a nice walk there and back'.

In (6), Jupiter has recently left Alcmena's bed in the shoes of her husband Amphitruo. Meanwhile the real Amphitruo returns home with his servant Sosia, Alcmena wonders why he is back (*revorto*) so early and says she is not ill-disposed on this coming back home again (*recipio*). Sosia, who has already had a hint of Zeus' trick, suggests that Amphitruo returns (*redeo*) to the ship of which he is the commander. Thus, in (6) *re*-verbs are all used to indicate a movement that takes place in the opposite direction compared to that of another movement that has already been accomplished earlier. Therefore, the prefix *re*- added to a motion verb marks not only the opposite direction, but also the return to a place where the TR has previously been. This results in a backwards motion also exemplified in (7), where the proper place of a moveable TR has been restored, and (8) in which the entire return situation is expressed by means of the simplex verb *ambulo* and the hapax legomenon *redambulo*.

4.5.2 Abstract values

In addition to the spatial meanings (in points 1 and 2 below there is the list of verbs with such meaning found in my corpus), the analysis of my data divides the semantic space of the prefix into four further zones:

1. 'back' (rearward)
   repello 'to thrust back', *replico* 'to fold back', *reprimo* 'to press back', *repudio* 'to reject', *respicio* 'to look back', *respecto* 'to look back', *retraho* 'to draw back'.

2. 'back to the previous or original place' (reditive)
   rebito 'to turn back, return', *recedo* 'to go back, retire', *reconcilio* 'to bring back', *recipio* 'to take back', *recurro* 'to run back', *redambulo* 'to walk back', *redeo* 'to go back', *redigo* 'to drive back', *reduco* 'to lead back', *refero* 'to bring back', *regredior* 'to step back', *reicio* 'to throw back', *remeo* 'to go/come back', *remigro* 'to journey back', *remitto* 'to send back', *removeo* 'to move back, remove', *reveho* 'to carry or bring back, to convey back', *revenio* 'to come back', *reviso* 'to look back', *reverto* 'to turn back'.

3. 'back to the previous (resultant) state or condition' (restitutive)
   reconcinno 'to set right again, repair', *redipiscor* 'to get again, to regain, recover', *renascor* 'to be born again; to grow, rise, or spring up again', *reperio* 'to find, meet with, find out', *reposco* 'to demand back', *repuerasco* 'to become a boy again', *resipisco* 'to recover one's senses, come to one's self again', *respiro* 'to blow or breathe back', *restituo* 'to replace in its former position, or (more frequently) to restore to its former condition'.

4. 'again-and-more' (repetitive, intensive)
   recogito 'to think over, consider, reflect upon', *recondo* 'to put back again', *recreo* 'to remake, reproduce, restore', *redauspico* 'to take the auspices anew or again', *refrico* 'to rub or scratch open again', *refringo* 'to break, break in pieces, break off', *refrigesco* 'to grow cold or cool', *remoror* 'to hold back, stay, detain, obstruct,

hinder, delay, defer', *reparco* 'to spare, to refrain or abstain from', *resecro* 'to implore repeatedly', *reservo* 'to keep back, save up', *resideo* 'to sit back, remain sitting; to remain behind', *resisto* 'to stand back, remain standing, to remain fixed in a position', *repleo* 'to refill; to fill up, replenish, complete', *reprehendo* 'to hold back, hold fast, take hold of', *reputo* 'to reckon; to think over, ponder, meditate, reflect upon', *resecro* 'to pray or beseech again, to implore repeatedly', *reservo* 'to keep (a matter, etc) back for future use, action or consideration', *resideo* 'to be or remain seated', *resto* 'to remain where one is, linger, stay put', *retineo* 'to hold fast'.

5. 'in return, in reply' (responsive)

   reddo 'to give back, restore (something taken away, borrowed, etc).', *redhibeo* 'to return (a defective purchase to the vendor); (of a vendor) to take back (a defective purchase)', *redimo* 'to buy back (something previously disposed of)', *referio* 'to strike in return, hit back', *renuntio* 'to take or send back a message', *resolvo* 'to pay back', *repromitto* 'to promise back', *respondeo* 'to speak in answer to a question, to reply', *reticeo* 'to refrain from speaking, to give no reply (to)', *revereor* 'to feel abashed before (a superior, or other person who exercises a restraining influence), to feel dismay in the face of'.

6. reversive

   recharmido 'to cease to be Charmides, to *un-Charmidize*', *recludo* 'to open, unlock', *resigno* 'to break the seal of, unseal', *restringo* 'to draw back the covering from (something concealed, usu. the teeth); also, to draw back (that which covers)'.

The situation outlined in this list is quite consistent with what has been analysed in the relevant literature, with a significant difference with respect to the iterative value, usually cited among the most central values of the prefix and here instead unified with the intensive value, which is in turn usually considered very unproductive. Pottier (1962: 287), for example, claims that intensification is not represented much in Latin and that it will take a great extension in Romance languages, in which it has already formed words such as Spanish-American *rebramar* 'to bellow loudly', *rebueno* 'very good', Portuguese *revelho* 'very old', *remilhor* 'much better', *remuito* 'in the highest degree', Italian *ribollire* 'to boil over', *ripieno* 'filled, stuffed'. García Hernández (1980: 198–199), instead, considers the intensive value among the abstract meanings of *re-* (e.g., in *reformido* 'to fear greatly' vs. *formido* 'to fear') and argues that sometimes such intensive modification shows a peculiar durative effect as exemplified by *resisto* vs. *sto*.

When applied to bases that do not express any spatial semantics, *re-* easily undergoes some extensions. My claim is that that these extensions take place starting from the reditive schema depicted in Figure 4.

With some change-of-state verbs, such as *resipisco* 'to recover one's senses, come to one's self again', *repuerasco* 'to become a boy again', *renascor* 'to be born again; to grow, rise, or spring up again', the reditive trajectory is specified in a more abstract

sense, according to the metaphor 'CHANGE OF STATE IS CHANGE OF DIRECTION' (Lakoff, [1993] 2006: 204; Lakoff & Johnson, 1999: 179–183). Therefore, in these cases *re-* shows a restitutive semantics: it indicates a return to a previous state, that is, as happens in the reditive situation illustrated above, the action expressed by the *re-*verb reverses the effect of another action which has already taken place in the opposite direction. In the case of change-of-state verbs this reversal determines the restitution of a former state, as in (9)- (11).

(9)　*ne*　　　*tu*　　　　　*hercle*
　　　NEG　　you:NOM.SG　INTERJ
　　　sero,　*opinor,*　　　　　　　　**resipisces***:*
　　　late　　suppose:PRS.DEP.1SG　regain.consciousness:SBJV.PRS.2SG
　　　si　*ad*　　*erum*
　　　if　　at/to　master:ACC.M.SG
　　　haec　　　　*res*　　　　　　*prius* †
　　　this:NOM.F.PL　thing:NOM.F.PL　formerly
　　　devenerit,　　　　　　　　*peribis*　　　　*pulchre.* (Plaut. *Mil.* 403–404)
　　　come.from:FUT.PRF.3SG　die:FUT.2SG　beautifully
　　　'By Hercules, I verily believe you'll come to your senses when it is too late. If this matter should only reach our master, you certainly are undone'.

(10) *senex*　　　　　　　*quom*　　*extemplo*
　　　old.man:NOM.M.SG　when　　as.soon.as
　　　est,　　　　*iam*　　　*nec*
　　　be:PRS.3SG　no.longer　NEG
　　　sentit　　　　　　　*nec*　*sapit,*
　　　have.sense:PRS.3SG　NEG　have.taste:PRS.3SG
　　　aiunt　　　　*solere*　　　　*eum*
　　　say:PRS.3PL　use.to:INF.PRS　DEM.ACC.M.SG
　　　rursum　**repuerascere**.　　　(Plaut. *Merc.* 296)
　　　again　　become.a.child.again:INF.PRS
　　　'Directly a person is old, no longer has he sense or taste; people say that he has become a child again'.

(11) *manibus*　　　　*carpito,*　　　　　*id*
　　　hand:ABL.F.PL　pick:IMP.FUT.2SG　DEM.NOM.N.SG
　　　renascetur*:*　　　　　　　　*quod*　*falcula*
　　　be.born.again:FUT.DEP.3SG　for　　small.hook:ABL.F.SG
　　　secueris,　　　　*non*　**renascetur**. (Cat. *Agr.* 54.3.4)
　　　cut:FUT.PRF.2SG　NEG　be.born.again:FUT.DEP.3SG
　　　'Pull the clover by hand and it will grow again, for if you cut it with the hook it will not'.

Also in this case the backward trajectory results in an iterative implication: if a previous state is restored, the TR is necessarily found in the resultant state of the *re*-verb one more time, again. In other words, the action expressed by the restitutive *re*-verb also expresses the repetition, in the opposite direction, of the action that it reverses, and the state to which the TR returns is interpreted as a re-instantiation of a former state (cf. Vicario, 2005 on the same value of the prefix *ri-* in Italian).

The iterative value of *re-*, therefore, is always implicational in this language *stratum* (or at least in my corpus). Moreover, the iterative sense diachronically overrides the original spatial semantics: languages that have prefixes variously derived from Latin *re-* in fact use them almost entirely with the meaning of 'again, one more time' (English re*start*, French re*démarrer,* Spanish re*iniciar*, Italian ri*cominciare*). This meaning, however, never occurs alone, but it is always related to some other value. In some verbs, especially in the Plautine corpus, *re-* shows an intensive component 'more' which is further clarified according to the semantics of the base. It may, in fact, consist of an increase in duration, force, quantity or quality of the event/state denoted by the simplex. This intensive value has been traced back (cf. Moussy, 1997: 238; Pottier, 1962: 318–319) to the repetitive value of the prefix: I claim that the repetition implied in the reditive trajectory may induce the intensification of the meaning of the *re*-verb according to the following pattern: 'back' → 'again' → 'more'(→ 'better'); the original spatial meaning of the prefix is bleached and the entire metaphorical path can be described as a quantitative increase along the temporal axis (cf. the description of the intensive value of *per-* in Brucale & Mocciaro, 2017).[16] The 'back' → 'again' → 'more' (→ 'better') pattern here identified is based on empirical observation that doing something more than once can mean either prolonging action over time, or acting with greater strength or effectiveness. This observation is also confirmed in studies on verbal plurality (Dressler, 1968) or pluractionality (Wood, 2007; Mattiola, 2017, *inter al.*) whereas "pluractionality is a phenomenon that marks the plurality or multiplicity of the situations (i.e., states and events) encoded by the verb through any morphological means that modifies the form of the verb" (Mattiola, 2017: 120). Wood (2017: 15), for example, notes that "an intensive meaning is a relatively common secondary meaning of categories indicating repetition" and Mattiola (2017) lists among the additional functions of pluractionals the expression of degree modification within the situation, i.e., the encoding of an alteration of its typical development whose most recurrent function is intensity. The individuated

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16 In Brucale & Mocciaro, 2017 it was already noted about *per-* that verbal prefixation results in the intensification of the simplex verb value. García Hernández, 1985: 521 notes that almost all Latin pre-verbed verbs may express the intensification of the event/ state denoted by the simplex. Then, García Hernández, 1989: 153–155 offers an interesting parallel between spatial and aspectual sequences. Extending this argument to our case, we could say that the iterative aspect can be conceptualized as a space which has been re-entered by a TR that has previously left the same space.

pattern is also consistent with the definition of intensification found in Dressler & Merlini Barbaresi (1994: 416), according to which intensification is an increase in quantity or quality ('very/extremely'). Related to increase in quality is increase in precision or accuracy ('really/properly').

With some durative verbs denoting states, such as *resto, restito, resideo*, the increase conveyed by the intensive *re-* can be interpreted as an increment in time. In these cases, the prefix acts on the durative component of the base prolonging the duration of the state or the process, as is apparent from the comparison between the simplex and the derivative in (12) and (13):

(12) *postridie   eius   diei   uilicum*
    the.next.day DEM.GEN.M.SG day:GEN.M.SG farmer:ACC.M.SG
    uocet,   roget   quid   operis
    call:SBJV.PRS.3SG ask:SBJV.PRS.3SG what:NOM.N.SG work:GEN.N.SG
    siet   factum,   quid
    be:SBJV.PRS.3SG make:PTCP.PRF.NOM.N.SG what:NOM.N.SG
    restet. (Cat. *Agr.* 2.1.6)
    stand.still:SBJV.PRS.3SG
    'Let him call in his overseer the next day and inquire of him what part of the work has been completed, what **remains** undone'.

(13) *columellam   ferream,   quae*
    pillar:ACC.F.SG made.of.iron:ACC.F.SG REL.NOM.F.SG
    in   miliario   stat,
    in(to)   mile-stone:ABL.N.SG stay:PRS.3SG
    *eam   rectam   **stare***
    DEM.ACC.F.SG straight:ACC.F.SG stay:INF.PRS
    oportet   in   medio
    it.is.necessary in(to) middle:ABL.N.SG
    ad   perpendiculum. (Cat. *Agr.* 20.1.2).
    at/to   plumb.line:ACC.N.SG
    'The iron pivot which stands on the post must **stand** straight upright in the center'.

With bases denoting actions performed with a certain degree of force, repetition results in an increase in this force, as in *frico/ refrico* and *frango/ refringo*. See examples in (14), in which *refringo* is intensive also with respect to *confringo* in the same context, constrasted with (15) which contains the simplex:

(14) *aulas   calices=que   omnes*
   pot:ACC.F.PL cup:ACC.M.PL=and all:ACC.PL
   confregit,   *nisi   quae*
   break:PRF.3SG if.not that:NOM.F.PL
   modiales   *erant . . .*   *cellas*
   containing.a.peck:NOM.PL be:IMPRF.3PL cellar:ACC.F.PL
   refregit   *omnis*   *intus*
   break.in.pieces:PRF.3PL all:ACC.F.PL inside
   reclusit=que   *armarium.* (Plaut. *Capt.* 916–918)
   open:PRF.3SG=and closet:ACC.N.SG
   'All the pots and cups he broke, except those that held a couple of gallons . . . all
   the cellars in the house he has smashed into, and has laid the store-closet open'.

(15) *qui*   *e*   *nuce*   *nuculeum*
   REL.NOM.M.SG from nut:ABL.F.SG kernel:ACC.M.SG
   esse   *volt,*   ***frangit***   *nucem.* (Plaut. *Curc.* 55)
   eat:INF.PRS want:PRS.3SG break:PRS.3SG nut:ACC.F.SG
   'The man that wants to eat the kernel, cracks the shell'.

The quantitative increase may also produce qualitative progress, well described by
the metaphor 'MORE IS BETTER' (Lakoff & Johnson, 1980: 22). This is the case of some
activity verbs, such as *cogito/ recogito*, *puto* 'to reckon, consider; to think (that)'/
reputo 'to think over, ponder, meditate, reflect upon'. (16) is an example that contains
both the *re*-verb and the simplex:

(16) *aequom*   *esse*   ***putat,***   *non*
   fair:ACC.N.SG be:INF.PRS consider:PRS.3SG NEG
   reputat   *laboris*   *quid*
   reflect.upon:PRS.3SG labour:GEN.M.SG what:ACC.N.SG
   sit. (Plaut. *Amph.* 172)
   be:SBJV.PRS.3SG
   'He thinks that this is the fair thing, and doesn't ponder what the labor is'.

Nevertheless, the iterative specification implied in reditive, restitutive and intensive
derivatives can also be backgrounded in the semantics of *re*-verbs. This is the case
of two groups of verbs found in my corpus. In the first, containing verbs like *reddo,
redimo, referio, renuntio, repromitto, resolvo, respondeo, reticeo, revereor*, the prefix

expresses a "responsive" value.[17] Mostly activity verbs are being dealt with, some of them denoting trading activities, in which the modification imposed by the prefixation results in a relationship of dependency of the action of the *re*-verb on another action that may be either expressed by the simplex verb or by another verb. *Re*-, therefore, in these cases, does not convey any iterative implication, but specifies that the action expressed by the verbal base is done in return, in reply, with respect to another action or situation. The most illustrative case of this value is *reddo* in (17), where Calidorus asks Pseudolus to give (*do*) him a coin with a promise to give it back (*reddo*) the next day. However, it can also be seen in the case of *respondeo* in (18), used in relation to *spondeo* in the previous verse, and *resolvo* in (19), in which it is established that the contractor must pay back the owner for the damage he could potentially have done.

(17) *sed   potes   nunc mutuam*
    but   can:PRS.2SG now   borrowed:ACC.F.SG
    *drachumam   **dare**   unam   mihi,*
    drachma:ACC.F.SG give:INF.PRS   one:ACC.F.SG I:DAT
    *quam   cras   **reddam**   tibi?* (Plaut. *Ps*. 86)
    REL.ACC.F.SG tomorrow give.back:FUT.1SG you:DAT.SG
    'But can you lend me just a single shilling now, which I shall give you back tomorrow?'

(18) ERGASILUS **spondesn**'   *tu*   *istud?*
              promise:IMP.PRS.2SG=INT   you:NOM.SG   that:ACC.N.SG
    HEGIO **spondeo**.
          promise:PRS.1SG
    ERG. *at   ego*
        but   I:NOM
    tuom   tibi   advenisse
    your:ACC.M.SG you:DAT.SG come.to:INF.PRF.
    *filium   **respondeo**.* (Plaut. *Capt*. 898–900)
    son:ACC.M.SG promise.in.return:PRS.1SG
    'ERG. I have your word on that?
    HEG. My word.
    ERG. And for my part, my word to you is your son has arrived'.

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17 García Hernández, 1980: 193 refers to the same value of these *re*-verbs as expressing a "subsequent complementary action"; Moussy, 1997: 233 follows the traditional literature and calls the same value "reciprocal".

(19) *si quid   redemptoris   opera*
    if what:NOM N.SG contractor:GEN.M.SG work:ABL.F.SG
    domino   damni   datum erit,
    master:DAT.M.SG damage:GEN.N.SG give:FUT.PRF.3SG
    ***resoluito*. (**Cat. *Agr.* 144.3.2)
    pay.back:IMP.FUT.2SG
    'Whatever damage is done the owner through the fault of the contractor the latter
    will pay back'.

The relationship of this value with the reditive is apparent with regard to the parameter of directionality: as noted by Zwarts & Basso (2016) about the articulation of the counter-directional domain, in the responsive value "a previous path of action from B to A is followed by a path of action from A to B". Thus, in this case the responsive sense of *re-* is an instance of the metaphor 'ACTION IS MOTION' (Lakoff & Johnson, 1980).

The second group of verbs in which the iterative implication of the prefix is backgrounded consists of properly reversive verbs in which *re-* extends its directional semantics in a further more abstract sense. In my corpus only four verbs of this kind are found, all in Plautus: *recludo* 'to open, unlock' which is opposed to *claudo* 'to close', *resigno* 'to unseal' opposed both to *signo* and *opsigno* 'to seal', *restringo* 'to draw back, unfasten, unclose, open' opposed to *stringo* 'to draw tight, to bind or tie tight; to draw, bind, or press together', and finally *recharmido* 'to cease to be Charmides, to uncharmidize' opposed to *charmidor* 'to change someone into Charmides, to charmidize', exemplified in (20)–(23). In all these cases, the reversive meaning can be explained starting from the reditive schema depicted in Figure 4: the trajectory in the opposite direction to that expressed by the simplex undergoes an abstractive process implicated in the metaphor 'CHANGE OF STATE IS CHANGE OF DIRECTION' and has as its effect a reversal in meaning of the simplex by which the re-verb comes to express a resultant state which is opposite to that denoted by the simplex. Although not particularly common, this value must still have been productive and present to the Latin speaker:

(20) *pergam   pultare   ostium.   heus, **reclude**,*
    go.on:FUT.1SG beat:INF.PRS door:ACC.N.SG hey   unlock:IMP.PRS.2SG
    *heus, Tranio,   etiam=ne **aperis**?* (Plaut. *Most.* 937)
    hey   Tranio:VOC also=Q   open:PRS.2SG
    'I'll keep on dinging at the door . . . Hey, unlock! Hey, Tranio, open up, will you?'

(21) *iam   si **opsignatas***
    already if seal:PTCP.PRF.ACC.F.PL
    non feret,   dici
    NEG bring:FUT.3SG say.INF.PRS.PASS

hoc   potest,   apud
this:NOM.N.SG can:PRS.3SG   towards
*portitorem   eas   **resignatas***
toll-gatherer:ACC.M.SG DEM.ACC.F.3PL   unseal:PTCP.PRF.ACC.F.PL
sibi   inspectas=que   esse. (Plaut. *Trin.* 793–795)
REFL.DAT   look.into:PTCP.PRF.ACC.F.PL=and be:INF.PRS
'Then, if he should bring them not sealed at all, this might be said, that they had been unsealed for him by the custom-house officers'.

(22) *ne   canem   quidem irritatam*
NEG dog:ACC.SG   even   inritate:PTCP.ACC.F.SG
voluit   quisquam   imitarier,   saltem,
want:PRF.3SG any.one:NOM.M.SG imitate:INF.PRS.PASS at.least
si   non arriderent,   dentes
if   NEG laugh.at:SBJV.IMPRF.3PL   tooth:ACC.M.PL
*ut   **restringerent**.* (Plaut. *Capt.* 486)
as/so.that unclose:SBJV.IMPRF.3PL
'No one was even willing to imitate an angry dog and at least bare their teeth if they wouldn't smile at me'.

(23) *proin   tu   te,   itidem*
just.so you:NOM.SG   you:ACC.SG   in.the.same.way
*ut **charmidatus** es,   rursum **recharmida**.* (Plaut. *Trin.* 977)
as charmidize:PRF.DEP.2SG again   un-charmidize:IMP.PRS.2SG
'So the same way you got charmidized, go get un-charmidized again'.

In (20), Faniscus knocks long at the door of the Teopropides' house believing that his master was guzzling there; since no one responds, Faniscus starts asking repeatedly for someone to open the door. Plautus uses the verbs *recludo* and *aperio* which are therefore treated as perfectly synonymic. *Recludo* occurs four other times in my corpus always in events of opening something with a door, the house, as in (15) (and also in *Most*. 452, *Poen*. 729, *Rud*. 413) or a closet (in *Capt*. 918). Plautus uses *aperio* more often in the same contexts, occurring 55 times in Plautus and 5 in *de Agricultura*. It is likely that the perfect synonymy of the two verbs, along with the prevalence of the iterative/ intensive value, has contributed to obscure the reversive meaning of *recludo* in later phases of Latin.

In (21), *resigno* is used in opposition to *opsigno*, where *ob-* seems to have an intensive meaning (cf. García Hernández, 1980: 173). Megaronides speaks to Callicles and hypothesizes that some letters that they expect to arrive sealed (*opsignatas*) may, rather, arrive *unsealed* (*resignatas*) and that the messenger who brings them might have a good excuse for this (they were checked by the customs officers). In this case

the reversive interpretation of the *re*-verb is made clear by the presence of its opposite in the same context.

(22) is found in the context of a monologue in which Ergasilus complains about the low esteem in which "fixers" like him have fallen. He recounts an episode in which he tries to convince a group of wealthy young people to offer him lunch. They ignore him, do not even pretend to smile at his jokes and do not even open up their lips showing teeth (*restringo*) as a mad dog would do. The case of *restringo* is particularly interesting because Plautus uses it only once in this reversive meaning that Lewis & Short (1963) define as rare (also found in Quintilian, *Declamationes Maiores* 12.27.8: *restrictis labris*). Instead *restringo* is normally used with an intensive meaning compared to the simplex. This latter is attested in *de Agricultura* (where we also find *destringo* 'to strip off') but not in the Plautine corpus in which instead *prae-*, *ob-, inter-, ad-, con-*, and finally *dis- stringo* are attested.

The case of *charmido* e *recharmido* in (23) is particularly interesting: it is in fact a type of derivative which in the classification proposed by Kanngiesser (1987: 10) is defined "designative/episodically relevant", i.e., an extemporaneous morphological construction, typical of speech and particularly imaginative speakers, characterized by a semantics relative to a highly specific context. Because of this characterization, therefore, while it is inevitable that the couple *charmido*/*recharmido* cannot be fixed in the Latin lexicon, such an ad-hoc invention can testify the existence of a productive word-formation rule which must have been available in the system of those encoding and decoding that *hapax*.

Finally, some *re*-verbs, especially in Plautus, do not seem to mean anything different from the simplex. This situation is also recognized by Moussy (1997: 239), who in this regard reports an interesting passage in which Servius commenting on a passage in Aeneid 12.35–6 containing *recaleo*, wonders if in this case prefixation is "unnecessary" or whether it expresses repetition (*recalent pro calent: re enim superflua compositio est uerbi. Aut recalent iterum calent... re enim iterationis obtinet uicem*). The passage is interesting because it reports the judgment of a Late Latin educated speaker (of between the fourth and fifth centuries) that captures an ambiguity, probably triggered by the prevalence of the iterative implication of the prefix, which is selected at the expense of other values.

In my corpus, two *re*-verbs do not seem to change anything in their meaning compared to simplexes. This is the case of *linquo/relinquo* "to leave (back) and *quiesco/requiesco* "to rest".

As for *linquo/ relinquo*, the former is much less frequent than the second. Cato never uses it, in Plautus it is found with a meaning which is not easy to distinguish from that expressed by *relinquo*, as can be seen in (24) - (25):

(24) *hoc*　　　　　*est*　　　　*eorum*　　　　*opus,*
　　this:NOM.N.SG　be:PRS.3SG　DEM.GEN.M.PL　work:NOM.N.SG
　　ut　　　　*mavelis*　　　　*lupos*　　　　*apud*
　　as/so.that　prefer:SBJV.PRS.2SG　wolf:ACC.M.PL　　towards
　　ovis　　　**linquere,**　　　*quam*　*hos*
　　sheep:ACC.F.PL　leave:INF.PRS　　than　this:ACC.M.PL
　　domi　　　*custodes.* (Plaut. *Ps.* 140)
　　home:LOC　keeper:ACC.M.PL
　　'This is the way they work it, and the result is you'd rather leave wolves in charge of sheep than these chaps in charge at home'.

(25) *eum*　　　　*roga,*　　　　*ut*　　　**relinquat**
　　DEM.ACC.M.PL　ask:IMP.PRS.2SG　as/so.that　leave:SBJV.PRS.3SG
　　alias　　　*res*　　　*et*　*huc*　*veniat.*　　(Plaut. *Rud.* 1212)
　　other:ACC.F.PL　thing:ACC.F.PL　and　here　come:SBJV.PRS.3SG
　　'Ask him to leave everything else and come here'.

The same difficulty is encountered in the interpretation of the semantic difference between *quiesco* and *requiesco* (in 26–27):

(26) *ibi*　*cenavi*　　*atque ibi*　　**quievi**
　　there　dine:PRF.1SG and　there　rest:PRF.1SG
　　in　*navi*　　　*noctem*　　　*perpetem.* (Plaut. *Amph.* 732)
　　in(to)　ship:ABL.F.SG night:ACC.F.SG long.lasting:ACC.F.SG
　　'I took dinner there and spent the whole livelong night there on board my ship'.

(27) APOECIDES *recipe*　　　　　　　*anhelitum.*
　　　　　　take.back:IMP.PRS.3SG　　　　breath:ACC.M.SG
　　PERIPHANES *clementer,* **requiesce**. (Plaut. *Epid.* 205)
　　　　　　calmly　　rest:IMP.PRS.2SG
　　'APOECIDES Get your breath.
　　PERIPHANES Easy, easy, rest yourself'.

Both pairs include durative verbs in which prefixation may have had an intensive value, more precisely may have acted as an intensifier of the duration (such as the one described before regarding *resideo* and *resto*), which was subsequently fully opacified to be completely indistinguishable and to coincide with the meaning of the simplex.

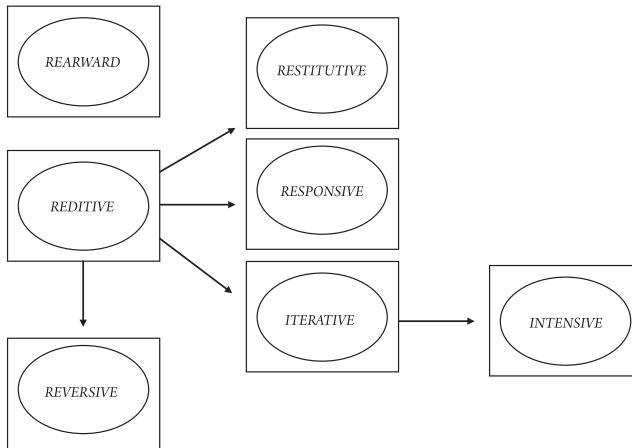The entire semantic network of *re-* can now be represented as in Figure 5.

Figure 5: The semantic network of *re-*.

4.6 *Dis-* data

The original meaning of *dis-* has been described by Ernout & Meillet ([1932] 2001: 176) as expressing separation/division into two parts, deviation, direction in opposite senses and, consequently, contrariness, opposition, and negation. On the basis of this description, the basic meaning of *dis-* can be depicted as a trajectory in which a TR normally associated with a dynamic verb moves away from a place in two opposite directions, d_1 and d_2 (see Figure 6).[18]

As in the case of *re-*, although through a completely different trajectory, such a dynamic event implies the removal of the TR from the location which constitutes the source of motion. Moreover, the subsequent location in two opposite directions will also have a restrictive effect on the selection of possible types of TRs: since only a few entities of reality can move simultaneously in two opposite directions, this ontological characteristic will result in the selection of uniplex internally separable TRs (air, for example) or, more frequently, of multiplex TRs that will undergo a separation induced by the basic semantics of *dis-*. The separation results in a new distant collocation of the entities that constitute the TR, which come to be placed in opposite points of space. According to García Hernández (1980: 152–153), in this "dissociative" value *dis-* is systematically opposed with *cum-*, having instead a basic "sociative" value as in *diverto* vs. *converto*.

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18 An analogue representation is found in Pottier, 1962: 279.
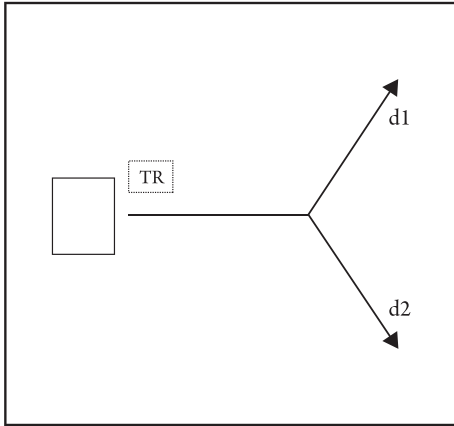
Figure 6: Schematic meaning of *dis-*.

While the basic spatial sense of the prefix is little attested in my corpus, in many cases the basic meaning undergoes a semantic shift within the spatial domain that modifies the motion in two different directions (d_1 and d_2 in Figure 6) as diffuse motion in space (dn). This is represented in Figure 7, where a typically multiplex TR moves away/apart from the source of motion to be distributed along two (d_1 and d_2) or more (dn) different directions.
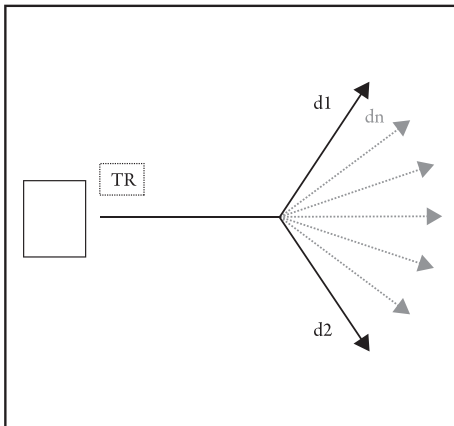

Figure 7: Spatial meaning of *dis-*.

If the TR is supposed to move in two or more directions, this motion can easily result in a scattering in space, as I try to picture in Figure 7. This implication is often induced by the semantics of the base, which is often a verb indicating diffuse motion in space like *difflo* 'to blow apart, disperse by blowing' (based on *flo* 'to blow').

(28) *nempe illum   dicis   cum*
    indeed that:ACC.M.SG say:PRS.2SG with
    armis   aureis,   cuius   tu
    armor:ABL.F.PL golden:ABL.F.PL REL.GEN.M.SG you:NOM.SG
    *legiones   **difflavisti**   spiritu,   quasi*
    legion:ACC.F.PL blow.apart:PRF.2SG breathing:ABL.M.SG as.if
    ventus   folia   aut paniculum
    wind:NOM.M.SG leaf:ACC.N.PL or   tuft.of.a.panicle:ACC.N.SG
    tectorium. (Plaut. *Mil.* 17)
    covering:ACC.N.SG
    'Of course you mean that one with the golden armor whose legions you puffed
    away with a breath, much as the wind does with leaves, or a thatch roof?'

The trajectory of motion results in the separation of the entities that constitute the
internally separable TR which, moving in different directions, are located far from
each other. Accordingly, in this "diffuse" context *dis-* extends its original bidirectional
trajectory into a multiple one. As we will see shortly, this multiplicity can undergo a
shift towards a more abstract value of intensification similar to that observed for *re-*.

In addition to the spatial meaning (point 1 below includes the list of verbs with
this meaning found in my corpus), the analysis of my data divides the semantic space
of the prefix into further zones:
1) motion away from a place in opposite or different directions:
    difflo 'to disperse by blowing', *diffundito* 'to pour out, scatter, spread; to be
    consumed, wasted', *diiungo* 'to unyoke', *dimitto* 'to send away', *discedo* 'to part
    asunder, divide, separate', *dispalesco* 'to spread about', *dispello* 'to pull apart',
    dispenno 'to spread out', *dispenso* 'to distribute', *dispicio* 'to see through all
    parts', *dissipo* 'to spread abroad, scatter, disperse';
2) abstract reversivity:
    diffido 'to be diffident, to distrust', *discingo* 'to ungird', *disconducit* 'not to
    be profitable', *discordo* 'to disagree', *displiceo* 'to displease, be dissatisfied',
    dissimulo 'to dissemble, disguise', *dissuadeo* 'to advise against';
3) intensification of the action/state expressed in the base:
    dilacero 'to tear to pieces', *dilido* 'to smash into pieces', *diluo* 'to wash to pieces,
    wash away; to dissolve', *diminuo* 'to break into small pieces, to dash to pieces',
    diripio 'to tear asunder, tear in pieces', *discindo* 'to tear or cleave asunder',
    discrucior 'to torture violently, to torment', *discupio* 'to desire greatly, to long for',
    dispercutio 'to dash out', *disperdo* 'to destroy', *dispudet* 'to be greatly ashamed',
    disrumpo 'to break to pieces', *distaedet* 'to be very tired of, disgusted with',
    distimulo 'to run through, waste, consume', *distraho* 'to pull asunder, tear in
    pieces, part, divide', *distrunco* 'to cut to pieces'.

The situation outlined in this list is quite consistent with what has been analysed in the relevant literature. However, there is a significant difference regarding the value of intensification, which is often considered peripheral, as in Ernout & Meillet ([1932] 2001: 176) (cf. also Lewis & Short, 1963, "in a few words *dis*- acquires an intensive force"), but actually highly salient within the semantic structure of the prefix, at least in my corpus, as evinced by the large number of words in which this meaning appears. The lists in 2 and 3 above include verbs in which *dis*- undergoes two different types of extension towards more abstract values: in one case towards the domain of directional opposition/ reversivity, in the other towards the domain of intensification. I claim that these extensions originate starting from the spatial configuration depicted in Figures 6 and 7 respectively.

As regards reversivity, with verbs of induced motion such as *diiungo* in (31) or *dispello* in (32), the TR assumes an opposite configuration with respect to that expressed by the simplex (in 29) or from the derivative with *cum*- (in 30 and 32). The examples thus illustrate both the original spatial semantics of *dis*-, and its role in the creation of directional opposites both of the unary and binary kind.

(29) *in   iis   tignis   parietes*
in(to) DEM.ABL.N.PL stick.of.timber:ABL.N.PL wall:ACC.M.PL
extruito   iungito=que   materiae,   uti
build.up:IMP.FUT.2SG join:IMP.FUT.2SG=and timber:DAT.F.SG as/so.that
oneris   satis   habeat. (Cat. *Agr.* 18.6.3)
load:GEN.N.SG enough have:SBJV.PRS.3SG
'And on these timbers build a wall and join it to the timber to give it sufficient weight'.

(30) *facito   iis   medullam   cum*
make:IMP.FUT.2SG   DEM.DAT.M.PL pith:ACC.F.SG   with
medulla   coniungas   artito=que
pith:ABL.F.SG   bind.together:SBJV.PRS.2SG wedge:IMP.FUT.2SG=and
ea   qua   terebraueris   alterum   ex
DEM.ACC.N.PL where   bore:FUT.PRF.2SG one.of.two:ACC.M.SG from
altera   parte. (Cat. *Agr.* 41.3.4)
one.of.two:ABL.F.SG side:ABL.F.SG
'Join pith to pith, and fit them into the perforation, one on each side'.

(31) *da,   meus   ocellus,   mea*
give:IMP.PRS.2SG my:VOC.M.SG little.eye:VOC.M.SG my:VOC.F.SG
rosa,   mi   anime,   mea
rose:VOC.F.SG my:VOC soul:VOC.M.SG my:VOC.F.SG
voluptas,   Leonida,   argentum   mihi,
pleasure:VOC.F.SG Leonida:VOC money:ACC.N.SG I:DAT

*ne   nos   **diiunge**   amantis.* (Plaut. *As.* 665)
NEG   we.ACC   unyoke:IMP.PRS.2SG   love:PTCP.PRS.ACC.PL
'Pay, my fine eyelet, my rosy rose, my dear heart, my sweet pleasure, Leonida . . . the cash . . . to me . . . Don't unyoke us, we are lovers'.

(32) *qui   hos=ce   amores   nostros*
REL.NOM.M.SG   this:ACC.M.PL=EMP   love:ACC.M.PL   our:ACC.M.PL
***dispulsos**   **compulit**.* (Plaut. *As.* 737–738).
drive.apart:PTCP.PRF.ACC.M.PL   drive.together:PRF.3SG
'He pulled our love together again, which had been pulled apart'.

In verbs with a less concrete meaning implying resultant states, the configuration in Figure 6 is easily subject to the metaphor 'CHANGE OF STATE IS CHANGE OF LOCATION' and results in pairs of opposites either of the unary or binary kind in which the directional semantic component will be understood in a more abstract sense, as in (33)–(34):[19]

(33) *quod=ne   vobis   **placeat**,*
REL.NOM.N.SG=Q   you:DAT.SG   please:SBJV.PRS.3SG
***displiceat**   mihi?* (Plaut. *Mil,* 614)
displease:SBJV.PRS.3SG   I:DAT
'Could I be displeased with what pleases you?'

(34) *quod   dat   non   dat;*
REL.ACC.N.SG   give:PRS.3SG   NEG   give:PRS.3SG
*deludit: modo   quod   **suasit**,*
play.false:PRS.3SG   only   REL.ACC.N.SG   persuade:PRF.3SG
*<id>   **dissuadet**,   quod   **dissuasit**,*
DEM.ACC.N.SG   dissuade:PRS.3SG   REL.ACC.N.SG   dissuade:PRF.3SG
id   ostentat. (Plaut. *Cist.* 217–19)
DEM.ACC.N.SG   show.off:PRS.3SG
'What he gives he does not give, he tricks me. What he just advised he advises against, what he advised against he recommends'.

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19 The examples in (34)–(35) also illustrate a feature of lexical opposites that was originally noticed for antonymous adjectives, and later extended to other pairs of opposites: the so-called "co-occurrence hypothesis" formulated by Charles & Miller, 1989, and extended to verbs by Fellbaum, 1995. This hypothesis states that antonymous pairs occur together in the same sentences with higher frequency than mere coincidence; this co-occurrence is particularly frequent in contrastive constructions like those in our examples. There is plenty of evidence in psycho-linguistic research demonstrating that pairs of opposites are closely linked in our minds: the members of these pairs tend to elicit each other in psychological tests such as free-word association and tend to co-occur in the same sentence situating themselves in appropriate slots in a grammatical construction.

Although I will not provide an in-depth description of the intensive *dis-* here, as far as its intensive value is concerned I will assume, albeit provisionally, that the intensifying value develops from the configuration depicted in Figure 7 in which, as we have seen above, *dis-* extends its original bidirectional trajectory into a multiple one; such an extension produces a quantitative increase of the directions involved in the *dis*-trajectory that can be reinterpreted as intensification of the event/ state denoted by the simplex. The intensive value of *dis-* occurs in my corpus in association with verbs essentially belonging to three semantic classes, sharing the semantic component of "force": "cutting and breaking events" (Majid et al., 2007), i.e., change-of-state verbs indicating forced separation in the material integrity of objects (cf. Hale & Keyser, 1987), such as *rumpo* 'to break', *trunco* 'to cut off', *lacero* 'to tear'; "hitting events" (cf. Fillmore, 1970), i.e., surface contact verbs involving forced impairment in the material integrity of objects, such as *laedo* 'to hurt by striking', *percutio* 'to hit, strike'; verbs expressing intense, basically negative, emotional states, such as *crucior* 'to be in agony', *cupio* 'to long for, desire', *pudet* 'to be ashamed', *taedet* 'to be tired/ sick of, disgusted'.

The inherent separative semantics of "cutting and breaking" verbs makes them particularly suitable for *dis*-prefixation. Indeed, separative semantics may be considered as the *locus* where the intensification meaning arose since the combination of two inherently separative elements (the prefix and the verb) has an effect of "reinforcement" of the semantics of the simplexes, as in *disrumpo* 'to break to pieces', *distrunco* 'to cut to pieces", *dilacero* 'to tear to pieces'. This reinforcement can also be easily applied to hitting verbs with which *dis-* acts on the semantic component of force and increases it; moreover, *dis-* will also convey the separative meaning absent in the base enabling the passage of hitting verbs to the semantic class of "cutting and breaking" verbs, such as *dilido* 'to batter to pieces', *dispercutio* 'to smash to pieces'. Finally, since 'EMOTIONS ARE FORCES' (Lakoff, Espenson & Schwartz, 1991), strong, basically negative, emotional states expressed by the third group of verbs mentioned above are equally intensified by *dis*-prefixation, as in *discrucior* 'to be troubled, vexed, chagrined', *discupio* 'to desire violently', *dispudet* 'to be greatly ashamed', *distaedet* 'to be very tired of, disgusted with, to loathe'.

Further research is needed in order to better describe this mechanism and consider whether the intensive function of *dis-* applies to other verb classes.

4.7 Conclusions

Re- and *dis-* develop their reversive semantics along quite different paths that consistently develop from respective image schemas. The basic modification conveyed by *re-* is a counter-directional change: a *re*-verb encodes processes that are somehow opposite in direction with respect to a reference point. In the broad domain of counter-directionality *re-* expresses two spatial configurations: 1) a simple

rearward trajectory; 2) a more complex reditive path in which a TR performs a counter-directional change of location towards a place it has previously been, producing a situation of "return". This spatial trajectory has a crucial iterative implication: if the TR goes to a place where it has already been, this necessarily implies that the action of going to that place is performed *again, one more time*. By selecting this implication *re-* acquires an iterative interpretation in which it remains highly diachronically productive. Furthermore, starting from this implication, *re-* also develops an intensive meaning that, although considered very peripheral, has a certain weight in the corpus that I have examined and is further specified according to the semantics of the verbal base.

Starting from the reditive configuration *re-* expresses a range of abstract counter-directional values: restitutive, responsive and, finally reversive (of the abstract kind). Reversivity is crucially connected with verbs whose semantic or contextual configuration involve some kind of reversible result. With some of these verbs the counter-directional *re-*trajectory undergoes an abstractive process implicated in the metaphor 'CHANGE OF STATE IS CHANGE OF DIRECTION' and has as an effect a reversal of meaning of the simplex. By means of this reversal *re-* conveys a resultant state which is opposite to that denoted by the simplex, generating pairs of opposites such as *claudo* 'close' vs. *recludo* 'open'. Although the reversive function of *re-* is scarcely represented in my corpus from a quantitative point of view, the presence of *hapax legomena* testifies the existence of a productive word-formation rule which must have been available in the system of Latin to speakers (writers)/ listeners (readers) who encoded and decoded that word. In spite of this productivity, the reversive value of *re-* seems not to have had a good fate throughout the history of Latin and beyond: as we have seen, in the languages in which prefixes variously derived from it are found, *re-* is largely used in its iterative interpretation, based on which it mainly forms repetitive verbs (encoding the repetition of an earlier event, such as Italian *rifare* 'to do/make again, redo, remake') and restitutive verbs (encoding the restitution of an earlier state, such as Italian *rimettere* 'to replace'). Since almost every type of event/ state can virtually be repeated/restored, this ontological feature makes iterative *re-* practically devoid of all those selective restrictions that other values exhibit. In other words, the iterative *re-* is easy to apply and this facility must have played an important role in its diachronic success. Reversive *re-*, in turn, is instantiated in a very small number of cases. This rarity will have made it progressively less salient in Latin's semantic system, until it was completely blurred and overridden by the prevalence of the iterative value.

In order to show a different path through which a prefix can reach the reversive function, I have briefly examined the semantic network of *dis-*, which differently from *re-*, persists beyond the history of Latin just with this reversive value, strictly depending on its schematic import. In fact, it represents a spatial configuration in which a typically multiplex TR has been separated from the source of motion and moves along two or more divergent paths. This separation results in a new distant

collocation of the entities that constitute the multiplex TR which come to be placed in opposite points of space. Opposition in space easily turns into notional opposition by means of a powerful metaphor which, connecting physical places and notional spaces, shifts the directional semantic component of *dis-* in a more abstract sense. More research is needed to verify the actual diffusion of the reversive *re-* within the history of Latin. What has been started here certainly needs to be extended in relation both to the chronological phases and the textual types examined.

Besides the reversive function, both *re-* and *dis-* frequently convey an intensive meaning, that is, they can add a semantic component of "more" to verbs with which they combine. Depending on the semantic of the simplexes, "more" is further specified as "more time", "more quantity", "more quality", "more force". Pottier (1962: 298–310) noted that in Latin and in the Romance languages certain markers of intensity can also express an opposite meaning, thus representing a semantic continuum that goes from diminution/ attenuation to negation/ opposition. This would merit much more extended discussion elsewhere.

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