



REVIEWS BY

Egle Mouton, William M. F. Leung (Eds.)

# TOWARD A COGNITIVE CLASSICAL LINGUISTICS

THE COGNITIVE BASIS OF CONSTRUCTIONS  
IN CLASSICAL LANGUAGES

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Egle Mocciaro, William Michael Short (Eds.)

**Toward a Cognitive Classical Linguistics**

**The Embodied Basis of Constructions in Greek and Latin**



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# **Toward a Cognitive Classical Linguistics**

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The Embodied Basis of Constructions in Greek and Latin

Managing Editor: Katarzyna Grzegorek

Series Editor: Cinzia Russi

Language Editor: Deirdre Adrienne Dunlevy

**DE GRUYTER**

ISBN 978-3-11-061633-0  
e-ISBN 978-3-11-061634-7



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© 2019 Egle Mocciaro, William Michael Short  
Published by De Gruyter Poland Ltd, Warsaw/Berlin  
Part of Walter de Gruyter GmbH, Berlin/Boston  
The book is published with open access at [www.degruyter.com](http://www.degruyter.com).

**Library of Congress Cataloging-in-Publication Data**

A CIP catalog record for this book has been applied for at the Library of Congress.

Managing Editor: Katarzyna Grzegorek  
Series Editor: Cinzia Russi  
Language Editor: Deirdre Adrienne Dunlevy

[www.degruyter.com](http://www.degruyter.com)  
Cover illustration: Shauna / [gettyimages.com](http://gettyimages.com)

# Contents

Egle Mocciaro, William Michael Short

## **Introduction — 1**

### **Toward a cognitive classical linguistics — 1**

On embodiment and constructions: Preliminary remarks — 1

Embodiment and classical studies — 3

Constructions in cognitive linguistics — 7

The contributions to this volume — 9

Bibliography — 14

Rutger J. Allan

## **1 Aspect and construal. A cognitive linguistic approach to iterativity, habituality and genericity in Greek — 16**

1.1 Introduction — 16

1.2 Iterativity, habituality and genericity in cognitive linguistics — 20

1.3 Types of construal in cognitive linguistics — 22

1.4 Ancient Greek tense and aspect in iteratives, habituals and generics — 27

1.5 Conclusion: Construal and embodiment — 38

Bibliography — 39

Annemieke Drummen

## **2 A construction-grammar analysis of ancient Greek particles — 42**

2.1 Introduction — 42

2.2 Construction grammar — 43

2.3 Ancient Greek particles — 44

2.4 Interpreting particles with constructions — 45

2.4.1 *Kaí*: From connecting to clarifying to indignation — 45

2.4.2 *Te*: Connecting and shared knowledge — 55

2.4.3 *Dé*: From a new step to epic style to hostility — 58

2.5 Summary — 61

2.5.1 *Kaí*-construction<sub>1</sub> — 62

2.5.2 *Kaí*-construction<sub>2</sub> — 62

2.5.3 *Kaí*-construction<sub>3</sub> — 62

2.5.4 *Kaí*-construction<sub>4</sub> — 62

2.5.5 *Te*-construction — 63

2.5.6 *Dé*-construction — 63

2.6 Beyond constructions — 64

Bibliography — 65

Chiara Fedriani

- 3 The embodied basis of discourse and pragmatic markers in Greek and Latin — 69**
- 3.1 Introduction — **69**
- 3.2 Discourse markers, pragmatic markers, and pragmaticalization — **72**
- 3.3 Image schemas of MOVEMENT and EXCHANGE and their metaphorical extensions in the pragmatic domain — **74**
- 3.4 The embodied pragmaticalization of *íthi*, *áge*, *age*, *phére* and *em* — **80**
- 3.4.1 *Íthi*, *áge*, and *age* as pragmatic markers — **81**
- 3.4.2 *Phére* and *em* as discourse markers (and the specific status of *phére*) — **84**
- 3.5 Conclusions — **88**
- Bibliography — **90**

Luisa Brucale

- 4 Reversive constructions in Latin: The case of re- (and dis-) — 93**
- 4.1 Introduction — **93**
- 4.2 Verbal prefixation — **94**
- 4.3 Reversivity and reversives — **96**
- 4.4 *Re-* and *dis-* — **98**
- 4.5 *Re-* data — **100**
- 4.5.1 Spatial values — **101**
- 4.5.2 Abstract values — **105**
- 4.6 *Dis-* data — **116**
- 4.7 Conclusions — **121**
- Bibliography — **123**

Anna Bonifazi

- 5 *Autós* and the center-periphery image schema — 126**
- 5.1 Introduction — **126**
- 5.2 The image schema CENTER-PERIPHERY — **128**
- 5.3 The syntax and the semantics of *autós* — **130**
- 5.4 Intensifiers evoking a center and periphery — **131**
- 5.5 *Autós* in Homer, and the link to *au-* adverbs and particles — **132**
- 5.6 The CENTER-PERIPHERY scenarios evoked by *autós*: Linguistic evidence in and beyond Homer — **133**
- 5.6.1 An individual at the center of the visual field, and more individuals around him/her — **135**
- 5.6.2 Individuals superior in rank to, or more important than, other people — **137**
- 5.6.3 Bodies without additional objects such as ‘arms’/‘corpses’ — **141**
- 5.6.4 The internal self; subject of consciousness; one’s true identity; proximity to the speaking “I” — **142**

- 5.7 *Autós*-objects and referents “just mentioned” — 144
- 5.8 Conclusion — 145
- Bibliography — 146

Silvia Luraghi, Eleonora Sausa

- 6 Aspects of aural perception in Homeric Greek — 149**
- 6.1 Introduction — 149
- 6.2 Experiential situations — 150
- 6.2.1 Verbs of perception — 151
- 6.3 Construction alternation with perception and cognition verbs — 153
- 6.4 *akoúō* — 155
- 6.4.1 Inanimate stimuli — 156
- 6.4.2 Animate stimuli — 158
- 6.5 Hear, listen, learn — 163
- 6.5.1 *klúō* — 164
- 6.5.2 *Punthánomai* — 165
- 6.6 Discussion — 169
- 6.6.1 Aspect and actionality — 169
- 6.6.2 The function of construction variation — 170
- 6.6.3 Perception, cognition and embodiment — 172
- 6.7 Conclusion — 173
- Bibliography — 174

Maria Papadopoulou

- 7 The role of spatial prepositions in the Greek lexicon of garments — 176**
- 7.1 Introduction — 176
- 7.2 The image schematic construal of the clothed body in ancient Greek — 179
- 7.3 Spatialities of the clothed body — 186
- 7.3.1 The clothed body in and out-of-bounds: *En-*, *ek-*, *apo-* compounds — 186
- 7.3.2 ‘Around’ vs. ‘on either side of’: *Peri-* and *amphi-* compounds — 190
- 7.3.3 Dress and the vertical axis — 195
- 7.4 The conceptual metaphor ‘DRESS(ING) IS (BEING IN/GOING IN/COMING OUT OF) A LOCATION’ — 197
- 7.5 Conclusion: Towards a spatial grammar of the clothed body — 200
- Bibliography — 203

Greg Membrez

- 8 Metaphor by any other name. A cognitive linguistic reassessment of Aristotle’s theory of metaphor — 207**
- 8.1 Introduction — 207
- 8.2 The embodied basis of constructions and metaphor — 209



- 8.3 Aristotle's metaphor of *metaphorá* — 212
- 8.4 Aristotle's definition of *metaphorá* — 214
- 8.5 Aristotle's metaphor of the *léxis* of everyday *lógos* — 215
- 8.5.1 The source frame: 'DWELLING IN A HOUSEHOLD' — 216
- 8.5.2 The target frame: 'THE LEXIS OF EVERYDAY LOGOS' — 216
- 8.6 The metaphorical household — 217
- 8.6.1 *Kúrimon ónoma* — 219
- 8.6.2 *Oikeíon ónoma* — 221
- 8.7 According to likeness — 222
- 8.8 Conclusion — 224
- Bibliography — 226

Christopher Collins

- 9 Animus inscriptus: An out-of-body embodiment? — 228**
- 9.1 The textual evidence — 228
- 9.2 Internal embodiment — 233
- 9.3 External embodiment — 236
- 9.4 Discussion — 239
- 9.5 Conclusions — 241
- Bibliography — 242

Luca D'Anselmi

- 10 Metaphorical word order — 245**
- 10.1 Introduction — 245
- 10.2 Previous approaches to "metaphorical" word order — 247
- 10.3 A cognitive-linguistic approach to visual word order — 250
- 10.4 Image-schematic structuring of word order in Latin — 253
- 10.4.1 PATH — 253
- 10.4.2 CONTACT and SEPARATION — 254
- 10.4.3 BALANCE — 258
- 10.4.4 COLLECTION — 258
- 10.4.5 MERGING and SPLITTING — 259
- 10.4.6 CONTAINMENT — 262
- 10.4.7 Combinations of effects — 268
- 10.5 Conclusions — 268
- Bibliography — 269

**Index — 271**

Egle Mocciano, William Michael Short\*

## Introduction

### Toward a cognitive classical linguistics

#### On embodiment and constructions: preliminary remarks

As its title indicates, this volume gathers a series of papers that brings together the study of grammatical and syntactic constructions in Greek and Latin under the perspective of theories of embodied meaning developed in cognitive linguistics. Several chapters result directly from presentations given as part of the panel session organized by the editors, under the same title, for the 13th International Cognitive Linguistics Conference (ICLC-13) in Newcastle, UK in July 2015. Additional contributions were subsequently invited from scholars working in this area of research, especially to widen the book's theoretical horizon, to include a greater variety of disciplinary perspectives, and to highlight different levels of analysis. In their chapters, authors address the role of human cognitive embodiment in determining the meanings of linguistic phenomena as diverse as verbal affixes, discourse particles, prepositional phrases, lexical items, and tense semantics. Needless to say, "embodiment" has been a pivotal notion in cognitive linguistics since its inception. This theory claims, in the words of perhaps its most influential advocate, that "the structure used to put together our conceptual systems grow out of bodily experience and make sense in terms of it; moreover, the core of our conceptual systems is directly ground in perception, body movement, and experience of a physical and social nature" (Lakoff, 1987: xiv).

As one component of the overall human cognitive system, language plays a part in elaborating and structuring world knowledge: that is, it contributes to dividing and organizing the pre-conceptually experienced world into cognized entities. Moreover, language "translates" this knowledge into a formal apparatus that makes it conveyable to other human beings. In some way, everything that receives linguistic expression thus "means" the experienced world, although of course at various levels of abstraction. In fact, it should be emphasized that in the embodied language hypothesis "meaning" is not conceived of as a merely iconic reproduction of the world. Rather, meaning is always an interpretation of the experienced (physical or not) world (as in the tradition of generative semantics: "meanings are mental representations"). Language, in this

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<sup>1</sup> This introductory article results from the joint work by the editors. However, for academic purposes, Egle Mocciano is responsible for the first and the third sections (On embodiment and constructions: preliminary remarks; Constructions in cognitive linguistics); William Michael Short for the second and the fourth sections (Embodiment and classical studies; The contributions to this volume).

sense, is not only a repository of meanings, but a form or a model of categorization and organization of knowledge. This is well explained by Geeraerts & Cuyckens (2007: 5) in terms of the perspectival nature of linguistic meaning, when they argue that “the world is not objectively reflected in the language: the categorization function of the language imposes a structure on the world rather than just mirroring objective reality. Specifically, language is a way of organizing knowledge that reflects the needs, interests, and experiences of individuals and cultures”.

One of the main mechanisms of abstraction from perception to conception is metaphor, which creates a mapping between one more concrete experiential domain (e.g., space) and one more abstract domain (e.g., time), by projecting skeletal cognitive patterns – image schemas – that capture recurrent features of bodily experience to the understanding of concepts not directly grounded in our sensorimotor interface with the world. As a matter of fact, embodiment imposes (or actually corresponds to) a constraint on directionality of metaphorical mappings: “First, we have suggested that there is directionality in metaphor, that is, we understand one concept in terms of another. Specifically, we tend to structure the less concrete and inherently vaguer concepts (like those for emotions) in terms of more concrete concepts, which are more clearly delineated in our experience” (Lakoff & Johnson, 1980: 112). As observed by Rohrer (2007: 32), for some time conceptual metaphor and embodiment were in fact inextricable concepts.

The main trends of cognitive linguistic research have developed around the notion of “schema” as the result of cognitive abstraction from embodied experience. Almost all the conceptual apparatus of cognitive linguistics in fact depends on this idea, from early “experiential gestalts” (Lakoff & Johnson, 1980) to “idealized cognitive models” (Lakoff, 1987), to “image schemas” – that is, “dynamic patterns that function somewhat like the abstract structure of an image, and thereby connect up a vast range of different experiences that manifest the same recurrent structure” (Johnson, 1987: 2) – as well as “cognitive archetypes” (Langacker, 1991), which may refer to any complex holistic schema constituting the basis of a grammatical construction. As Langacker (1993: 485) puts it, “Relevant to clause structure are numerous conceptual archetypes, some of which are incorporated as components of others. One set of archetypes related in this fashion includes the conception of physical object, the conception of a physical object occupying a location in a space, and that of an object moving through space (i.e., changing location through time)”.

From this short description, it appears that the semantic approach to language applies to every level of linguistic analysis, from lexical semantics to grammatical categories, which have been traditionally conceived of as meaningless (i.e., merely as formal “containers” for the meanings of their constituent lexical elements). Rejecting the hypothesis that grammar is an empty structure, cognitive linguistics instead argues that the structure itself is determined by meaning. “This was seen as a type of embodiment, since the goals, intentions, knowledge, and beliefs of the individual can’t help but be shaped by individual experience, and to the extent that they in

turn affect grammar, that would mean that grammar depends on individual world experiences” (Berger, 2015: 14). In this view, the various levels of linguistics analysis (morphology, lexicon, syntax) are made of the same substance, so to speak: there is no sharp separation among levels, which are instead conceived of as different areas along a lexicon-to-grammar continuum. Consequently, they can be approached by means of a unified theoretical and methodological perspective.

The kind of perspective necessary for studying language should therefore be “constructional” in nature. A constructional approach to linguistic structure explains language use as conventionalized pairings of form and (semantic or discourse) function, whose overall meaning cannot be predicted from their component parts, but is instead recognized, learned, and stored as an autonomous unit (cf. Goldberg, 2006: 4–6).<sup>2</sup> This idea of “construction” embraces all the levels of grammatical analysis: not only syntactic units, but also morphemes, words, phrasal patterns, and so forth. In this sense, it is more in line with the Saussurian idea of “linguistic sign” than other current approaches to grammar, especially the various strands of generativism. More relevant to our purposes, this encompassing view is a defining aspect of cognitive approaches to linguistic analysis, tightly bound up with other theoretical commitments, such as the so-called “lexicon/syntax continuity hypothesis” (see below), the co-dependence of semantics and pragmatics, and the idea that linguistic structure is deeply rooted in and constrained by usage, as well as speakers’ physical embodiment.

## Embodiment and classical studies

Grounded in these theoretical assumptions, the contributions collected here build on the momentum currently enjoyed by cognitive linguistic approaches within the field of Classics both in adopting a semantic theory whose explanatory potential remains to be fully exploited, and in extending the scope of this burgeoning field of study to cover a fuller spectrum of linguistic phenomena. The title of this volume suggests why we think it is important for classical scholars to include constructions, broadly conceived, in their analyses of Greek and Latin. We see this aspect of language study as probably the most immediate arena for bringing classical linguistics and cognitive linguistics definitively together into a “cognitive classical linguistics”.

In the last decade, an increasing number of classical linguists have in fact started to introduce concepts from cognitive linguistics into analyses of the Greek and Latin, illustrating the potential of such an approach to contribute to our understanding of the classical languages. In this arena, pioneering work has been done by Silvia Luraghi (2003; 2010) on case systems, prepositions and semantics roles, both in

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<sup>2</sup> In other words, this approach considers constructions to be at least partially arbitrary, rather than fully compositionally analyzable: cf. Croft, 2001: 18.

Greek and in Latin, conducted in terms of certain motion and force schemas and their metaphorical interpretations. Francisco García Jurado's (2000) studies of Plautus in a squarely Lakovian framework can also be mentioned in this respect, since these have shown that the sorts of orientational metaphors cognitive linguists have identified in English and many other modern languages ('GOOD IS UP', 'BAD IS DOWN', and so forth) are also present in archaic Latin. Chiara Fedriani, meanwhile, has produced a series of shorter articles (2016) and now a major monograph (2014) examining the ontological and orientational metaphors underpinning the encoding of feelings and emotions in Latin; and Kiki Nikiforidou (1991; 2009) has studied the role of conceptual metaphor in motivating semantic change diachronically in Greek. Not to mention the abundance of other research dealing with the "structured polysemy" of prepositions and preverbs.<sup>3</sup>

Though largely focusing on the characterization of the meanings of individual lexical items or on circumscribed grammatical categories, these studies have also sometimes considered the implications of the hypothesis, fundamental in cognitive linguistics, that it is impossible to establish fixed limits between lexicon and grammar.<sup>4</sup> Building on the program delineated in *Embodiment in Latin Semantics* (Short, 2016), this volume emphasizes precisely this dimension of language study: it encompasses other aspects of Greek and Latin's linguistic structure within the embodiment paradigm, shifting attention especially to the interface of lexical and morpho-syntactic structure, in order to demonstrate the viability of cognitive linguistics as an overall framework for explaining the highly complex grammatical structures that characterize these languages.

Now, constructions – even if in a more traditional, merely syntactic sense – have always been part and parcel of the description and analysis of the linguistic structure of Greek and Latin and indeed central to ancient language pedagogy. Any student of the classical languages will be familiar with the sorts of syntactic and grammatical configurations around which the presentation and teaching of Greek and Latin grammar is typically organized: temporal, circumstantial, and causal clauses; result and final clauses; conditional sentences; proviso clauses; gerunds, gerundives, and supines; and so on. Reference grammars also recognize more idiosyncratic or specialized constructions like the so-called *constructio praegnans* in Greek, where a locative prepositional phrase with the dative case expresses the endpoint of some verbal motion that might have been construed more naturally with a directional accusative, e.g., Xen. *Ages.* 1.32, *en tōi potamōi épeson*, literally, 'They fell in the river',

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<sup>3</sup> Including our own studies, among which Mocciaro & Brucale, 2015; Short, 2013 on the Latin preposition *de* and Brucale & Mocciaro, 2011; 2017 on Latin *per* and *per-*.

<sup>4</sup> See, for instance, Short's comments, 2013: 400 on the interconnectedness of language, in the sense that the same conceptual metaphors work their effects across, and at different levels of, linguistic encoding.

where we might have expected *eis tòn potamón*, ‘into the river’ (see, most recently, Nikitina & Maslov, 2013). Or Latin’s “relative-correlative construction” (see Probert & Dickey, 2016), where a relative clause precedes a syntactically complete main clause which contains a kind of epenthetic demonstrative pronoun that referentially “picks up” the relative (e.g., Cic. *Cat.* 1.9, *quos ferro trucidari oportebat, eos nondum voce vulnero*, literally, ‘Whom it was right to put to death by the sword, them I am not yet even wounding with my voice’). Or, at a higher level of grammatical abstraction, the *constructio ad sensum*, in which Greek or Latin’s normal requirements of grammatical concord may be violated in the name of “conceptual” agreement (as in, e.g., Xen. *Hell.* 2.3.55, *hē dè boulē . . . ouk agnooûntes hóti egkheirídia ékhontes parêsan*, “The senate (they were) not unmindful that cutthroats were present” or Liv. *AUC.* 24.3.15, *omnis multitudo abeunt*, “the entire throng (they) depart”).<sup>5</sup>

Indeed, Greek and Latin are particularly rich in this respect because of the elaborate and very often multiple, seemingly functionally equivalent syntactic constructions that constitute their grammatical systems. For instance, in Greek, the purpose of some verbal action can be expressed by a subordinate clause equally introduced by the conjunction *hína* or *hōs* (*mē*), with subjunctive or optative depending on the tense of the main verb. But purpose can also be expressed by *hopōs* (*mē*) with the future indicative; a motion verb with the future participle, as in the exhortation given to Nausikaa by her handmaiden: *all’ íomen plunéothsai hám’ eōî phainoménēphi*, “Come, let us go to wash them at break of day” (Hom. *Od.* 6.31); by the genitive case (with or without *húper* or *héneka*); by the articular or simple infinitive; or, in some cases, by an indefinite relative clause (*hostis . . .*). In Latin, the possibilities for expressing purpose are, if anything, more numerous and ramified (cf. Cabrilla, 2011 and, for a cognitive grammar account, Brucalé & Mocchiari, 2016). The following constructions are available to Latin speakers for expressing this notion: *ut* + subjunctive; a relative clause with subjunctive; *ad* + accusative of the gerund or gerundive; the gerund or gerundive in the genitive before *causa*, *gratia* or *ergo*; the gerund or gerundive in the dative case; *in* or *ad* + nominal accusative (as in Plaut. *As.* 257, *ad eri fraudationem callidum ingenium gerunt*, “they use their cunning wit to rip off the master”); the supine in the accusative; and (especially in archaic and colloquial or poetic registers) the bald infinitive.

Traditionally, however, grammatical handbooks and language textbooks have treated such alternative constructions as basically synonymous and differing only stylistically. So, on this view, Caesar, in place of *legatos mittunt qui doceant* (*BG.* 6.96), could have written *legatos mittunt ut doceant* or *legatos mittunt ad docendum* or even

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<sup>5</sup> Ov. *Her.* 1.88, *turba ruunt in me luxuriosa proci*, often cited in the literature and indeed emblematic of *constructio ad sensum* in medieval grammatical treatises, is probably not an example, since it can actually be analyzed with *proci* as regular subject of the verb: see Colombat, 1993: 59. More generally, see Birkenes & Sommer, 2015.

*legatos mittunt doctum* (cf. 75.2; Hirt. *BG.* 8.4.2) without serious consequences for interpretation. In all cases, the meaning would be "they send legates to announce", even if the first version was preferable in this context to avoid clash with the gerundive in the prior clause or repetition of *ut* in the following sentence (cf. Elerick, 1985: 297–298). Emblematic of this attitude is how scholars have viewed the relation between gerund and gerundive. In contexts where the rules of Latin grammar call for a gerund with a nominal or pronominal direct object, authors instead frequently employ a construction in which the noun or pronoun takes the case of the putative underlying gerund and is then modified by a participial form in *-ndus* agreeing with it. Gerundival expressions like *ad liberandam rem publicam* (Cic. *Fam.* 10.12.4) and *Urbis capiendae fiducia* (Ann. *Ep.* 1.38) can thus be found where gerundial *ad liberandum rem publicam* ("for liberating the republic") and *urbem capiendi fiducia* ("confidence of capturing the city") might be more strictly grammatical. The two forms have always been considered semantically equivalent and wholly interchangeable: Benjamin Mitchell's (1912: 144) declaration that "There is no difference in meaning between the gerund and gerundive" represents the orthodox view (cf. now Vester, 1990; Joffe, 2002). Selection of one or the other construction in context is seen as coming down to largely aesthetic considerations, the gerundive tending to be favored except where a double genitive plural in *-orum* or *-arum* would cause an unpleasant rhyming sequence.

A cognitive perspective suggests, by contrast, that we need to take very seriously Dwight Bolinger's (1968: 127) admonition that "A difference in syntactic form always spells a difference in meaning". (Cognitive) constructional approaches in fact take this principle as foundational in order to treat constructions as meaningful *in and of themselves*, that is, as having meanings that emerge separately from the meanings of the particular words of which they are composed. In a constructional grammar, in other words, constructions, like lexemes, may be paired independently with semantic structures (cf. Langacker, 1987 and 1991; Wierzbicka, 1988; Goldberg, 2003). What this means is that seemingly alternative ways of expressing the same semantic content will be treated as entailing some variation in meaning. Consider, for example, the classic example of the so-called "ditransitive construction" in English, where a verb expressing literal or figurative transfer can be construed with two direct objects rather than a direct object and an indirect object. Thus, we can say either: *I taught Harry Greek* or *I taught Greek to Harry*. On the traditional account, these sentences express the same semantic content. However, Lakoff & Johnson (1980: 126–30) have argued that selection between the two constructions actually involves subtle considerations of meaning that depend on our metaphorical understanding of STRENGTH OF EFFECT in concrete terms of CLOSENESS. Thus, in *I taught Greek to Harry*, where direct object *Greek* is separated from *Harry* by the preposition *to*, we may still wonder if Harry has in fact learned Greek; on the basis of the metaphor – which applies directly to form of the sentence – the spatial distance between *Harry* and the verb imposed by the preposition is interpreted as a weakening of effect. On the other hand, in *I taught*



*Harry Greek* the absence of any element spatially intervening between *Harry* and *Greek* implies, again metaphorically, a stronger effect – so we understand that Harry did indeed learn the language. Part of our interpretation of these sentences, then, seems to depend on a non-arbitrary (in fact strongly motivated) linkage between form and meaning in our linguistic and conceptual system.

## Constructions in cognitive linguistics

Our use of the term “construction” may seem to imply that there exists a single theory, and a single definition of this term, which the papers collected in this volume universally adopt. This is not the case. It would be more appropriate to speak of “constructional” approaches, since this field is actually constituted by a constellation of more or less related approaches, developed at somewhat different times and with somewhat different interests (cf. Östman & Fried, 2005).

George Lakoff’s “Linguistic Gestalts” (1977) represents one early version of the constructional approach. It argued against a strictly compositional view of meaning and proposed that constructions themselves could have meanings independent of and not reducible to those of their component parts. Lakoff (1987) later gave this approach robust empirical support through his study of English *there*-constructions, when he showed that the different kinds of meanings that can be expressed by the fixed formula *There’s . . .* or *There goes . . .* – for example, perceptual reference (“There’s the signal”), existential or stative declarations (“There goes the plane”), or paradigmatic demonstrations (“There’s a real beauty”) – can be derived systematically from a central spatial deictic meaning (as in “There’s what I was looking for”) through conventionalized metaphorical and metonymic associations. In Latin, clause-initial *esse* constitutes a construction with a similarly prototypical semantic structure: alongside simple deictic usages like Vergil’s *est locus Hesperiam Grai cognomine dicunt*. “There is a place the Greeks call Hesperia by name” (*Aen.* 1.530–31), we also find extended “existential” or “characteristic” or “causal” meanings in examples such as *fuit olim . . . senex* ‘There once was an old man’ (Plaut. *St.* 539), *sunt qui quod sentiunt non audent dicere* ‘There are those who dare not say what they feel’ (Cic. *Off.* 1.84), and *est quod suscenset tibi* ‘There is something that makes him angry with you’ (Ter. *Andr.* 448).

Charles Fillmore’s “Frame Semantics” represents another. As in the previous case, in Frame Semantics specific attention is paid to idiomatic constructions – constructions, that is, whose morpho-syntactic behavior as well as the overall semantics cannot be compositionally deduced from those of the sub-parts or from other constructions of the language – such as the English structure “The *x*-er . . . the *y*-er”, where *x* and *y* are comparative adjectives or adverbs (e.g., *The more carefully you do your work, the easier it will get*), or the “let alone” construction (e.g., *I doubt you could get Fred to eat shrimp, let alone Louise squid*). For the latter, Fillmore, Kay & O’Connor



(1988) showed that *let alone* shares certain properties with other constructions (coordinating conjunctions, the paired focus construction, sentence fragments), but also has its own autonomous properties, especially at the (prâgma-)semantic level: the fundamental meaning of the construction is a relation of entailment, where the second reduced clause (*let alone Louise squid*) necessarily follows from the first, full and more informative claim (*I doubt you could get Fred to eat shrimp*); the two parts belong to the same polarity (typically, a negation) and are placed at different points of the same presupposed semantic scale. A Latin correlate of the *let alone* construction involves the coordinator *nēdum*, which connects two entities ordered on the same scale, such as the intensity of the assault expressed by *impetum* and *clamorem* in *vix clamorem eorum, nedum impetum, Suessetani tulere* "The Suessetani barely withstood their war-cry, let alone (their) charge". (Liv. *AUC.* 34.20.7). As in the case of the English construction, *nēdum* exhibits autonomous characteristics, e.g., in contrast with the conjunction *et*, it only admits binominal coordination and, moreover, it involves non-reversible coordinands, as the *nēdum*-clause can only occur as the second coordinand. Later, and more peripheral, examples of *nēdum* as the first coordinand evidence a shift towards the expression of a positive polarity, as in *nedum hominum humilium (ut nos sumus), sed etiam amplissimorum virorum consilia ex eventu, non ex voluntate a plerisque probari solent* "The advice of not just humble people, as we are, but even of the greatest men, tends to be judged by most people by the result, not by the intention" (Cic. *Att.* 9.7a.1) (cf. Goldstein, 2013).

Both in Lakovian and Fillmorean constructional analysis, the decoding of a construction's semantics embraces non-literal aspects of meaning, the pragmatic context of the utterances, and world knowledge. In other words, it requires the speakers' active interpretative role (a notion that Langacker, 1987 calls "construal"). This line of theorizing has reached its fullest elaboration in contemporary versions of the constructional approach, above all the "Cognitive Construction Grammar" represented by the work of Adele Goldberg (1995; 2006), the "Cognitive Grammar" of Ronald Langacker (1987; 1991), and the "Radical Construction Grammar" of William Croft (2001).<sup>6</sup> Although proposing models of linguistic meaning that differ in many respects, these approaches can be said to share certain theoretical commitments. Apart from their definitive treatment of the construction – defined as "any linguistic pattern . . . [whose] form or function is not strictly predictable from its component parts or from other constructions recognized to exist" (Goldberg, 2006: 5) – as the fundamental unit of linguistic analysis, what these approaches have in common is

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<sup>6</sup> For a good summary from the perspective of classical linguistics, see Barðdal & Danesi, 2014, who describe various possible applications of the constructional approach to Greek grammar, such as dative of agent, infinitive with accusative subject construction, and complement patterns. The last have been studied especially by Cristofaro, 2008, who focuses on declarative indicatives, participial complements and infinitives.

a general enlargement of the perspective from peripheral phenomena, such as those described above, to more regular aspects of grammar (e.g., argument structure, passive constructions, and so on) (cf. Barðdal & Danesi, 2014).

Any construction grammar should explain the full range of phenomena found in natural languages by means of the same analytical tools. All types of linguistic units (i.e., morphemes, words, idioms) are taken to be constructions, that is, pairings of form with semantic and/or discourse function. Phrasal constructions, in fact, differ from lexical items only in terms of their internal complexity. This is the so-called “lexicon/syntax continuity” hypothesis, according to which the grammar of a language can be arranged along a continuum stretching from lexical to more schematic constructions, from simple to more complex structures (cf. Barðdal & Danesi, 2014; Croft & Cruse, 2004: 255). Other tenets widely shared by cognitive constructional models are: the hypothesis also of a semantic/pragmatic continuity, and the “what you see is what you get” approach to syntax (in other words, the idea that no underlying levels of syntax must be postulated, as with Chomskyan “deep structures”, which yield manifold surface structures through transformations and derivations). Thus, a construction grammar associates differences in semantic and pragmatic meanings directly with differences in surface form. Constructions are claimed to be learned based on the input pattern and general cognitive mechanisms (i.e., “constructed”), and they vary at the cross-linguistic level. At the same time, cross-linguistic generalization is the effect of general cognitive constraints and the set depends on the functions conveyed by the constructions involved (Goldberg, 2003: 219).

## The contributions to this volume

Fittingly with the varied character of constructional approaches in contemporary cognitive linguistics, the papers in this volume stake out a range of views and interpretations of what constitutes a “construction” and place their attention on a wide range of linguistic material in Greek and Latin. In doing so, they help highlight new ways in which Greek or Latin syntax can be seen as meaningful and contribute new perspectives and new theoretical resources to the research agenda of a cognitive classical linguistics. Just as there is no single “construction grammar” but rather a multiplicity of construction grammars loosely associated by their commitment to the construction (however defined) as the basic unit of analysis and by their belief that language should be described in terms of cognitive structures and processes known from psychology and neuroscience, the chapters collected here are not all cut from the same cognitive linguistic cloth, but instead sometimes differ in the details of the theoretical apparatus and terminology they adopt (or simply declare this adoption more or less explicitly). In a discipline where the norm has been collections organized narrowly on the basis of author, genre, or chronology, someone might look for more of a common thread. But we view the diversity of methods and approaches adopted

by our authors as a clear strength of the volume, intending it to represent a cross-section of how the theories and methods of cognitive construction grammar(s) have inspired *different kinds* of analyses in classical studies – literary and social-historical as well as linguistic – all under the general rubric of embodiment. Our authors adopt the theoretical and methodological insights of embodiment in different ways and to different degrees. Yet they all take the basic premises of embodied cognition and language to heart and, in true interdisciplinary fashion, integrate these premises with their own traditions of scholarship. We believe they represent some of the most ambitious attempts to integrate the embodiment paradigm into classical studies and will thus help set the contours for this burgeoning subdiscipline.

**Rutger Allan** challenges mainline views that the present and imperfect tense of the Greek verb inherently express notions of iterativity, habituality, and genericity. He takes the position that these meanings instead arise either through contextual factors or through inference from experiential knowledge, on the basis of conventionalized semantic values relating to temporal boundedness of the denoted event which interacts with other embodied construal phenomena (especially our tendency to perceive multiple similar entities as constituting a single entity, our ability to impose a temporal “viewing frame” on experiences and memories, and our ability to imagine the same scene from multiple different vantage points).

**Annemieke Drummen** then takes a constructional approach to one of the most studied but still perhaps least understood aspects of the ancient languages: the Greek particles. In her study of *kaí*, *te*, and *dé*, Drummen demonstrates that this kind of approach can show that the semantic “multifunctionality” of the particles falls together in a systematic way. As Drummen argues, the meanings of the particles follow from the combination of conventionalized form-meaning pairs with specific contextual features; in this sense, the semantic structure of each particle is organized as a prototype category, with one construction representing the “basic” meaning and the other “daughter” constructions inheriting the features of the parent construction while also adding certain additional dimensions of form and meaning.

**Chiara Fedriani** analyzes usage of several fixed-form imperatives in Greek and Latin – *íthi*, *áge*, *age*, *phére*, and *em* – whose grammaticalization or pragmaticization develops largely on the basis of conventionalized metaphorical patterns in these languages. Specifically, Fedriani argues that the different development of these words as pragmatic or discourse markers depends above all on the interaction between their literal spatial and physical meanings and the kinds of metaphorical interpretation these meanings are conventionally subject to in Greek and Latin – namely ‘ACTION IS MOTION’ and ‘IDEAS ARE OBJECTS’ – which determines their acquisition of either action-oriented or discourse-related functions. As Fedriani suggests, this analysis reveals that the same embodied metaphors that operate in the determination of lexical semantic structure can and do also motivate processes of functional enrichment.

A morphological phenomenon par excellence, that is, verbal prefixation, is dealt with in **Luisa Brucale**’s paper, who investigates the development of a reversive

sense in the usage of the Latin preverbs *re-* and, to a lesser extent, *dis-*. Based on the insights of Langacker's Cognitive Grammar, Brucale traces the reversive value to the basic spatial concepts (image schemas) expressed by the two preverbs. Then, using evidence from Plautus and Cato, she reconstructs the semantic network of *re-* and *dis-* based on certain pervasive metaphorical and (context-induced) metonymical associations in Latin.

**Anna Bonifazi** focuses on the word *autós*, whose polysemy, she suggests, can be explained in image-schematic terms. Starting from Ekkehard König's claim that intensifiers evoke a center and a periphery, Bonifazi argues that the different meanings of *autós* – as intensifier, anaphor, reflexive, and exclusive – can in fact be seen as following from a series of metaphorical and metonymic extensions of a CENTER-PERIPHERY image schema, with (the referent of) *autós*, in the basic form of the schema, corresponding to the conceptual center or focal point. According to different metaphorical construals, *autós* may thus be interpreted in terms of a visual location, an attentional focus, a “hidden nucleus”, or even a certain unit of information assumed in ongoing discourse.

Tapping into certain themes of contemporary research in cognitive linguistics and philosophy of language – first, the idea that words relating to sensory perception typically develop figurative meanings in the domain of knowledge and thought (reflecting a perhaps universal ‘MIND-AS-BODY’ metaphor), and second, that vision, while important, is not necessarily the exclusive source for metaphorization of this domain (i.e., ‘SEEING IS KNOWING’) – **Silvia Luraghi & Eleonora Sausa** analyze the constructions in which the Greek verbs *akoúō* ‘hear’ and *klúō* ‘listen to’ participate. They argue that the differences in usage of the verbs that characterize Homeric Greek in particular can be explained by reference to notions of animacy (of the stimulus) and that the different “actionalities” of the verbs in these terms – in other words, whether they denote a controlled activity or merely a(n uncontrolled) state – can account for why *akoúō* but not *klúō* develops a figurative evidential or intellectual meaning (i.e., ‘learn’).

**Maria Papadopoulou** examines the Greek lexicon of garments and clothes-wearing, and especially its usage of locative prepositions, to show that this semantic field is structured by a certain image-schematic understanding of the body. As Papadopoulou shows, Greek's vestimentary vocabulary is organized around the spatial prepositions *amphi-*, *ana-*, *apo-*, *en-*, *ek-*, *epi-*, *peri-*, and *hupo-*, an organization that reveals that the Greeks conceptualized the spatiality of the clothed body in terms of specific “regions”, as well as in terms of the conceptual metaphor ‘DRESSING IS A LOCATION’.

Aiming to restore the reputation of Aristotle as a theorist of metaphor among cognitive linguists by using the apparatus of cognitive linguistic itself, **Gregory Membrez** shows that Aristotle's own ideas of metaphoricity in the *Poetics* and the *Rhetoric* are couched in explicitly metaphorical terms, specifically in terms of a metaphor drawing on concepts from the domain of ‘DWELLING IN AN OIKOS’. By analyzing the conceptual mappings of

this metaphor – according to which literal usage of a “governing” term (*kúrion ónoma*) is understood as a ‘household’ (*oikeîon*) sense and its figurative usage as ‘belonging to another’ (*allótrion*) domain – Membrez argues that Aristotle’s theory of metaphor actually comes close to the Lakovian theory, especially in its view of metaphor as an aspect of everyday language, and of the basis of metaphor not as a “likeness” of literal properties but as a kind of conceptual transfer.

**Chris Collins** explores the metaphorical construal of memory in terms of writing in Greek and Latin. Tracing the narrowly “autobiographical” or “historical” definition of memory to the metaphor, pervasive in Roman thought already by late Republican times, in which the memory is likened to a written text (a wax tablet or, later, a papyrus scroll), Collins argues that while images of writing certainly have permitted some degree of understanding of the workings of memory (by casting it in terms of something more immediately comprehensible), this metaphor has also tended to engender a view of the mind as characterized *only* by those features of writing and thus to hide to classical (and indeed much of modern) culture the real diversity of memory’s functions now recognized by cognitive neuroscience and cognitive psychology.

**Luca D’Anselmi** tackles the issue of “word pictures” in Latin literature from the perspective of Lakovian conceptual metaphor theory, arguing that the form and meaning of pictorial lines are determined by image schemas of the kind underpinning conventional metaphorical expression in Latin: for instance, PATH, CONTACT and SEPARATION, BALANCE, CONTAINMENT. As D’Anselmi argues, these schemas provide an experience-based set of images for verbal expression through metaphorical extension from the spatial domain; thus, they constitute directly meaningful (instead of merely iconic) constructions. And in positing that such patterns of metaphorical word order are based on conventionalized and pervasive conceptual (rather than purely imaginative) associations, D’Anselmi also suggests that these constructions may occur more frequently outside of highly stylized poetry than previously recognized.

Interlineal glosses of Greek and Latin texts, standard in works of linguistic orientation but normally not provided in other areas of classical studies, have been added as an aid in cases where the precise morphosyntactic details of a given citation are taken up as material for further discussion. In cases where the morphosyntax of only a single lexeme is at stake, glosses have been given in-line. This practice is meant to highlight grammatical issues where relevant, while keeping the text otherwise as clean and as user-friendly as possible for the largest audience. In the glosses, the following abbreviations have been used:<sup>7</sup>

ABL = ablative

ACC = accusative

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<sup>7</sup> The abbreviations are based on the Leipzig Glossing Rules, with minor adaptations (<https://www.eva.mpg.de/lingua/resources/glossing-rules.php>).

ADV = adverb(ial)  
AOR = aorist  
COMP = comparative  
DAT = dative  
DEM = demonstrative  
DEP = deponent  
DU = dual  
EMP = emphatic  
F = feminine  
FUT = future  
GEN = genitive  
IMP = imperative  
IMPRF = imperfect  
IMPS = impersonal  
IND = indicative  
INDF = indefinite  
INF = infinitive  
INTERJ = interjection  
IPFV = imperfective  
LOC = locative  
M = masculine  
MID = middle voice  
M/P = medio-passive  
N = neuter  
NEG = negation, negative  
OPT = optative  
PASS = passive  
PL = plural  
POSS = possessive  
PRF = perfect  
PRS = present  
PTC = particle  
PTCP = participle  
Q = question particle/ marker  
REFL = reflexive  
REL = relative  
SBJV = subjunctive  
SG = singular  
VOC = vocative

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Rutger J. Allan

## 1 Aspect and construal

# A cognitive linguistic approach to iterativity, habituality and genericity in Greek

**Abstract:** This chapter analyzes the use of tense and aspect in iterative, habitual and generic expressions in terms of the cognitive linguistic notion of construal, i.e., the cognitive ability to conceive and portray a situation in alternative ways. It will be argued that tense and aspect use in iterative, habitual and generic clauses in Ancient Greek hinges on a number of specific construal operations: the capacity to construe a series of individual events as a holistic higher-order event, the capacity to construe an event as bounded or unbounded, and the capacity to view a situation from alternative vantage points.

**Keywords:** tense, aspect, iterativity, habituality, genericity, construal, cognitive linguistics, embodiment

### 1.1 Introduction

In discussing the uses of the present and imperfect tense, many of our standard Greek grammars distinguish a separate iterative, habitual or generic use. For example, Goodwin (1889) states that “[T]he present may express a *customary* or *repeated* action or a *general truth*” (9), whereas the imperfect “may denote a customary or repeated action, or a series of actions” (11). According to Stahl (1907) the present “refers to present time or the general extent of time [bezeichnet Gegenwart oder allgemeinen Zeitumfang]”<sup>1</sup> (87), and he mentions “the imperfect of interrupted duration or repetition [[d]as Imperfektum der unterbrochenen Dauer oder der Wiederholung]” (96). In Schwyzer & Debrunner (1950: 270–271), we read that the present indicative can be “timeless” when it is used in gnomic and proverbial expressions and it can also be “habitual [[g]ewohnheitsmäßig)”. Smyth (1956: 421, 424) discusses the “Present of Customary Action”, “Present of General Truth” and the “Imperfect of Customary Action”. Similar remarks are found in some more recent reference grammars. Duhoux (2000: 361), for example, refers to the “‘frequentative’ use of the imperfect, conveying the repetition of an action or the habit of engaging in it [[e]mploi ‘frequentative’ de

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<sup>1</sup> The present “expresses present time or general time”. The translations from German in this paper are mine.

l'imparfait, rendant la répétition d'une action ou l'habitude de s'y livrer]”,<sup>2</sup> while Rijksbaron (2006: 10, 14; cf. also 4–5, n. 1) speaks of “the generic use of the present indicative” and points out that the imperfect “may express iterative (habitual) states of affairs”. Napoli (2006: 32) notes that, if iterativity is not expressed by means of reduplication or affixation in Homer, “the iterative reading of an event can also be included in the function of the imperfective aspect”.<sup>3</sup>

What these handbooks seem to suggest is that genericity, habituality and iterativity are distinct conventional uses or meanings of the present and imperfect indicative. Perhaps the only dissenting voice is that of Kühner & Gerth (1898: 132), who state in their treatment of the meaning of present indicative:

Doch ist zu betonen, dass das Präsens an sich weder den Begriff der Dauer, noch den der Wiederholung enthält, sondern die Handlung in ihrer Entwicklung vor Augen führt.

“However, it should be stressed that the present in itself neither contains the notion of duration nor that of repetition but that it presents the action in its development”.

And similarly, regarding the imperfect (1898: 142):

Ebenso wenig kann es an sich eine wiederholte Handlung in der Vergangenheit, ein Pflegen ausdrücken . . . Das Imperfekt erscheint in diesem Falle nur deshalb öfter als der Aorist, weil eine wiederholte Handlung gleichsam eine zusammenhängende Reihe von Handlungen darstellt, bei der der Beschauer weit öfter den Verlauf als den Abschluss ins Auge fasst.

“Nor can it in itself express a repeated action in the past, a habit . . . The imperfect occurs in this case more frequently than the aorist only because a repeated action in a sense constitutes a coherent series of actions, of which the observer envisages the progress much more often than the completion”.

Thus, Kühner & Gerth stress that the present and imperfect do not *in and of themselves* express iterativity and habituality. The tendency for iterative or habitual events to appear in these tenses has to do, rather, with the fact that iterative/habitual events constitute a coherent series which are typically viewed in their progress rather than in their completion.<sup>4</sup>

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2 The “frequentative” use of the imperfect expresses the repetition of an action or the habit of indulging in it.

3 Similar remarks can be found on pp. 49, 130, 143.

4 Interestingly, a similar debate about the connection between iterativity-habituality-genericity, on the one hand, and imperfective aspect (cf. the present stem in Ancient Greek), on the other, is occurring in general linguistics. For example, Comrie, 1976: 25 classifies habitual as a subdivision of imperfective. Bertinetto & Lenci, 2012 argue that habituals and generics belong to the class of “gnomic imperfectives”. Dik, 1997: 223–224, however, distinguishes imperfective aspect (a predicate operator) from habitual and iterative aspect (predication operators), although he mentions that the imperfective in some languages can get a habitual or iterative *interpretation*. Carlson, 2012 suggests that habituality should not be considered an aspect.

An indication that iterativity, habituality and genericity are not inherent meanings of the present and imperfect is the occurrence also of the aorist in such contexts, a fact recognized by the aforementioned reference grammars – although they do not seem to acknowledge that this use of the aorist is fundamentally at odds with the idea that iterativity, habituality and genericity are expressed by the present and imperfect. Examples of the aorist in such contexts are the so-called “gnomic” aorist, “empiric” aorist and “iterative” aorist:<sup>5</sup>

- (1) a. *pathòn dé te népios égnō*<sub>AOR</sub>. (Hes. *Op.* 218)  
 ‘A fool learns only when he has suffered’. (gnomic)  
 b. *polloì pollákis meizónōn epithūmoúntes tà parónt’ apólesan*<sub>AOR</sub>. (Dem. 23.113)  
 ‘Many men often lost what they had in the desire for greater possessions’.  
 (empiric)  
 c. *hopóte prosblépsēi*<sub>AOR.OPT</sub> *tinas tôn en taîs táxesi, tóte mèn eîpen*<sub>AOR</sub> *án*. (Xen. *Cyr.* 7.1.10)  
 ‘Every time he looked at some of the men in the lines, he would say . . .’. (iterative + *án*)

These examples show that the aorist is not incompatible with iterative, habitual and generic meanings. So, what sense does it make to explicitly state the existence of an iterative, habitual or generic meaning of the present and imperfect, if there also appears to be iterative, habitual and generic aorists?<sup>6</sup>

In this chapter, I argue that Kuhner and Gerth are right in adhering to a dissenting opinion: iterativity, habituality and genericity are *not* inherently expressed by the present indicative and imperfect. The iterative, habitual or generic interpretation of a clause is not dependent on the aspectual form of the verb, but it is always prompted either by other linguistic indications (e.g., the presence of a generic subject noun, special adverbial expressions or the particles *án* or ‘epic’ *te*) or by contextual information and general world knowledge. The flip side of this approach is that the

<sup>5</sup> These aorist types are discussed by Goodwin, 1875: 54–56; Rijksbaron, 2006: 14–15, 31–33; Schwyzler & Debrunner, 1950: 278; Smyth, 1956: 408, 431, 529. The examples cited are taken from Smyth.

<sup>6</sup> Other examples of the occurrence of the aorist in iterative expressions are the general (distributive-iterative) subjunctive + *án* and the iterative-distributive optative in conditional, temporal en relative subordinate clauses. In these syntactic constellations, the aorist aspect signals that the state of affairs referred to by subordinate clause is *anterior* to state of affairs of the main clause (e.g., Her. *Hist.* 1.194.4–5: *epeàn dè . . . apikōntai opisō es tous Armeniōus, álla trópōi tōi autōi poieúntai ploía* ‘When they have arrived in Armenia, they make other boats in the same way’), whereas present subjunctives and optatives signal that the state of affairs in the subordinate clause is *simultaneous* with the state of affairs of the main clause (e.g., *tóte gār pleísta kerdáinousin, hótan kakoū tinos apaggelthéntos tēi pólei tímion tôn sítōn pólōsin* ‘For they make most profit when at the announcement to the city of some disaster they sell corn at a high price’); see Rijksbaron, 2006: 70, 72–73, 82–83, 88–89.

present (i.e., imperfective aspect) and the aorist (i.e., perfective aspect) in iterative, habitual and generic expressions are not in any way “special” uses of their respective aspect forms. As I shall argue, the semantic contribution of the present and aorist aspect marking in these expressions is no different from their general meaning: the present aspect in iterative, habitual, or generic expressions is used to construe the event as unbounded within the temporal scope, while the aorist imposes a bounded construal on the event.

This general characterization of the semantics of the present and aorist aspects brings us to the cognitive linguistic notion of construal. A central tenet of the cognitive linguistic approach to semantics is that meaning is not something “objective”, involving a “God’s eye view”. In cognitive linguistics, meaning cannot be abstracted away from a concrete conceptualizer who is perceiving, evaluating and physically and emotionally interacting with the world and its inhabitants surrounding him or her. Semantic content implicitly or explicitly always involves a conceptualizing consciousness, an embodied subject of conception who “construes” the content in a certain way. Construal thus refers to “the relationship between a speaker (or hearer) and a situation that he conceptualizes and portrays” (Langacker, 1987: 487–488).

Humans are able to conceive and portray a situation in alternate ways: “People have the capacity to construe a scene by means of alternative images, so that the semantic value is not simply received from the objective situation at hand but instead is in large measure imposed on it” (Langacker, 1991: 35). The conventional meaning of an expression does not only evoke a certain “objective” conceptual content, it is also associated with the particular way in which a speaker *construes* the conceptual content. In the view of semantics taken by cognitive grammar, not only lexical elements but also grammatical elements are meaningful; that is, both lexical and grammatical elements represent a particular way of construing the conceptual content. Construal is never neutral: linguistic expressions always impose a way of construing the conceptual content.

Langacker (2008: 3) illustrates the notion of construal by a visual metaphor: “In viewing a scene, what we actually see depends on how closely we examine it, what we choose to look at, which elements we pay most attention to, and where we view it from”. These various aspects involved in observing a scene correspond to four broad types of construal phenomena: specificity, focusing, prominence and perspective. In section 3, I will go into the specific construal types and their relevance to aspectual semantics in more detail.

Construal is an embodied cognitive phenomenon. As Evans & Green (2006: 45) put it: “Our construal of reality is likely to be mediated in large measure by the nature of our bodies”. An embodied understanding of mind and language holds that conceptual structure is grounded in everyday bodily experiences, such as motion, perception, emotion and social interaction:

Thought is embodied, that is, the structures used to put together our conceptual systems grow out of bodily experience and make sense in terms of it; moreover, the core of our conceptual systems are directly grounded in perception, body movement, and experience of a physical and social character. (Lakoff, 1987: xiv)

The way in which humans bodily engage the world and interact with its inhabitants fundamentally shapes their minds, their knowledge, beliefs and understandings (both personal and culture-dependent) of the reality surrounding them. A speaker's construal of reality cannot be separated from his or her embodied viewpoint and that of his or her interlocutor.

The notion of construal also features in embodied simulation approaches to language comprehension. The central idea behind the embodied simulation view is that understanding language is based on a mental simulation that is grounded in the actual bodily experience of motion and perception. One of the prominent advocates of the embodied simulation view is the cognitive psychologist Rolf Zwaan. In his model of language comprehension – which shows some similarities to Langacker's cognitive grammar – construal is defined as “the mental simulation of an experience conveyed by an attentional frame” (Zwaan & Madden, 2005: 230). According to Zwaan, linguistic constructions (words, grammatical items) in an intonation unit (which he, following Langacker, equates with an attentional frame) activate experiential resources in the mind of the language comprehender that are used to construct a mental simulation of the situation.<sup>7</sup>

## 1.2 Iterativity, habituality and genericity in cognitive linguistics

Before we return to the role of construal operations, it is important to go somewhat further into the specifics of iterativity, habituality and genericity. In section 1, I have treated the semantic domain of iterativity, habituality and genericity more or less as a unitary category. Even though these notions share features, and precise boundaries between them may at times be difficult to draw, it is helpful to identify some of their

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<sup>7</sup> See also Zwaan, 2004. There is a growing body of empirical evidence supporting the presence of embodiment effects in language comprehension, e.g., motor simulation: Bergen & Wheeler, 2010; Glenberg & Kaschak 2002; Taylor & Zwaan, 2008; perceptual simulation: Yao, Belin & Scheepers, 2011; Zwaan et al., 2004; emotional simulation: Havas, Glenberg & Rinck, 2007. Helpful overviews of the research on embodiment and language comprehension are given by Barsalou, 2010; Gibbs, 2005; Kaschak et al., 2014; Sanford & Emmott, 2013: 132–160. In Allan, *forthc. a* and *forthc. b*, I use Zwaan's embodied simulation model in an analysis of the linguistic and narratological aspects of immersive narrative.

distinctive semantic properties.<sup>8</sup> Typical examples of iterative, habitual and generic expressions are the following sentences (from Langacker, 2000: 251):

- (2) a. Iterative: *My cat repeatedly stalked that bird.*  
 b. Habitual: *My cat stalks that bird every morning.*  
 c. Generic: *Cats stalk birds. Cats have four legs.*

Iteratives refer to events that are repeated on the same occasion (within one “scene”), each occurrence of which is anchored to a specific point in time, and they refer to events that are conceived of as actually occurring (or having occurred). Iteratives are therefore located, in the terminology of cognitive grammar, on the *actual plane*. Habituals instead involve repeated events on different occasions. They do not directly refer to actual event occurrences that are anchored to a specific point in time. Habituals express that the multiple occurrences of a certain event type are characteristic of the world’s structure during some period of time. Since they do not directly provide information about actually occurring events but about the structural dimension of the world, they designate events located on the *structural plane*. The structural plane “comprises event instances with no status in actuality. These instances are conceived merely for purposes of characterizing “how the world is made”. They have no existence outside the structural plane, which can be thought of metaphorically as “blueprints’ for the world’s structure” (Langacker, 2000: 251).

Like habituals, generic expressions do not designate actual occurrences of events anchored to specific moment in time but to events located on the structural plane. The difference between habituals and generics is that the former refer to individual instances (tokens) (“my cat”, “that bird”), while generics refer to types of entities (“cats”, “birds”). Another difference is that generics do not necessarily involve repeated events but may also be states (e.g., “cats have four legs”). The distinctive semantic features of iterativity, habituality and genericity are summarized in the following table:

**Table 1.** Iterativity, habituality genericity: semantic features.

	REPETITION	PLANE	SUBJECT
ITERATIVE	+	actual	instance
HABITUAL	+	structural	instance
GENERIC	+/-	structural	type

<sup>8</sup> My discussion of iterativity, habituality and genericity mainly draws on Langacker’s Cognitive Grammar analysis. Alternative approaches are the contributions in Bertinetto & Lenci, 2012; Carlson & Pelletier, 1995; Carlson, 2012. Typological studies are Bybee, Perkins & Pagliuca, 1994 and Dahl, 1995.

### 1.3 Types of construal in cognitive linguistics

As we have seen in section one, Langacker distinguishes four general types of construal operations: *specificity*, *focusing*, *prominence*, and *perspective*. For my analysis of iterativity, habituality and genericity in Greek, the three latter of these four general types will be of special importance. The use of tense and aspect in iterative, habitual and generic statements can be explained by a combination of three more specific construal operations: (1) the mental ability to focus by selecting a particular portion of conceptual content for linguistic representation; more specifically, our ability to impose a “viewing frame” on a particular situation that either includes or excludes the boundaries of an event; (2) the ability to construe some aspects of an entity or situation as more prominent than others; more specifically, the capacity to construe a number of components as collectively constituting a higher order entity. In other words, to construe the whole as cognitively more prominent than the parts; and (3) the capacity to select alternative spatio-temporal vantage points from which a given situation is viewed and described.<sup>9</sup>

The first construal type relates to specificity. Although this construal type is not directly relevant to my analysis, I will briefly discuss it for the sake of completeness. This construal type relates to the level of precision and granularity with which a situation is portrayed. Expressions vary with respect to their degree of specificity, as in the following example, ranging from more schematic to more specific (from Langacker, 2008: 56):

*Something happened.* →

*A person perceived a rodent.* →

*A girl saw a porcupine.* →

*An alert little girl wearing glasses caught a brief glimpse of a ferocious porcupine with sharp quills.*

The second construal type is focusing. This dimension has to do with the speaker’s selection of conceptual content for linguistic presentation (while omitting other content) and also with the speaker’s choice to present some conceptual content as foreground and other content as background. An example of focusing relevant to this argument regards verbal aspect. Grammatical categories such as tense and aspect are not used to reflect reality in an objective way but are exploited by a speaker to impose a particular construal on the described situation. By using a present (i.e., imperfective) form or an aorist (i.e., perfective) form, a speaker imposes a temporal scope, a “viewing frame”, on the conceptual content expressed by the verb stem.

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<sup>9</sup> The following discussion of construal is based on Langacker, 2008: 55–89. Another very useful introduction to the cognitive linguistic concept of construal is given by Croft & Cruse, 2004: ch.3.

The temporal scope selects some portion of the event, which becomes the focus of attention; other portions are left out of focus. The present (imperfective) aspect imposes a limited scope on the event, a scope which excludes the initial and final boundaries of the event. The speaker “zooms in” to view the event from an internal viewpoint in its development. By contrast, the aorist (perfective) imposes a wider frame of view on the event to such an extent that it includes the boundaries of the event.<sup>10</sup>

This difference of construal can be illustrated by Figures 1.1 and 1.2:

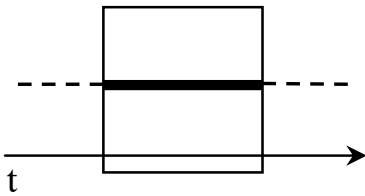


Figure 1.1: Present (imperfective) aspect: unbounded within temporal scope.

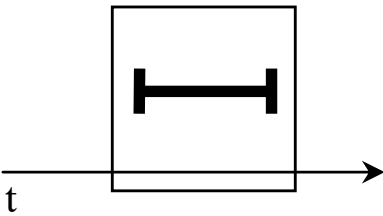


Figure 1.2: Aorist (perfective) aspect: bounded within temporal scope.

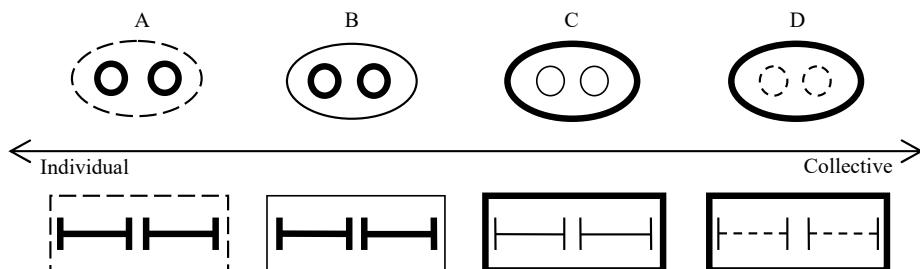
The straight horizontal lines are abstract representations of events. The boxes represent the temporal scope (“viewing frame”). The arrow labeled *t* stands for time. The portion of the total event that is located in the focus of view is indicated by a thick line. The dashes indicate that the boundaries of the situation are not specified as they are outside the scope of view. How long the event has been going on and how long the event will go on is left unspecified.<sup>11</sup>

<sup>10</sup> Note, however, that in the case of the ingressive aorist (*ebasileuse* ‘he became king’, *egélase* ‘he burst into laughter’), which only occurs with atelic verb stems (i.e., states or activities), only the *initial* boundary of the event is included in the scope of view.

<sup>11</sup> For the cognitive grammar account of verbal aspect I refer to Langacker, 1987: 258–262; 1991: 88; 2000: 222–229; 2008: 147–160. A cognitive linguistic analysis of ancient Greek aspect is given by Allan, 2017.



The third dimension of construal is prominence. This has to do with differences in cognitive salience between various elements of a conceptual content. An example of cognitive prominence that is relevant to the issue of iterativity, habituality and genericity, relates to our ability to construe a number of individual entities as constituting a collective, higher-order entity. The cognitive salience of this collective entity relative to the individual component entities may vary in degree, depending on the presence of particular linguistic elements and on pragmatic knowledge (Langacker, 1997: 199–200). This is illustrated by Figure 2 and the English examples (from Langacker, 1997: 200–201) given in (3).



**Figure 2:** Construal of higher-order entities (Langacker, 1997: 200).

- (3) a. *The man and the woman are both very smart.* [column A]  
 b. *That man and woman make an attractive couple.* [column B]  
 c. *Peanut butter and jelly {are/ is} wonderful for sandwiches.* [column B/C]  
 d. *He got three tons of {gravel/ ??pebbles} to pave his driveway.* [column C/D]

In example (3a), the presence of a word like *both*, the fact that each coordinated noun has its own article and the lexical semantics of the words *smart* evoke a construal as diagrammed in column A: the salience of the man and woman as distinct individuals is high (represented by the thick circles), while the conception of the man and woman as a collective entity is only slight (dashed oval shape). In (3b), the lack of an individual article and the lexical semantics of the word *couple* trigger a construal in which the collective entity acquires a certain degree of prominence, as represented by the continuous oval shape in column B. In (3c), the option of a singular verb form *is*, points to a construal as in column C, where the subject is construed as a single collective entity (thick oval shape) of which the individuality of the component entities (*peanut butter*, *jelly*) has become less salient. The use of the collective mass noun *gravel* in (d) is associated with column D. Here the conception of individual component pebble stones (dashed circles) is even more pushed to the background in favor of the conception of the collective entity.

A parallel scale can be observed in the construal of individual vs. higher-order events, represented in Figure 2 by the rectangular shapes in the lower row.

- (4) a. *Jack bought it and the next day Jill painted it.*  
 b. *I should wash and dry the dishes.*  
 c. *Sam kicked his dog several times.*  
 d. *Sam kicked his dog for many years.* (From Langacker, 1997: 196, 201)

The two events in (4a) are construed as completely distinct, while the conception of them as forming a coherent entity is only tenuous. The events of washing and drying in (b) are construed as constituting a more prominent unity. Example (c) is an iterative sentence. The component events (every single time Sam kicked his dog) are construed as relatively less salient as compared to the higher-order iterative event. Example (d) describes a habitual event. Here, the component events are construed as minimally salient: in contrast to the components of an iterative event, the component entities of habitual events are not anchored to any specific point in time (Langacker, 1997: 202; 2002: 252).

The fourth and final dimension of construal concerns perspective, the overall relationship between the subject of conception (the “viewer”) and the object of conception (the situation being “viewed”). An important element of perspective is the vantage point, the actual location in space and time, from which a conceptualizer observes and describes a given situation. This construal operation is relevant to tense and aspect marking in ancient Greek. Typically, the imperfect will evoke an internal viewpoint on the state of affairs, while the aorist is used when a speaker views the state of affairs in its totality from a retrospective point of view.

We have seen that the use of tense and aspect in iterative, habitual and generic sentences crucially hinges on several construal operations: the ability to conceive of higher-order entities; the ability to impose a temporal scope on a particular event that either includes or excludes the event’s boundaries; and the capacity to view a given event from alternative vantage points. How these construal operations interact can be seen in Figures 3.1 and 3.2 (cf. Langacker, 2000: 249):

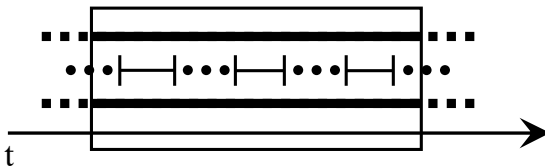


Figure 3.1: Higher-order imperfective: unbounded series of iterations.

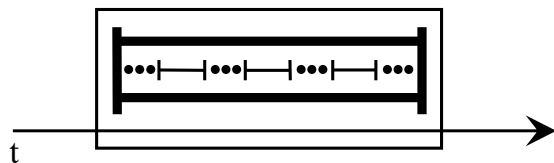


Figure 3.2: Higher-order perfective: bounded series of iterations.

Higher-order events consist of a number of component events. These component events are usually bounded, as indicated in Figures 3.1 and 3.2 by the H-like shapes (see also Figure 1.1). In this diagram, an arbitrary number of three component events are represented. However, the number of component events will often be indefinite, which is indicated by the dots between the H-shapes. The thick lines represent the construal of the component events as higher-order events. The rectangles indicate the temporal scope. The crucial distinction between (3a) and (3b) is that in the former the higher-order event (i.e., the series of iterations) is viewed from an external vantage point and construed as a bounded (perfective) entity, while in (3b) the higher-order event is viewed from an internal vantage point and construed as unbounded. In ancient Greek, tense and aspect choice in iterative, habitual and generic sentences can be shown to be directly linked to these alternative construal configurations.

#### 1.4 Ancient Greek tense and aspect in iteratives, habituais and generics

The first case to be addressed concerns the alleged “iterative/habitual imperfect” that is so often mentioned in our handbooks. To illustrate this meaning of the imperfect, Rijksbaron (2006: 14) cites two examples (5), both of which can, in my view, straightforwardly be explained otherwise.

- (5) a. *etímēse dé min megálōs· kai gàr dôrá hoi anà pân étos edídou<sub>IMPRF</sub> taûta tà Pársēisi estí tîmiótata, kai tèn Babulôná hoi édōke<sub>AOR</sub> ateléa némeshthai mékhri tēs ekeínou zóēs, kai álla pollà epédōke<sub>AOR</sub>.* (Her. Hist. 3.160.2)

‘Moreover, he (sc. Darius) gave him (Zopyrus) great honors; for not only did he give him every year those things which by the Persians are accounted the most honorable, but also granted him Babylon to rule free for tribute; so long as he should live; and he added many other gifts’.

- b. *epeidè dè tò paidíon egéneto hēmîn, hē métēr autò ethélazen<sub>IMPRF</sub>· hina dè mé, hopóte lousthai déoi, kinduneúēi katà tēs kîmakos katabainousa, egò mèn ánō diēitómēn, hai dè gunaîkes kátō. kai houtōs édē suneithisménon ên, hōste polláki hē gunē apéiei kátō katheudēsousa hōs tò paidíon, hina tòn titthòn autôî didôî kai mē boái.* (Lys. Erat. 9–10)

‘When the child was born to us, its mother suckled it; and in order that, each time that it had to be washed, she might avoid the risk of descending by the stairs, I used to live above, and the women below. By this time, it had become such a habitual thing that my wife would often leave me and go down to sleep with the child, so as to be able to give it the breast and stop its crying’.

The presence of the cyclic adverbial *anà pân étos* in (5a) cannot be used as decisive evidence that the imperfect here has a habitual meaning. This type of argument always cuts both ways. One might equally argue the opposite case, that it is actually the presence of the adverbial that evokes the habitual interpretation of the sentence, whereas the imperfect form conveys a different semantic value. In my view, the imperfect *edídou* does not of itself express habitual meaning. Instead, it serves to construe the series of annual gifts as an unbounded higher-order event (cf. Figure 3.1). In this context, a very common discourse-pragmatic factor may have played a role: the narrator wishes to present the series of annual gifts as a temporal frame within which the following events take place. This frame-instantiating function is in fact mentioned by Rijksbaron (2006: 11) as the imperfect’s main use in narrative: “Since the *imperfect* characterizes the state of affairs as ‘not-completed’ it creates a framework within which other states of affairs may occur, while the *aorist indicative* characterizes the state of affairs as ‘completed’, as a mere event”.

From a theoretical point of view (and that of Occam’s Razor), it is more parsimonious and so more attractive to explain the imperfect *edídou* as a case of the prototypical framework-creating use of the imperfect rather than to postulate that it is used with a special “iterative” meaning. The semantic effect of the imperfect form of *edídou*, the construal of the series of iterations as an unbounded higher-order event, can be represent by Figure 4:

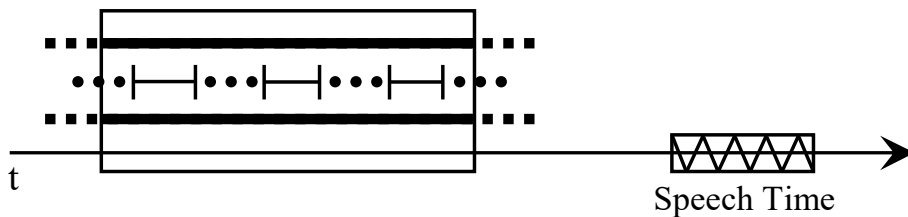


Figure 4: Imperfect: unbounded series of iterations.>

The series of iterations is unbounded within the temporal scope, represented by the rectangular box to the left. The box with squiggly lines to the right indicates the time of speaking.<sup>12</sup> As the imperfect is a past tense, the event is located in time prior to the time of speaking.

The imperfect *edidou* is followed by two aorists *édōke* and *epédōke*. The first aorist *édōke* is straightforward: it is a singular bounded event that does not function as a temporal frame for any subsequent events. The second aorist *epédōke* is more interesting. The direct object *álla pollá* makes it clear that we are, in fact, dealing with an iterative event. This time, however, it is not an imperfect but an aorist form: yet another indication that iterativity is not necessarily linked to the imperfect. But what does the aorist form do? The semantic effect of the aorist form of *epédōke* is that the series of repeated events is construed as a bounded, holistically viewed unity, as represented in Figure 5:

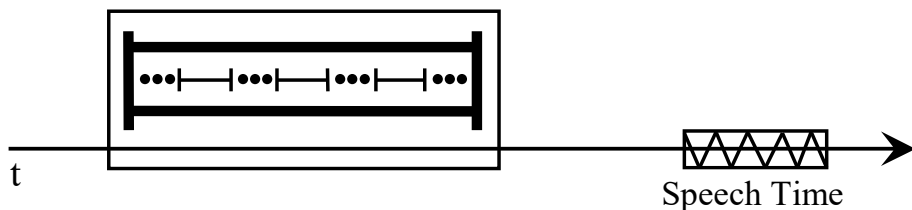


Figure 5: Aorist: bounded series of iterations.>

Again, a factor that plays a decisive role in the choice of aspect is discourse-pragmatics. Unlike *edidou* earlier, *epédōke* does not function as a framework for any following events and there is, therefore, no need to represent it from an internal viewpoint. It concludes the section about Zopyrus and the gifts he received from Darius. In the next sentence, the topic switches to Megabyzus, Zopyrus' son.

The second example of the “iterative/habitual” imperfect cited by Rijksbaron is (5b). In this case, too, it is unnecessary to ascribe the habitual reading to the imperfect *per se*. Here, knowledge of the world is enough to prompt the addressee to a habitual interpretation of *ethélazen*. Once the speaker, Euphiletus, has mentioned that he and his wife had a child, the hearer understands that the mother will not breastfeed the child only once, but will do so habitually. Instead, the imperfect serves a different,

<sup>12</sup> In cognitive grammar, the time of speech (acting as a reference point in tense marking) is not seen as punctual, as in many other linguistic theories, but, more realistically, seen as taking a brief time span, typically the length it takes to utter a finite clause; see Langacker, 2008: 158.

discourse-pragmatic purpose. The fact that the mother breastfeeds the child is construed by the speaker as an unbounded activity in order to present it as a temporal framework within which (and because of which) a number of subsequent actions take place: the women servants and the child move downstairs, and Euphiletus' wife often joins them to breastfeed the child.

It is worth noting that while the final boundary of *ethélazen* is left unspecified, its initial boundary is given in the syntactic context by the temporal subordinate clause (*epeidè dè tò paidíon egéneto<sub>AOR</sub> hēmîn*). The aorist aspect of *egéneto* signals that the time of the subordinate clause is anterior to the time of the main clause (see Rijksbaron, 2006: 76). It appears that in such contexts, in which an activity or state is presented as starting immediately from a moment in time specified in the context, the imperfect (or, more generally, the imperfective present stem) can be used.<sup>13</sup> Since the initial boundary of the event is already indicated explicitly in the syntactic context, there is no further need to express the boundedness of the event by means of an aorist form.<sup>14</sup>

Other illustrative examples showing that there is no exclusive link between iterativity and the imperfect form (and therefore no “iterative imperfect”) are the following minimal pairs from Xenophon:

- (6) a. *kai sumbalóntes tās aspídas eōthoúnto<sub>IMPRF</sub>, emákhonto<sub>IMPRF</sub>, apékteinon<sub>IMPRF</sub>, apéthnēiskon<sub>IMPRF</sub>. télos dè tōn Thēbaíōn hoi mèn diapíptousi pròs tòn Helikóna, polloì d' apokhōroúntes apéthanon<sub>AOR</sub>*. (Xen. HG. 4.3.19)  
 ‘And setting shields against shields they shoved, fought, killed, and were killed. Finally, some of the Thebans broke through and reached Mount Helicon, but many were killed while making their way thither’.
- b. *allà takhù mèn ho Arkhídamos etétrōto tòn mērōn diampáx, takhù dè hoi makhómēnoi prò autoú apéthnēiskon<sub>IMPRF</sub>, Poluainídas te kai Khílōn ho tèn adelphèn toú Arkhidámou ékhōn, kai hoi pántes dè autôn tóte apéthanon<sub>AOR</sub> ouk élatton tōn triákonta.* (7.4.23)  
 ‘But Archidamus speedily received a wound straight through his thigh and speedily those who fought in front of him kept falling, among them Polyaeidas and Chilon, who was married to the sister of Archidamus; and the whole number of them who fell at that time was not less than thirty’.

<sup>13</sup> Cf. also Rijksbaron's, 2006: 17–18, “immediative imperfect”.

<sup>14</sup> Note that the imperfect of activities and states (i.e., atelic states of affairs) is also commonly used in contexts that form a mirror-image, i.e., contexts that provide an explicit *final* boundary, e.g., by means of a *posterior* temporal subordinate clause: *autoi dè pálin tōi mèn pezōi ekhōroun dià tōn Sikelōn hēōs aphikonto es Katánēn* ‘The troops marched back through the territory of the Sicels until they reached Catana’ (Th. 6.62.3). The imperfect *ekhōroun* expresses that the activity continues until the moment in time referred to by the subordinate temporal clause.

In these two passages, an imperfect and an aorist occur at a short distance from one another. In (6b), the two verbs actually refer to the same event. All four verb forms refer to iterative events, i.e., to a series of killings. However, two are imperfects and two aorist forms. The interpretation of the four events as iterative is, obviously, not dependent on the imperfect form since the aorist forms equally designate iterative events. Instead, the iterative interpretation of all four events should be ascribed to the punctual lexical semantics of *apothnēiskō* (i.e., Aktionsart *achievement*) in combination with the plural subject. Since it is unlikely that a considerable number of people should die at exactly the same moment (except in the drastic case of a bomb explosion or plane crash), the reader will naturally interpret the plurality of the killings as an iterative *series* of deaths distributed over a certain time span.

The contrast between the imperfects and the aorists has to do with a difference in boundedness and viewpoint. In (6a), the series of imperfects *eōthoûnto*, *emákhonto*, *apékteinon*, and *apéthnēiskon* set up, by virtue of their unboundedness, an internal viewpoint with respect to the battle events. The events are viewed in their development (cf. Figure 4) and as occurring simultaneously. With aorist *apéthanon*, the narrator invokes a retrospective viewpoint from which he views the series of deaths in a holistic way as a bounded unity (cf. Figure 5). The sentence concludes the battle description and thereby the discourse segment. In a similar way, (6b) first takes an internal viewpoint on the battle. We plunge into the battle scene when Archidamus has already been wounded (pluperfect) and the men fighting in front of him are being killed, among whom are Polyaeidas and Archidamus' brother-in-law Chilon. The aorist refers to the same series of killings, but then from a retrospective vantage point, considering it in its completeness and comprising the total number of casualties.

It should be noted that the events referred to by *eōthoûnto*, *apékteinon* and *apéthnēiskon* can be interpreted as iterative but this interpretation is, again, not due to their imperfect form but to their punctual lexical Aktionsart (achievements) combined with a plural subject. The imperfect *emákhonto*, being lexically atelic (activity), does not allow an iterative reading. An additional argument against the idea of an iterative imperfect meaning is that it is theoretically more sound to explain every one of these imperfects in the same way, i.e., as indicating an internal viewpoint, than to say that the imperfect form of *eōthoûnto*, *apékteinon* and *apéthnēiskon* designates iterativity, while only the imperfect form of *emákhonto* is used to create an internal viewpoint. This methodological principle applies to many allegedly iterative imperfects which occur in a passage next to other imperfects. To give another example, it is more attractive to analyze the whole series of imperfects in *hē dē mákhē sphéōn ên<sub>IMPRF</sub> ap' híppōn, dōratá te ephóreon<sub>IMPRF</sub> megála, kai autoi êsan<sub>IMPRF</sub> hippeúesthai agathoi* (Her. *Hist.* 1.79.3) ('They fought on horseback, they carried long spears and they were themselves good in horsemanship.') as marking the states of affairs as unbounded and thus temporally simultaneous ("framework") to the events of the main story line than to single out *ephóreon* from the series and explain it differently by referring to an "iterative meaning of the imperfect".

In other types of iterative/habitual expressions, aspect variation seems to have a different semantic effect. Consider, for example, the following examples of the imperfect and the aorist combined with the particle *án*.

- (7) a. *en mèn tōi tēōs khrónōi, hósoi me pháskoien*<sub>PRS.OPT.</sub> *deinòn eínai . . . éganáktoun*<sub>IMPRF</sub>  
*án*. (Lys. 7.12)  
 ‘At that time, whenever people called me shrewd . . . I would be angry’.
- b. *hopóte prosblépsēi*<sub>AOR.OPT.</sub> *tinas tōn en taís táxesi, tóte mèn eípen*<sub>AOR</sub> *án*. (= ex. 1c).  
 ‘Every time he looked at some of the men in the lines, he would say . . .’.

In these examples, the combination of a past tense form with the particle *án* expresses a iterative/habitual meaning. In this type of iterative construction, the aspectual marking is used to provide information about the individual constituent events, rather than about the whole series of iterations. The imperfect “zooms in” on the constituents and construes them as unbounded (Figure 6.1), whereas the aorist specifies that every component event is viewed as bounded (Figure 6.2).

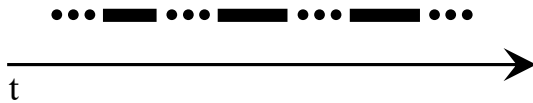


Figure 6.1: unbounded component events.

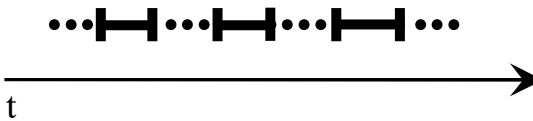


Figure 6.2: bounded component events.

The increased saliency of the constituent events is marked by the thickness of the lines. The dots indicate the indefinite iteration of the component events.

By way of digression, it is worthwhile to leave classical Greek briefly and turn to an intriguing verb formation in Homeric Greek involving an aorist stem combined with an iterative/habitual suffix *-sk-* and imperfect endings. This formation, too,



clearly shows that present aspect is not used to express iterativity or habituality. An example from Homer's description of the shield of Achilles is the following:<sup>15</sup>

(8) *toîsi d' épeit' en khersî dépas meliédéos oînou*

*dósken anèr epiôn: toî dè strépsaskon an' ógmous.* (Hom. *Il.* 18.545–46)

'[A] man would come forward and put a cup of honey-sweet wine in their hands: then they would turn back down the furrows'.

The complex morphological forms *dó-sk-en* and *strép-sa-sk-on* provide aspectual information on several hierarchically organized semantic levels: one semantic level has scope over the other. The hierarchical organization is iconically reflected in the order of morphemes. The aorist verb stems *do-* and *strepsa-* express that each of the individual component events (“giving a cup”, “turning back”) is in itself bounded; the suffix *-sk-* signals that each of these component events is iterated; and the imperfect endings, finally, express that the series of iterations as a whole is unbounded and thus viewed in its development. The narrator presents these iterative series of actions as unbounded for discourse-pragmatic purposes. In Homer's description of the images depicted on Achilles' shield, the imperfect is the most frequently used tense by far (Koopman, 2014: 94–95). The imperfects seem to suggest that the images depicted on Achilles' shield are “snapshots” capturing actions that have to be imagined as being in progress. In his book on the description of Achilles' shield, Becker (1995: 109) describes this effect of the imperfect in the following words: “The imperfect tense here could reflect the visual image: given its progressive aspect, the imperfect could represent the necessary incompleteness of a depicted action that is frozen in a metallic representation”. The special verbal formations *dósken* and *strépsaskon* show, once again, that the imperfect inflection does not in itself express iterativity or habituality (which is, after all, already expressed by the suffix *-sk-*) but, instead, it is used to construe, for discourse-pragmatic purposes, the series of iterated component events as unbounded.

I now turn to aspectual variation in generic expressions. Although the present is more frequently used in generic expressions, the aorist is certainly not uncommon. An example is the so-called “empiric” aorist; that is, the use of the aorist in combination with adverbs such as *aeí, édē, pollákis, oúpō, oúpote* in expressions referring to a fact of experience.<sup>16</sup> These expressions have a generic meaning (in the case of a generic subject) or, at least, a very strong implication of generic (“gnomic”) validity, as in:

<sup>15</sup> For more examples of this formation, see Chantraine, 1958: 323–325.

<sup>16</sup> See Goodwin, 1875: § 156; Kühner & Gerth, 1898: 159, who do not distinguish the empiric from the gnomic aorist; Rijksbaron, 2006: 33; Smyth, 1956: 431. Most of our traditional grammars assume that the empiric aorist is the historical source of the gnomic aorist. For the gnomic aorist, see below.

- (9) a. *allā gār athūmoûntes ándres oúpō trópaion éstēsan*<sub>AOR</sub>. (Pl. *Crit.* 108c)  
 ‘But faint-hearted men never set up a trophy yet’.
- b. *polloì pollákis meizónōn epithūmoûntes tà parónt’ apólesan*<sub>AOR</sub>. (Dem. *Orat.* 23.113)  
 ‘Many men often lost what they had in the desire for greater possessions’.

Formally, these expressions refer to past events. According to Rijksbaron (2006: 33), the empiric aorist is a type of constative aorist; that is, an aorist occurring in direct speech, which “usually indicates that the state of affairs is completed relative to the *moment of utterance* . . . the completion of the state of affairs is merely ascertained” (Rijksbaron, 2006: 28–29). From a retrospective viewpoint, the speaker oversees the past in its totality (i.e., the past as a whole is located within his or her viewing frame) and observes that some events have (or have never) occurred. Taken literally, the expressions only provide information about the past. The special effect of using an aorist past indicative – instead of, for example, a present tense – is to highlight that our knowledge of the general structure of the world is based on past experience. These constructions strongly imply that our past experience can be used as reliable evidence for the existence of the more structural characteristics of our world.

Tense and aspect variation in generic expressions can be insightfully analyzed by reference to the cognitive model already briefly discussed above, that is, the structured world model, which relates to the idea that the world has a stable structure or “blueprint” that specifies how the world is made. Our knowledge of the world’s structural dimension consists of generalizations based on the observation of actually occurring instances of a particular event type. Generic sentences do not refer to actual, incidental events (the *actual plane*) but to structural generalizations about the world’s essential nature (the *structural plane*). The generalizations may be like laws of nature or physical regularities (*Cats have four legs, Cats stalk birds*) or they may be established in social practice (*In the UK, cars drive on the left side of the road, A man proposes to a woman*). Since generalizations do not refer to actual events, they are virtual entities: they represent what is common to a number of actual events (Langacker, 2009: 197–198). The cognitive model structuring the conceptual content relevant to generic expressions is represented in Figure 7.

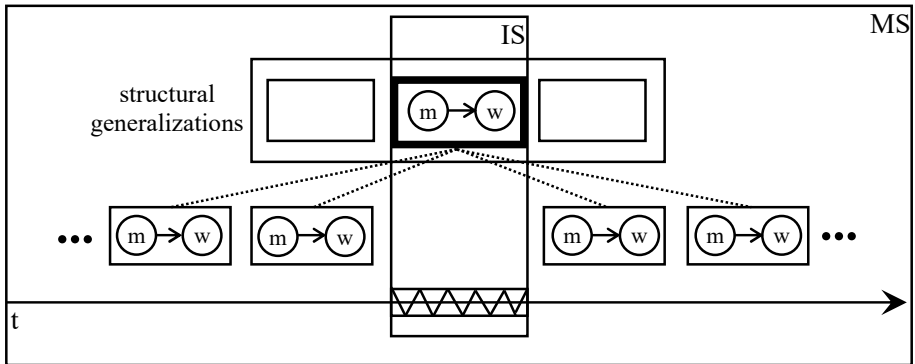


Figure 7: 'A man proposes to a woman' (Langacker, 2009: 198).

The conceptual content involved in generic expressions includes a number of elements. The abbreviation MS stands for “maximal scope”, which relates to the full extent of a conceptual structure evoked by a linguistic expression. IS stands for “immediate scope”: this is the portion within the totality of the conceptual structure that is focused on by a linguistic expression. Metaphorically speaking, it is the “onstage region” to which viewing attention is directed.<sup>17</sup> Since we are dealing with matters of tense and aspect, the immediate scope can in this case be identified with the temporal scope. The rectangular shapes in the lower row, containing circles connected by an arrow represent actual events in which a man (m) proposes to a woman (w). These events can be located at particular moments in the past (depicted to the left of the speech event, the box with the squiggly lines in the middle of the time line *t*), but they can also be projected into the future (to the right of the speech event). The larger rectangle in the upper half of the diagram represents the structural plane, which contains structural generalizations on the basis of actual occurrences in the past (indicated by the two dotted lines connecting them to the actual past occurrences). Structural generalizations can, in turn, be used as a basis to predict the occurrence of actual events in the future (indicated by the two dotted lines towards the actual future events). Since the events on the structural plane are abstractions from actual events, they are not anchored to a specific temporal location.

The elements mentioned above are the standard components of the complete conceptual content evoked by a generic expression. However, these components are not always equally prominent in all generic expressions. In the end, it is the speaker who has the choice of construing one element as being more salient than another, or to view

<sup>17</sup> For example, the word *elbow*, even though it only designates a particular part of the body, it also evokes the conception of the whole human body. In other words, the word *elbow* has the designated body part in its immediate scope, while it has the conception of the human body in its maximal scope.

the conceptual content form a particular perspective. Figure 7 is in fact a representation of the specific generic sentence *A man proposes to a woman*. This sentence features a present tense. In the diagram, this is indicated by the fact that the designated generic event (thick-lined rectangle) is located above (i.e., simultaneous with) the speech event. In a cognitive semantic approach to genericity as advocated here, this should not be analyzed as the “generic” or “timeless” meaning of the present tense. Instead, the reason why the speaker uses a present tense is a matter of construal: the speaker wishes to highlight the present validity of the generalization at issue and thus to stress its present relevance to his or her current communicative aims.

To return to the empiric aorist: In terms of construal, the use of the empiric aorist can now be analyzed as a way to focus on the past events, while the general validity that may be inferred from the occurrence of these past events is left implicit.

Another aorist occurring in generic sentences is the “gnomic” or “generic” aorist. Perhaps the most puzzling property of the gnomic aorist is that it is, despite its apparently past form (augment and secondary endings), in fact (equivalent to) a present tense. This is not only shown by its alternation with the present tense in one and the same passage (especially similes) but also by the fact that subordinate clauses depending on it feature a subjunctive (instead of an optative). Kühner & Gerth (1898: 160) explain this present by stating that “its main emphasis (lies) on its practical use for the present or the future [das Hauptgewicht [liegt] auf der Nutzenanwendung für die Gegenwart oder Zukunft]”. In other words, generic events are construed by the speaker as somehow presently relevant. The clash between the morphologically past tense form and its present-oriented meaning was possibly not felt as very strong, since gnomic aorists do not refer to events that are actually occurring simultaneously to speech time, but to virtual events which by definition are not anchored to a particular moment in time but merely construed by the speaker as being presently relevant.

One of the ways in which the past tense form can be explained historically is by assuming that the gnomic aorist has evolved from the empiric aorist (for this explanation, see Goodwin, 1889: § 156; Rijksbaron, 2006: 33; Smyth, 1956: 431). With the empiric aorist, the present validity of the generalization is still only an implicature, while in the gnomic aorist the present validity has conventionalized and become part of the inherent semantics. In other words, the historical development from empirical to gnomic aorist can be analyzed as an instance of the very common diachronic process of the semanticization of erstwhile pragmatic implicatures.

This is not the place to review the considerable body of scholarly literature on the intriguing phenomenon of the gnomic aorist. Instead, we can focus on one particular issue relating to the gnomic aorist: the semantic effect of the aorist marking. Cross-linguistically, it is rare to find perfective aspect forms in generic expressions. In a typological study of generics, however, Östen Dahl (1995: 420) has found a number of Slavic languages in which perfectives appear in generic sentences. In these languages, perfective forms are used in opposition to imperfective forms and, according to Dahl, the opposition perfective vs. imperfective in generics expresses the

same aspectual distinction as in the rest of the aspectual system. The same situation seems to apply to the variation of present and (gnomic) aorist forms in ancient Greek generic expressions. The alternation between present indicative and gnomic aorist in generic expressions, once again, shows that it makes no sense to distinguish a separate “generic present” and a “generic aorist”. Neither the present nor the aorist form expresses genericity; rather, they show their general semantic value, that is, they construe the event as unbounded or bounded, respectively. This can be neatly observed in Homeric similes; for example,

- (10) *hōs d' hót' apò skopiês eîden<sub>AOR</sub> néphos aipólos anêr*  
*erkhómenon katà pónton hupò Zephúroio iōês·*  
*tôî dé t' áneuthen eónti melánteron eúte píssa*  
*pháinet'<sub>PRS</sub> iòn katà pónton, ágei<sub>PRS</sub> dé te laílapa pollén·*  
*rhígēsén<sub>AOR</sub> te idón, hupó te spéos élase<sub>AOR</sub> mēla·*  
*toîai . . . (Hom. Il. 4.275–80)*

‘As from some high point a goat-herd sees a cloud coming over the sea at the west wind’s blast: to his eyes in the distance it shows black as pitch as it crosses the sea, and it brings a great storm with it: and he shivers at the sight and drives his flock into a cave’s shelter – so . . .’.

Similes do not describe structural patterns in a direct way by explicitly referring to multiple occurrences. Instead, they depict one single scene (often with a singular protagonist: ‘a lion’, ‘a man’) that is used as an arbitrary instance to stand for a plurality of occurrences, a general pattern. The generic validity of the events is clear from the presence of a generic subject *aipólos anêr* (‘a goatherd’) and “epic” *te*. This means that aspect morphology is “free” to be used for other purposes. More specifically, present and aorist forms – through their difference vis-à-vis boundedness – are used to view the events either from an internal viewpoint as they are evolving, or as completed. The first aorist *eîden* is ingressive (it designates the initial boundary of the state of seeing): the goatherd discerns a cloud coming over the sea. He notices that the cloud looks (*pháinet'*) black as pitch and that it brings (*ágei*) a storm with it. These two presents construe the two events from an internal viewpoint: they are occurring while the goatherd is viewing them. The two following aorists, *rhígēsén* (‘starts to shiver’ or ‘shivers (once)’) and *élase* (‘drives’), designate completed, sequential events.<sup>18</sup> In a similar way, in proverbial expressions (*gnômai*) such as *pathôn dé te nēpios égnō<sub>AOR</sub>*, the aorist is used to mark the boundedness of the event: the fool’s mental change

<sup>18</sup> A very similar analysis of aspectual variation in similes can be found in Mackay, 1988.

subsequent to his suffering involves a transition from a state of ignorance to one of knowledge.<sup>19</sup>

Apart from present and aorist indicatives, we also find other tenses in generic expressions. For example, the imperfect can be used in generic expressions to discard the speaker's present vantage point and thus to disregard the present relevance of the generic sentence. In such cases, the imperfect serves to present the generic state of affairs from a viewpoint in the past when the generic state of affairs was relevant to a particular character. In narratological terms, we are dealing with character focalization.<sup>20</sup>

- (11) a. *éntha diatméxas tàs mèn Krétēi epélassen,*  
*hêkhi Kúdōnes énaion*<sub>IMPRF</sub> *Iardánou amphì rhéethra.* (Hom. *Od.* 3.292)  
 'He (sc. Zeus) split their ships in two: some of them he drove to Crete, to where the Cydonians were living around the streams of the Iardanos'.  
 b. *all' ên*<sub>IMPRF</sub> *ekeinē g', éphē, antístrophos tês gumnastikês, ei mémnēsai.* (Pl. *Rep.* 522a)  
 "No", he said, "it (sc. music) was the counterpart of gymnastics, if you remember".

In (11a), the permanent state of affairs that the Cydonians live in a certain place on Crete is viewed from the particular moment in time at which Zeus sends some of Menelaus's ships to Cydonia. In (11b), Socrates disregards the fact that music is *always* a counterpart of gymnastic in order to transfer his interlocutor mentally to the earlier moment of their discussion when this point was at issue.<sup>21</sup>

Generic expressions, finally, may also feature a future tense. For example,

- (12) a. *óρθrou dè genoménou loúntai kai amphóteroi: ággeos gàr oudenòs hápsontai*<sub>FUT</sub>  
*prìn àn loúsōntai.* (Her. *Hist.* 1.198)  
 'And when it is morning they wash themselves, both of them, for they will touch no vessel until they have washed themselves'.  
 b. *phamèn dè dē hótī ho epieikēs anēr tōi epieikeī, hoûper kai hetaîrós estin, tō tethnánai ou deinòn hēgēsetai*<sub>FUT</sub>. (Pl. *Rep.* 387d)

<sup>19</sup> In Allan, 2016 I discuss in more detail the issues regarding tense, aspect and the augment of the gnomic aorist.

<sup>20</sup> Cf. Kühner & Gerth (1898: 145): "The speaker disregards the continuation of the action into the present, and transfers himself to the moment in the past in which he perceived the action or in which the action was discussed [der Redende nimmt alsdann keine Rücksicht auf das Fortbestehen der Handlung in der Gegenwart, sondern versetzt sich in den Zeitpunkt der Vergangenheit zurück, in welchem er dieselbe erkannt oder von ihr die Rede war]". More examples of this use of the imperfect are given by Kühner & Gerth, 1898: 145–146. For an analysis of this imperfect in terms of character focalization, see Rijksbaron, 2012.

<sup>21</sup> I.e., 410a–412a. See also Duhoux, 2000: 364.

‘We say that a decent man will not think that death is a terrible thing for another decent man whose friend he is’.<sup>22</sup>

The future tense serves to emphasize the predictive aspect of generics: our knowledge of the structural dimension of the world allows us to predict the occurrence of certain events in the future.<sup>23</sup>

## 1.5 Conclusion: Construal and embodiment

Labels such as “iterative/habitual imperfect”, “iterative aorist”, “generic present”, “generic/gnomic aorist”, “gnomic perfect” and “gnomic future”, so often found in our reference grammars, are misleading as they suggest that these are inherent meanings of the tense and aspect forms. As I have argued, the iterative, habitual or generic interpretation of a particular expression should not be ascribed to the primary indicative form (as a marker of the present tense) nor to the present stem as a whole (as a marker of imperfective aspect), but to other factors: either to explicit linguistic elements in the syntagmatic context (such as adverbs, generic subject or object, “epic *te*”, or the iterative suffix *-sk-*) or to pragmatic knowledge of the world. This means that upon closer inspection the semantic effect of tense and aspect in iterative, habitual and generic expressions is in accordance with the general meaning of the Greek tenses and aspects.

A central notion in cognitive linguistic theory is the construal, which pertains to the idea that a speaker is able to conceptualize a given situation in alternative ways by means of alternative linguistic expressions. In the case of the semantic domain of iterativity, habituality and genericity, a number of construal operations are relevant: the capacity to construe a plurality of individual events as a collective higher-order event, the capacity to construe a state of affairs as bounded or unbounded, and the capacity to view and describe a given state of affairs from alternative vantage points. In ancient Greek, tense (primary vs. secondary indicative) and aspect (present vs. aorist stem) morphology is not used to express iterativity, habituality or genericity, as is often assumed, but to construe a state of affairs in alternate ways.

Embodiment is of key importance to such topics as conceptual metaphor, prototype and polysemy, image schemas, deixis, perspective, cognitive scripts, usage-based approaches to language, and mental simulation in language understanding.

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<sup>22</sup> More examples can be found in Goodwin, 1875: 19; Kühner & Gerth, 1898: 171–172; Smyth, 1956: 428; Stahl, 1907: 141.

<sup>23</sup> Often, an implicit condition is present that enables the occurrence of the event at issue. For example, in (b) the subject *ho epieikês anêr* is equal to a condition ‘if a man is decent’. Thus, the use of the future in generic sentences can be compared to the future in apodoseis.

Considerable linguistic work has already been done on ancient Greek from an embodied perspective (although not always explicitly using the term “embodiment”). To name only a few examples: Allan (2003) (usage-based approach, prototype, polysemy and the middle voice), Bakker (1997; 2005) (tense-aspect, deixis, discourse structure, visualization and memory), Bonifazi (2012) (deixis, discourse markers and their role in visualization and memory), Luraghi (2003) (usage-based approach, metaphor in case and prepositional semantics), Martínez Vázquez & Jiménez Delgado (2008) (metaphor in the verbal lexicon). To this wide variety of linguistic topics that are in one way or another connected to embodiment we may add the notion of construal. Construal is an important element of a cognitive approach to semantics. It revolves around the important observation that linguistic meaning always incorporates the embodied viewpoint of a conceptualizing (speaking or hearing) subject. Construal is of pervasive importance to lexical semantics (e.g., subjective-evaluative vocabulary, modals), grammar (e.g., tense, aspect, mood, and voice), and discourse-pragmatic meaning (e.g., topic and focus assignment, discourse structure). Recognizing the significant role of construal operations in semantics and pragmatics may help us to insightfully explain many still elusive aspects of the ancient Greek lexicon and grammar.

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**Annemieke Drummen**

## **2 A construction-grammar analysis of ancient Greek particles**

**Abstract:** Our understanding of ancient Greek particles can be illuminated by adopting a construction-grammar perspective. This framework helps clarify which interpretation of a particle is the most appropriate for a given context by identifying the specific co-textual features that determine each particle's constructions (and thus possible meanings). That is to say, a constructional approach makes it clear that the different uses of a single particle are actually different constructions, which include both the particle itself and certain specific feature(s) of its co-text. I analyze the multifunctional particles *kaí*, *te*, and *dé* in this way, taking my material from classical tragedy and comedy (fifth century BCE).

**Keywords:** ancient Greek, comedy, tragedy, particles, conjunctions, construction grammar, discourse markers, multifunctionality, pragmatic markers, pragmatics

### **2.1 Introduction**

Across languages, words that are generally labeled “discourse markers” or “pragmatic markers” are notoriously difficult to interpret, describe, and translate. They tend to be multifunctional, and it can be hard to decide which function to assign to them in a particular instance. Moreover, such words are usually more relevant to pragmatics than to syntax or semantics, even though they may simultaneously carry a syntactic, semantic, and pragmatic value. In this paper, I apply an approach developed in the context of cognitive linguistics, namely Goldbergian construction grammar, to the description of such function words in ancient Greek. I focus on three lexical items in particular – *kaí*, *te*, and *dé* – and their usage in a corpus of dramatic texts from Athens of the fifth century BCE. In classical philology, the words in question are often referred to as “particles”, although no consensus exists around the definition of this category.

The goals of my study are twofold. First, I argue that construction grammar can be highly illuminating for our understanding of Greek particles, since this framework can clarify which interpretation of a given particle is the most appropriate one in a specific instance, by identifying the contextual features that determine the constructions each particle participates in. That is, a constructional approach makes it clear that the different uses of a single particle are actually different constructions, which include both the particle itself and some specific features of its context, and which are associated with conventionalized meanings. The different contextual features make the constructions recognizable in particular instances. My results therefore advance research on the specific texts in which they occur. Second, ancient Greek

particles form a good testing ground for the insights and methods of construction grammar, which makes my results relevant to cognitive linguistics in general, and to researchers of particles and similar words in other (especially written) languages. Greek particles are interpreted differently in different contexts, just as their functional correlates in other languages. In addition, they have been extensively studied over the centuries, which gives us the opportunity to clarify earlier descriptions by using a modern linguistic method. If my findings are helpful to readers of ancient texts, this will support the potential of construction grammar as a tool for understanding pragmatic function words.

## 2.2 Construction grammar

Construction grammar assumes that words and other linguistic structures are learned and interpreted in context. Though methods and assumptions vary among the different sub-branches of construction grammar, in general linguistic knowledge is described in the form of “constructions”, that is, conventional, symbolic pairings of form and meaning (see Bybee, 2010; Croft & Cruse, 2004; Goldberg, 2013; Hoffmann & Trousdale, 2013). No level of language is autonomous: phonology, morphology, syntax, semantics, and pragmatics can all be combined in a construction. Because of this holistic view, there is no sharp boundary between grammar and lexicon; lexemes are considered constructions as much as abstract syntactic structures or even longer stretches of text, associated with certain genres. Since construction grammar assumes that words are interpreted and learned in concrete usage contexts, it follows that specific contextual features are used to select appropriate forms (for speakers) or meanings (for hearers). For a certain construction involving a particle, the “form” pole includes the lexical item itself, but possibly also information on co-occurring words or features. The “meaning” pole includes semantic as well as pragmatic (including discourse-organizational) information. Related constructions are connected in networks involving “daughter” constructions that “inherit” features from their more general “parent” constructions (e.g., Traugott & Trousdale, 2013: 8–11 on networks and construction grammar). For example, in English, a question starting with “how” carries a certain meaning, whereas a question starting with “how could you” carries the same meaning with some additional meaning. If a “how could you” question conveys a slightly different meaning than the sum of its constituents’ meanings, or is sufficiently frequent to be entrenched separately, then we can speak of a separate (daughter) construction.

Identifying constructions means, then, specifying the features of form and meaning that are unique to a construction. In this way, we can explain how hearers and readers arrive at a specific interpretation of a multifunctional word or phrase. Such words or phrases participate, in other words, in several constructions: each interpretation is connected to a specific combination of form features. That is, if the

lexical item concerned does not change, different contextual features will belong to the form pole. The multifunctional word or phrase may thus constitute a parent construction for several more specific daughter constructions.

Since most Greek particles are multifunctional words, they can usually not be captured in one construction per lexical item. Instead, a particle may be part of many constructions, each of which includes specific contextual features in its form pole. Identifying these features for selected particles, as well as the specific interpretations to which they lead will be the main task of this paper. First, however, let us consider the words under discussion in more detail.

### 2.3 Ancient Greek particles

The lexical items in ancient Greek usually considered “particles” tend to be short, uninflected words without their own propositional meaning; many of their various functions fall in the realm of pragmatics. A clear definition, however, does not exist, and several of the lexical items are also often called conjunctions or adverbs (see Drummen, 2016a). In this respect, Greek particles resemble words in modern languages that are called “discourse markers” or “pragmatic markers”: the boundaries of all these categories are fuzzy.<sup>1</sup> In English, for example, *well*, *so*, and *and* are often considered to belong to this class, at least in some of their uses. This caveat is crucial, because another recurring characteristic of the Greek particles, and of functionally similar words in other languages, is that they are multifunctional. Often it can be challenging to decide which function to assign to any particular instance, and this is especially the case for a language with no native speakers available anymore.

The Greek particles and their functions have been the subject of a great number of studies. Since the sixteenth century no fewer than fifteen monographs have appeared, along with hundreds of descriptions in articles, grammars, thesauruses, and lexica.<sup>2</sup> Nevertheless, modern linguistic research can still provide new insights, because most previous research tends to focus exclusively on syntax and semantics, and as a result remains muddled about how to distinguish between the different uses of a single lexical item. I argue, by contrast, that it is useful to describe these uses of particles in terms of “constructions” that include the particle as well as certain contextual features. Apollonius Dyscolus, a grammarian of the second century CE,

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<sup>1</sup> For terminology and definitions used concerning “discourse markers” and “pragmatic markers”, see Drummen, 2016a.

<sup>2</sup> Monographs on ancient Greek particles are, in chronological order: Devarius, 1588; Hoogeven, 1769; Hartung, 1832; Stephens, 1837; Bäumllein, 1861; Paley, 1881; Des Places, 1929; Denniston, [1934] 1950; Labéy, 1950; Thrall, 1962; Blomqvist, 1969; Thyresson, 1977; Sicking & Van Ophuijsen, 1993; Redondo Moyano, 1995; Bonifazi, Drummen & de Krej, 2016. Other important books are Vigerus, 1627; Kühner, 1835; Klotz, 1835–1842; Ruijgh, 1971; Bakker, 1997; Rijksbaron, 1997; Bakker & Wakker, 2009.

had in fact already made a similar point, when he claimed that the particles – what he calls *súndesmoi*, literally “combiners” – can only “co-signify” (*sussemainein*) together with other words (see de Kreij, 2016a for discussion). That is, Apollonius recognizes the importance of context to the interpretation of particles. This is a fundamental idea, and in line with modern usage-based linguistics such as construction grammar. However, Apollonius’ insight is usually not taken up in modern analyses of particles.<sup>3</sup> Often several functions are discussed without specification of the contextual features that lead to different interpretations.

## 2.4 Interpreting particles with constructions

This paper illustrates the explanatory power of a constructional approach for our interpretation of Greek particles by analyzing three words in this way: *kaí*, *te*, and *dé*. I have selected these particles in particular because they are highly frequent, and because they appear to overlap to some degree in meaning, making a comparative study beneficial. In addition, like most Greek particles, they have been widely discussed in the literature, which presents an opportunity to show what a constructional approach can add to the picture.

My analysis is based on classical Greek tragedy and comedy, written in the fifth century BCE in Athens: the authors comprising my corpus are Aeschylus, Sophocles, and Euripides for tragedy, and Aristophanes for comedy.<sup>4</sup> Since these authors wrote in a poetic, highly stylized language, my observations may only relate to this particular corpus. Without further study, I would not claim their validity for other ancient Greek texts, let alone Attic Greek as it was spoken. However, I do posit that this method of describing particle constructions can help elucidate other corpora and other languages as well.

### 2.4.1 *Kaí*: From connecting to clarifying to indignation

*Kaí* is variously labeled a conjunction, adverb, and/or particle; since these labels are not mutually exclusive, and no single, clear definition of “particle” exists (see the discussion above), it is no surprise that *kaí* appears in handbooks on particles, such

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<sup>3</sup> Construction grammar itself has so far been applied to the study of ancient Greek particles in Koier, 2013 on the particle *pou*, and Drummen, 2016b: III, 2 on distributional patterns of particles in Greek drama.

<sup>4</sup> The editions from the *Thesaurus Linguae Graecae Online* have been used: Page, 1972 for Aeschylus; Lloyd-Jones & Wilson, 1990 for Sophocles; Diggle, 1984; 1994 for Euripides; Wilson, 2007 for Aristophanes. For Aeschylus, the newer edition by West, 1990 has been consulted in many cases.

as those by Hartung (1932), Denniston ([1934] 1950), and Labéy (1950).<sup>5</sup> It is usually translated as ‘and’, but in certain cases it may mean ‘also’, ‘even’, ‘and in particular’, ‘to be precise’, or ‘really’.<sup>6</sup> But are these merely different options for translating a single function of the word, or can these in fact be called different constructions? Let us begin with the clearest use of *kaí* in the corpus: i.e., as a syntactic coordinator of two explicitly mentioned items of similar syntactic and morphological shape.<sup>7</sup> In such ‘A *kaí* B’ structures, conjunct A and B are two noun phrases, two finite verbs, or two entire clauses. Here is an example with noun phrases:

- (1) KHO. *epagellētō*<sub>IMP.PRS.3SG</sub> *pās*<sub>NOM.M.SG</sub> *anēr*<sub>NOM.SG</sub> *kaí* *gunē*<sub>NOM.SG</sub>. (Ar. *Lys.* 1048–49)  
 ‘CHORUS Let every man **and** woman announce’.

The contribution of *kaí* as ‘and’ to this utterance seems straightforward, but in fact we need the conjuncts themselves, too, before we can arrive at this interpretation of the particle. The description of this construction should thus include this contextual information in its form pole, as well as the information that *kaí* is placed between the two conjuncts. The meaning pole, that is, the interpretation ‘and’ associated with the combined information from the form pole, tells us that the two conjuncts are closely linked together.<sup>8</sup> It also shows that the conjuncts simultaneously imply a certain similarity and a certain difference – an interpretation suggested for the meaning of English *and* by Sköries (1999: 52–60). To clarify: the conjuncts have to be somehow similar in order to be suitable for connection. Thus, with *kaí*, it is possible to say ‘man and woman’ as well as ‘he raged and shouted’, but not ‘man and shouted’ – at least not without envisioning some very specialized context. At the same time, the

<sup>5</sup> As an anonymous reviewer has observed, in other literature *kaí* is not labeled as a particle. However, it is not the category label that is relevant for my constructional analysis, but the functions that the word arguably fulfils in various contexts.

<sup>6</sup> Canakis, 1995: 14, writing mainly on Modern Greek *kaí*, cites research on the ancient Greek particle, and notes that “*kaí* has a very long history of multifunctionality in Greek”. He undertakes a cognitive linguistic analysis of Modern Greek *kaí*, which shows similarities to the approach taken here (185–261).

<sup>7</sup> See Muchnová, 2014: 385 on the difference between coordinators and connectors: the former mark syntactic relations and link clauses, whereas the latter mark only semantic relations, and link larger units than clauses. I here discuss a use of *kaí* as coordinator, but it can also be used as a connector; see Bonifazi, 2016: IV.2 §§ 106–113 on the different scope that *kaí* may have. On the frequency of *kaí* in several Greek authors, see Bonifazi, Drummen & de Kreij, 2016: I.5.13. In Aeschylus *kaí* forms 2.3% of all words, in Sophocles 1.9%, in Euripides 1.9%, and in Aristophanes 2.9%. This is a much higher frequency than those of most particles.

<sup>8</sup> See e.g., Hartung, 1832: 153, who describes *kaí* as marking a union (*Vereinigung*) between two elements, and Bäumléin, 1861: 145, who writes that *kaí* marks the addition of something new “under the same viewpoint as before [ein Weiteres unter gleichem Gesichtspunkt]”. As the primary force of *kaí*, Hoogveen, 1769: 278 considers a connective one (“copulative”), Denniston, [1934] 1950: 289, “addition”.

conjuncts also have to be distinct, that is, they have to refer to different entities or actions in order for the ‘and’ connection to make sense.<sup>9</sup>

Notably, our interpretation process does not stop at recognizing this instance as instantiating a particular construction. After all, Aristophanes may use each construction for specific reasons. In (1), hostilities between men and women are a central theme in the play; the fact that these words are linked together by *kai* at this (late) moment of the play underlines the crucial event of reconciliation. This is reflected, moreover, in an unusually high frequency of *kai* throughout the song that constitutes the overall context of this expression.<sup>10</sup>

If the two conjuncts are noun phrases, as in (1), *kai* usually does no more than connect them. In the case of verb phrases, however, a connection often implies a temporal sequence: not merely ‘and’, but more specifically ‘and then’ or even ‘and therefore’.<sup>11</sup> For example:

- (2) οἱ. *kagō*<sub>NOM.SG</sub> *tòn ektrépona*<sub>ACC.SG</sub> *tòn trokhēlātēn*<sub>ACC.SG</sub>  
*paíō*<sub>IND.PRS.1SG</sub> *dī’ orgēs· kai m’*<sub>ACC.SG</sub> *ho prēsbus*<sub>NOM.SG</sub> *hōs horāi,*  
*ōkhous parasteikhonta tērēsas, méson*  
*kára díploīs kéntroisí mou kathíketo*<sub>IND.AOR.3SG</sub>. (Soph. *Oed. Rex* 806–9)  
 ‘OEDIPUS And I struck the one who had turned me aside, the driver, in anger. **And then** the old man, when he saw it, watched for me to pass by the chariot and hit me on the middle of my head with his double goad’.

Oedipus relates his worrying experiences of many years earlier to his wife Jocasta. The separate events in this excerpt – ‘I struck the driver’ and ‘the old man hit me’ – are part of a narrative in which the described actions follow each other temporally as well as causally. We can thus paraphrase ‘I struck the driver *and then* the old man hit me’ or ‘I struck the driver *and therefore* the old man hit me’.<sup>12</sup>

The fact that we can interpret *kai* in this way does not mean that the particle itself has suddenly become different. Rather, it participates in a different construction,

<sup>9</sup> Other examples of this *kai* construction ‘A and B’ are found in Aesch. *Ag.* 314, 704; *Lib.* 1058; Soph. *Aj.* 447 (both *kai* instances; here they do not form a ‘both A and B’ connection, on which see (3) below with discussion), 505; *El.* 619; Eur. *Bacch.* 185; *Med.* 550, 809; Ar. *Av.* 973; *Ran.* 143, 929.

<sup>10</sup> In the choral song in *Lys.* 1043–1071, there are 12 occurrences of *kai* in 123 words in total, a frequency of 9.8%. The average frequency of *kai* in Aristophanic choral songs is 4.1% (based on a corpus of 1,715 words).

<sup>11</sup> See e.g., Canakis, 1995: 152–153 on the temporal interpretation of Modern Greek *kai* for a possible explanation of this implication. See e.g., Bonifazi, 2016: IV.2 § 11 on such “enrichments” conveyed by English *and*; later in the chapter she discusses various enrichments of ancient Greek *te* and *kai*.

<sup>12</sup> Other examples of the *kai* construction ‘A and then B’ are found in Aesch. *Ag.* 590; Soph. *Aj.* 288 (first *kai*); *OT* 952 (here connecting imperatives); Eur. *Bacch.* 1117; *Hec.* 243, *Hipp.* 1445 (here connecting imperatives); *Med.* 1394 (here connecting imperatives).



which includes specific features of the context. In this case, we are dealing with a daughter construction of the one mentioned earlier: ‘A and then B’ is a particular type of the more general ‘A and B’. This daughter construction has the following form features, apart from *kaí* appearing between two conjuncts: the conjuncts need to be verbs, and to refer to different actions that can both hold true, but not simultaneously (at least in the context at hand); in addition, the action mentioned second has to be the one occurring later.<sup>13</sup> If the context allows for a causal link between the two conjuncts, we may translate ‘and therefore’, but I do not consider this a separate construction, since in these cases, an interpretation as no more than a temporal sequence (‘and then’) is always possible as well, and a speaker could deny having claimed any causality.<sup>14</sup> Thus, I see the interpretation of a temporal sequence as part of the construction, whereas a potential causal link will remain implicit.

In some cases, *kaí* is repeated in close proximity, even though there are still only two conjuncts. We then translate ‘both A and B’, taking the first *kaí* as announcing the connection.<sup>15</sup>

(3) *xo. toutōn léxas’ hó ti kaí dunatōn*<sub>NOM.N.SG</sub>  
*kaí thémis*<sub>NOM.SG</sub>. (Aesch. Ag. 97–98)

‘CHORUS Of these things, after you have said whatever is **both** possible/ **and** right’.

The presence of the second *kaí* thus leads to a different interpretation of the first one than it otherwise could have had, being placed before its conjunct. The repetition of *kaí* puts emphasis on the connection itself.<sup>16</sup>

<sup>13</sup> Such constraint on the iconic order of events is cross-linguistically attested in various constructions. See e.g., Dancygier & Sweetser, 2005: 170 on this constraint in the use of English *then* in conditional as well as temporal constructions: as they point out, “if/when P, then Q” is acceptable, but not “then Q, if/when P”.

<sup>14</sup> I do not find any examples with an imperative, conveying a conditional nuance, as in English “do that and I’ll smash your face”, see Comrie, 1986: 85.

<sup>15</sup> Bäumlein, 1861: 148 describes this use as follows, citing the same example: we find *kaí* . . . *kaí* “expressing a mutual connection between two concepts or thoughts, so that the first term refers to the following, and the second, to the first [um eine gegenseitige Verbindung zweier Begriffe oder Gedanken auszudrücken, so dass bei dem ersten Glied auf ein folgendes, bei dem zweiten auf das erste hingewiesen wird]”. See also Hartung, 1832: 143–144.

<sup>16</sup> Raeburn & Thomas, 2011 also paraphrase ‘both possible and right’. Other examples of the *kaí* construction ‘both A and B’ are found in Soph. *Ant.* 573; *El.* 522; Eur. *Alc.* 141; *Med.* 777; Ar. *Lys.* 1046–1047 (first *kaí*; see Drummen, 2016b: III, 2 §37).

In other instances, the two conjuncts both refer to the same situation, action, or entity in the described world. This leads us to interpret *kaí* as marking a specification or reformulation:<sup>17</sup>

- (4) TE. *xúnapte*<sub>IMP.PRS.2SG</sub> *kaì* *xunōrízou*<sub>IMP.PRS.2SG</sub> *khéra*. (Eur. *Bacch.* 198)  
 ‘TEIRESIAS Grab (my hand), **that is**, join your hand (with mine)’.

The second conjunct can be considered more precise, as it includes the joining of two hands, not only the grabbing of one. *Kaí* can here be translated with ‘that is’, ‘in other words’, ‘better to say’, or ‘to be precise’. Whether one conjunct is a specification of another one (‘that is’), or in fact refers to a different entity (‘and’) involves a subjective judgment (see below).<sup>18</sup> The following example occasioned much debate already in antiquity:

- (5) OR. *hēkō*<sub>IND.PRS.1SG</sub> *gār es gēn*<sub>ACC.SG</sub> *tēnde*<sub>ACC.F.SG</sub> *kaì katérkhomai*<sub>IND.PRS.1SG</sub>. (Aesch. *Lib.* 3)  
 ‘ORESTES For I come to this land, **that is**, I am returning’.

This Aeschylean line is quoted in Aristophanes’ *Frogs* (1128), where it meets with harsh criticism from Euripides (lines 1154–57). He claims that *hēkō* ‘I come (back)’, and *katérkhomai* ‘I am returning’, are the same thing. Aeschylus defends his choice (1160–65) on the grounds that anyone can ‘come back’ to a country, but only an exile can ‘return’. In other words, there is a subtle difference between the two conjuncts. An interpretation in terms of specification works well in this case: ‘coming (back)’ and ‘returning’ may refer to the same action, but the second description has more specific implications than the first: it does not only imply that the referent has been to the mentioned place before, but also that it is his or her native soil.<sup>19</sup>

In another construction, our interpretation of *kaí* is determined by the presence of only one explicit constituent that could be modified by the particle. Usually the context will give information about a relevant parallel constituent, so that *kaí* can be

<sup>17</sup> This use of *kaí* is specifically described by Hartung, 1832: 145 and Humbert, 1960: 412. See also Bäumlein, 1861: 146, who speaks of *kaí* marking the second element in a combination as a “more specific qualification [nähere Bestimmung]” of the first element. On *kaí* marking a specification in other Greek authors, see Bonifazi, 2016: IV, 2, esp. n. 157 and 158, with further literature.

<sup>18</sup> The paraphrase of Dodds, 1960 seems to imply an interpretation as ‘and then’: ‘There, take it in yours and make a pair of them’.

<sup>19</sup> Other examples of the *kaí* construction “A (and), that is, B” are found in Aesch. *Ag.* 294; *Lib.* 903, 1062; *Pers.* 190; *Soph. Aj.* 87, 288 (second *kaí*), 496, 808; *Ant.* 711, 718, 746, 1193; *El.* 368; *OT* 58, 265; Eur. *Bacch.* 198, 246; *Hec.* 50, 384; *Hipp.* 680; *Med* 903; *Ar. Av.* 378, 499; *Ran.* 836; *Lys.* 227, 529, 1047 (second *kaí*; see Drummen, 2016b: III, 2 § 37).

interpreted as marking, if not a connection, still an addition of one element to another one that is somehow similar and different at the same time.<sup>20</sup> Thus, for instance:

- (6) *xo. eí pote **kaí** protéras átas huperornuménas pólei  
 énúsat'*<sub>IND.AOR.2PL</sub> *ektopían phlóga pématos, élthete*<sub>IMP.AOR.2PL</sub> ***kaí** nún.* (Soph. *Oed. Rex*  
 165–67)  
 ‘CHORUS If ever you turned **also** earlier doom away, hanging over our city, a flame  
 of disaster, come now **also**’.

Here, the chorus of old Theban men prays to several gods, asking them to come and bring help to their city. The presence of *kaí* makes it clear in both cases that ‘earlier doom’ and ‘now’ as instances of divine help do not stand on their own, but belong to a list of several occasions. That is, the chorus members juxtapose the current occasion to earlier occasions in which their city needed help.<sup>21</sup>

As (6) shows, appropriate translations for *kaí* in this construction are ‘also’, ‘too’, and ‘as well’. The rendering with ‘even’ likely also belongs here, although I do not consider the idea of an unexpected extreme on some scale (‘even’) to be explicitly conveyed by the *kaí* construction.<sup>22</sup> Rather, it is a possible implication of the idea of addition (‘also’), and therefore not a necessary part of our interpretation.

Only slightly different in its form *pole*, but leading to a clearly distinct meaning pole is the construction exemplified by (7). In occurrences of this type, as well, there are no two conjuncts connected by *kaí*, but here the context does not even provide information about a relevant implicit parallel constituent. An interpretation in terms of an addition is therefore impossible:

<sup>20</sup> Canakis, 1995: 138 describes modern Greek “intensifying *kaí*”, translated as ‘also’, in very similar terms. On the use of ancient Greek *kaí* as ‘also’, see e.g., Hartung, 1832: 125–134; Bäumllein, 1861: 149–153; Denniston, [1934] 1950: 293–294.

<sup>21</sup> As Dawe, 2006 notes, one of these two *kaí* instances could already have made clear the addition, but it occurs more often that the particle is found in such duplication (so he implies, by citing one example). This is more explicitly and more generally described by Bäumllein, 1861: 153. Other examples of the *kaí* construction ‘also B’ are found in Aesch. *Ag.* 1035, 1040; *Lib.* 252 (see example (12) below), 976; *Hept.* 657, 716; Soph. *Ant.* 710, 719, 1256; *El.* 62; *OT* 557; *Phil.* 1268; Eur. *Bacch.* 39, 190; *Hec.* 228; *Med.* 584; Ar. *Nub.* 357; *Ran.* 888; *Vesp.* 457.

<sup>22</sup> Cf. Denniston, [1934] 1950: 293, who also considers the difference between the ‘also’ and ‘even’ interpretations of *kaí* to be unexpressed in Greek.

- (7) AGG. *toiád' ep' autoîs êlthe sumphorà páthous,*  
*hōs toîsde*<sup>DAT.PL</sup> ***kaî*** *dîs*<sup>ADV</sup> *antisêkôsai*<sup>INF.AOR</sup> *rhopêid*<sup>AT.SG</sup>. (Aesch. *Pers.* 436–37)  
 ‘MESSENGER Such a misfortune of suffering came upon them, that it counterbalances the weight (of what I told you before) **really** twice [*literally*: so as to compensate really twice for these things in weight]’.

This contextual situation leads to an interpretation of pinning down instead of adding or connecting.<sup>23</sup> The speaker marks a “zooming in” on a particular element. Suitable English translations of *kaî* in this construction can be ‘really’, ‘actually’, ‘exactly’, ‘absolutely’, ‘indeed’, or by emphasis on the relevant word (“as much as *twice!*”).<sup>24</sup>

So far, we have seen constructions independent of the dramas’ dialogic context. If *kaî* marks a connection across utterances by different speakers, however, this interactional setting – fictional and artificial though it may be – plays a role in our interpretation of the particle.

- (8) XO. *kaî dédrakas*<sup>IND.PRF.2SG</sup> *toûto tourgon;*  
 EP. ***kaî*** *dedrakôs*<sup>PTCP.PRF.NOM.M.SG</sup> *g' hêdomai*<sup>IND.PRS.1SG</sup>. (Ar. *Av.* 325)  
 ‘CHORUS You have really done this thing?  
 HOOPOE **Yes, and** (what’s more) I’m glad I’ve done it!’

By starting his new utterance with *kaî*, the speaker, the Hoopoe Tereus, does not so much connect two items, but marks that he will further pursue some element from a preceding utterance. In this case this is explicitly signified by using the same verb as in the previous turn, *dedrakôs*, even in the same tense stem as before. The literal echo is highlighted by *ge* after it, which is often used in such contexts to mark that a speaker puts a new spin on repeated linguistic material (see Drummen 2016b: III.3.3.1.1). The particular interpretation of *kaî* in this passage stems from its position in the dialogue, and the link between the two utterances: they are thus part of the form pole of this construction.<sup>25</sup> In some instances, the earlier utterance that a speaker connects to is her own previous stretch of talk, instead of one by an interlocutor.<sup>26</sup>

<sup>23</sup> I take over the term “pinning down” as a description of one of *kaî*’s functions from Bonifazi, 2016: IV, 2.4.2, who discusses this function of the particle and its combinations in several Greek authors, mainly Herodotus and Thucydides. She also cites further literature on this function.

<sup>24</sup> Hall, 1996 translates ‘at least twice’, which fits this instance due to the numerical reference. Groeneboom, 1930 suggests the apt Dutch paraphrase ‘wel tweemaal [two times]’. Other examples of the *kaî* construction ‘really A’ are found in Aesch. *Lib.* 892; *Pers.* 1045; *Hept.* 760; *Soph. Ant.* 726, 772 (on this instance, see Bonifazi, 2016: IV, 2 § 104), 1253; *Phil.* 297; *Eur. Med.* 526, 901; *Ar. Eq.* 342.

<sup>25</sup> Other examples of the *kaî* construction ‘(Yes) and (to go on with what you said) B’ are found in Aesch. *Lib.* 500, 503, 911; *Pers.* 236; *Soph. Aj.* 527; *Ant.* 322, 443; *OT* 1170; *Eur. Hipp.* 724; *Med.* 608; *Ar. Av.* 1349; *Ran.* 568; *Lys.* 752.

<sup>26</sup> An example of this is found in *Ar. Ran.* 568, discussed in Drummen, 2016b: III, 3 § 92.

A more specific case of *kaí* starting a question is given by the immediately previous exchange:

- (9) EP. *ándr' edexámēn*<sup>IND.AOR.1SG</sup> *erastà têsde tês xunousías*.  
 XO. *kaí dédrakas*<sup>IND.PRF.2SG</sup> *toûto touírgon*; (Ar. Av. 324–25)  
 ‘HOOPOE I have received two men who adore this society here.  
 CHORUS (**What?!**) You have **really** done this thing?’

Because of their natural enmity towards humans, the chorus of birds reacts with surprise, disbelief, and indignation to the Hoopoe’s statement. As in (8), here the speaker “zooms in” on something previously said. Combined with the questioning illocutionary force of the host utterance, the interpretation of this daughter construction becomes more specific: it signals that the speaker casts doubt on the credibility of the preceding utterance, or is even indignant about it.<sup>27</sup>

There is an even more specific daughter construction. This is a *kaí* question that does not simply express disbelief at the preceding utterance, but implies that what the previous speaker said is actually impossible: e.g.,

- (10) SU. *kaí pôs àn lógois*  
*ándra pteróseias*<sup>OPT.AOR.2SG</sup> *sú*; (Ar. Av. 1437–38)  
 ‘INFORMER **And (just)** how (**do you think**) could you wing a man with words?’

The form pole of this construction includes, in addition to the aspects mentioned for the parent construction of the skeptical question, *pôs* “how?” and a potential optative. The potential optative generally expresses that a certain event is possible in some circumstances.<sup>28</sup> Asking how something would be possible in some circumstances, rather than merely how it could take place in a concrete situation, usually implies that

<sup>27</sup> On this use of *kaí*, see e.g., Hartung, 1832: 146–147 (such questions are asked “to show the inconsistency or contradiction of the terms [um die Inconsequenz oder den Widerspruch der Glieder darzustellen]”); Hancock, 1917: 29; Denniston, [1934] 1950: 309–310. Dunbar, 1995 speaks of *kaí* marking a “surprised or indignant question”, referring to Denniston. Other such skeptical questions starting with *kaí* are found at e.g., Aesch. Ag. 280; Lib. 122, 179, 776; Pers. 438; Soph. Ant. 548; Eur. Med. 1398; Ar. Av. 326, 976; Nub. 210; Ran. 1019, 1049.

<sup>28</sup> For a constructional description of the potential optative in ancient Greek drama, see Drummen, 2013.

the event is in fact impossible in all circumstances. In this way, the speaker conveys that the addressee has made a ridiculous suggestion.<sup>29</sup>

Up to this point, I have discussed nine constructions with *kaí*, none of which contains another particle in the form pole. Yet particles are often combined, and it is well-known that these combinations may carry additional nuances on top of the semantic and pragmatic contributions of their parts (see Denniston, [1934] 1950: li-iv; Bonifazi, Drummen & de Kreij, 2016: I, 4 § 8). *Kaí*, in particular, frequently occurs together with *allá*, *dé*, *dê*, *dêta*, *ê*, *gár*, or *mên*. However, there are two problems complicating the description of particle combinations beyond that of single particles. First, two contiguous particles may be intended to convey a more complex meaning together (a “cluster”), but they may also be juxtaposed accidentally, each providing their own semantic and/or pragmatic contribution (see Bonifazi, Drummen & de Kreij, 2016: I.1 §19). Moreover, since clusters develop out of “accidental” combinations, where the two single particles are simply compatible with the same context, borderline cases remain.

The second problem is the multifunctionality of many individual particles. Even though not all particles participate in as many different constructions as *kaí* does, most do occur in several different contexts leading to different interpretations. A form element such as “*kaí* directly followed by *dê*” can therefore potentially be found in many more constructions than simple *kaí* or *dê*.<sup>30</sup> Its meaning could be any combination of the meaning pole of one *kaí* construction, plus that of one *dê* construction, plus some additional meaning of this cluster. Because not all constructions of each particle will be compatible – some may, for instance, only occur at the beginning of speaking turns, whereas others avoid this position – and not every particle participates in as many as nine constructions, the actual number of constructions will be lower than 81, but it is clear that interpretation possibilities expand rapidly in the case of particle combinations.

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**29** On *kaí pōs* questions in tragedy, see e.g., Hancock, 1917: 29. Other *kaí pōs* questions with potential optatives, implying that (some element of) the content of the previous utterance is impossible, include Aesch. *Ag.* 1198 (here it is a presupposition that is challenged); *Suppl.* 509; *Soph. El.* 1189; *Trach.* 1210; *Eur. Alc.* 142; *Phoen.* 1348; *Ar. Av.* 829, 1437; *Nub.* 1333; *Ran.* 582; *Lys.* 912; *Pax* 1076a. The questions in Aesch. *Lib.* 776 and *Soph. OT* 1019 do not contain a verb, but a potential optative would fit the contexts, and the implication of impossibility is present.

**30** For descriptions of several uses of *kaí dê*, see (in chronological order) Hoogeveen, 1769: 298–300 (with temporal, additive, confirmative, or transitional meaning); Hartung, 1832: 263–266 (marking a connection, increase, specification, or indifference concerning a hypothetical situation); Kühner, 1835: 388 (marking a connection, specification, or surprise); Devarius in Klotz, 1835–1842: 115 (with a supposedly temporal interpretation); Bäumlein, 1861: 147 (emphasizing a new, but connected point); van Erp Taalman Kip, 2009 (especially marking entrances in drama).

Example (11) illustrates both problems:

- (11) IP. *ólōla*<sub>IND.PRF.ISG</sub> ***kai dê*** *nertérōn*<sub>GEN.M.PL</sub> *horô*<sub>IND.PRS.ISG</sub> *púlas*<sub>ACC.PL</sub>. (Eur. *Hipp.* 1447)  
 ‘HIPPOLYTUS I have perished **and – look!** – I see the gates of the Underworld’.  
 or ‘I have perished – **yes, look!** – I see the gates of the Underworld’.  
 or ‘I have perished, **that is, I really** see the gates of the Underworld’.

In the literature, there is disagreement whether *kai dê* here is a cluster or merely two juxtaposed particles, and about its resulting interpretation. Barrett (1964: 414) writes that “normally in Attic the [*kai*] is non-connective, and the particles simply stress (more or less vividly) the actuality of an event or state of affairs . . . but occasionally, as here, they carry a connective sense as well”. This seems to imply that he interprets this instance as the ‘and’ or ‘and afterwards’ construction, because *kai* is surrounded by two verbal conjuncts. Barrett considers an asyndeton here, as suggested by Denniston ([1934] 1950: 249), “impossibly artificial”.<sup>31</sup> Translations of this line also vary in their rendering of the two particles: from ‘and indeed’ to ‘yes’ to no translation at all.<sup>32</sup> A connective interpretation of *kai* seems likely because two items are present that could very well be combined with ‘and’ or even ‘that is’. In fact, as we have seen, there are more functional possibilities for *kai* itself than only “connective” and “non-connective”. In other cases, however, *kai dê* clearly does work as a cluster. Van Erp Taalman Kip (2009) on *kai dê* and *kai mên* in drama, for example, shows that a single particle cluster can have various interpretations, depending on small contextual differences. She also convincingly describes the pragmatic differences between *kai dê* and *kai mên*, two seemingly synonymous particle clusters. However, a constructional approach could bring even more clarity to the analyses of van Erp Taalman Kip, because she does not always make it clear what her interpretations of sets of examples are based on, that is, on which contextual features exactly. For entry-marking *kai dê* and *kai mên* (112–121) it seems clear why they receive this label, but for the other instances, interpretations seem to be based more on Denniston’s descriptions ([1934] 1950) than on identifiable patterns in the contexts.

<sup>31</sup> Denniston does not explain why he considers an asyndeton “perhaps better” in this instance. Van Erp Taalman Kip (2009: 13–31), with n. 21, also cites this instance in her discussion of *kai dê*. While she does not explicitly decide on a specific interpretation, she certainly does not exclude a connective interpretation of *kai*.

<sup>32</sup> Here are examples of English translations of this line. Coleridge, 1891: ‘I am a broken man; yes, I see the gates that close upon the dead’. Murray, 1911: ‘I see the Great Gates opening. I am gone’. Halleran, 1995: ‘I’m dead, and indeed I see the gates of the dead’. Kovacs, 2005: ‘I’m gone. I see the gates of the Underworld!’. The exclamation mark might be his rendering of the particles. Theodoridis, 2010: ‘Father, I am gone. I see the gates of Hades!’.

### 2.4.2 *Te*: connecting and shared knowledge

The particle (or conjunction) *te*, though usually translated by ‘and’ as well, is clearly functionally different from *kaí*. For a start, *te* does not share any other meaning of *kaí* beside ‘(both ...) and’: it does not mean ‘and then’, ‘that is’, ‘also’, ‘really’, and so on. It is also only very rarely found at the beginning of speaking turns (see Drummen, 2016b: III, 4 § 27). Furthermore, *te* adds a nuance of its own that *kaí* does not carry: that of traditional, shared knowledge. This meaning is often connected to rituality or allusions to epic or lyric.

In virtually all cases in tragedy and comedy, *te* marks a connection of some element to another, whereby one of these elements includes at least the word preceding *te*.<sup>33</sup> This may be the first of two conjuncts, as in ‘A *te* B *te*’ or ‘A *te* *kaí* B’, or it may be the second, as in ‘A *te* B *te*’ or ‘A B *te*’ – we may consider these options two syntactically different constructions. On top of signaling a connection, the particle marks the items it connects as belonging to shared or traditional knowledge (see Bloch, 1955: 147; Bonifazi, 2016: IV, 2 IV, 2 § 54–57; § 58–60, § 65–69; de Kreij, 2016b: II, 4 § 32–37, § 54–68; Gonda, 1954: 207; Wentzel, 1847: 2).

For the dramatic corpus, the particle’s distributions across dialogues, monologues, and choral songs illuminate its function. In Aeschylus, it is the most frequent in monologues, and in the other authors in choral songs (see Drummen, 2016b: III.2 § 39 for details). In Aristophanes, the average frequency of *te* in songs is more than eleven times as high as in dialogues (2.6 *versus* 0.2% on average). Such striking frequency differences of *te* across the parts of the plays show that also in these texts there must be more to its use than the simple connecting of items. Consider the following example:

(12) OR. *hou̅tō*<sub>ADV</sub> *dè*<sub>PTC</sub> *kamè*<sub>ACC.SG</sub> *ténde*<sub>ACC.F.SG</sub> *t’*, *Ēléktran légō*,  
*ideîn párestí soi*. (Aesch. *Lib.* 252–53)

‘ORESTES And so thou canst also see me **and** her here, I mean Electra’.

Orestes has addressed Zeus and asked him for help, comparing himself and his sister Electra to the orphaned offspring of an eagle. That he connects ‘me’ and ‘her here’ with *te* is not only metrically useful, preventing hiatus; it also highlights that the natural connection between the siblings, and/or their fate after the death of their father Agamemnon, is well-known to Zeus, as well as to the audience. In other words, the knowledge associated with these two conjuncts is shared between speaker and addressee(s). Usually this nuance cannot be translated into English; my use of “thou canst” is meant to reflect the traditional, solemn tone associated with *te*.

<sup>33</sup> Only in the idiomatic, fossilized construction *hoiós te*, which means ‘able (to)’, ‘capable’, *te* does not mark a connection.



What is shared is often traditional, such as encyclopedic information about the past, humankind, or nature. An example from a gnomic statement may clarify the type of context meant (though I do not see this as a separate construction):<sup>34</sup>

- (13) xo. *aiaî· tò doûlon hōs kakòn péphuk'*<sup>IND.PRF.3SG</sup> *aeî*  
*tolmâi*<sup>IND.PRS.3SG</sup> **th'** *hâ*<sup>ACC.N.PL</sup> *mê*<sup>NEG</sup> *khre'*<sup>IND.PRS.3SG</sup> *têi bíai nikōmenon.* (Eur. *Hec.* 332–33)  
 'CHORUS Oh no! What bad thing slavery always is, **and** how it doth suffer what it ought not, overcome by force'.

In reaction to Odysseus' rejection of Hecuba's supplication for her daughter's life, the chorus of Trojan women utters a general remark. Because of the general applicability of both descriptions of a slave's life, it is appropriate to connect them with *te*.

The singing of a choral song, moreover, is a traditional and ritual activity. This rituality makes choral songs an ideal context for the frequent use of *te*, regardless of the specific elements that the particle connects. I do not consider *te* in choral songs, or its generally high frequency there, to be a separate construction, that is, a different conventional form-meaning pair. The association with shared knowledge that the particle always carries is sufficient to explain its affinity to ritual contexts. Such contexts include choral songs, but also prayers, oaths, supplications, and official statements.<sup>35</sup> While they would also have been rituals without *te*, the particle highlights the rituality: we can think of it as adding a solemn tone to its utterance. The following example is illustrative:

- (14) OI. *humîn*<sup>DAT.PL</sup> *dê taûta*<sup>ACC.N.PL</sup> *pânt'*<sup>ACC.N.PL</sup> *episképtō*<sup>IND.PRS.1SG</sup> *teleîn,*  
*hupér t' emautoû*<sup>GEN.SG</sup> *toû*<sup>GEN.M.SG</sup> *theoû*<sup>GEN.SG</sup> **te,** *têsdé*<sup>GEN.F.SG</sup> **te**  
*gês*<sup>GEN.SG</sup> *hōd' akárpōs kathēōs ephtharménēs.* (Soph. *Oed. Rex* 252–54)  
 'OEDIPUS And I command you to fulfill all this because of myself **as well as** the god **as well as** this land, which has been destroyed so barrenly and ungodly'.

<sup>34</sup> De Kreij, 2016b: II, 4 § 22 discusses *te* in *gnōmai* in Homer: the particle, he writes, “serves to mark the statement as referring to a large body of shared knowledge, which we might term tradition”. Other examples of *te* in gnomic statements include Aesch. *Ag.* 322 (two instances).

<sup>35</sup> Examples of *te* connecting traditional knowledge in choral songs include Soph. *Ant.* 350, 352; Eur. *Andr.* 475, 476, 481; *Hipp.* 535, 536; *Med.* 827, 835. In prayers: Aesch. *Ag.* 509 (two instances), 513, 514, 516, 519 (two instances); *Lib.* 124a (=165), 128, 130, 131 (two instances in Page 1972, one in West 1990); Soph. *Ant.* 1200 (reporting a prayer); *El.* 67, 69; Eur. *Med.* 764; Ar. *Nub.* 265 (two instances). In oaths: Aesch. *Ag.* 1433; Eur. *Med.* 746, 747, 752, 753. In supplications: Soph. *Aj.* 492, 493; *Phil.* 469, 469, 472; Eur. *Hec.* 276 (two instances); *Med.* 710 (two instances). In official statements: Soph. *Ant.* 1016, 1017; *OT* 995 (reporting a prophesy); *Phil.* 390 (a wish, resembling a prayer), 1428 (two instances; a prophesy); Eur. *Alc.* 343–344 (a promise, resembling an oath; three instances in total); *Her.* 1325 (a promise; two instances); Ar. *Av.* 1232, 1233 (reporting an official message from Zeus).

Oedipus urges his fellow Theban citizens to help him find the murderer of Laius. By using the particle *te* to connect the items ‘for me’, ‘for the god’, and ‘for this land’, Oedipus marks his utterance as an official one: his citizens should consider his proclamation very important. The nuance of shared knowledge is also present: his listeners know that the proclamation is based on information from Apollo’s oracle (‘the god’), and that this decision is meant to save Thebes (‘the land’). They also know that Oedipus is personally involved in saving the city (‘myself’), although of course the spectators possess more knowledge about this than the characters.<sup>36</sup>

Even if the utterance as a whole is not a ritual or official activity, *te* still marks the items it connects as such:

- (15) PR. *humîn*<sub>DAT.SG</sub> *dè póthen*<sub>Q</sub> *perì toû*<sub>GEN.M.SG</sub> *polémou*<sub>GEN.SG</sub> *tês*<sub>GEN.F.SG</sub> *t’ eirénēs*<sub>GEN.SG</sub>  
*emélēsen*<sub>IND.AOR.3SG</sub>; (Ar. *Lys.* 502)  
 ‘MAGISTRATE And how come you started to care for “**War and Peace**”?’

The Athenian magistrate asks the women why they are meddling with war issues, which he considers men’s affairs only. Connecting the items ‘war’ and ‘peace’ with *te* here marks them as concepts linked to traditional knowledge, and, by implication, as official themes.<sup>37</sup> I have rendered this in the translation with capital letters and quotation marks. We can detect irony in this formulation: the magistrate considers it outrageous that women deal with war and peace exactly because these are such important and traditional concepts.

Beside associations with shared knowledge, tradition, and rituality, *te* may, if it occurs in sufficient frequency, trigger or strengthen an allusion to epic or lyric. These are genres characterized by traditional and shared knowledge, and which employ the particle in high frequencies.<sup>38</sup> In the case of Aristophanes, such allusions may include a reference to tragic lyric. Because it is conventional knowledge for hearers, an allusion to these genres can be seen as part of the meaning pole of a daughter construction of *te*, including as form pole a strikingly frequent occurrence and/or the co-presence of other alluding elements. We can see a parody effect in this song from Aristophanes, where several *te* instances are combined with epic-sounding nouns:

<sup>36</sup> Also in 244–245 in the same monologue we find two *te* instances underlining the official nature of Oedipus’ promise, as well as the shared knowledge. Other clear examples of *te* conveying a solemn tone and a link to shared knowledge in this play are the three instances in 1184–1185.

<sup>37</sup> As Henderson, 1987 remarks, ‘war and peace’ are “generic despite the articles”; he does not comment on *te*.

<sup>38</sup> See Bonifazi, Drummen & de Kreij, 2016: I, 5.21 for the frequencies of *te* in eight Greek authors. It is very high in Homer (2.01% of all words) and especially Pindar (2.11%). Muchnová’s (2014: 389) remark that “[t]he most abundant use of *te* is found in Homer” is thus not entirely correct.

- (16) XO. *éstai*<sub>IND.FUT.3SG</sub> *d' hupsilóphōn te lógōn korutháiola neikē*  
*skindálamoi te paraxonión smileúmatá t' érgōn.* (Ar. *Ran.* 818–819)  
 ‘CHORUS And there will be helm-glancing battles of high-crested words **as well as**  
 linchpin splinters **as well as** cuttings of artworks’.

Stanford (1958: 142) remarks in his commentary: “This is a brilliant piece of pseudo-elevated diction (parody of any particular piece is unlikely), superbly contrived to make the spectators view the coming contest between Aeschylus and Euripides as a mock-epic conflict”. Although he does not comment on the presence or high frequency of *te*, this surely contributes to the epic style as well. Beyond the identification of the alluding construction, we can in this case detect that the solemn tone and the allusion to epic are meant in a non-serious way; this is not part of the conventional knowledge within the construction itself.

The particle *te* is frequently combined with *kaí*, but it is not necessary to posit a separate construction for *te kaí*, because both particles carry out their own function. The only restriction on their potential interpretations is that *te kaí* is always surrounded by two conjuncts; those constructions in which *kaí* modifies only one item (see above) are thus cancelled. However, it may still carry the nuance of closer specification:

- (17) AGG. *Xérxēs*<sub>NOM.SG</sub> *mèn*<sub>PTC</sub> *autòs*<sub>NOM.M.SG</sub> *zēi*<sub>IND.PRS.3SG</sub> *te kaí pháos*<sub>ACC.SG</sub> *blépei*<sub>IND.PRS.3SG</sub>.  
 (Aesch. *Pers.* 299)  
 ‘MESSENGER Well, Xerxes himself is alive **and, that is to say**, he looks on the  
 light’.

Speaking of “being alive” in terms of “seeing the light (of the sun)” is a traditional formulation in tragedy as well as epic (see Broadhead, 1960; Groeneboom, 1930; Hall, 1996; Italie, 1953). Hence *te* suits the connection. Because of this traditional synonymy, both descriptions actually refer to the same content, and we may interpret *kaí* as marking a specification or reformulation.

### 2.4.3 *Dé*: From a new step to epic style to hostility

Like for *te*, we can identify a “parent” construction also for the particle *dé* in tragedy and comedy: in all cases, *dé* marks a new step in the discourse (see Bakker, 1993: *passim*; 1997: 62–68; Bäumllein, 1861: 89; Bonifazi, 2016: IV, 2 § 26–46; IV, 3 § 89, § 107; § 113–15; de Kreij, 2016b: II, 2 § 31–36; II, 3 § 65–67). This general description already makes it clear that this particle differs from *kaí* and *te*, even though *dé* too may often

be translated by ‘and’.<sup>39</sup> In contrast to the other two particles, *dé* does not signal a connection; instead, it signals a transition to something new. The instance in (18) illustrates this general construction.

- (18) ἘΛ. *taútēi khorou̓s hístēsi*<sub>IND.PRS.3SG</sub> *kai̓ mēlosphageî*<sub>IND.PRS.3SG</sub>  
*theô̓sin émmēn’ hierà tois sôtēriois.*  
*egô̓*<sub>NOM.SG</sub> *d’ horôsa*<sub>PTCP.PRS.NOM.F.SG</sub> *dúsmoros katà stégas*  
*klaíō*<sub>IND.PRS.1SG</sub>. (Soph. *El.* 280–83)  
 ‘ELECTRA On that day she (sc. Clytemnestra) sets up dances and slaughters sheep as monthly sacrifices for the gods, her saviors. **But I**, unhappy one, seeing (the feast), cry inside the house’.

Bäumlein (1861: 90) mentions this example of *dé* as involving a contrast (*Gegensatz*). In this case the contrast is between Clytemnestra’s actions, mentioned earlier, and Electra’s own actions. However, the particle itself does not signal this contrast, but merely marks the new step in the discourse. Jebb (1894) renders this in his translation not only with ‘but’, but also by starting a new paragraph.

One daughter construction involves a *dé* clause or phrase somehow reacting to an earlier clause or phrase with the particle *mén*. Though it would be wrong to consider this construction the main one for *dé*, especially in poetry and archaic literature, in fifth-century Attic it is established enough to view it as a separate construction also in drama texts.<sup>40</sup> Sophocles is the author fondest of *mén . . . dé*, especially in *Antigone* (see Drummen, 2016b: III, 5 § 38–39, with further literature).

- (19) KR. *kai̓ tou̓ton*<sub>ACC.M.SG</sub> *àn*<sub>PTC</sub> *tòn*<sub>ACC.M.SG</sub> *ándra*<sub>ACC.SG</sub> *tharsoiēn*<sub>OPT.PRS.1SG</sub> *egô̓*<sub>NOM.SG</sub>  
*kalôs*<sub>ADV</sub> *mèn árkhēin*<sub>INF.PRS\*</sub> *eû*<sub>ADV</sub> *d’ àn*<sub>PTC</sub> *árkhesthai*<sub>INF.PRS</sub> *thélein*<sub>INF.PRS</sub>. (Soph. *Ant.*  
 668–669)  
 ‘CREON And about this man I would have confidence that he would, **on the one hand**, rule properly, **and on the other hand**, would well be willing to be ruled over’.

Kreon here juxtaposes two sides of proper citizen behavior. In this construction, the *mén* clause somehow announces the *dé* clause, and the *dé* clause somehow reacts

<sup>39</sup> I thus do not agree with Denniston’s [1934] 1950: 162 remark that in many cases “there is no essential difference between [*dé*] and [*kai*]”.

<sup>40</sup> Therefore, there is no reason to speak, as Denniston does, of an “omission of [*mén*]” ([1934] 1950: 165). See de Kreij, 2016b: II, 2 § 43–58 for discussion of *mén* and *mén . . . dé* in archaic Greek poetry.

to the *mén* clause. Often, but not always, this involves a contrast.<sup>41</sup> In many cases it remains ambiguous whether we are dealing with this *mén* . . . *dé* construction, or both particles in fact carry out a function of their own, and do not refer to each other.<sup>42</sup>

If *dé* occurs in a strikingly high frequency within narrative discourse (especially in messenger speeches in Euripides), or in choral songs (especially in Aeschylus), a specific element can be added to our interpretation, and therefore another daughter construction identified. In these cases, namely, the style of the Homeric narrator is evoked.<sup>43</sup> The following example comes from a messenger speech that is particularly rich in instances of *dé*:<sup>44</sup>

(20) AGG. *hē*<sub>NOM.F.SG</sub> *d'*, *hōs eseīde*<sub>IND.AOR.3SG</sub> *kósmon*<sub>ACC.SG</sub>, *ouk ēnéskheto*<sub>IND.AOR.3SG</sub>. (Eur. *Med.* 1156)

‘MESSENGER **And** she, when she saw the adornment, did not resist’.

The messenger elaborately tells Medea about the death of Jason’s new bride. One event in this story is the girl’s reaction to the poisoned presents. She is referred to with *hē*, which is usually a demonstrative pronoun in Homer, but the definite article in later literature. The particle *dé* marking this new step in the narrative is typical for the Homeric poems as well. Indeed, tragic messenger speeches resemble epic narrative in many aspects (Page, 1938; J. Barrett, 2002; Mastronarde, 2002; Rutherford, 2010: 444). The frequent use of *dé* in this environment fits in with this overall allusion.

Since a new turn of speaking is already a new step in the discourse by virtue of the speaker change, we can infer that the newness of the utterance is somehow especially relevant when *dé* occurs at the beginning.<sup>45</sup> Since this interpretation follows directly from the *dé* parent construction and the context, it is not necessary to call it a separate

<sup>41</sup> See e.g., Stephens, 1837: 74–75 for a similar description of *mén* . . . *dé*, in terms of the hearer “being forewarned” by *mén* “that some statement is about to follow which ought to be considered in connection with” the *mén* part. Other examples of the *mén* . . . *dé* construction include e.g., Aesch. *Eum.* 585; Soph. *Ant.* 78, 93–94; *El.* 73, 370–371; *Phil.* 279–280; Eur. *Alc.* 182; *Med.* 726–727; *Ar. Lys.* 17–19.

<sup>42</sup> On ambiguity, see below, and see the reminder at the end of the *kai* section that both particles involved in a combination are in fact multifunctional, that is, participate in several constructions; this also holds for *mén*. On ambiguity involved in instances of *mén* followed by instances of *dé*, see e.g., Stephens, 1837: 78–79.

<sup>43</sup> In Homer, the average frequency of *dé* is 5.4% of all words, see Bonifazi, Drummen & de Kreij, 2016: I, 5.9. It is roughly twice as frequent in narrator text as in direct speech: see de Kreij 2016b: II, 1 § 14.

<sup>44</sup> The entire messenger speech, 1136–1230, contains 32 *dé* instances in a total of 558 words, a frequency of 5.7%. The average frequency of *dé* in Euripidean monologues is 3.7%. See Drummen, 2016b: III, 2 § 24 for the distribution of *dé* in the four dramatists.

<sup>45</sup> As a postpositive particle, *dé* cannot occur at the very start of utterances. I consider its position nevertheless “turn-initial” when it is found in the first discourse act of an utterance. See Drummen, 2016b: III, 4 § 11. On discourse acts, see especially the elaborate discussion in de Kreij (2016b: II, 2).

construction. A *dé* turn is thus marked as starting something new that is partially independent, instead of as pursuing further some element from the preceding. For questions, this means that it is presented as asking about a new point, often within a series of questions, rather than as going on with the preceding. For utterances directly following a question, *dé* signals that these are not answers to these questions, but somehow independent (see Drummen, 2016b: III.4 §§ 34–38).

A combination that I do consider a separate daughter construction is *dé ge* (contiguous or with words in between) at the beginning of utterances, in contexts of resonance. Resonance refers to the echoing of words or structures of a previous utterance, in order to achieve some pragmatic goal; such echoes are particularly frequent in hostile situations (Drummen, 2016b: III, 3; § 80–83; see also Denniston, [1934] 1950: 153; Hartung, 1832: 382; Paley, 1881: 17). In the following passage, Menelaus and Peleus are arguing about the fate of the slave Andromache, whom Menelaus' daughter wants to kill.

- (21) ME. *heílōn*<sub>IND.AOR.1SG</sub> *nin*<sub>ACC.F.SG</sub> *aikhmálōton*<sub>ACC.F.SG</sub> *ek Troías egṓ*<sub>NOM.SG</sub>.  
 PĒ. *houmòs*<sub>NOM.M.SG</sub> *dé g' autèn*<sub>ACC.F.SG</sub> *élabe*<sub>IND.AOR.3SG</sub> *país*<sub>NOM.SG</sub> *paidòs*<sub>GEN.SG</sub> *géras*<sub>ACC.SG</sub>.  
 (Eur. *Andr.* 583–84)  
 'MENE LAUS It was me who seized her as a captive from Troy.  
 PELEUS **But it was my grandson** who received her as a prize!'

Both men claim authority over Andromache. In doing so, Peleus mirrors several aspects from Menelaus' utterance: the syntactic structure of the turns is very similar, their objects refer to the same person, and the descriptions of this person are semantically similar. Such mirroring is a common strategy in conflict stichomythia (see Collins, 2004; Hesk, 2007; Pfeiffer-Petersen, 1996). The particles *dé* and *ge* in this environment together signal that the new utterance reacts to the previous one (resonance) as a juxtaposed, independent step (*dé*) and as a hostile twist on the earlier utterance (*ge*).

## 2.5 Summary

The following constructions have been identified for *kai* in the corpus. Although I see all of these as connected, only some can be considered daughter constructions, that is, as inheriting all aspects of form and meaning of the parent construction while also adding certain specific aspects.

2.5.1 *Kaí*-construction<sub>1</sub>

**A *kaí* B** → close linkage, implying similarity and difference ('and', 'as well as')

<p><b>A<sub>verb</sub> <i>kaí</i> B<sub>verb</sub></b> → close temporal and/or causal linkage ('and (then)', 'and (afterwards)', 'and (therefore)')</p>	<p><b><i>kaí</i> A <i>kaí</i> B</b> → close linkage, connection highlighted ('both ... and', 'as well as')</p>	<p><b>[/]<i>kaí</i> B</b> → an earlier mentioned, resonant element is to be pursued further in the new utterance ('(And) to go on with what you said', 'Yes, and')</p>
		<p><b>[/]<i>kaí</i> B;</b> → surprised, skeptical, or indignant questioning ('What? ... Really?!', 'Really? And ...?', or a surprised tone and 'And ...?')</p>
		<p><b>[/]<i>kaí pōs</i> + potential optative</b> → questioning of possibility ('And (just) how (do you think) ...?')</p>

2.5.2 *Kaí*-construction<sub>2</sub>

**A1 *kaí* A2** → specification of same entity ('that is (to say)', 'in other words', 'to be precise')

2.5.3 *Kaí*-construction<sub>3</sub>

**[A] *kaí* B** → the mentioned conjunct is added to an implicit conjunct ('also', 'too', 'as well', 'even')

2.5.4 *Kaí*-construction<sub>4</sub>

***kaí* B** → validity highlighted ('really', 'actually', 'exactly', 'absolutely', 'indeed')

### 2.5.5 *Te*-construction

For *te* the following constructions have been distinguished. The two constructions on the first level only differ from each other syntactically, not in their pragmatic contribution; therefore, the “allusion” construction is connected to both of them.

<b>A B <i>te</i></b> → close linkage, in discourse marked as referring to shared or traditional knowledge ('and (as thou knowest)', 'as well as')	<b>A <i>te</i> B (te) or A <i>te</i> (<i>kaî</i>) B</b> → close linkage, in discourse marked as referring to shared or traditional knowledge ('both . . . and (as thou knowest)')
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<b>A B <i>te</i> or A <i>te</i> B (te)</b> ( <i>te</i> in a strikingly frequent occurrence and/or other alluding elements close to <i>te</i> ) → close linkage, in discourse marked as referring to shared or traditional knowledge; the style of epic, non-tragic lyric, and/or (in the case of Aristophanes) tragic lyric is imitated ('(both . . . and')
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### 2.5.6 *Dé*-construction

The particle *dé* can be described with one parent construction and at least three daughter constructions:

<b>[A] B <i>dé</i></b> → a new step in the discourse ('and', 'but', 'now', or untranslated)		
<b>A <i>mén</i>, B <i>dé</i></b> → a new step in the discourse, reacting to the <i>mén</i> clause or phrase ('and', 'but', 'one the one hand . . . on the other hand', or untranslated)	<b>B <i>dé</i></b> (in a strikingly high frequency within a short stretch of discourse, and/or other alluding elements close to <i>dé</i> ; a narrative context (especially in Euripides) or a choral song (especially in Aeschylus)) → a new step in the discourse; an allusion to Homeric style, especially of narrator text ('and', 'but', 'now', or untranslated; the Homeric allusion cannot be translated within the translation of <i>dé</i> )	<b>[A] B <i>dé ge</i> or <i>dé</i> . . . <i>ge</i></b> → the new utterance is presented as a juxtaposed, independent step and as a hostile spin on the preceding utterance ('(Yes,) but' or '(Yes,) and' and emphasis on the item marked with <i>ge</i> , or an exclamation mark after the entire utterance)

Note that these constructions do not describe *all* uses of the three particles in the corpus (notably not those of particle combinations with *kaî*). Moreover, the constructions are subjective, as they involve judgments concerning the relevance of form aspects, as well as concerning the interpretation of these features, that is, their meanings. Thus,



this overview merely illustrates one possible constructional description of these three particles. Nevertheless, it reveals what elements a reader of the Greek texts might take into account when interpreting a particle, as well as what a constructional description might look like for similar words in other languages.

Let me end the analysis part with an example that incorporates all three particles:

(22) EP. *autíkh'*<sup>ADV</sup> *hai*<sup>NOM.F.SG</sup> *póleis*<sup>NOM.PL</sup> *par'* *andrôn*<sup>GEN.PL</sup> *g'*<sup>PTC</sup> *émathon*<sup>IND.AOR.3PL</sup>  
*ekhthrôn*<sup>GEN.M.PL</sup> *kou philôn*<sup>GEN.M.PL</sup>  
*ekponeîn*<sup>INF.PRS</sup> *th'* *hupsēla*<sup>ACC.N.PL</sup> *teikhē*<sup>ACC.PL</sup> *naūs*<sup>ACC.PL</sup> *te* *kektēsthai*<sup>INF.PRF</sup> *makrás*<sup>ACC.F.SG</sup>  
*tò*<sup>NOM.N.SG</sup> *dē*<sup>NOM.SG</sup> *máthēma*<sup>NOM.SG</sup> *toûto*<sup>NOM.N.SG</sup> *sôizei*<sup>IND.PRS.3SG</sup> *paídas*<sup>ACC.PL</sup> *oîkon*<sup>ACC.SG</sup>  
*khrēmata*<sup>ACC.PL</sup> (Ar. Av. 378–80)

'TEREUS Promptly cities learn from *men*, who are enemies, **that is**, not friends, **both** to work hard on high walls **and** to acquire long ships. **Now** this lesson saves children, household, money!'

Tereus, the Hoopoe, argues to the other birds that they can actually learn from humans, even though they are enemies. The *kai* in 378 can be interpreted as marking a specification or reformulation: 'from enemies, *that is to say*, not from friends'; he urges his addressees to change their mind on this important point. In 379, two *te* instances connect two items and mark them as shared, traditional, and official knowledge: building walls and ships are conventional elements of founding and protecting a city, as he presumes his addressees know. The particle *dē* in 380 marks a new step in Tereus' argument, in this case a return to his main point at the end of his six-line speech. Finally, the elements 'children, household, money' are presented in asyndeton, to emphasize their importance.

## 2.6 Beyond constructions

A constructional approach clarifies our understanding of the different functions of Greek particles, since their different interpretations can be shown to follow from the combination of conventionalized form-meaning pairs with specific contextual features. That is, the multifunctionality of Greek particles is best explained through the participation of each particle in several distinct constructions. This does not mean, though, that our interpretation should stop at identifying constructions. It is helpful for discussing a passage if we are clear about the contextual features on which we base our reading, but disagreement can still exist about which contextual features exactly are relevant to a certain construction, and why we interpret these features the way we do. Thus, for example, determining whether the two conjuncts that may surround an instance of *kai* actually refer to the same entity (*kai*-construction<sub>1</sub>) or to two different ones (*kai*-construction<sub>2</sub>) involves subjective judgment. Describing the different interpretations of a particle in terms of constructions, with clearly determined

form and meaning poles, does not (and should not) make these interpretations less subjective, but it does make them less arbitrary.

Ambiguity can also still arise, even if the particular contextual features belonging to the form poles of a particle's different constructions are clearly defined. This is the case when the contextual features are such that the form pole cannot be assigned to one and only one construction. For example, some *kaí* instances that fit the constructions of resonance or skeptical questioning (i.e., [*kaí* B]) are simultaneously compatible with the 'also' construction.<sup>46</sup> Such ambiguity is to be expected, of course, because new constructions develop out of previously existing ones.<sup>47</sup>

Constructional descriptions of Greek particles, then, are a useful tool in our interpretation of texts. In a theoretical perspective, too, these descriptions illustrate how we might decide which contextual features end up in constructions. They also show that even in written texts, there are more elements that may determine our interpretation than only co-occurring words: some constructions, after all, include relations between different (fictional) speaking turns, an utterance's illocutionary force, or a hearer's experience of an item's frequency of occurrence. Finally, they show that the subjectivity involved in the interpretation of a multifunctional word depends on the interpretation of specific, identifiable contextual features.

In general, my analysis illustrates that cognitive linguistics can throw new light on well-studied phenomena in ancient languages, and can therefore enrich classical philology. In doing so, previous interpretations need not be overthrown entirely, but are expanded and made more consistent. It becomes clearer how we arrive at certain interpretations, how these are related to others, and why they fit their respective contexts. As cognitive analyses are based on the workings of the human mind, it is only logical to include the ancient Greek mind, too.

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<sup>46</sup> Examples of ambiguous *kaí* instances are Aesch. *Lib.* 223; Soph. *Ant.* 751; Ar. *Av.* 980.

<sup>47</sup> Compare Canakis, 1995: 203–250 for a similar description of modern Greek *kai* as having a network of related senses.

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Chiara Fedriani

### 3 The embodied basis of discourse and pragmatic markers in Greek and Latin

**Abstract:** This paper deals with the pragmaticalization of some verbs of movement and exchange in Latin and Greek. The verbs under scrutiny instantiate two image schemas, MOVEMENT ACROSS SPACE and EXCHANGE OF OBJECTS, both of which constitute basic sensorimotor experiences that are at the root of many grammaticalization processes. Little attention has been paid to pragmatic developments, however, and even less has been paid to ancient languages. This paper tries to fill this gap, by exploring how pragmatic meanings emerged as embodied outcomes licensed by the semantics of their sources and through recurrent pathways of metaphorical extension.

**Keywords:** verbs of movement, verbs of exchange, embodiment, discourse markers, pragmatic markers, pragmaticalization, inter-subjectification, Latin, Greek, metaphorical extension

#### 3.1 Introduction

In this paper, I explore the pragmatic expansion undergone by some verbs of movement and exchange in Greek and Latin, and show that this development can be better understood in the light of a process of embodiment triggered by metaphorical extensions. In both languages, some verbs expressing the general meanings of ‘go’ and ‘lead’, on the one hand, and ‘bring’ and ‘take’, on the other, give rise to fixed forms derived from imperatives inflected in the second-person singular, which develop meta-textual (i.e., discursive) and socio-interactional (i.e., pragmatic) functions. The forms to be discussed are:

Greek *íthi* ‘come on!’ (2nd pers. sg. imp. of *eîmi* ‘I go’)

Greek *áge* ‘come on!’ (2nd pers. sg. imp. of *ágō* ‘I lead, move on’)

Latin *age* ‘come on!’ (2nd pers. sg. imp. of *ago* ‘I lead, move on’)

Greek *phére* ‘come on!’ (2nd pers. sg. imp. of *phérō* ‘I carry, I bring’)

Latin *em* ‘see there, come on!’ (2nd pers. sg. imp. of *emo* ‘I buy, I take’)

The meanings of all these verbs derive from one of two image schemas, namely MOVEMENT ACROSS SPACE or EXCHANGE OF OBJECTS, both of which constitute sensorimotor experiences which are basic to human life and cultural practice, respectively. The term “image schema” denotes an expression of the embodied construal of experience, a basic pattern which is deeply grounded in a variety of embodied situations (Clausner & Croft, 1999; Johnson, 1987: 29; Lakoff, 1987: 459–

461): in this case, the typical movements performed by the human body across space and the basic event of exchanging objects. These schemas are built directly on our bodily-based interaction with the world ('going', 'taking', 'giving'), and thus capture the phenomenological basis crucial to our elementary experience of the environment in which we live. Image schemas of MOVEMENT ACROSS SPACE and EXCHANGE OF OBJECTS have long been recognized as greatly contributing to the grammar and the lexicon of the world's languages, including through metaphorical extension (see Bybee, Perkins & Pagliuca, 1994: 5, 55–57; Heine & Kuteva, 2002).<sup>1</sup>

Less attention has been paid to their pragmatic developments, however. Once co-opted at the level of pragmatics, the forms listed above no longer act semantically or syntactically as verbs and, partially bleached of their original semantic content, develop several discursive and interactional meanings. To mention a typical and clear case, frozen imperatives of motion verbs can be used to strengthen the illocutionary force. In (1)–(3), *íthi*, *áge*, and *age*, all expressing a pragmatic meaning similar to English *come on!*, serve the same interactional purpose, that of encouraging the addressee to perform the action encoded by the juxtaposed imperative.

(1) *íthi*            *dê*    *parístasthon*    *parà*    *tō*  
 go:IMP.2SG now stand:IMP.M/P.DU beside the:ACC.DU  
*plástigg'* (Ar. Ran. 1378)  
 balance.pan:ACC.DU  
 'Come on, stand beside the balance pans!'

(2) *áge*            *támnete*. (Hom. Od. 3.332)  
 lead:IMP.2SG cut:IMP.2PL  
 'Come on, cut!'

(3) *age*            *igitur intro abite*. (Plaut. Mil. 929)  
 lead:IMP.2SG then inside go:IMP.2PL  
 'Come on, then, go inside!'

Frozen imperatives formed out of verbs of exchange *phére* and Latin *em*, on the other hand, acquire a number of related meta-textual functions as discourse management tools, which can be strategically used by the speaker to "handle" linguistic "objects" from an informational and discursive perspective. In (4) from Greek, *phére* introduces a question which realizes a topic-shift after two exclamations: the speaker opens his interrogative sentence with *phére*, implicitly asking the hearer to 'carry on' this new communicative move. In English, a possible translation is the adversative conjunction

<sup>1</sup> See further Newman, 1996 on exchange verbs and Nicolle, 2007 on motion verbs.

*but*, which expresses the idea of thematic discontinuity and presents the interlocutor with a new topic he is asked to ‘bring’ with him.

- (4) **phére**      *poû*      *tòn*  
 bring:IMP.2SG where the:ACC.M.SG  
*ândra*      *toûton*      *exeurêsomen*; (Ar. Eq. 144–45)  
 man:ACC.M.SG this:ACC.M.SG find:FUT.1PL  
 ‘**But** where can this man be found?’

In the pragmatic development of Latin *em*, the force dynamics of the EXCHANGE event frame is even clearer. Example (5) shows how a speech act can be metaphorically perceived as embodied in terms of an exchanged object. Lyconides’s assertion that Phaedria is giving birth is conceptualized as a *concrete entity* being transferred, to which the girl calls her mother’s attention. In this case, *em* functions as a marker that invites the interlocutor to ‘take’ the speech act she is uttering, thus behaving as a meta-textual device to shed light on a specific portion of the communicative *exchange*.

- (5) PHAEDRIA *perii mea nutrix obsecro te uterum dolet Iuno Lucina, tuam fidem.*  
 LYCONIDES **em**,      *mater*      *mea*  
 take:IMP.2SG mother:VOC.F.SG my:VOC.F.SG  
*tibi*      *rem*      *potiorem*  
 you:DAT.SG fact:ACC.F.SG convincing:ACC.F.SG  
*verbo:*      *clamat,*      *parturit.* (Plaut. Aul. 691–93)  
 word:ABL.N.SG cry:PRS.3SG give.birth:PRS.3SG  
 ‘PHAEDRIA I die, my nurse; my pangs are coming on! I entreat you for your protection, Juno Lucina!  
 LYCONIDES **Look**, my mother, facts are more convincing than words; she’s crying out, she’s in the pangs of labor!’

These examples by no means exhaust the possible discussion of the multifaceted functional spectrum covered by these markers, but they sufficiently demonstrate the fact that these markers developed a number of procedural functions. These functions can be interpreted as embodied outcomes licensed by the semantics of their sources through recurrent figurative mappings. The main aim of this paper is thus to investigate how new embodied meanings emerge and develop in Greek and Latin, and along what pathways of metaphorical interpretation. My approach is based on both the methods and theoretical underpinnings of image schema theory, which maintains that systematic processes of functional enrichment largely depend on humanly embodied imaginative mechanisms. According to this approach, networks of functional expansions can be accounted for in terms of bodily- and experience-based image schemas, frequently activated and constrained by metaphorical extension. Thus, after illustrating the basic image schemas of MOVEMENT ACROSS SPACE and



EXCHANGE OF OBJECTS, I show how they fostered the emergence of abstract discursive and pragmatic meanings. Comparative evidence then shows that the same embodied processes detectable in Greek and Latin are present also in many modern languages. I conclude with a summary of my findings and their implications for an embodied-based account of pragmaticalization processes in Latin.

### 3.2 Discourse markers, pragmatic markers, and pragmaticalization

Before turning to the data, some terminological observations are in order. In the philologically-oriented literature and in reference grammars, *íthi*, *áge*, *age*, *phére* and *em* are usually regarded as interjections expressing the current emotional state of the speaker (see Barbini, 1966; Hofmann, 1936: § 45; Hofmann & Szantyr, 1972, II: 289, 339, 471 for Latin markers; Biraud, 2010; Labiano Ilundain, 2000; Lepre, 2000; Schwyzer & Debrunner, 1950 II: 601 for Greek markers). In these (often pre-theoretical) approaches, however, the label “interjection” does not say anything about the functional nature of these pragmaticalized verbs, which are cursorily mentioned in terms of highly routinized items, semantically opaque in meaning and difficult to classify. In this paper, I refer to such terms instead as Discourse markers or Pragmatic markers (henceforth DM and PM, respectively), depending on their specific function. But in order to be able to fully exploit the insight of this terminological distinction, we need a clear understanding of what exactly DM and PM mean.

In much current pragmatics literature, the two notions of DM and PM are often used in a confusing way: either DM or PM are used indifferently as overarching terms whose functional boundaries are highly blurred, or one is seen as a subclass of the other (e.g., Hansen, 2006, who claims that DM is a hyponym of PM). Different authors have adopted either term as an interchangeable umbrella notion to refer to all those elements which acquired some procedural value, be it *meta-textual* or *interactional*. It is beyond the scope of this paper to attempt to exhaustively survey all the classifications suggested in the literature. However, a clear distinction will be made between DMS, i.e., elements oriented toward discourse or text organization, discourse management, and discourse interpretation (such as English *then* and *well*), and PMS, i.e., elements which are (inter-)subjective in nature and point toward social relationships, personal attitudes, and identity negotiation, among other things (as the English politeness marker *please* and the softener of the speaker’s commitment *I think*). This distinction is functional in essence, since it rests on the fact that these two classes perform different types of what Ghezzi (2014) calls “macrofunctions”: namely, textual cohesion and coherence, social cohesion, and personal stance. This classification is represented in Table 3.1.

**Table 3.1:** Macrofunctions, Discourse markers and Pragmatic markers (from Ghezzi, 2014: 14).

MACROFUNCTION	FOCUS ON	MARKERS INVOLVED
TEXTUAL COHESION AND COHERENCE	Discourse structure and the act of speaking: markers index the relationship between the propositional content of utterances and texts	<b>Discourse markers</b>
SOCIAL COHESION	The social act of speaking: markers index the relationship between the interlocutors	<b>Pragmatic markers</b>
PERSONAL STANCE	The speaker: markers index the speaker's stance toward the discourse, her interlocutor, the context of interaction	<b>Pragmatic markers</b>

The second point that needs to be clarified is that in this study I use the term “pragmaticalization” to refer to the process of functional enrichment undergone by the frozen imperatives under scrutiny. In my view, the development of discursive and pragmatic values constitutes a different kind of linguistic change from “grammaticalization”. Traugott (2010: 272), for one, stated that grammaticalization is primarily conceived of as “a change in form, and grammar is typically conceptualized as syntax, morphology and phonology”, thereby leaving out of the discussion the process of meta-textual or interactional expansion characterizing the emergence of discursive and pragmatic values. The motivation behind this exclusion basically rests on the fact that DMS and PMS do not conform to the classical grammaticalization criteria cross-linguistically: viz., that different functions foster the acquisition of different properties and, consequently, that the relevant parameters that can be applied in order to describe their status can vary drastically (see Diewald, 2011; Kaltenböck, Heine & Kuteva, 2011; Traugott, 2010, among others). These observations also hold for the imperatives at issue here. A recent paper by Zakowski (2018) offers a detailed analysis of the structural behavior of the Greek markers *íthi*, *áge*, and *phére* and compares it with grammaticalization parameters, showing that they do not fully adhere to them. Similar observations about Latin markers are provided by Unceta Gómez (2017), who focuses on *em*, and by Fedriani & Ghezzi (2014), who look at *age* and *em*; see further Molinelli (2010) on the pragmaticalization of *rogo* and *quaeso*.

The only typical features of grammaticalization shown by the verbs under scrutiny are fossilization, decategorialization, and (inter-)subjectification. Examples (1)–(4) above show that these verbs, ossified in the second-person singular, can co-occur with imperatives inflected in other numbers.<sup>2</sup> In (1), for instance, *íthi* co-occurs with the dual imperative *paríasthōn* ‘(the two of you) stand beside!’. Similarly,

<sup>2</sup> *Numerusindifferenz*: Hofmann & Szantyr, 1972, II: 289.

*age* in (3) has scope over plural *abite* ‘go inside!’.<sup>3</sup> Therefore, while developing new pragmatic functions, these verbs underwent decategorialization, since they lost their morphosyntactic inflexional properties. This presumably happened at an early stage both in Greek and in Latin, given that we have occurrences as early as in Homer and in Plautus, respectively. Interestingly, such intertwined processes of fossilization and decategorialization had already been noticed by the Latin grammarian Servius, who, while commenting on the use of *age* in Vergil, describes *age* as a hortatory adverb which can be associated with plural verbs:

- (6) *age non est modus verbum imperanti, sed hortantis adverbium, adeo ut plerumque ‘age come:,MPG.2SG facite do:IMP.2PL’ dicamus et **singularem numerum copulemus plurali.*** (Serv. in Aen. 2.707)  
 ‘Age is not a form of the imperative mood, but an exhortative adverb, so that we commonly say “come on, do (it)” and we connect the singular [of the frozen adverb] with the plural [of the main verb it modifies]’.

Parallel to this process of morphological reduction, these elements show a clear increase in (inter)subjectification, since they come to encode the speaker’s perspective and his attitude towards the interlocutor. However, besides fossilization, decategorialization, and subjectification, these items show characteristics which are inconsistent with the classical grammaticalization criteria. For one, they develop an increase rather than a reduction in scope, projecting their functional value over the whole speech act and not only over a lexeme or phrase (something which is very typical in pragmaticalization). Moreover, they are not involved in processes of paradigmaticization and obligatorification; rather, these elements undergo functional expansion in terms of pragmatic strengthening and increase in informativeness (see below). The question thus arises as to what driving force triggered this process of pragmaticalization.

### 3.3 Image schemas of MOVEMENT and EXCHANGE and their metaphorical extensions in the pragmatic domain

As briefly stated above, typological studies have widely shown that verbs of motion and exchange are grammaticalized in a large number of the world’s languages,

<sup>3</sup> Note that lack of agreement resulting from decategorialization and pragmatic crystallization characterizes equifunctional markers in a number of modern languages as well, such as French *tiens*<sub>take</sub> IMP.2SG *ça, vous*<sub>you.2PL</sub>, lit. ‘take this, you’; *allez*<sub>go.IMP.2PL</sub>, *rentre*<sub>get.IMP.2SG</sub> *dans la voiture*, lit. ‘go, get in the car’ and Italian forms *dai*<sub>give.IMP.2SG</sub>, *venite*<sub>come.IMP.2PL</sub>, lit. ‘give, come’; *andate*<sub>go.IMP.2PL</sub>, *va*<sub>go.IMP.2SG</sub>, lit. ‘go, go’, Fedriani & Ghezzi, 2014: 119.

developing a variety of different functions such as case affixes and tense, aspect and mood markers. Recent studies have also highlighted less typical values acquired by motion verbs along a number of lesser-known grammaticalization pathways (see Devos & van der Wal, 2014; Lord, Yap & Iwasaki, 2002; von Wandenfels, 2012). I focus on the polysemy activated by metaphorical extensions involving the basic sensorimotor experiences of MOVEMENT and EXCHANGE, to assess why and in what terms they constitute excellent candidates “feeding” our figurative understanding of more abstract domains, such as that of giving orders and other interpersonal functions, like communication of intentions or encouragement in doing something.

Consider, first, the MOVEMENT schema. In their *World Lexicon of Grammaticalization*, Heine & Kuteva (2002: 159–160) mention a path of semantic change concerning verbs of going that can develop into what they call “hortative” imperative markers. The example they provide to account for this semantic development is the verb *gò* ‘go’ in Baka, which, probably starting from constructions of the type ‘go and do something’ (cf. 7a), evolved into a pragmatic marker with a clear directive meaning (7b):

(7) Baka (Niger-Congo; after Heine & Kuteva 2002: 160)

- a. **gò** -ε na ja ndò!  
 go.IMP -INF take banana  
 ‘Go and fetch bananas!’
- b. **gò** ja ndò!  
**gò** take bananas  
 ‘Fetch bananas!’

The motivation for this development has been convincingly proved by Mauri & Sansò (2014: 175), who argue that, when receiving orders, the addressee typically needs to move away from the actual location where the speaker gives his command as a “preliminary action necessary to bring about the desired SoA [State of Affair]”. A case in point is the so-called *go get* construction. This construction is constituted by a verb of movement asyndetically juxtaposed with the main verb, giving rise to what is frequently called a “(quasi-)serial verb construction”. An English example is (8), and a French example is (9): they show that the source of this construction is to be looked for in complex sequences of actions.

(8) *Let’s go find the paragraph marker.* (Nicolle, 2007: 49)

(9) *Va voir Marie! Autrement elle se fâchera.* (Rossari, 2006: 305)  
 ‘Go see Mary! Or she will be angry’.

The same development may also be at the root of the semantic change that occurred in Greek and Latin. In Latin, there are diachronically co-existing and partially ambiguous constructions featuring *age*, such as (10a), where *age* implies a movement in space

which is necessary to completing the command, but also (10b), where no change of location is required, and (10c), where *age* is fully pragmaticalized, compatible with persons other than the 2nd-singular, and juxtaposed with the imperative with the aim of strengthening its illocutionary force. It may thus be hypothesized that the pathway of semantic bleaching, on the one hand, and pragmatic strengthening, on the other, occurred along the lines described by (10a–c). In (10c), Latin *age* even modifies a verb of movement which points to the actual dislocation that should be performed (*eamus*), showing that the marker is fully desemantized. Since the pragmaticalization of *age* is already completed in early Latin, however, we do not have clear evidence to argue for this specific development along the lines of the *go get* construction and its role remains largely hypothetical.

- (10) a. *ergo age et iratae*  
 then lead:IMP.2SG and angry:DAT.F.SG  
*medicamina fortia praebe.* (Ov. *Ars* 2.489)  
 medicine:ACC.N.PL powerful:ACC.N.PL bring:IMP.2SG  
 ‘Come on then, and bring powerful medicines for an angry woman!’
- b. *immo age et a prima*  
 nay lead:IMP.2SG and from first:ABL.F.SG  
*dic, hospes, origine nobis*  
 tell:IMP.2SG guest:VOC.M.SG beginning:ABL.F.SG we:DAT  
*insidias.* (Verg. *Aen.* 1.753)  
 treachery:ACC.F.PL  
 ‘Nay come on and tell us, my guest, from the first beginning the treachery!’
- c. *age eamus, mea*  
 lead:IMP.2SG go:SBJV.PRS.1PL my:VOC.F.SG  
*gnata, ad matrem tuam.* (Plaut. *Rud.* 1179)  
 daughter:VOC.F.SG to mother:ACC.F.SG your:ACC.F.SG  
 ‘Come on, let’s go, my daughter, to your mother!’

According to Spitzer ([1922] 2007: 87), who commented on the similar development of Italian *va* ‘come on!’ (literally ‘go!’), the insertion of a motion verb in coordination with an imperative serves to encourage the interlocutor by setting him in motion and thus predisposing him to the imminent effort. In this way, the event is construed as more complex, since the action is split into two distinct segments (‘go’ AND ‘do something’ vs. ‘do something’).<sup>4</sup> This subjective construal of the event, where the

<sup>4</sup> “The action appears as more complex: one dwells on the action for longer (*go and do something* vs. *do something*) [L’azione appare più complessa: ci si sofferma più a lungo sull’azione (*va e fa’ qualcosa* vs. *fa’ qualcosa*)]”, Spitzer, [1922] 2007: 87.

motion segment is added by the speaker to confer pragmatic strength and emotional load, has been gradually incorporated into the asyndetic construction (cf. 10c).<sup>5</sup>

This process of incorporating the speaker's subjective perspective has probably been enhanced by the collusion of three crucial features of the MOVEMENT image schema, namely its deictic component, its dynamic semantics, and its telicity. This is especially true in the case of verbs instantiating the MOVEMENT image schema, which presuppose a change of location oriented toward a goal, as in our case. Let us discuss them in some detail.

Firstly, the existence of a goal to be reached presupposes a specific deictic perspective profiled by the speaker and implies a given orientation in space, thus providing a contextual connection of the speaker and of the interlocutor(s) with the image schema which is actualized in conversation ("deictic anchoring", Radden, 1996: 431). Importantly, all the verbs analyzed here imply a deictic orientation corresponding to motion away from the speaker, i.e., from the *origo*, and this point is crucial to our understanding of the subsequent pragmatic development. Indeed, these verbs move the deictic center outwards and perfectly fit the schema suggested by Bourdin (2003) for capturing the functional expansion of 'go' verbs, namely <DIRECTED MOTION + OTHERNESS>, in contrast with 'come' verbs, described as <DIRECTED MOTION + IDENTITY>.<sup>6</sup> 'Otherness', in our case, could be understood in terms of an inter-subjective, interactional meaning acquired by these PMS, which are typically addressed to the interlocutor (i.e., the 'other'), who becomes the abstract endpoint of the motion.

Moreover, in some communicative contexts the presence of a deictic frame featuring a spatial orientation away from the *origo* probably played a role in fostering the incorporation of the subjective deictic perspective within the image schema. This point is clearly made by Nicolle (2007: 58): "When a deictic movement verb is coordinated or juxtaposed to another verb, the result is a subjectified construal of both the action of moving and the other event. As frequency of use diminishes the force of the deictic movement verb, the perspective of the conceptualizer becomes incorporated into the description of the event described by the main verb, whilst less prominence is given to the act of physical movement". This is precisely what is likely to have happened with *íthi*, *áge*, and *age*, which, once pragmaticalized, were bleached of their semantic component pointing to movement in space away from the *origo*, expressing on the other hand the speaker's other-directed (i.e., inter-subjective) attitude. In other words, the speaker's point of view became integrated within the

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5 This is what Hofmann & Szantyr, 1972 II: 471 refer to as the "asyndetic juxtaposition of the imperative [asyndetische Nebeneinanderstellung der Imperative]".

6 See further Mauri & Sansò, 2014 for an extensive discussion about the semantic divergence of 'go' and 'come' verbs and its consequences in different grammaticalization pathways. See also Bourdin, 2008.

construction, which was then oriented towards otherness thanks to the “moving away” semantics. The verb expressing the preliminary movement requested by the speaker to perform his command underwent a process of highly inter-subjective embodiment, being reinterpreted as a pragmatic marker with directive value in imperative constructions.

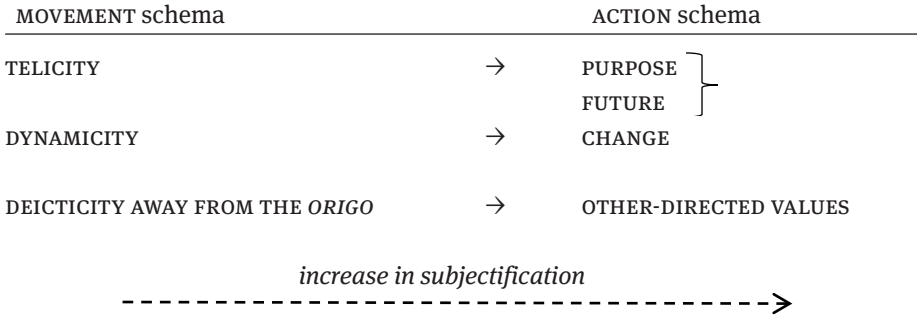
The second trait contributing to the pragmaticalization of these verbs is their inherent dynamic semantics. Greek *ágō* and Latin *ago* include a kinetic and causative meaning that could have enhanced their pragmaticalization in hortative contexts, by realizing the metaphorical implicature MOVE, LEAD (IN SPACE) → DRIVE, PUSH (SOMEBODY INTO ACTION) (Fedriani & Ghezzi, 2014: 121). This dynamic causative feature may have rendered these verbs privileged candidates to be reanalyzed in directive contexts, in which they were frequently coordinated (or juxtaposed) with imperatives. The original fully lexicalized request to ‘move on’, ‘go’, ‘set in motion’ to accomplish an order was therefore gradually reanalyzed as an exhortative, directive PM to drive the interlocutor into action. The metaphor at work in the embodiment process of the sensorimotor experience constituting the MOVEMENT IN SPACE schema is the metaphorical extension MOTION → ACTION. Crucially, both the MOVEMENT schema and its metaphorical extension share the semantic component of CHANGE (OF LOCATION and OF A STATE OF AFFAIRS, respectively). This is another semantic trait which may have played a role in this pragmatic development, since the primary function of imperative constructions is that of *changing* the current situation.

Thirdly, *eimi*, *ágō*, and *ago* are all telic since they presuppose an endpoint in their semantics. Now, it has long been noted that telicity is linked with purpose, the latter being a key semantic ingredient of agentive motion verbs such as those investigated here (see, e.g., Bourdin, 2008: 48). In addition, both the PURPOSE and the CHANGE components, which are conceptually deeply interconnected, intrinsically rely on the concept of futurity, since both purposes and changes require time to be accomplished and are projected towards the future (see again Bourdin, 2008: 49–50). This last point is worth stressing, since it is entirely in keeping with the fact that *ithi*, *áge*, and *age* are pragmaticalized within imperative contexts, which by definition represent a future and virtual situation that, at the time of utterance, is yet to be actualized.

Figure 1 contains a diagrammatic summary of the multiple layers of the embodiment processes that presumably take place in the metaphorical extension MOTION → ACTION, which is at the root of the pragmatic development of the Greek and Latin verbs of movement considered.

Let us now turn to the EXCHANGE schema. The two items at issue in this case are Greek *phére* (‘come on’, 2nd pers.sg.imp of *phérō* ‘I carry, I bring’) and Latin *em* (‘see there!, come on’, 2nd pers.sg.imp of *emo* ‘I take, I buy’). The verbs from which these markers originated share a number of constitutive entailments which render them highly prone to develop discursive functions.





**Figure 1:** Semantic components of motion verbs fostering the ‘MOTION → ACTION’ metaphorical extension.

Firstly, both verbs imply an exchange of objects, therefore a *negotiation* in which the focus is placed on the item exchanged. In view of this semantic feature, both the imperatives of *phérō* and *emo* are ideal candidates to accommodate the so-called “conduit metaphor” (Reddy, 1979), according to which IDEAS ARE OBJECTS and, more precisely, speech exchange is seen as manipulation of objects in terms of “linguistically packaged ideas” (Sweetser, 1987: 451). It is likely that the activation of the conduit metaphor enhanced the process of pragmaticalization of *phére* and *em* as discourse management tools to handle and exchange linguistic objects in communicative negotiations. Evidence for the metaphorical reading of mental experiences in terms of images drawn from physical experiences is richly provided by Short (2012), who demonstrates how the ‘THOUGHTS ARE PHYSICAL OBJECTS’ mapping systematically fed the Roman representation of mental phenomena and a variety of understandings of the mind (see further Short, 2013, especially pp. 142–145, for the application of the conduit metaphor to the semantics of “mistakenness” in Greek and Latin). Similar evidence for the vitality of the conduit metaphor in the domain of communication in Greek is offered by Luraghi (2003: 112–133, 289–290).

In the context of our discussion, the conduit metaphor can be enriched with additional details that realize the specific sub-metaphor VERBAL COMMUNICATION IS TRANSFER OF OBJECTS. This sub-metaphor stresses that linguistic ideas, as objects, can be metaphorically exchanged between the participants of a communicative transaction, and therefore be given or taken. If we consider the case of English, we see that one can, for example, *give a talk*, *give a lecture*, *give an idea*, *send a message* or *take advice*, *get an idea*. More precisely, speaking implies an other-directed activity and can be metaphorically construed as an act of giving; the reception of a message, by contrast, is a self-oriented action which fits the ‘take’ semantics (see Newman, 1996: 244). That the communication of messages is seen as an act of physically giving something is witnessed, for example, by the etymology behind communicative actions such as *propose* (< *pro-ponere* ‘put forward’), *promise* (*pro-mittere* ‘send forward’), and *suggest* (*sub-gerere* ‘drive under’) (Sweetser, 1987: 451). By contrast,



the image of receiving a message as taking an object is very clear if we think of our brain as something that can receive stimuli and messages, thereby fostering the related metaphor ‘TAKE (→ TAKE WITH THE MIND) → CONSIDER, UNDERSTAND’ (cf. the English expression *I got it* and the etymological derivation of *comprehension* from Latin *comprehendere* ‘to seize’: Sweetser, 1990: 20; see also Short, 2012: 117).

Secondly, both *phérō* and *emo* are deictic and telic in essence, since they feature a specific orientation and imply an endpoint in their eventive frame (see Newman, 1996: 57–58). These semantic entailments trigger similar metaphorical extensions to those observed with regard to verbs of motion. On the one hand, their telic nature, presupposing an endpoint, is easily metaphorically reanalyzed in terms of purposive and directive meanings; on the other, their deictic component facilitates the embodiment of the speaker’s subjective perspective within the new pragmatic functions.

Crucially, however, *phérō* and *emo* fundamentally diverge in terms of their deictic orientation, and their discrepancies turn out to be crucial in triggering different discursive values once the imperatives have been pragmaticalized. The first difference concerns their deicticity. Whereas *phérō* is basically oriented outwards, towards an endpoint which does not coincide with the speaker, *emo* is clearly centripetal. If we follow Bourdin’s (2003) distinction between motion oriented towards “otherness” (like ‘go’ verbs) and motion towards “identity” (like ‘come’ verbs), the same distinguishing criterion can be applied to exchange verbs. In this perspective, *phérō* accommodates the centrifugal frame <EXCHANGE + OTHERNESS>, while *emo* can be better described as centripetal: <EXCHANGE + IDENTITY>. This allows us to note the second discrepancy, namely, that *phérō* does not fit the prototypical semantics of exchange *tout court*, because it describes a transportation of objects rather than a mere exchange. By definition, transportation requires movement in space to transfer an object from a source to a goal. Therefore, the resulting semantics of *phérō* is more complex than that of *emo*, which is a static verb only implying the acquisition of goods by offering something of equal or greater value. Considering the multi-layered semantics of *phérō*, we may thus rearrange its description as <MOTION + EXCHANGE>, which results in a centrifugal delivery: <TRANSFER + OTHERNESS>.

### 3.4 The embodied pragmaticalization of *íthi*, *áge*, *age*, *phére* and *em*

In what follows, I survey the main pragmatic and discursive values developed by the imperatives *íthi*, *áge*, *age*, *phére* and *em* through a process of embodiment, actualized along the lines of the metaphorical extensions described above. My corpus is composed of Aristophanes’ comedies for Greek and Plautus’ comedies for Latin.

### 3.4.1 *Íthi*, *áge*, and *age* as pragmatic markers

Coherently with the pathway of metaphorical extension MOTION → ACTION, *íthi*, *áge*, and *age* develop addressee-oriented values in terms of PMS. Their typical context of occurrence is in asyndetic juxtaposition with an imperative expressing a command. In this case, *íthi*, *áge*, and *age* strengthen the illocutionary force of the order expressed by the imperative they have scope over, thus functioning as PMS which impose a subjective force on the speech act, metaphorically *pushing* the interlocutor into action, as exemplified in (11 a–c):

- (11) a. *íthi*          *nun*          *káleson*                  *autén*. (Ar. *Lys.* 861)  
 go:IMP.2SG now call.out:IMP.AOR.2SG she:ACC  
 ‘**Come on** now, **call her out!**’
- b. *áge*          *dè*          *takhéōs touti*  
 go:IMP.2SG PTC quickly this:ACC.N.SG  
*xunárpason*. (Ar. *Nub.* 774)  
 snap.up:IMP.AOR.2SG  
 ‘**Come on** then, quickly **snap up** this one!’
- c. *age*          *accipe*          *hoc*                  *sis*. (Plaut. *Pers.* 691)  
 lead:IMP.2SG take:IMP.2SG this:ACC.N.SG please  
 ‘**Come on**, take this please!’

A less frequent, but still well attested context of use is the co-occurrence of *íthi*, *áge*, and *age* with a first person plural subjunctive which also includes the speaker within the action or state she wishes to bring about. In this case, the pragmatic markers at issue have a slightly different value, that of an inclusive exhortation, comparable with the English expression *come on, let’s go!*

- (12) a. *íthi*          *nun*, *apodōmen*          *ténde tèn Theōrian hanúsante tēi*  
 go:IMP.2SG then hurry.up:SBJV.1PL  
*boulēi*. (Ar. *Pax* 871)  
 ‘Then **come on**, **let’s hurry up** and give Holiday here to the Council!’
- b. *áge*          *nun*          *iōmen*. (Ar. *Pax* 851)  
 go:IMP.2SG then go:SBJV.1PL  
 ‘**Come on** then, **let’s go!**’
- c. *age*          *decumbamus*          *sis*,          *pater*. (Plaut. *As.* 828)  
 lead:IMP.2SG recline:SBJV.1PL please father:VOC.M.SG  
 ‘**Come on**, **let’s recline**, father, if you please!’

A less frequent speech act in which these pragmaticalized verbs occur is that of questions, and this usage is only attested with *áge* and *age*. In this case, these markers oscillate towards the discursive domain, since they serve to encourage the addressee

to *proceed* with a communicative move or to take the floor, thus functioning as turn-yielding devices. Since they invite the interlocutor to *go on in discourse*, they could be better categorized as DMS in such rarer and less prototypical contexts. I suggest that a more fine-grained sub-metaphor stemming from the general MOTION → ACTION mapping is at work here, whereby the domain of COMMUNICATIVE SPACE (i.e., a text or discourse) is conceptualized as physical space. Coherently, the order is that of proceeding in a more specific type of action, namely a COMMUNICATIVE ACTION. This is evident in (13a) from Greek, where *áge* prefacing a question serves to trigger a quick answer on the side of the interlocutor, and in (13b) from Latin, where Antipho asks his daughter Pamphila what is, in her opinion, the preferable type of woman to marry after her mother's death, and stresses the urgency of his question by encouraging Pamphila to give an answer.

- (13) a. *áge*            *dè tí*        *khre*                    *drân*; (Ar. Av. 809)  
 go:IMP.2SG PTC what be.necessary:IMPS do:INF.PRS  
 'Come on, what's on the agenda?'  
 b. *age*            *tu*            *altera utra*        *sit*  
 lead:IMP.2SG you:NOM.SG other:NOM.F.SG be:SBJV.3SG  
*condicio*            *pensior*,  
 match:NOM.F.SG preferable:NOM.F.SG.COMP  
*virginemne an viduam habere?* (Plaut. St. 118)  
 'Come on, you other one, which match is preferable, having a virgin or a widow?'

The least frequent context of use in which, again, only *áge* and *age* occur, is that of positive answers followed by promises or statements with which the speaker guarantees the interlocutor the felicitous development of a given action. In such contexts, the process of functional extension underlying the use of pragmaticalized verbs of movement is probably to be found in a metaphorical invitation to “move on” with the planned action without stopping on account of a situational or conversational obstacle. In (14), *age* functions as a marker of agreement used by the speaker to encourage the interlocutor to “proceed” with his action or discourse, thus removing an impediment to its smooth development:

- (14) LEO. *placide ergo unum quidquid rogita, adquiescam non vides me ex  
 cursura anhelitum etiam ducere?*  
 LIB. *age*                                    *age*,                                    *mansero*  
 lead:IMP.2SG                            lead:IMP.2SG                            wait:FUT.PRF.1SG  
*tuo*                            *arbitratu*,                            *vel adeo usque dum peris.* (Plaut. As. 326–328)  
 YOUR:ABL.M.SG wish:ABL.M.SG  
 'LEONIDA Then ask me each question gently, so that I can calm down. Can't you see that I'm still out of breath from running?  
 LIBANUS **All right, all right**, I'll wait just as you wish, or even until you die'.

Detailed frequencies describing the contexts of occurrence of *íthi*, *áge*, and *age* in the selected corpus are provided in Table 2, in which the statistics for *íthi* and *áge* are taken from a recent study by Zakowski (2018). As mentioned above, these markers mainly occur in directive speech acts, where they modify an imperative expressing a command: this function is realized in 93% of cases for *íthi*, 69% for *áge* and 89% for *age*. This context greatly outranks the others both in Greek and Latin and this holds for all the markers considered. In general, next come inclusive exhortations in the first person plural subjunctive, which are in any case a kind of command; questions and answers constitute the rarest utterance types (the latter ratio is however inverted for *áge*).

**Table 2:** Frequencies of occurrence of *íthi*, *áge*, and *age* in different speech acts in Aristophanes and Plautus.

	<i>íthi</i>	<i>áge</i>	<i>age</i>
COMMANDS	42	38	98
INCLUSIVE EXHORTATIONS	3	4	7
QUESTIONS	–	12	3
ANSWERS (STATEMENTS, PROMISES)	–	2	2
TOTAL	45	56	110

The data show that the most frequent contexts, i.e., the directive contexts (whether they are syntactically realized and whether they include the speaker or not) correlate with the basic pragmatic function of *íthi*, *áge* and *age*. Secondary patterns such as questions and answers are more marked, since they are not attested with *íthi* and are much less frequent. The use of *áge* and *age* in these contexts strays quite far from the core meaning of these markers, acquiring instead more discourse-oriented values.

Interestingly, typological data can be interpreted as providing support for the proposed embodiment-driven development. Indeed, this pragmaticalization process is not isolated, but attested across many languages: verbs of motion frequently acquire comparable pragmatic functions of illocutionary strengthening in directive contexts, both in Indo-European languages (15 a–f) and non-Indo-European ones (cf. 7b above, from Baka, a Niger-Congo language, and Mauri & Sansò 2014 for more cross-linguistic data).

- (15) a. English (Andersen, 2001: 256)  
       ‘**Come on** look at her yeah’.
- b. French (Sierra Soriano, 2006: 75)  
       *Allez, on s’en va!*  
       ‘**Come on**, let’s go!’  
       *Allons, ne soyez pas triste!*  
       ‘**Come on**, don’t be sad!’

- c. Italian (Fedriani & Ghezzi, 2014: 123)  
*Ok vai riattacca vai sentiamo chi c'è pronto?*  
 'Ok, **go ahead**, hang up, **go ahead**, let's listen, who's there, hello?'
- d. Spanish  
*Anda no hagas tonterías* (Tanghe, 2016: 22)  
 'Come on, don't be foolish!'  
*Venga, haga su pregunta* (Tanghe, 2016: 22)  
 'Come on, ask your question!'  
*Vamos, esto es el colmo!* (Sierra Soriano, 2006: 81)  
 'Come on, this is the last straw!'
- e. Mexican Spanish (Company Company, 2006: 113–114)  
*¡Andale!* – exclama Héctor –, *qué buena onda, ya llegaron las reinas.*  
 'Andale! – Hector exclaims – cool, the babes have arrived'.
- f. Modern Greek (Nikiforidou, Marmaridou & Mikros, 2014: 660)  
*ti sta leo tora afta, ela pjes to frappe su.*  
 'What am I telling you all this for, **come on** drink your coffee'.

It is worth noting that in modern Greek we find *ela* (2nd pers. sg. imp. of *erxome* 'come'), whose functions can in some cases be compared with those displayed by ancient Greek *áge* (as in 15f). This process of functional substitution suggests a renewal which can be described in terms of a "pragmatic cycle" (cf. Ghezzi & Molinelli, 2016; see also Hansen, 2014), and testifies to the productivity of the embodiment-based process of semantic and pragmatic extension illustrated in this section, not only at a cross-linguistic level, but also within an intra-linguistic diachronic perspective.

### 3.4.2 *Phére* and *em* as discourse markers (and the specific status of *phére*)

As pointed out in the previous section, *phére* and *em* entail different deictic orientations: centrifugal and centripetal, respectively. Due to this basic divergence, these markers developed different functions and therefore require a separate account. Let us start with *em*, whose development is in some way simpler, since its original lexical meaning has less semantic entailments (i.e., only EXCHANGE) compared to *phére* (MOTION + EXCHANGE). The functional enrichment of the imperative *em* stems from its presentative value in deictic contexts ('take!'). Such original lexical meaning fostered a metaphorical reinterpretation of *em* as a focus marker ('here you are!, look at that!, lo and behold!'), used by the speaker to call the interlocutor's attention to an object from a specific (more subjective) perspective.

- (16) *em*            *tibi*            *pateram,*            *eccam.* (Plaut. *Am.* 211)  
 take:IMP.2SG you:DAT goblet:ACC.F.SG here.it.is  
 'Take the goblet (for you); here it is'.

- (17) *sequere: em tibi hominem,*  
 follow:IMP.2SG take:IMP.2SG you:DAT man:ACC.M.SG  
*adi atque adloquere.* (Plaut. *Capt.* 540)  
 go:IMP.2SG and address:IMP.2SG  
 ‘Follow me. **Here’s** your man. Go and address him’.

This highly context-dependent focalizing function, in which *em* works as a deictically-rooted DM highlighting an element of the current communicative situation, constitutes the point of departure for further discursive values. First, we have some contexts featuring a shift of its focalizing function from the concrete state of affairs where the communication takes place, indexing concrete objects (e.g., 16 and 17), to the textual domain, i.e., the abstract exchange in which ideas and speech acts are metaphorically perceived as objects being transferred. At this more abstract level, *em* functions as a discourse management tool which serves to highlight portions of discourse, giving them particular communicative salience. By prefacing a speech act with *em*, the speaker overtly invites the interlocutor to ‘take (with the mind)’, that is, to ‘consider’ attentively the focalized content: in (18), for example, the order *habeto gratiam*; in (19), the answer is *argentum huc remisit*.

- (18) *em huic habeto gratiam.* (Plaut. *Most.* 1180)  
 take:IMP.2SG this:DAT.M.SG have:IMP.FUT.2SG regard:ACC.F.SG  
 ‘**There**, be grateful to this chap’.

- (19) LIB. *quid tum postea?*  
 LEO. *em ergo is argentum huc*  
 take:IMP.2SG then he:NOM money:ACC.N.SG here  
*remisit.* (Plaut. *As.* 335–336)  
 send.back:PRF.3SG  
 ‘LIBANUS What next?  
 LEONIDA **Well**: then, he sent money back here’.

Lastly, building on the focalizing function just described, *em* further developed as an agreement marker. This pathway of functional enrichment can be understood in terms of an increase in subjectification assumed by the focus marker, which in some contexts also expresses the additional feature of positive focalization projected by the speaker on the communicative “object” exchanged. In these cases, *em* signals a favorable reception of the content or of the point of view given by the interlocutor. This is especially clear in (20), where *em* is reinforced by the compliment *sapis sane* (but also *optumest* immediately before), and in (21), where the speaker receives a command (*si tu iubes*) and accepts its content (*ibitur tecum*).

(20) LYS. *servos sum tuos.*

OL. *optumest.*

LYS. *opsecro te Olympisce mi mi pater mi patrone.*

OL. **em**                *sapis*                *sane.* (Plaut. *Cas.* 738–39)

take:IMP.2SG taste:PRS.2SG sound:ADV

‘LYSIDAMUS I am your slave.

OLYMPIO That’s very good.

LYSIDAMUS My dear little Olympio, my father, my patron, I do beg of you.

OLYMPIO **Well**, you certainly are of sound mind’.

(21) *si tu iubes, em, ibitur* (Plaut. *Cas.* 758)

if you:NOM tell:PRS.2SG take:IMP.2SG go:FUT.PASS.3SG

*te=cum.*

you=with

‘If you tell me, **well**, I’ll go with you’.

In view of a lexical meaning that points to a negotiation between two persons, *em* developed clear discourse management functions, acting in terms of (1) a deictic presentative marker, (2) a focalizer, and (3) an agreement marker. All these specific values can be subsumed under the functional domain of a typical DM. The detailed frequencies with which *em* occurs across the different functions in the Plautine corpus, and a detailed discussion, can be found in Unceta Gómez (2017), who shows that the contexts in which *em* functions as a deictic focus markers correspond to 39% of cases, whereas *em* as a discursive focalizer, as a marker of agreement and with some other related discourse-management strategies occurs in 45% of cases.<sup>7</sup> These frequencies testify to the degree of pragmaticalization acquired by *em* already at an early stage of Latin.

Let us now consider the pragmaticalization of *phére*, whose status and functions are crucial to a full understanding of the potential of an embodiment-based approach to semantic and pragmatic change. Indeed, I suggest that the double-layered semantics of *phére*, participating both in the MOTION and the EXCHANGE image schemas, is at the root of two parallel but distinct pathways of metaphorical development. First, the semantic component of MOTION made *phére* an ideal candidate to function as a pragmatic marker in directive contexts, where it has scope over imperatives and, more frequently, over hortative subjunctives, strengthening their illocutionary force (cf. 22 and 23). The centrifugal orientation (‘to carry away from the *origo*’) probably enhanced this pragmatic, action-oriented meaning and rendered *phére* essentially synonymic with *íthi*, *áge*, and *age* in inclusive exhortations.

<sup>7</sup> In the cases left, *em* is used with its original lexical sense or as a routinized exclamation.

- (22) *phére*            *nun*            *phráson*            *moi*,  
 bring:IMP.2SG    now            tell:IMP.AOR.2SG    I:DAT  
*taút' aréskei sphôin*; (Ar. *Eccl.* 710)  
 'Come on, tell me, does the plan meet with your approval?'

- (23) *phére*            *tô*                    *ésthos*  
 bring:IMP.2SG    the:ACC.N.SG    cloak:ACC.N.SG  
*ambalómetha*. (Ar. *Lys.* 1096)  
 put.back.on:SBVJ.AOR.M/P.1PL  
 'Come on, let's put our cloak back on!'

The second metaphorical pathway is activated by the EXCHANGE image schema, which fostered the functional expansion of *phére* also at the level of discourse management and discourse organization, i.e., in terms of a DM. The original semantics of 'bring' is clearly centrifugal and addressee-oriented, and it turned out to be crucial for the development of turn-yielding values ('bring your contribution, your communicative turn, or your answer, to the exchange'). In (24), *phére* precedes a question, therefore signaling from the outset the communicative intention of the speaker that the addressee should take the floor and give an answer. Such an intention is also made explicit in (25), where the question is followed by the command *deíxon* ('show me!').

- (24) *è n oîn huph' humôn prôton apólōmai kakôs*,  
*phére*,            *pôs*    *ep' ekeinēn*            *tēn*  
 bring:IMP.2SG    how    to    that:ACC.F.SG    the:ACC.F.SG  
*kalēn*                    *aphíxomai*;  
 pretty:ACC.F.SG    get:FUT.M/P.1SG (Ar. *Eccl.* 1080)  
 'So tell me, if I'm miserably done in by you two, how will I get to that pretty girl?'

- (25) *phére*,            *poû*;            *deíxon*. (Ar. *Clouds* 324)  
 bring:IMP.2SG    where            show:IMP.AOR.2SG  
 'Tell me, where? Show me!'

These are the two principal lines of pragmatic enrichment along which *phére* developed, and it is readily apparent that the ambivalent semantic nature of this marker directly determined its alternative status as DM and PM. Further detail of secondary and rarer uses is beyond the scope of this article; the interested reader may refer to Zakowski (2018), who also provides a quantitative description of the contexts of occurrence of this marker. It is given here as Table 3, with some minor adaptations.



**Table 3:** Frequencies of occurrence of *phére* in different Speech Acts in Aristophanes.

	<i>phére</i>
COMMANDS	6
INCLUSIVE EXHORTATIONS	53
QUESTIONS	24
TOTAL	<b>83</b>

As with the pragmaticalization of motion verbs, the functional expansion of exchange verbs is not an isolated phenomenon. Similar mechanisms of metaphorical development are attested in different languages. I limit myself to just a few examples from the Romance languages.

(26) Medieval French (Oppermann Marseaux, 2008: 14)

*Tenez, ma dame:/ je vous promet par ma foy et par m'ame/ que . . .*

'**Look**, my lady: I promise to you by my faith and by my love that . . .'

(27) Spanish (Company Company, 2006: 388)

*¡Y dale! ¿Pero no ves tú lo que cuesta mantener una familia?*

'And **dale!** Don't you see how expensive it is to maintain a family?'

(28) Spanish (Unceta Gómez, 2017)

*¿Te apetece ir al cine? **Toma**, pues claro.*

'Do you fancy going to the cinema? **But** of course!'

(29) Italian (Fedriani & Ghezzi, 2014: 130)

*allora/<dai/ siamo d'accordo >//*

'Then, **all right**, we have an agreement'.

### 3.5 Conclusions

In this paper, I have focused on some Greek and Latin "frozen" imperatives whose meaning is based on metaphorical interpretation of the MOTION IN SPACE and EXCHANGE OF OBJECTS image schemas. The existence of these ossified verbs has long been noted in philological literature, and valuable observations, especially on the morpho-syntactic status of these items, have also been made in recent theoretically-grounded studies. However, an adequate understanding of their formal crystallization and their functional enrichment as DMS and PMS is only possible by identifying the conceptual and metaphorical bases of this process of semantic and pragmatic change. The cognitivist approach taken here helps to explain not only why these specific classes of verbs underwent this process of pragmaticalization, i.e., what lexical

features contained in their original semantics rendered them likely to undertake this process of pragmaticalization, but also along which pathways of semanto-pragmatic development this process was actualized, and which metaphorical extensions fed them; and, importantly, why some verbs acquired action-oriented values and became PMS whereas others developed discourse-related functions, thus functioning as DMS. This last point is of utmost importance and shows how the perspective of embodiment has the clear advantage of interpreting functional, abstract, and fine-grained differences as deriving directly from the lexical sources involved and, more precisely, from the body-based interactions with the environment they denote.

*Phére* is a particularly interesting case in point here: its functions demonstrate that this verb, given an ambivalent nature that participates in both the MOVEMENT and EXCHANGE image schemas, developed both along the lines of a PM, oriented toward action due to its MOVEMENT semantics, and a DM, in view of the EXCHANGE semantic component included in its meaning. Its dual status is represented in Figure 2, which summarizes the findings of this study and represents the functions discussed arranged along a continuum of embodied-based pragmatic development.

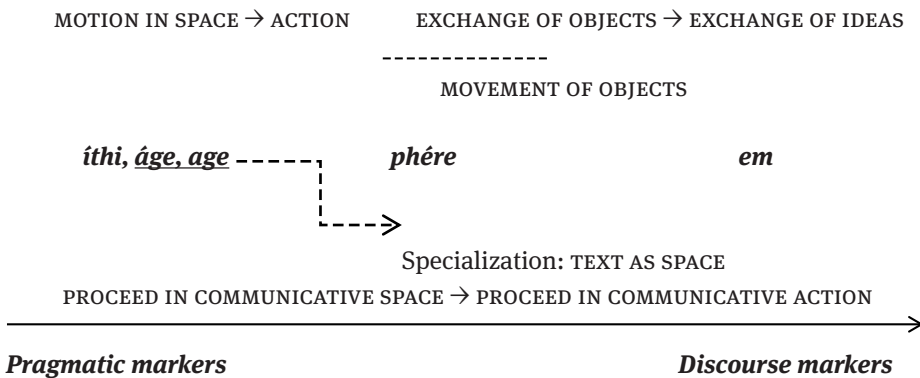


Figure 2: The functional space of *ithi*, *áge*, *age*, *phére*, and *em*.

Figure 2 illustrates the functional space across which *ithi*, *áge*, *age*, *phére*, and *em* developed their pragmatic and/or discursive functions and suggests two considerations. Firstly, the majority of the elements considered are multifunctional in essence. *Áge* and *age* mostly behave as PMS, but can also function as DMS in particular contexts through the elaboration of a semantically specific sub-metaphor (‘proceed in a text, i.e., in performing a discursive action’). *Phére* works both at a pragmatic and at a discourse organization level due to its complex semantics of TRANSFER. This is no surprise considering that multifunctionality is one of the constitutive features of DMS and PMS both cross-linguistically and language-internally. Secondly, the same function can in some cases be performed by different markers: this suggests that

the functional space is arranged along a continuum with overlapping areas, within which, in view of metaphorical extensions, clusters of semantically compatible elements co-exist (as in the case of *áge* and *age* oscillation towards the discursive level due to the instantiation of the ‘TEXT-AS-SPACE’ metaphor). To manage and modulate actions and texts, Greek and Latin speakers thus probably resorted to co-occurring, partially overlapping strategies available in their mental “pragmatic grammar”, whose organization was not random but shaped by their conceptualization of basic sensorimotor and cultural experiences. This organization has parallels in other ancient and modern languages and points to the existence of presumably universal principles of semantic and pragmatic change.

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Luisa Brucale

## 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. *claudio* ‘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).<sup>8</sup>

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.<sup>9</sup>

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 "preverbatation", 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.

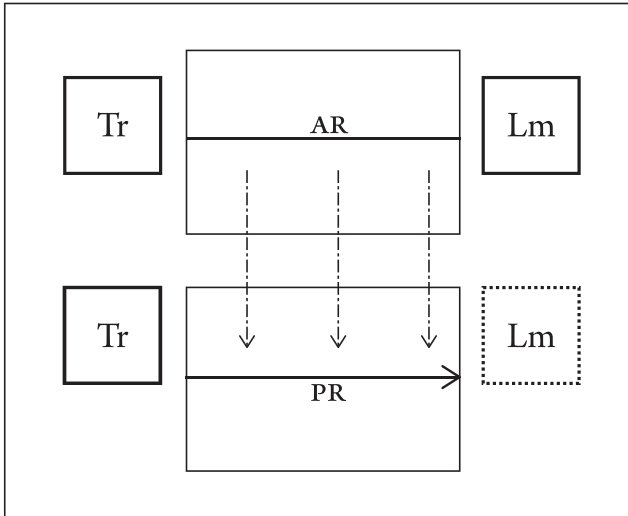
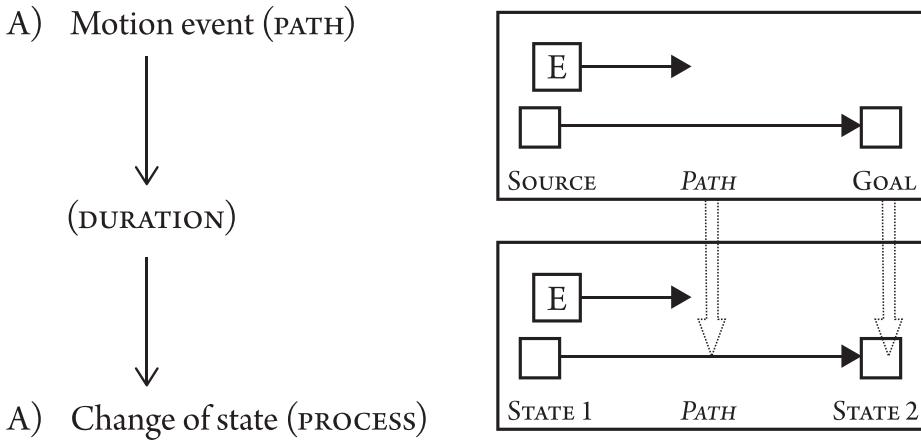


Figure 4.1: Verbal prefixation (Brucale & Mocciaro, 2017: 204).

### 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 opposite 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).



**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 *eisbainō* ‘to go into; to enter’ vs. *ekbainō* ‘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).<sup>10</sup> 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’).<sup>11</sup> 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 & Mocchiari, 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).<sup>12</sup> 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* ~ *diatēinō* ‘to stretch out, extend’, *disto* ~ *diēsten* ‘to stand apart, to be separate, distant’, *diverbum* ~ *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).<sup>13</sup> It can be placed before nouns (e.g., *discors*

<sup>12</sup> *Red-* is also found in *red-do* ‘to give back’, before *h*, as in *redhibeo* ‘to give back, return’, and with the linking-vowel *-i-* in *rēdī-vivus* ‘that lives again, renewed’.

<sup>13</sup> 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.<sup>14</sup>

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*, *nursus*, *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

<sup>14</sup> 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’, *revertō* ‘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’ *revertō* ‘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*                      *praecipēs*                      ***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’.<sup>15</sup>

<sup>15</sup> 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%3Acollection%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’.

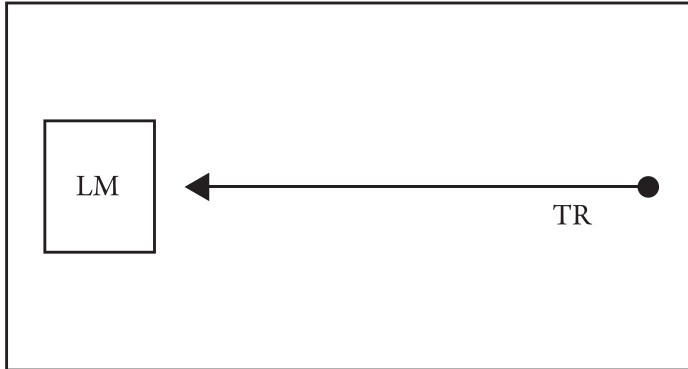
- (3) DAEM. *agedum ergo, accede*  
 move:IMP.PRS.2SG=INTERJ therefore go.to:IMP.PRS.2SG  
*huc modo.*  
 to.this.place just.now  
 LAB. *iube dum recedere*  
 order:IMP.PRS.2SG just go.back:INF.PRS.  
*istos ambo illuc modo.* (Plaut. Rud. 785–6)  
 that:ACC.M.PL both to.that.place just.now  
 ‘DAEMONES 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’.

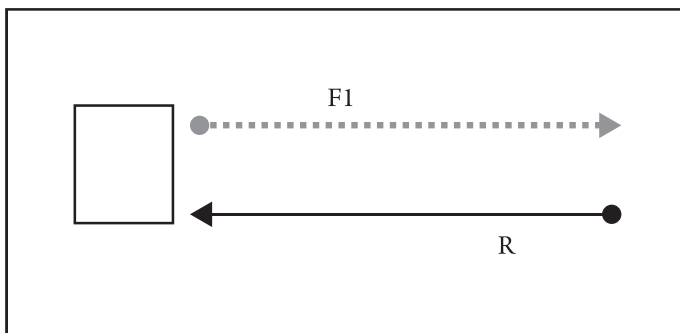
- (5) *eum ego meis dictis*  
 DEM.ACC.M.SG I:NOM.SG my:ABL.N.PL say:PTCP.PRF.ABL.N.PL  
*malis his foribus atque*  
 bad:ABL.N.PL DEM.ABL.F.PL door:ABL.F.PL and.also  
*hac <muliere> . . . reppuli,*  
 this:ABL.F.SG woman:ABL.F.SG drive.back:PRF.1SG  
*reieci hominem.* (Plaut. Bacch. 632a–633)  
 throw.back.PRF.1SG 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-*.





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', *reprimis* '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', *revehō* 'to carry or bring back, to convey back', *revenio* 'to come back', *reviso* 'to look back', *revorto* '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  
*nursum 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 falcua*  
 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 *restart*, French *redémarrer*, Spanish *reiniciar*, Italian *ricominciare*). 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).<sup>16</sup> 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; Mattioli, 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” (Mattioli, 2017: 120). Wood (2017: 15), for example, notes that “an intensive meaning is a relatively common secondary meaning of categories indicating repetition” and Mattioli (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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<sup>16</sup> 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 perpendicularum.* (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, contrasted 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  
*reclisit=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, reveor*, the prefix

expresses a “responsive” value.<sup>17</sup> 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 mutuum*  
 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’.

<sup>17</sup> 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 *claudio* ‘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 uncharmize’ opposed to *charmido* ‘to change someone into Charmides, to charmize’, 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 irritate:PTCP.ACC.F.SG  
*voluit quisquam imitari, saltem,*  
 want:PRF.3SG any.one:NOM.M.SG imitate:INF.PRS.PASS at.least  
*si non arriderent, dentes*  
 if NEG laugh.at:SBJV.IMP.F.3PL tooth:ACC.M.PL  
*ut restringent.* (Plaut. *Capt.* 486)  
 as/so.that unclose:SBJV.IMP.F.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 (*recalet pro calent: re enim superflua compositio est uerbi. Aut recalet 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’.

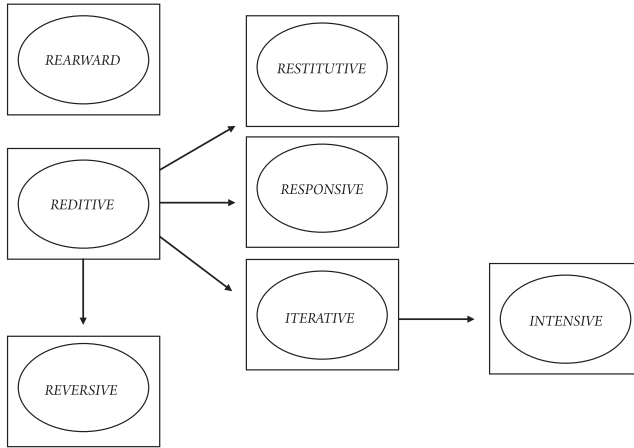
The same difficulty is encountered in the interpretation of the semantic difference between *quiesco* and *requiesco* (in 26–27):

- (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* *anhelitem.*  
 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.



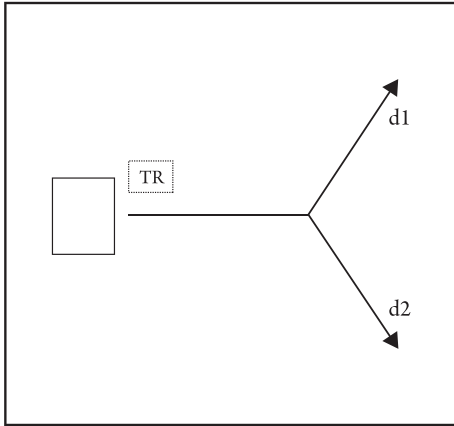
**Figure 5:** The semantic network of *re-*.

#### 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).<sup>18</sup>

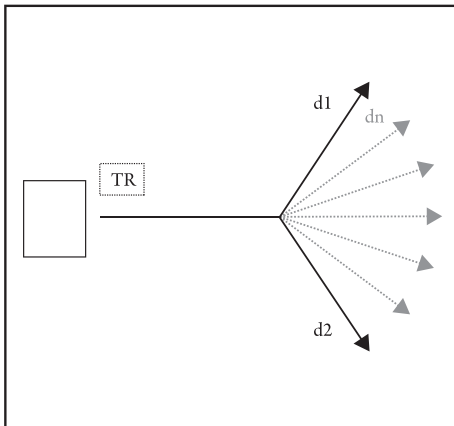
As in the case of *re-*, although through a completely different trajectory, such a dynamic event implies the removal of the TR from the location which constitutes the source of motion. Moreover, the subsequent location in two opposite directions will also have a restrictive effect on the selection of 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*.

<sup>18</sup> 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):<sup>19</sup>

(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’.

<sup>19</sup> 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 situation 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 *claudio* ‘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 reversionary *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 reversionary 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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Anna Bonifazi\*

## 5 *Autós* and the center-periphery image schema

**Abstract:** The chapter suggests that the traditional interpretation of headless and non-nominative forms of *autós* as regular third person pronoun can be at least partially revised. An image schematic interpretation of *autós* implying a center and a periphery allows us to account for its various syntactical, semantic, and pragmatic meanings in a structured way. The analysis of several passages from prose and poetry provides cognitive input to the study of anaphor processing and of viewpoint phenomena. It also confirms the necessity of considering discourse units beyond the sentence level to make sense even of single words.

**Keywords:** CENTER-PERIPHERY image schema; *autós*, third person pronouns; intensifiers; cognitive projections; metaphorical and metonymic extensions of meaning; visual field; social rank; discourse prominence; bodies; ancient Greek

### 5.1 Introduction

The tale of Arion and the dolphin in Herodotus' *Histories* (1.24) is a self-contained episode that, like many others, reveals the historian's ability to tell a good story as well as his attention to paradigmatic methods of inquiry (see Cobet, 1971: 145–151; Gray, 2001; Munson, 1986). Scholarly commentary on this tale normally focuses on historical or encyclopedic information about the great musician Arion, the type of music that he performs from the deck, and the way in which the tyrant of Corinth, Periander, discovers the truth about what happened. Among the discourse strategies that make the episode a good (and memorable) piece of storytelling, the pronouns Herodotus uses to refer to Arion deserve attention. The musician undoubtedly is the protagonist throughout the story; however, he is recalled by different lexical markers, in accordance with different implications arising from the host sentences.

The tale is reported through the voice of the Corinthians and thus features a series of infinitive constructions. Arion, the protagonist, is invariably referred to in the accusative case of pronouns – first by adjectival *toûton* at the beginning of the tale<sup>1</sup> (1.24.1); then by the weak demonstrative *tón* (1.24.2; 1.24.5; 1.24.6), the reflexive marker *heôutón* (1.24.4) and *min . . . heôutón* (1.24.5); and finally by *autón* and *autòn . . . min* (1.24.3, 1.24.4, and 1.24.6). Two of these occurrences of *autón* can be explained through established grammatical accounts of *autós* (see section 3). At 1.24.4, *autón* occurs in

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\*Warm thanks to the editors and to Greg Membrez for their perceptive feedback.

1 See Bonifazi, Drummen, de Kreij, 2016: IV.3§124 on *hoûtos* at the beginning of a new discourse move in Herodotus.



indirect speech, and refers to the speaking ‘I’ Arion (*Aríona . . . paraitésasthai, . . . periideîn autòn* ACC.M.SG . . . *aeîsai*, “Arion begged them that they watch him singing”).<sup>2</sup> At 1.24.3, *keleúein tous porthméas ê autòn* ACC.M.SG *diakhrâsthai min . . . ê ekpēdân es tēn thálassan tēn takhístēn*, ‘The seamen order that he either kill himself or jump into the sea at once’, *autón* functions as a reflexive marker accompanying the pronoun *min*. The remaining two occurrences of *autón*, however, are less straightforward. In neither case is it immediately clear what motivates the choice of the form *autón* over *tón* or *toûton* or *ekeînon*. The two related passages narrate Arion’s attempt to get his own life spared (1), and his safe arrival ashore after the miraculous ride on a dolphin’s back (2):

- (1) *ouk ôn dê peíthein autòn* ACC.M.SG *toútoisi, allà keleúein tous porthméas* (Her. Hist. 1.24.3)  
 ‘[He (*tón*) begs this, that he gives them the money, and [his] life is spared.] Then, **he** does not persuade [them] with these words, but the seamen order that . . .’.<sup>3</sup>
- (2) *apobánta dê autòn* ACC.M.SG *khōréein es Kórinthon sùn tēi skeuēi* (Her. Hist. 1.24.6)  
 ‘[They say that a dolphin picked him (*tón*) up, and brought him to Tainaron.] As **he** dismounted, he made his way to Corinth, with the singing costume’.

In each case, the context makes clear that Arion is already “active”, to use Chafe’s term denoting the status of an entity being “in focus” in one’s consciousness.<sup>4</sup> Therefore, there is no need to recall the referent in a particularly strong way. Yet Herodotus equally could have chosen another third person pronoun instead of *autós*. Why *autós*, then? In (1) and (2), *autós* can be interpreted as a pronoun marking the referent as the focal center, surrounded by an explicit (in (1)) and implicit (in (2)) focal periphery. In (1), the pronoun marks Arion as being at the center of the narrators’ (i.e., the Corinthians’) attention, while the seamen function as peripheral items; in (2) Arion is set off from people and objects/animals: he is still wearing the singing costume,<sup>5</sup> but

2 On *autós* and *ekeînos* in indirect discourse, see especially Bakker, 2006: 100–101. The translations of these Herodotean passages, as well as of Sappho (4) and of Thucydides (18) are my own.

3 On *ôn dê* in Herodotus, see Bonifazi, Drummen, de Kreij, 2016: IV.3§79 and IV.5§80.

4 See Chafe, 1996: 40 words distinguishing between “active,” “semiaactive,” and “inactive” states of ideas: “Accessibility . . . is best understood in terms of degrees of activation in consciousness. At least three degrees are necessary to explain what we find in language . . . Ideas can be said to be either active, semiaactive, or inactive. An active idea is one that is in a person’s focus of consciousness at the moment. A semiaactive idea is one that is in peripheral consciousness, as with something on which consciousness was focused a few moments before but which has in the meantime receded from the fully active state. An inactive idea is one that is neither active nor semiaactive. It might be in long-term memory, or might never have entered consciousness before”.

5 The singing costume is such a prominent feature of Arion, that in this relatively short episode it is mentioned four times, i.e. *en tēi skeuēi pásēi*, 1.24.4; *pâsan tēn skeuēn*, and *sùn tēi skeuēi pásēi*, 1.24.5; *sùn tēi skeuēi*, 1.24.6.



he is alone, with nobody else around, and without the dolphin.<sup>6</sup> Neither *tón*, *toûton* or *ekeînon* conveyed this sense.

This article links the use of *autós* as seemingly an unmarked third-person pronoun to the CENTER-PERIPHERY image schema described by cognitive linguists. I argue that the skeletal scenario of a core and an edge underpins the polysemy of and the different constructions involving *autós* in archaic as well as in classical texts (prose and poetry). After briefly introducing the theory of image schemas in cognitive linguistics, and the CENTER-PERIPHERY schema in particular, I survey some relevant accounts of the syntax and the semantics of *autós*, including Ekkehard König's, according to which intensifiers in different languages evoke a center and a periphery (even if in non-cognitive terms). After discussing my previous contribution to pragmatic readings of *autós* in Homer, and in particular in the *Odyssey*, I move on, in the core of the paper, to illustrate how occurrences of anaphoric *autós* in different genres reflect the CENTER-PERIPHERY image schema through various semantic, cognitive, and pragmatic implications.

## 5.2 The image schema CENTER-PERIPHERY

Image schemas are “skeletal structures representing spatial configurations and/or the various forces that affect a human body” (Dancygier & Sweetser, 2014: 22). Instances discussed in the cognitive linguistics literature include REMOVAL, CYCLE, ITERATION, PART-WHOLE, BALANCE, ATTRACTION, IN-OUT, FULL-EMPTY, PATH, UP-DOWN, FRONT-BACK, and CENTER-PERIPHERY.<sup>7</sup> Their main function is to let us map spatial structures onto conceptual structures, and their skeletal nature makes them useful in a variety of contexts (Oakley, 2007: 215–217). Cognitive linguistics establishes particularly fruitful links between certain image schemas and polysemous lexical or morphological items: the range of (literal as well as metaphorical) meanings of a word, or the range of grammatical constructions involving a word can be explained on the basis of overarching image-schematic patterns and their transformations. For example, Pauwels (1995) argues that the image schema of Containment can account for the metaphorical usages of the English verb *put*, including those “profiling an inferred destination, as in *put in a good word for me*” and those “profiling a loss of control, as in *put out a statement*”. Other examples include the image-schematic structures underlying the different meanings of Spanish *por* and *para* (Delbecque, 1995), and

<sup>6</sup> To keep a human being separate from other human beings and animals is relevant to the use of *autós* already in Wagnon, 1880, see section 5.

<sup>7</sup> Image schemas have been originally explored in Lakoff & Johnson, 1980; early relevant works include Johnson, 1987; Lakoff, 1987; Lakoff & Turner, 1989. An updated list of image schemas appears in Croft & Cruse, 2004: 45.

image-schematic invariance through semantic changes of the Russian instrument marker *om* (Smith, 1999).

Image-schematic structuring is not confined to the micro-level of language, however. It is also involved in broader constructions such as extended metaphors, story plots, and even writing styles. For example, Turner (1996: 28–31) points out how pervasively stories' events may reflect the image schema PHYSICAL FORCE DYNAMICS or the image schema MOVEMENT ALONG A PATH. Freeman (1999) analyzes the figurative language of Shakespeare's *Antony and Cleopatra* by identifying not only the conceptual metaphors involved, but also the image schemas blended with those metaphors, i.e., CONTAINER, LINKS, and PATH. Freeman (2002), meanwhile, connects different image schemas to different uses of poetic imagery in the works of Robert Frost and Emily Dickinson. Kimmel (2008) sees various image schemas at work in the macro-structure(s) of narratives.

In classical studies, Pagán Cánovas (2011) has considered the image schema of EMISSION in relation to the complex metaphorical structure underlying the representations of Eros the Archer, and Apollo/Death as Grim Archer throughout ancient Greek literature. Especially relevant to the present investigation is Short's (2013) image-schematic analysis of the multiple meanings of the Latin preposition *dē*. The author argues for a minimal image schematic scenario constituting the meaning of *dē*: a trajector (dynamic entity) moves from one landmark (static entity) to another landmark (cf. Zlatev, 2007: 327–328). The landmark of destination coincides with the position of the observer, who thus perceives the trajector moving from the landmark of departure toward herself. In this sense, the image schema “entails inherent perspectivization” (Short, 2013: 384). This skeletal scenario provides the inferences that are connected to the various senses of the Latin preposition: the indication of a source point or original material, separation from something, downward motion, motion toward something, a completion process, and more. The image schematic account in question provides an explanation for the various meaning extensions of the preposition, while helping, at the same time, the interpreter/reader to disentangle the network of conceptual metaphors and metonymies being employed.

Several features of image schemas are relevant to my analysis. First is the principle of “figure/ground segregation” that characterizes “gestalts”, perceptual wholes (Evans & Green, 2006: 65). Human beings isolate the figure (a dominant shape) from the ground (elements of a scene appearing in the background). Image schemas involve minimal structures, such as a gestalt structure, which are subject to figure/ground construal.<sup>8</sup> A second concept is that of “structured polysemy”, as presented in Nikiforidou (1991: 150). The article unpacks the multiple metaphorical extensions of genitive constructions in ancient and modern Greek as well as in other Indo-European

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<sup>8</sup> About “figure” and “ground” being similar concepts to “trajectory” and “landmark” respectively, see Talmy, 2000 and Levinson, 2003.

languages. “Structured polysemy” expresses the idea that the conceptual metaphors underlying the various semantic and pragmatic implications of a construction relate to each other in a complex but organized network. Also, synchronic polysemy plays a role in understanding diachronic semantic changes (Nikiforidou, 1991: 163, 168, 192–193).

The following fundamental aspects concerning the CENTER-PERIPHERY schema in particular, and, more generally, the cognitive semantics of space, are equally relevant. As described by Johnson (1987: 124–25) the CENTER-PERIPHERY schema involves a physical or metaphorical core and edge. The distance between the core and the edge may vary; so Kimmel (2005: 289) remarks that the image schemas “CENTER-PERIPHERY, NEAR-FAR, SCALE, and FORCE co-occur in the bodily experience of being a center of force which decreases with distance in a scalar fashion, like when a hand is extended”. Finally, Talmy (2005: 207–212) examines various categories pertaining to spatial components of scenes. Individual spatial components may reflect spatial categories such as dimension (bi-dimensional or tri-dimensional relations), number (e.g., ‘between’ requires a ground consisting of two objects), motive state (motion vs. stationariness), state of boundedness, and type of geometry. The latter deals with rectilinear vs. radial geometry (e.g., ‘away’ relates to the former, while ‘out’ relates to the latter). In turn, “radial” may refer to motion along a radius as well as around a central point. The circumcentric type can be applied to a curved periphery, to a line following a curved path, and to a rotating object (Talmy, 2005: 209–210).

### 5.3 The syntax and the semantics of *autós*

*Autós* has been called the “prototypical intensifier” in ancient Greek (see Mocciano, 2014: 247; Puddu, 2005: 207). Standard accounts hold that in the classical Greek *autós* reveals its intensifying function only as an adjunct: in attributive position, it conveys “sameness” (like Latin *idem*), whereas in predicative position it conveys “selfness” (like Latin *ipse*). *Autós* also works as intensifier when it occurs with names, with pronouns such as *min*, *nin*, *he/hé*, *hoi*, *sph-* forms, with first and second person pronouns, and even “headless”, that is, without any focus constituent, but only in the nominative case. In non-nominative cases, *autós* alone functions as a regular third person pronoun. Mocciano (2014: 248) notes that in classical Greek *autós* contributes to a new paradigm of reflexives: the former reflexive pronoun *hé* is combined with oblique cases of *autós* to produce *heaut-* forms (*heout-* in Herodotus) or compressed *haut-* forms.

Puddu (2005: 213) remarks that the use of intensifiers as anaphoric markers is cross-linguistically peculiar: only classical Greek seems to use the same lexical item for an intensifying and a plain anaphoric function. I would add that scholarship records certain usages of *autós* in archaic and classical texts that in fact do not fit the canonical account mentioned above. For instance, in a section devoted to indirect

reflexives – a reflexive marker occurring in a dependent clause whose referent is the subject of the main clause – Smyth (1920: 305) notes that oblique cases of *autós* may be used instead of *heautoû*. Powell (1934: 173) mentions “confusing oblique cases” of *autós* in Thucydides referring to the main subject, and, most of all, notes the role of editors in emending non-reflexive forms of *autós* given by manuscripts by adding rough breathing (1934: 160–162). Finally, Chantraine (1953: 157) observes that in the Homeric poems *autós* sometimes corresponds to a reflexive marker even though it shows no syntactic reflexivity. All of this suggests that at least up to Thucydides grammatical rules and the interpretation of a reflexive sense do not necessarily go together.

As for the semantics of *autós*, two considerations must be recognized, which I will associate with the results of my image schematic reading (see Bonifazi, 2012: 133–134). First, according to Taillardat (1987: 77–79), one of the basic semantic components of *autós* is a sense of separation and distinction. The meanings ‘alone’, ‘without anything else’, and the *exclusive* intensifying function (as in *I always wash my clothes myself*, on which see below) stem from this fundamental sense. Second, according to Sadoulet (1984: 62–63) *autós* makes somebody/something the primary entity which a text talks about. Argumentative prominence and discourse topicality thus constitute the level at which *autós* singles out people and objects.

## 5.4 Intensifiers evoking a center and periphery

In a typological account of intensifiers across languages, König (1998: 5; and see also 1991: 87–88) describes the basic semantics of intensifiers in these terms: “They evoke alternatives to the referent of their focus”; moreover, “the set of alternatives is characterized as periphery (entourage) of a centre constituted by the referent of the focus”. He identifies the following set of conditions for *X* (the referent of the focus) to be related to *Y* (a periphery):

- “a. *X* has a higher rank than *Y* on a real-world hierarchy;
- b. *X* is more important than *Y* in a specific situation;
- c. *X* is identified relative to *X* (kinship-terms part-whole, etc.);
- d. *X* is the subject of consciousness, centre of observation, etc”. (König, 1998: 6).

For example, in *The Queen herself will come to the final*, the Queen is the center by virtue of being high in rank, the relevant periphery being made up by the subordinates or entourage (König, 1998: 5–6). Evoking a set of alternatives works particularly well for adnominal intensifiers (i.e., with a small, noun-phrase scope, and semantically inclusive, as in *the Queen herself*). However, it holds also for adverbial intensifiers (i.e., with larger, clause scope, and semantically exclusive, as in *I always wash my clothes myself*): in that case, the referent of the focus is “the interested party for the action mentioned in the sentence . . . as opposed to possible alternatives” (König,

1998: 7). In a later piece on the same topic, König (2001: 749) reinforces the idea by adding a drawing resembling Saturn surrounded by a ring: Saturn represents X, the referent of the focus, while the ring represents Y, the periphery.

Two more findings in König's works are crucial for the present argument. First, cross-linguistic variation concerning adnominal and adverbial intensifiers consistently follows the Animacy Hierarchy: namely, human proper nouns > human common nouns > animate common nouns > inanimate common nouns. An intensifier combined with a noun phrase at a certain point of the hierarchy can combine with noun phrases to the left (König, 1998: 12; 2001: 754). A second anthropocentric aspect is the semantic development of intensifiers in different languages from nouns referring to body parts.<sup>9</sup> König sees in the semantic changes of intensifiers as a process of "metaphorical extension: a structure of the body which distinguishes centre and periphery is imposed on social groups . . . [I]t seems plausible that intensifiers were originally only used with persons of high rank in all languages" (König, 1998: 12).

## 5.5 *Autós* in Homer, and the link to *au-* adverbs and particles

Wagnon (1880: vi) defines the basic function of *autós* as follows: "The fundamental function of the pronoun *autós* consists in opposing someone to someone else, and in shedding a lively and striking light on this person, therefore [being] separate from what surrounds him. [[L]a fonction fondamentale du pronom *autós* consiste à opposer une personne à d'autres, et à présenter à l'esprit sous un jour vif et frappant cette personne, ainsi détachée de ce qui l'entoure]". Given this basic function, Wagnon (1880: 107) then groups usages of *autós* into several categories, including: *autós* in opposition to others (divided into five subgroups: father vs. other members of the family; military chief vs. other members of the army; individual vs. horses or chariots; Hector as *autós*; the Greeks vs. their ships); *autós* referring to bodies and to corpses; *autós* referring to the object itself distinct from its parts or ornaments; *autós* meaning 'alone'; *autós* meaning 'the same'; *autós* suggesting the value that owners attach to objects; *autós* suggesting the identity of a person who performs contrasting actions; *autós* suggesting complete identity, i.e., that of divinities; the anaphoric meaning; the reflexive meaning.

These categories generally match not only König's notions of center and periphery, but also my pragmatic readings of *autós* constructions in the *Iliad* as well as in the *Odyssey* (Bonifazi, 2012: 138–145). In the Homeric poems, the referent of *autós* is regularly singled out visually (*qua* prominent among other people participating in a scene), or socially (*qua* higher-rank), or thematically (*qua* prominent in the

<sup>9</sup> Such as 'body', 'soul', 'hand', 'head', 'marrow', and 'eye'. See König, 1998: 12; 2001: 756; Puddu, 2005: 90–92.

discourse). *Autós* may also work as indirect reflexive marker (2012: 145–149), and as a marker of someone’s identity (2012: 150–153). *Autós* meaning ‘the same’ invites the audience to maintain visual attention on somebody/something just mentioned (2012: 153–155). The pragmatic aspects of these meanings reside in the link between the use of the word and its discourse implications beside the syntax of the host clause. These aspects can be connected to the use of adverbs lexically bound, such as *autíka*, *autós*, *aútis*, *aúthi/autóthi*, and, most of all, to the visual and narrative functions of *aû*, *aûte*, and *autár*. The connections between *autós* and *aû*, *aûte*, and *autár* in particular, concern the metanarrative intention to isolate, to separate scenes, subjects, and list entries being narrated in sequence. They also relate to the anaphoricity expressed at the level of performance, as the primary narrator use these markers to introduce new information either about already mentioned entities, or within the same overarching narrative frame.

The investigation of the use of *autós* with Odysseus as the referent throughout the *Odyssey* (2012: 155–183) leads to further findings. The hero is recalled by means of the pronoun *autós* (in any grammatical case) in situations where his physical position or his actions are set against the position or the actions of the companions. His being at the center of everyone’s attention in the second part of the poem is more than once interwoven with allusions to his identity – the allusions being in turn a sophisticated play involving the stance of some characters as well as the primary narrator’s and the audience’s. The result is a picture of the use of anaphoric *autós* that disproves the common equivalence to a plain third-person pronoun.

The next section of the present work aims to show that processing anaphoric *autós* can involve cognitive operations and inferences very similar to the standard understanding of intensifying or emphatic *autós*, in Homer and later. As I will suggest below, this view is informed by – and informs – the pragmatics not only of the immediate co-text, but also of the ongoing discourse beyond the sentence level.

## 5.6 The CENTER-PERIPHERY scenarios evoked by *autós*: Linguistic evidence in and beyond Homer

König argues that intensifiers in several languages evoke a set of alternatives, whether explicitly mentioned or just implied. Although König does not mention the cognitive linguistic notion of image schemas, his explanations and accompanying illustration harmonize with an image-schematic understanding of the basic meaning of intensifiers. In what follows, I interpret the metaphorical extensions mentioned by König in terms of the skeletal structure CENTER-PERIPHERY, and I identify further metaphorical extensions. However, unlike König, I focus exclusively on ancient Greek *autós*, and on the grammatical usage of *autós* that is commonly considered non-intensifying, namely anaphoric *autós*. This deserves some explanation.

Coupling the intensifying usages with the CENTER-PERIPHERY schema is, I believe, intuitively simple. Constructions involving intensifying *autós* as an adjunct in predicative or attributive position, including *autós* accompanying nouns, personal names or other pronouns such as *min*, *nin*, *he/hé*, *hoi*, *sph*- forms, and first- or second-person pronouns, can be said to embody the CENTER-PERIPHERY schema by virtue of tangible morpho-syntactic characteristics. These characteristics are objectively recognizable, and are what explicitly contributes to the conceptual saliency of a certain entity with respect to other entities. As for *autós* alone in the nominative case, which is acknowledged to be emphatic as well, the combination of agency plus subjectness (and, in Homer, singular forms being far more frequent than plural forms) in a “pro-drop” language, where nominative and accusative pronouns may be omitted (see Puddu, 2005: 14), calls for an equally clear grammatical representation of a foregrounded center. The following three passages exemplify the point:

- (3) *egò dé, ô ándres, ei hōs málista alēthē légousin hoi katégoroi, hup’ autoîn<sup>GEN.M/F.DU</sup> mèn phēmì toîn theoîn sesôisthai.* (And. *Myst.* 113)  
 ‘But I maintain, gentlemen, that even if every word of the prosecution’s story is true, it was **the Goddesses themselves** who saved my life [lit. I have been rescued by the Goddesses themselves]’. (tr. Maidment, 1968).
- (4) *óssa dé moi télessai thûmos imérrei, téleson, sù d’ áuta<sup>NOM.F.SG</sup> súmmakhos ésson.* (Sappho fr. 1.26–28)  
 ‘And what my heart desires to accomplish, please accomplish it, and **you yourself** be my ally’.
- (5) *Atréidēs d’ ebóēsen idē zōnnusthai ánōgen Argeíous· en d’ autòs<sup>NOM.M.SG</sup> edúseto nōropa khalkón.* (Hom. *Il.* 11.15–16)  
 ‘And Atreus’ son cried out aloud and drove the Achaians to gird them, while **he himself** put the shining bronze upon him’.<sup>10</sup>

These grammatical configurations of *autós* allow the reader to easily infer Demeter and Persephone in (3), Aphrodite in (4), and Agamemnon in (5) as the centers, while understanding the speaking ‘I’ and the court (3), the singing ‘I’ (4), and Agamemnon’s companions (5) as the periphery.

What seems less intuitive, and is definitely not reflected in general accounts of ancient Greek *autós*, is to consider if and how the image of Saturn and the rings applies to *autós* when it does not accompany any other pronoun, and in non-nominative cases. König does not discuss this, and Puddu limits herself to observing that in a

<sup>10</sup> All translations of Homer are by Lattimore, 1951; 1967.



typological perspective the use of intensifiers as anaphoric markers is peculiar. This is why I confine my analysis to instances of anaphoric *autós* in non-nominative cases. If elements of the CENTER-PERIPHERY image schema are detectable in non-nominative cases, they come from the consideration of the following linguistic aspects: the lexical choice of *autós* over *ekeînos*, *hoûtos*, *hó*, *min*, and all the discourse elements that co-occur beyond the sentence level. Only the joint processing of these aspects allows us to see in *autós* the linguistic embodiment of the CENTER-PERIPHERY schema.

### 5.6.1 An individual at the center of the visual field, and more individuals around him/her

As I see it, the fundamental CENTER-PERIPHERY scenario evoked by *autós* depicts a figure – the center – radially surrounded by a backgrounded periphery. The center, *qua* figure, is distinct from the periphery *qua* ground. The center is a single or unified entity, while the periphery is multiple. A recurrent realization of this scenario, especially in the Homeric poems, is a situation where the referent of *autós* is put at the center of the visual field being depicted or implied. The periphery is constituted by a plurality of people around this singled-out individual. The visual center metaphorically becomes the center of the joint attention of the author, the internal characters, and the (reading or listening) audience.

- (6) *hîxen d' es klisiên hoû huiéos· énth' ára tôn ge  
 heûr' hadinà stenákhonta· phíloi d' amph' autòn<sub>ACC.M.SG</sub> hetâiroi  
 essuménōs epénonto kai entúnonto áriston·  
 toîsi d' oîs lásios mégas en klisiēi hiéreuto.  
 hê dê mál' ánhk' autoîo<sub>GEN.M/N.SG</sub> kathézeto pótnia mêtēr,  
 kheirí té min katérexen épos t' éphat' ék t' onómaze. (Hom. Il. 24.122–27)*  
 'And she made her way to the shelter of her son, and there found him  
 in close lamentation, and his beloved companions about **him**  
 were busy at their work and made ready the morning meal, and there  
 stood a great fleecy sheep being sacrificed in the shelter.  
 His honored mother came close to him and sat down beside **him**,  
 and stroked him with her hand and called him by name and spoke to him'.

At Zeus's behest, Thetis reaches her son Achilles in his tent in order to persuade him to release the corpse of Hector. The narrator depicts the scene by mentioning first Thetis' arrival (*tón ge*, 122, conveying her visualization of the son), the companions' activities, and Thetis's actions before she speaks (*min*, 127, possibly implying a shift in attention from Achilles to Thetis). In lines 123 and 126, *amph'autón* and *anhk'autoîo* consistently refer to the referent, Achilles, as the center around which things happen, even though he is not the grammatical subject of the relevant clauses. Prepositions



such as *ankhí*, *amphí*, *epí* and *perí* near *autós* frequently encodes the “circumcentric” idea of CENTER-PERIPHERY.

Example (7) features *perí* + *autós*, and includes two variants with respect to example (6): the pronoun is a plural form, and yet it represents a unified center with respect to the periphery constituted by several peoples. Also, the visual field in this case coincides with an implied mental geographical map.

(7) *Amazónes gâr Áreōs mèn tò palaiòn êsan thugatéres, oikoûsai dè parà tòn Thermódonta potamón, mónai mèn hōplisménai sidérōi tòn perí autás<sub>ACC.F.PL</sub>, prōtai dè tòn pántōn eph’ híppous anabásai . . . árkhousai dè pollōn ethnōn, kai érgōi mèn toûs perí autás<sub>ACC.F.PL</sub> katadedoulōménai.* (Lys. Orat. 2.4–5)

‘In ancient times were the Amazons, daughters of Ares, dwelling beside the river Thermodon; they alone of the people round about [lit. around **them**] were armed with iron, and they were first of all to mount horses . . . Ruling over many nations, they had in fact achieved the enslavement of those around **them**’. (tr. Lamb, 1930)

The first instance of glorious deeds by the ancestors in sections 3–16 of Lysias’ *Funeral Oration* (devoted to the mythological past of Athens) is the repulse of the invasion by the Amazons. The opening statements about the Amazons rhetorically enhance Athenian superiority by clarifying the positive virtues that make their power stand out: they were the only women to arm themselves, and the first to mount horses;<sup>11</sup> furthermore, they had enslaved the peoples around them. Twice *perí autás* serves to put them at the center of the map, and to make them stand out from other peoples.

(6) and (7) show that the perception of a referent being placed at the center of a given space does not hold just for the sentence including *autós*, but it extends to a stretch of discourse having a certain individual (or a group of people) as the central topic. This matches Sadoulet’s (1984: 62–63) conclusion that “It is the referent that is brought to consciousness as quickly as possible. We call it the *first evident* (item) of the contextual idioscosmos [C’est le référent qu’on rappellera le plus vite à la conscience. ... Nous l’appellons *premier évident* de l’idio-cosme contextual]”.<sup>12</sup>

The next example profiles the center as involving the sphere of a single human being as opposed to animals (non-human entities) surrounding them (the periphery):<sup>13</sup>

(8) *tís târ tōn ōkh’ áristos éēn sú moi énepe Moûsa*

<sup>11</sup> See Todd, 2007: 215–216: “Being the first and/or only people to have done something is normally in the epitaphic corpus a positive virtue predicated of those celebrated . . . This is one of very few occasions when the motif is applied to non-Athenians”.

<sup>12</sup> On *autós* referring to the macrotopic of discourse, see Puddu, 2005: 216–217; see also König, 2001: 755–757 about intensifiers as topic markers.

<sup>13</sup> For this subsection I draw elements of content from Wagnon, 1880, who groups the meanings *autós* in a way that is highly compatible with the present cognitive reading.

*autôn*<sub>GEN./M./N.PL.</sub> *ēd' híppōn, hoi hám' Atréidēisin héponto.* (Hom. *Il.* 2.761–62)  
 ‘Tell me then, Muse, who of them all was the best and bravest,  
 of **the men**, and the men’s horses, who went with the sons of Atreus’.

The Iliadic Catalogue of the Ships concludes with a section on the best of the best, heroes as well as horses. At line 762, *autôn ēd' híppōn* prompts an image schematic scenario, however minimal, with human beings at the center, and horses at the periphery.<sup>14</sup> Analogous cases appear in the *Odyssey*, whenever Odysseus or the companions are referred to by *autós* to single out their action with respect to the ship’s location.

### 5.6.2 Individuals superior in rank to, or more important than, other people

König’s first two conditions for *X* (the referent of the focus) to be related to *Y* (a periphery) are that *X* has a higher rank than *Y* in a real-world hierarchy, and that *X* is more important than *Y* in a specific situation (see above). This basically instantiates metaphorical transfers from the domain of visual space to the domain of social hierarchies, and then to the domain of prominence in a discourse context. Passages (9)–(11) illustrate social CENTER-PERIPHERY scenarios, while (12) and (13) illustrate contingent and less contingent discourse prominence.

- (9) *hōs nūn Néstorí dôke diamperēs émata pánta*  
*autôn*<sub>ACC./M./SG.</sub> *mèn liparōs gēraskémen en megároisin,*  
*huiéas aū pinitóús te kai énkhesin eínai arístous.* (Hom. *Od.* 4.209–11)  
 ‘[Easily recognized is the line of that man, for whom Kronos’  
 son weaves good fortune in his marrying and begetting,]  
 as now he has given to Nestor, all his days, for **himself**  
 to grow old prosperously in his own palace, and also  
 that his sons should be clever and excellent in the spear’s work’.

While talking to Peisistratus (Nestor’s son), Menelaus depicts a peaceful and almost idyllic scene featuring Nestor enjoying his elderly life and blessed by excellent sons. *Autós* isolates the most important member of the family, while the sons serve as the periphery (note the particle *au*, which introduces a separate entry). As Wagnon (1880: 5) reminds us, in the *Iliad* this social implication frequently applies to military chiefs as opposed to their men (see, e.g., Agamemnon in (5) above). Note, too, that the gestalt-distinction between figure and ground that operates as part of the CENTER-PERIPHERY

<sup>14</sup> I remind the reader that Arion in (2) is *autós* not only because he is alone, but also because at that point he is without the dolphin.

schema also entails the idea of segregation: several scholars have suggested, not by chance, a sense of *autós* involving aloneness and isolation.<sup>15</sup>

Gods are prototypical higher-rank entities in the ancient Greek worldview. Passage (10) represents an instance in formal discourse, while (11) confirms gods-as-centers in irreverent comic contexts.

(10) *prôton mén, ên d' egô, tò mégiston kai perì tôn megístôn pseûdos ho eipôn ou kalôs epseúsato hōs Ouranós te êrgásato há phēsi drásai autôn*<sup>ACC.M.SG</sup> *Hēsíodos, hó te aû Krónos hōs etimōrésato autôn*<sup>ACC.M.SG</sup>. (Pl. *Rep.* 377e)

'First, I said, the one who spoke the greatest falsehood about the greatest [gods] did not speak falsely well, when he said that Uranus accomplished the things that Hesiod says **he** did, and what [Hesiod says] Cronus did in turn, that he took revenge on **him**'. (tr. slightly adapted from Marušič, 2005)

I interpret anaphoric *autós* occurring twice in this passage not only as Socrates' way of avoiding ambiguity in the reference to many male individuals, but more specifically as a strategy to draw the attention of his interlocutor to Uranus-the-god-and-father-of-Cronus, whose actions are the central topic of the argument against Hesiod.<sup>16</sup> Any other way to recall him (for example, *tôn theón*, 'the god') would have not achieved the same effect.

The following usage of *autós* deliberately, and meta-poetically, employs the pronoun with referents that are (mockingly) considered higher in rank.

(11) SOCRATES *ô méga semnai Nephélai, phanerôs êkoúsaté mou kalésantos. éisthou phônês háma kai brontês mukēsamenēs theósepton; STREPSIADES kai sébomai g', ô polutímētoi, kai boulómai antapopardeîn pròs tās brontás· hoútōs autās*<sup>ACC.F.PL</sup> *tetramainō kai pephóbēmai.* (Ar. *Nub.* 291–94)

'SOCRATES Most stately Clouds, you have clearly heard my summons. (to Strepsiades) Did you mark their voice and, in concert, the bellowing thunder that prompts holy reverence?

STREPSIADES I do revere you, illustrious ones, and I'm ready to answer those thunderclaps with a fart; that's how much I fear and tremble at **them**'. (tr. Henderson, 1998)

Strepsiades echoes Socrates' worshipful attitude towards the Clouds, as if they are goddesses to revere and to fear. The thunders (*brontás*, 294) represent their holy

<sup>15</sup> See, e.g., Monro, 1891: 218; Taillardat, 1987: 77–78. Let us also think of the exclusive implication of "X-self" intensifiers with clause scope (see above).

<sup>16</sup> On the context of this passage see in particular Marušič, 2005.

manifestation (*autás* possibly referring to *brontás* as well as to an implied *nephélas*), but the bodily response of the disciple reverses any sense of veneration.

The next passages ((12) and (13)) instantiate discourse strategies involving *autós* to refer to someone who is a major figure in the context of local circumstances and thoughts (12), and in a broader discourse framework (13).

(12) *toúto dê tò ágos hoi Lakedaimónioi ekéleuon elaúnein dêthen toîs theoîs prôton timōrountes, eidótes dê Perikléa tòn Xanthíppou prosekhómenon autôî [see n. 17] katà tèn mētéra kai nomízontes ekpesóntos **autoû**<sup>GEN.M/N.SG</sup> rháion <àn> sphísi prokhōreîn tà apò tòn Athēnaíōn. ou méntoi tosoúton élpizon pathēin àn **autòn**<sup>ACC.M.SG</sup> toúto hóson diabolèn oísein **autôî**<sup>DAT.M/N.SG</sup> pròs tèn pólin hōs kai dià tèn ekeínou xumphoràn tò méros éstai ho pólemos. òn gār dunatótatos tòn kath' heautòn kai ágōn tèn politeían...* (Thuc. *Hist.* 1.127.1–3)

‘This then was the curse which the Spartans demanded should be driven out. They pretended that their prime object was to serve the honour of the gods, but in fact they knew that the curse attached to Pericles the son of Xanthippus on his mother’s side, and they thought that if **he** were expelled they would find it easier to deal with the Athenians. Not that they really expected this to happen: their hope was rather to discredit **him** in the eyes of his fellow citizens and make them think that this family circumstance of his would be a contributory cause to the war. He was the most influential man of his day and the leader of the state’. (tr. Hammond, 2009).

To the eyes of the Spartans, Pericles represents a pivotal figure, certainly not to be followed or respected, but still crucial; by means of the several uses of *autós* in these lines, Thucydides makes sure that we infer the thematic importance of Pericles in the mind of the Spartans (forms of *hoútos*, for example, would have led to different inferences).<sup>17</sup> Interestingly, towards the end of the passage we find *tèn ekeínou xumphoràn*, where the use of *ekeínos* for a referent that is already fully in focus, and is otherwise recalled through *autós*, is noteworthy. This supports a point that I make elsewhere (Bonifazi, 2009; 2012): lexically differentiated third-person pronouns are not interchangeable; rather, they are chosen in their form to achieve communicative

<sup>17</sup> The first *autôî* in the passage, actually, refers to *ágos*, the curse. A different but related instance of *autós* in Thucydides with Pericles as the referent shows how editorial (and grammatically biased) choices may alter the linguistic evidence of anaphoric *autós*. The famous “obituary” of Pericles (2.65) opens with these words: *ho Periklés légōn epeirátō toûs Athēnaíōus tēs te es **hautòn**<sup>ACC.M.SG</sup> orgēs paralúein kai apò tòn paróntōn deinōn apágein tèn gnómēn* ‘With this sort of argument Pericles tried to dispel the Athenians’ anger against **himself** and to lead their thought away from the terrible conditions of the present’, tr. Hammond, 2009. Jones writes *hautón* (reflexive marker), while the MSS give *autón* (smooth breathing). Smyth, writing in 1920, comments on this passage by taking *autón* into account, just as Classen, 1863: 106 did much earlier.

goals and effects that may be local as well as global; they are linguistic items that are particularly discourse-sensitive. In this case, *ekeînos* reveals the renown of Pericles and emotional distance towards his circumstance, that is to say, what the Spartans could tell the other fellow Spartans, or what the other fellow Spartans could perceive, or both. In the closing general statement, I read a further variation: the absence of the grammatical subject conveys the status in focus of Pericles in the mind of the historian, who embraces the statesman's perspective (note the reflexive marker *heautón*).

- (13) *epei kai autós<sub>NOM.M.SG</sub> emempsámēn éstin hà en têi xungraphêi tôn Alexándrou érgōn, allà autón<sub>ACC.M.SG</sub> ge Aléxandron ouk aiskhúnomai thaumázōn.* (Arr. *Anab.* 7.30.3)

So, while I **myself** have censured some of Alexander's acts in my history of them, I am not ashamed to express admiration for Alexander **himself**. (tr. Brunt, 1983).

Although here we find a nominative case accompanying an 'I' verb form ('I Arrian *autós*'), and *autós* in the accusative case accompanying Alexander's name, this passage, which opens the very final statements of the *Anabasis*, shows the potential of *autós* on a larger scale. Arrian singles out himself from other historians (an implicit periphery), and singles out the king of Macedon from other rulers (a parallel implicit periphery) to put both at the center of the entire work. Moreover, by choosing the same marker, he achieves – linguistically – what he has been striving to do throughout the work: to consider himself “the literary counterpart of Alexander” (Bosworth, 1988: 34).

### 5.6.3 Bodies without additional objects such as arms; corpses

In the CENTER-PERIPHERY schema, the distance between core and edge is not specified. I include in this group cases where *autós* refers to someone's body without inanimate objects being worn or used at a certain moment – that is to say, where the distance between core and edge is greatly reduced. Here we turn to meanings of *autós* that provide a link to the etymology of several intensifiers in IE languages (see n. 9 and passage 14). Examples (15) and (16) flag the not infrequent habit of using *autós* to mean 'corpses'. In general, this word's meanings related to bodies and corpses reflect a metonymic transfer, from the (third) person to the person's physical body, alive or dead.

- (14) *TECMESSA kai dè komízei prospólōn hód' engúthen.*

AJAX *aîr' autón<sub>ACC.M.SG</sub>*, *aîre deúro.* (Soph. *Aj.* 544–545)

'TECMESSA Here comes the servant bringing him near.

AJAX Lift **him**, lift him up here'. (tr. Garvie, 1988).

These words are part of an exchange on the stage. Ajax has asked Tecmessa repeatedly to bring his son Eurysaces to him. Eventually, the child appears on the scene accompanied by a servant. During the exchange (530-545) the child is recalled via *autós* no less than four times (531, 538, 542, before the reported occurrence). The prominence of Eurysaces-*autós* does not rest just on his being everyone's center of attention but more specifically on the handling of his body.<sup>18</sup>

The association between *autós* and corpses can be found at the outset of the *Iliad*:

- (15) *pollàs d' iphthímous psukhàs Áidi proíapsen*  
*hērōōn, autòis*<sub>ACC.M.PL</sub> *dè helória teúkhe kúnessin*  
*oiōnoísí te pási.* (Hom. *Il.* 1.3–5)  
 '[Achilles' anger] hurled in their multitudes to the house of Hades strong souls of heroes, but gave **their bodies** to be the delicate feasting of dogs'.<sup>19</sup>

Tragic language seems to keep this association, as the following utterance by Orestes shows:

- (16) ORESTES *krínō se nikân, kai paraineís moi kalôs.*  
*hépou, pròs autòn*<sub>ACC.M.SG</sub> *tónde sè spháxai thélō.* (Aesch. *Lib.* 903–904)  
 'ORESTES (to Pilades) I judge you the winner; you have advised me well.  
 (to Clytemnestra) Follow me. I want to slay you right next to **that man**'. (tr. Sommerstein, 2008).

Next to *autón* referring to Aegisthus' corpse, the deictic marker *tónde* points to its appearance on the stage.

In these passages, the implicit periphery is constituted by what would typically be found around a living body in the genres in question: arms or personal objects. This brings us to the next major (metonymic) meaning extension, when the image schematic core and edge apply to the inner part of a person, one's consciousness, one's "inner" identity.

<sup>18</sup> The same play at line 1132 features a CENTER-PERIPHERY schema embodied through word order: Teucer considers impious that Menelaus does not want to bury the dead, and Menelaus replies that indeed it is not good to bury one's own enemies: *toús g' autòs*<sub>NOM.M.SG autoúGEN.M/N.SG</sub> *polemíous· ou gàr kalón.*

<sup>19</sup> See Bonifazi, 2012: 141–142 and 2012: 147 for Iliadic instances of the formulaic expression 'the arms clanked upon him [*ep' autôi*]' said of falling (and injured) heroes.

### 5.6.4 The internal self; subject of consciousness; one's true identity; proximity to the speaking "I"

In certain usages, the schema's basic topographical configuration of radial geometry is maintained, but the unified figure becomes interpreted as one's inner part, one's consciousness. This means that the CENTER-PERIPHERY image schema can account also for *autós* as an indirect reflexive marker. As the core is not visible (and not immediately recognizable), the periphery coincides with anything external to this nucleus. The sense of "self" as someone's truest core paves the way for meanings related to "true" identity, and the proximity to the speaking 'I' uttering *autós*.

Let us first pair two instances, one from the *Odyssey*, and one from Thucydides, attesting to the same phenomenon: namely, that *autós* has reflexive meaning, though it cannot correspond syntactically to a reflexive.

- (17) *autàr hó g', ópbra mèn autôi*<sup>DAT.M/N.SG</sup> *amúnesthai ésan ioí,*  
*tópbra mnēstérōn hēna g' aiei hōi enī oikōi*  
*bálle tituskómenos.* (Hom. *Od.* 22.116–18)  
 'Odysseus, while he still had arrows left to defend **him**,  
 kept aiming at the suitors in his house; and every  
 time he hit his man'.

- (18) *pánta dē pantakhóthen autoús*<sup>ACC.M.PL</sup> *elúpei te kai perieistékei epì tōi*  
*gegenēménōi phóbos te kai katáplēxis megístē dē.* (Thuc. *Hist.* 8.1.2)  
 'Everything everywhere was distressing **them**, and turned out for the worse after  
 what had happened. (Their) fear and consternation were truly considerable'.

Odysseus in (17) and the Athenians in (18) are the referents of *autós*. They are also the subjects of consciousness of the respective contents: in (17) the narrator adopts Odysseus' viewpoint by mentioning the arrows still available to protect him (and his body!) while striking as many suitors as possible in his own house (*hoi enī oikōi*). In (18) Thucydides reveals his strategy in the description of Athens' reaction to the defeat in Sicily (8.1): his access to the psychological state of the Athenians makes the readers perceive their desperation directly.<sup>20</sup>

The next instances show that the Homeric narrator, Euripides, and Xenophon play with the use of *autós* on a cognitive-pragmatic level of communication. Out of a seemingly neutral reference to a third-person pronoun, a special alignment is established between the speaking 'I' and the external audience – the internal characters participating in the verbal exchange are not necessarily engaged in the full significance of the pronoun. In the perspective of a CENTER-PERIPHERY schema, the

<sup>20</sup> More on this point, and on *dē* in this passage in Bonifazi, Drummen & de Kreeij, 2016: IV.5 § 38.

figure is distinct from the periphery in epistemic terms. The center is someone's inner self whose identity can be recognized and enjoyed only by those who share enough knowledge, while the periphery is someone's outer part, backgrounded because less revealing or not revealing at all to the eyes of unaware characters.

- (19) *eúkheto d' ex Ithákēs génos émmenai, autàr éphaske*  
*Laértēn Arkeisiádēn patér' émmenai autôi*<sup>DAT./M./N.SG.</sup> (Hom. *Od.* 24.268–69)  
 'He announced that he was by birth a man on Ithaka,  
 and said that his [lit. to **him**] father was Laertes, son of Arkeisios'.

Odysseus-in-disguise is reporting to his father news of Odysseus by pretending he once hosted Odysseus in a remote land. With the words *Laértēn patér' émmenai autôi* the identity of the person in disguise is revealed to the external audience, without necessarily sounding revealing to Laertes, the interlocutor. The implied epistemic correspondence "that person is the same as the one who is speaking" invites a blending of third and first person. A similar effect of proximity to the speaking 'I' is achieved in the following lines, which Orestes addresses to Electra, still unaware of his real identity:

- (20) ORESTES *ê kai met' autoû*<sup>GEN./M./N.SG.</sup> *mētér' àn tlaîēs ktaneîn;*  
 ELECTRA *tautôi ge pelékei tòi patèr' apóleto.*  
 ORESTES *légō tád' autôi*<sup>DAT./M./N.SG.</sup> *kai bébaia t'apò sou;* (Eur. *El.* 278–80)  
 'ORESTES Would you really endure, with **him [your brother Orestes]**, to kill your mother?  
 ELECTRA Yes, with the very axe which killed our father!  
 ORESTES Am I to tell **him** this? Is it sure on your side?' (tr. Cropp, 1988)

For Electra 'he'-Orestes is epistemically in the background, whereas for the spectators and for us he is in the foreground, he is on the scene *himself*.

My final example of this type of scenario illustrates an analogous interplay, but with a reversed situation concerning the participants. Xenophon manages to talk about himself in such a way that the characters co-present in the scene share full knowledge of his identity, whereas the relation of sameness between Xenophon-the-soldier and Xenophon-the-narrating 'I' is grammatically screened off to readers by means of the use of *autós* in third person.

- (21) *ên dé tis en têi stratiâi Xenophôn Athēnaîos, hôs ou̓te stratēgòs ou̓te lokhagòs ou̓te stratiótēs òn sunēkolou̓thei, allà Próxenos autòn*<sup>ACC./M./SG.</sup> *metepémpsato oíkothen xénos òn arkhaiòs· hupiskhneîto dè autô*<sup>IDAT./M./N.SG.</sup> *ei élthoi, phílon autòn*<sup>ACC./M./SG.</sup> *Kúroi poiéseîn* (Xen. *Anab.* 3.1.4)  
 'There was a man in the army named Xenophon, an Athenian, who was neither general nor captain nor common soldier, but had accompanied the expedition



because Proxenus, an older friend of his, had sent **him** at his home an invitation to go with him; Proxenus had also promised **him** that, if he would go, he would make **him** friend of Cyrus'. (tr. Brownson, 1998)

This interplay goes on in subsequent sections (during the account of Xenophon's meeting with Socrates in 3.1.7, and at the beginning of the description of the dream in 3.1.11–12), until grammar makes the overlap explicit. Third-person *autós* turns into 'I' at the beginning of the famous monologue: *euthùs epeidè anēgérthē prôton mèn énnoia autô<sub>DAT.M/N.SG</sub>i empíptei· tí katákeimai*; 'Firstly, on the moment of his awakening, the thought occurred to **him**: 'Why do I lie here?' (3.1.13).

The transfer from a circumcentric inner point of oneself to the assimilation to 'I' can be explained in cognitive terms. The image schema CENTER-PERIPHERY holds when *autós* accompanies 'you' markers beside third-person markers just as it does with 'I' markers; however, *autós* may flag the subjectivity of the speaking 'I' (e.g., referring to the speaker in indirect speech) even without any co-occurring 'I' marker. This can happen by virtue of a cognitive projection that perspectivizes one's consciousness: the circumcentric space is projected onto the "zero-point of utterance" (Lyons, 1977: 682), and the result is a conceptual integration, or blending, of the two conceptual structures.

## 5.7 *Autós*-objects and referents "just mentioned"

Analysis reveals that there is no fundamental difference in the treatment of inanimate referents. A CENTER-PERIPHERY scenario is equally applicable, especially when the *autós*-object in question is the topic of more than one sentence,<sup>21</sup> when the context makes it the center of attention of the narrating 'I' (if not of the local participants as well), and when the constitutive part of an object is kept distinct from its peripheral parts.<sup>22</sup> Of course, further investigation may reveal that not just in the Homeric poems, but also in later texts *autós*-objects occur much less frequently. If this turns out to be the case, we would have macro-level grammatical evidence of the CENTER-PERIPHERY schema's structuring effects: *autós*-people numerically are the center, while *autós*-objects are the periphery. Furthermore, in usages of *autós* with referents evoked only for the speaker/writer to move on to new salient pieces of information about other referents – the quintessential "plain" third-person pronoun – the CENTER-PERIPHERY schema appears equally involved. The relevant metaphorical extension is based on the

<sup>21</sup> A Platonic example is in *Symposium* 175d, where *autó* recalls a special thought that had made Socrates stop while walking, together with Aristodemus, towards Agathon's place.

<sup>22</sup> A Homeric example of that is in *Il.* 6.243, where *autós* refers to the inner part of Priam's palace, after the mention of its beautiful cloister walks.

hinging role of discourse “old” vs. discourse “new” information. When a referent “just mentioned” or “mentioned above” is recalled via *autós*, *autós* invites the audience to keep the focus, however momentarily, on that referent already in mind. This “old” information works as a center, as a hinge. Only from that can the surrounding new information and new referent – the periphery, which in turn may become the center against further new referents in subsequent discourse – be understood.

## 5.8 Conclusion

This paper posits that the image schema CENTER-PERIPHERY is the skeletal cognitive configuration underlying not only usages of *autós* as an intensifier, but also various usages of anaphoric *autós*. My sample has not exhausted the totality of usages of “anaphoric” *autós*, at the very least because it does not include post-classical instances (with the exception of Arrian). Nevertheless, it suggests that the traditional interpretation “regular third person pronoun” can be at least partially revised.

My analysis points to the following advantages of an image schematic interpretation of *autós*. First, the polysemy of lexical markers becomes “structured polysemy”. The chain of metaphorical and metonymic extensions allows us to see the logic of the relation between seemingly opposed meanings: centers and peripheries may cooperate or may be contrasted to each other, and projected onto visual locations as well as onto mental abilities of recognition; centers may attract attention, but may also coincide with hidden nuclei, or even with old information on which new discourse is built. Second, perceptual facts are shown to be stronger and deeper than chronological syntactic and semantic variation. For example, this image schematic reading of *autós* provides a link between anaphoric *autós* and indirect reflexive uses of *autós*. At the same time, the structured polysemy under consideration provides links up with etymology, and a diachronic continuum between visual structures and discourse structures. Third, the idea of a cognitive basic spatial configuration is what realizes and ultimately justifies the syntactic, semantic, and pragmatic variation of the uses of *autós*.

Furthermore, on a meta-scientific level, this analysis confirms the necessity of considering discourse units beyond the sentence level to make sense even of single words. The results contribute to the study of image schemas in literary texts. And finally, they can impact text translation, future developments of anaphor processing in ancient Greek, and our understanding of viewpoint phenomena.

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Silvia Luraghi, Eleonora Sausa

## 6 Aspects of aural perception in Homeric Greek<sup>1</sup>

**Abstract:** The verb *akoúō* ‘hear’ in Homeric Greek can indicate concrete aural perception as well as acquisition of knowledge by hearsay, and mean ‘learn’. In addition, it can denote an uncontrolled state, either perceptual or cognitive, the controlled activity of listening, or an inchoative event. In this paper, we discuss its syntax and semantics and compare it with *klúō* ‘listen to’, which indicates activities, and *punthánomai* ‘learn’, which mostly has an inchoative meaning. We show that construction variation is connected with animacy of the stimulus, and is not triggered by semantic differences in the verbal meaning, with the partial exception of *punthánomai* when indicating uncontrolled situations. Different actionalities expressed by the three verbs are often matched by verbal aspect. We argue that the figurative extension of hearing to learning is explained through pragmatic inference. The same can be said of the much better studied metaphorical extension of seeing to knowing. Different meanings of perception verbs when referring to the domain of cognition are based on embodiment, in that they depend on our knowledge of the structure of perception events.

**Keywords:** perception, cognition, embodiment, pragmatic inference, construction alternation

### 6.1 Introduction

Cross-linguistically, perception verbs are often polysemous in referring not only to the physical senses, but also to knowledge. In ancient Indo-European languages, the standard example is the verb ‘know’ as instantiated by ancient Greek *oída* and Sanskrit *veda*. This form is the perfect tense of the root *\*wid-* ‘see’, and indicates knowledge as the result of having seen something (Mallory & Adams, 2006: 321–322). The metaphorical extension of “seeing” to “knowing” reflects embodiment, as does the connection with the resultative meaning of the perfect: cognition is a mental state, which results from sensory perception. However, within Indo-European linguistics, much less attention has been paid to the connection of aural perception with cognition, which is well known from non-Indo-European languages (cf. Evans & Wilkins, 2000). In this paper, we would like to fill this gap at least partially, and provide a discussion of the syntax and semantics of the verb *akoúō* in Homeric Greek.

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<sup>1</sup> We would like to thank the editors for their comments, and all other colleagues who took part in the session we opened on Academia.edu. Our paper profited much from the discussion.

We will describe the attested constructions of this verb in connection with its various meanings, and compare it with two other verbs that have similar functions and share the same pattern of construction variation as *akoúō*, that is, *klúō* ‘listen to’ and *punthánomai* ‘learn’.

The extension of perception verbs to cognition has been discussed in the framework of cognitive linguistics, and has been explained as connected with the ‘MIND-AS-BODY’ metaphor: following this approach, knowledge is metaphorically understood as mental vision (Sweetser, 1990: 38). In our analysis of *akoúō*, we will show that its evidential function, by which the verb indicates acquisition of knowledge not only by direct aural perception, but often also by hearsay, is better understood as based on pragmatic inference. We will suggest that the same development can explain the extension of ‘seeing’ to ‘knowing’. Studies on evidentiality have shown that both visual and aural evidence are frequent sources for evidentials (Aikhenvald, 2005: 273–274). In this framework, visual perception seems to have a special status in the encoding of sensory evidentials (in line with a generalized bias that, since Aristotle, has privileged sight over the other senses), with hearing often merging with other senses. On the one hand, information acquired from hearing seems to be less perspicuous than information acquired from sight (cf., among others Jay, 1993). On the other hand, evidence from Homeric Greek suggests that information acquired from hearing is multifaceted, as it can be direct or indirect. In the latter case, it is often contrasted as uncertain with information from sight, which is a source of unquestionable knowledge, and is mostly direct.

The paper is organized as follows. In section 2, we discuss experiential situations, focusing on features of participants and on peculiarities of perception verbs. We show that experiential situations and their participants can be variously construed in terms of control and event structure. In section 3, we give some background information on argument structure variation in Homeric Greek, in particular between constructions involving accusative or genitive second arguments. Section 4 is devoted to *akoúō* and its meanings and constructions in Homeric Greek, especially in connection with animacy of the stimulus. Section 5 provides a survey of the use of *klúō* and *punthánomai*. In section 6, we then discuss possible changes in the three verbs’ actionality in connection with verbal aspect, the function of construction variation with the three verbs, the shift from perception to cognition, and the role of embodiment. Section 7 summarizes our findings.

## 6.2 Experiential situations

Verbs of perception and cognition belong to the broader group of experiential verbs. Such verbs typically feature two participants, an experiencer and a stimulus. The former is the participant who experiences the situation, and is necessarily sentient and hence animate, while the latter is the trigger of the experiential situation.

Experiential situations are of different types: beside perception and mental activities, they also include bodily sensations, emotions, and volitionality. Being typically animate, experiencers share an important feature of agents. In the case of verbs of perception and cognition similarity with action verbs is even higher than with other experiential predicates, as such verbs feature experiencers that can often be conceived as controllers. As discussed in the literature, experiential situations can be construed as implying control by the experiencer to varying extents (see Luraghi & Sausa, 2015 and forthc.). In particular, verbs of perception such as ‘hear’ or ‘see’ can often imply an intentional activity, and acquire the meaning of ‘listen’ or ‘look’, as discussed in sections 3 and 5.

Possible stimuli display a wider referential range, as they can be equally animate or inanimate. Remarkably, with some groups of experiential predicates, animate stimuli can be construed as being more or less active. For example, Luraghi & Sausa (2015) have shown that in Homeric Greek verbs that indicate negative feelings feature interactive stimuli in connection with experiencers construed as controllers, while verbs that indicate desire or yearning feature non-controlling experiencers and non-interactive stimuli. This suggests that the animacy of the stimulus must be taken into account in the case of perception verbs as well. In any case, the stimulus of experiential verbs cannot be said to undergo any change of state, and verbs of this type have a relatively low degree of transitivity, no matter how the experiencer is construed.

### 6.2.1 Verbs of perception

Viberg (1984) classifies perception verbs based on three parameters: sense modality (which indicates how the stimulus is perceived, whether through sight, hearing, touch, taste or smell), subject/topic selection, and dynamic system. The parameter of subject/topic selection classifies verbs based on their tendency to select either the experiencer or the stimulus as their subject, thus assigning either participant a higher degree of topicality: experiencer-based verbs have experiencer subjects, while phenomenon-based verbs have stimulus subjects. All verbs treated in this paper are experiencer-based, as are the majority of experiential predicates in Ancient Greek. The dynamic system parameter is thus more relevant for our discussion. It is based on actionality (or lexical aspect), causativity and agentivity, and singles out two groups of verbs: experiences and activities. Basically, this corresponds to a distinction between uncontrolled states, experiences in Viberg’s terminology as with *see* or *hear*, and controlled activities, as with *look* and *listen*, and combines control with



lexical aspect.<sup>2</sup> Notably, however, this connection does not necessarily exist: in fact, while states are always non-controlled, activities can be both controlled and non-controlled. We will return to this issue again. Apart from possible control, states and activities share the feature of being atelic, hence of involving no change of state in a patient. As Viberg (1984) points out, both activities and experiences display non-prototypical transitivity. This is because experiences do not have an agent (they are uncontrolled), while activities refer to non-resultative events: as we note above, there is no patient that undergoes a change of state. As we show, *akoúō* can refer both to uncontrolled and to controlled situation: apparently, contextual disambiguation is sufficient. In several occurrences, *akoúō* is virtually synonymous with *klúō*, whose function is to indicate controlled activities.

However, activities and states are not the only types of situation indicated by *akoúō*. In a significant number of cases, *akoúō* can also refer to inchoative, telic situations. Such occurrences may indicate sudden perception, but most often they indicate the acquisition of some new information (section 4). When expressing telicity, *akoúō* most often features the aorist stem, and its meaning comes close to the meaning of *punthánomai* (see further section 5).

Dik & Hengeveld (1991: 237) discuss four different situations to which verbs of perception may refer. Their remarks clearly hold for *see* and *hear* in instances like those described by (i) and (ii) below, mostly for *see* and only to a limited extent for *hear* in (iii), and in the case of (iv) virtually only for *hear*.<sup>3</sup> The four types of perception are quite different: while (i) and (ii) refer to concrete perception, (iii) and (iv) refer to acquisition of knowledge. In the case of (iii) acquisition of knowledge follows from perceptual evidence, while in the case of (iv) it does not.

i. Immediate perception of individuals, as in *I heard Luciano Pavarotti several years ago*. The verb specifies the relation between two participants, and refers only to the physical act.

ii. Immediate perception of state affairs, as in *I heard him singing at Carnegie Hall*. The verb specifies a relation between the experiencer and the state of affairs in which the (human) stimulus is involved. This construction requires simultaneity of the state of affairs described in the complement with the event of perception and does not allow the complement to be independently negated (cf. *I didn't hear him singing* vs. *\*I heard him not singing*).

<sup>2</sup> Similarly, Croft, 2012: 156 points to the difference between verbs that highlight the condition of attending to a stimulus such as *listen to* or *watch*, defined as 'inactive actions' (and corresponding to activities in Viberg's terminology), and 'genuine' mental state predicates, such as *hear* and *see*.

<sup>3</sup> The authors do not provide a list of the verbs for which their discussion is relevant, except for remarking in a footnote that they do not consider verbs such as *witness*, Dik & Hengeveld, 1991: 256. See further below, fn. 4.

iii. Mental perception of propositional content, which consists in acquisition of knowledge by an experiencer, as in *I heard that Mary had been crying* (e.g., *I realized that from the sound of her voice*). Perception is indirect and concerns acquisition of knowledge made possible by what the experiencer knows based on what they see or hear. Remarkably, perception verbs in this construction are inchoative rather than stative, and do not convey their concrete meaning, but rather mean something like ‘realize’.

iv. Reception of the propositional content of a speech act, illustrated by *I hear you will probably sing in the Royal Albert Hall next week*.<sup>4</sup> Here, the experiencer acquires knowledge from a third party. The verb is inchoative again, and means ‘learn’. It involves cognitive perception, and is not directly related to physical perception by the experiencer, but it depends on an external source. The original source can be specified (e.g., *I heard from John that Peter had been fighting*).

Both (iii) and (iv) do not require simultaneity and allow independent negation in the complement clause.

Dik & Hengeveld (1991) devote much of their discussion to the difference between (iii) and (iv), which, in our case, is not very relevant. Indeed, while (iii) is only marginally relevant for *hear*, (iv) is not relevant for *see*, at least in an oral culture such as was the society described in the Homeric poems.<sup>5</sup> This is a consequence of specific perceptual modalities: as noted in section one, while one can hear something both physically as in (i) and (ii), and from an indirect source, as in (iv), this is impossible for seeing. Similarly, one can understand that an event has taken place by seeing its consequences (e.g., *I looked for John in the library and didn't find him there, so I saw he had left*). This is also possible for hearing, as shown in the example in (iii), but audible consequences are much less frequent than visible ones.

### 6.3 Construction alternation with perception and cognition verbs

In Homeric Greek, *akoúō* occurs only marginally with subordinate clauses. Most often, it takes a noun phrase as its second argument, and the same holds for *klúō* and *punthánomai*, as shown in Tables 1, 3 and 5. For this reason, we discuss variation between argument structure constructions in detail in this and the following sections.

Experiential predicates with experiencer subjects feature a variety of argument structure constructions *vis-à-vis* second argument realization. In particular, verbs

<sup>4</sup> Example (4) is taken from Dik & Hengeveld, 1991. We have provided different examples for (1)–(3), because Dik & Hengeveld use the verb *see*.

<sup>5</sup> In fact, type (iv) is possible for seeing when *see* is equivalent to *read*: *I see (from what I've read) that you're performing in the Royal Albert Hall next week*. But this cannot be attested in an oral, pre-literate culture. We owe this remark to Lachlan Mackenzie.

of emotion may occur in three different constructions: Nominative-Accusative, Nominative-Dative, and Nominative-Genitive (henceforth NomAcc, NomDat, and NomGen), verbs of thinking mostly occur in the NomAcc construction, and verbs of cognition (i.e., verbs that indicate knowledge and memory) display alternation between the NomAcc and the NomGen construction (see Luraghi & Sausa, 2017). Verbs of visual and aural perception take an intermediate position between verbs of cognition and verbs of thinking: while the verb *horáō*, *eídon* ‘see’, only occurs in the NomAcc construction, *akoúō* and *klúō* feature construction alternation, and may take either the NomAcc or the NomGen construction.

Traditionally, possible case alternation for the second argument of specific verbs is explained as due to semantic properties of individual cases. According to this view, the object of a verb is inflected in the genitive when it is only partly affected by the verbal meaning (Delbrück, 1901: 310). In other words, case variation is connected with the partitive meaning of the genitive: while the accusative indicates that a referent is totally affected, the genitive indicates that only a part of the referent is affected. Ingestion verbs provide a good example of this type of alternation, as shown in (1) and (2).

- (1) *óphra píoi*                      *óinoio*. (Hom. *Od.* 22.11)  
       for     drink:OPT.3SG   wine:GEN  
       ‘In order to drink some wine’.
- (2) *pîné*                      *te*   *óînon*. (Hom. *Od.* 15.391)  
       drink:IMP.2SG   PTC   wine:ACC  
       ‘Drink the wine!’

In (1), the verb *píoi* ‘drink’ takes *óinoio* in the genitive as its object, while in (2) the same verb takes an accusative object, *óînon*. The difference between the two consists in the opposition total/partial as instantiated by variation between the accusative and the genitive, which is also known from other Indo-European languages. As argued in Conti & Luraghi (2014) for ‘ingestion’ verbs, the partitive genitive indicates that the verbal action refers only to a part of the patient (though the action affects this part completely): the partitive genitive has a clear quantifying function here, and case variation is not connected with referential properties of the object. In addition, case variation in (1) and (2) does not trigger any semantic difference in the verb’s meaning. In particular, the degree of transitivity of the verb remains the same, and the object undergoes a change of state, the only difference being that in (1) this only holds for a certain part of the referent.

The semantic difference brought about by case variation is connected with the independent meaning of the genitive and is typical of partitive cases cross-linguistically (see Luraghi & Kittilä, 2014), but it becomes unclear when one approaches case variation with verbs of perception and cognition. In general, with Ancient Greek

verbs that take non-accusative, second arguments are all low transitivity predicates, and case variation may trigger differences in the verbal meaning connected with degrees of transitivity (see Conti & Luraghi, 2014; Sausa, 2015). However, in the case of perception verbs, explanations of case variation based on degrees of transitivity or affectedness are hardly compelling. As a matter of fact, as pointed out in section 2, these distributional differences are not easily accounted for in terms of partial vs. total affectedness, as these verbs do not really imply that the second argument is affected at all by the situation. Indeed, perception verbs are all low-transitivity predicates, and their second arguments are not patients that may be conceived of as undergoing a change of state. Thus, it is not clear to what extent the partitive meaning of the genitive as shown in (1) and (2) can account for case alternation with perception or cognition verbs.

Furthermore, one could envisage meaning variation of verbs of hearing as connected to transitivity. As the same verbal roots can mean both ‘hear’ and ‘listen’, it might be tempting to conclude that the presence of a controlling agent in the second case brings about a higher degree of transitivity and hence case variation. However, as we will show in section four, constructional differences are either disconnected from possible control, or when they show connections, occurrences referring to controlled situations are more likely to take the genitive. This contradicts the expectations raised by the semantics of partitivity. A more promising observation is based on the distribution of the accusative and the genitive with these verbs depending on animacy of the stimulus. In particular, with verbs of hearing, according to Chantraine (1953) the distribution of the genitive and the accusative appears to be determined by animacy: there is a clear tendency for the accusative to occur when the second argument is inanimate, whereas the genitive is used both when it is animate and when it is inanimate. For this reason, in the following sections we discuss construction variation in connection with animacy.

## 6.4 *akoúō*

The meaning of the verb *akoúō* can change depending on certain specific contextual features. The total number of occurrences of *akoúō* in the Homeric poems is 181; among these, 134 feature the verb with a NP as second argument, as shown in Table 1.<sup>6</sup> In most of the occurrences that do not feature an object or some other complement, a null object is inferable from the context, as in (3).

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<sup>6</sup> This figure does not include occurrences of adverbial genitives indicating the source of information, as discussed below in this section.

- (3) *hòs éphat' ou d' ára hoi*  
 so say:AOR.MID.3SG NEG PTC PTC 3SG.DAT  
*kêrux apíthēsen akoúsas.* (Hom. *Il.* 4.198)  
 herald:NOM disobey:AOR.3SG listen:PTCP.AOR.NOM  
 'He said so, and the herald did not disobey him having heard (him)'.

**Table 1:** Constructions of *akoúō*

NO OBJECT	NOMACC	NOMGEN	NOMDAT	PP	INFINITIVE	SUB. CLAUSE	TOTAL
39	77	56	1	1	2	5	181

In Table 2, we summarize the distribution of different argument structure constructions. Note that while the NomGen and the NomAcc construction account for almost all occurrences, the NomDat construction also occurs once.

**Table 2:** Occurrences of *akoúō* with different argument structure constructions

	TOTAL OCCURRENCES	ANIMATE STIMULUS	INANIMATE STIMULUS
NOMGEN	56	48	8
NOMACC	77	1	76
NOMDAT	1	1	0

Experiencers with *akoúō* are human beings, gods or, less frequently, animals. Stimuli can be of three types: (a) sounds (voices, calls, sounds produced by objects), (b) individual animate participants (human beings, animals, gods), and (c) states of affairs. In the last case, as shown in Table 1, states of affairs are most often not encoded in subordinate clauses: rather, we find the human participant who is most relevantly involved in the event also functioning as stimulus, with a dependent participle which encodes the predication (see below, examples (10)-(12) and (17); in (11) a participle modifies a referential null object). We will return on this construction when discussing specific occurrences.

#### 6.4.1 Inanimate stimuli

Type (a) (inanimate) stimuli are encoded either in the genitive or in the accusative with no detectable semantic difference, as shown in (4)-(7). The verb, often in the aorist, indicates a sudden perception, and has an inchoative, rather than a stative meaning.

- (4) *kōkutoû d' êkouse kai oimôgês apô pûrgou.* (Hom. *Il.* 22.447)  
 shriek:GEN PTC hear:AOR.3SG and groaning:GEN from tower:GEN  
 'But she (Athena) heard the shrieks and the groaning from the wall'.
- (5) *ou gâr pō sphin akoúeto laôs aûtês.* (Hom. *Il.* 4.331)  
 NEG PTC yet 3PL.DAT hear:IMPRF.M/P.3SG host:NOM war.cry:GEN  
 'For their host had not as yet heard the war-cry'.
- (6) *ēute párdalis... oudé ti thumôi tarbeî oudè phobeîtai, epeí ken hulagmôn akoúsēi.* (Hom. *Il.* 21.573–575)  
 as panther:NOM NEG INDF heart:DAT fear:PRS.3SG NEG  
 flee:PRS.3SG when PTC barking:ACC hear:SBJV.AOR.3SG  
 'As a panther is neither afraid at heart, nor flees when she hears the baying of the hounds'.
- (7) *hōs gâr egō óp' ákousa theôn aieigenetáōn.* (Hom. *Il.* 7.53)  
 when PTC 1SG.NOM voice:ACC hear:AOR.1SG god:GEN.PL eternal:GEN.PL  
 'When I heard the voice of the eternal gods'.

In (7), the experiencer is human, while in (6) it is a non-human animate. Stimuli are inanimate, and indicate the human voice or animals' calls. Example (5) features one of the few occurrences of middle forms. Again, the stimulus is inanimate and is a sound produced by human beings, while the experiencer is an animate collective noun. In the Homeric poems, there are two more occurrences of middle voice with this verb, both in the *Iliad*, one with a genitive third person pronoun (15.199), and one with an accusative demonstrative (15.91). The genitive object has human reference, and the context suggests the meaning 'listen to' (controlled activity) for the verb, while the accusative object has inanimate reference, similar to the genitive in (5). Thus, voice does not seem to convey any relevant semantic difference with *akoúō*.

Apart from lower frequency of inanimates with NomGen, it is difficult to see any difference between the two constructions when they occur with inanimate nouns. In some cases, the choice seems highly idiosyncratic: the word *múthos* 'word, discourse', for example, always occurs in the accusative in the singular, but a few occurrences in the plural feature the genitive. In this connection, a particularly interesting occurrence is (8), which shows coordination of a genitive and an accusative object, both referring to animals' calls.

- (8) *mukēthmōu t' êkousa boôn aulizomenáōn oiôn te blēkhēn* (Hom. *Od.* 12.265–66)  
 lowing:GEN PTC hear:AOR.1SG cow:GEN.PL lodge:PTCP.PRS.M/P.GEN.PL  
 sheep:GEN.PL PTC bleating:ACC

‘I heard the lowing of the cattle lying (in the courtyard) and the bleating of the sheep’.

Remarkably, metrical factors, often adduced as an explanation for unexpected morphological marking in the Homeric poems, do not play a role here, as the accusative *mukēthmōn* would have yielded the same metrical structure here. The two objects instantiate the two constructions, and show that they are equivalent in this context. Occurrences of genitive inanimate stimuli, besides those mentioned above in examples (2), (3), and (6), are *múthōn* ‘words’ (*Od.* 21.290, 292), *stonakhês* ‘cry’ (*Od.* 21.237, 383), and *phthoggês* ‘voice’ (*Od.* 12.198).

#### 6.4.2 Animate stimuli

When animate participants are involved as triggers of perception (type (b) stimuli), we find occurrences that can be described as immediate perception of an individual (see Dik & Hengeveld, 1991: 237), as in (9).

- (9) *síga*                      *nûn, mḗ tís*                      *seu*                      *Akhaiôn*  
 keep.silent:IMP.2SG    now NEG INDF.NOM 2SG.GEN Achaean:GEN  
*állos*                      *akoúsēi*. (Hom. *Od.* 14.493)  
 other:NOM    hear:SBJV.AOR.3SG  
 ‘Keep silent now, so that no other Achaean can hear you!’

Type (c) stimuli can refer to immediate perception of an individual (type (i) in Dik & Hengeveld, 1991: 237–, cf. section 2.2), as in (10) and (11).

- (10) *ê*                      *ouk otrúnontos*                      *akoúete*                      *laòn*                      *hápanta*  
 PTC not encourage:PTCP.PRS.GEN    hear:PRS.2PL army:ACC all:ACC.PL  
*Héktoros?* (Hom. *Il.* 15.506)  
 Hector:GEN  
 ‘Don’t you hear Hector encouraging the army?’

- (11) *allà klágxantos*                      *ákousan*. (Hom. *Il.* 10.276)  
 but cry:PTCP.PRS.GEN    hear:AOR.3PL  
 ‘But they heard it (sc. the heron) crying’.

In (10), what is heard is the event of Hector encouraging the army: Hector, who is the participant responsible for bringing about the event, is encoded as the stimulus, and the event brought about by Hector is encoded by the participle *otrúnontos*. In (11), the stimulus is a non-human animate (a heron), which is referred to by a null object (it occurs in the immediately preceding context; see Luraghi, 2003: 169), and the act of crying is encoded by the participles *klágxantos*. The genitive inflection of

the participle indicates that a possible overt object would also be in the genitive. All occurrences of this type take the NomGen construction, except for (12), which features the only occurrence of the NomAcc construction with an animate stimulus.

- (12) *toùs nûn ei ptóssontas hup' Héktori*  
 DEM.ACC.PL now if flee.cowering:PTCP.PRS.ACC.PL under Hector:DAT  
*pántas akoúσαι.* (Hom. *Il.* 7.129)  
 all:ACC.PL hear:OPT.AOR.3SG  
 'If he were to hear now all of them cowering before Hector'.

Example (12) contains an object *toùs pántas* 'all (of the men)', which encodes the participant responsible for bringing about the event encoded by the predicative participle *ptóssontas*, similar to (10) with the genitive.

In various passages, *akoúō* indicates the controlled activity of listening. In this case, too, the stimulus may be animate or inanimate, and the verb most often features the NomGen construction. This is especially clear when imperative forms of the verb occur, as in (13) with the genitive and (14), the only occurrence of the NomAcc construction in an order.

- (13) *sù dê súntheo kaí meú ákouson.* (Hom. *Od.* 18.129)  
 2SG.VOC PTC pay.attention:IMP.AOR.MID. 2SG and 1SG.GEN hear:IMP.AOR.2SG  
 'Pay attention and listen to me!'

- (14) *hêso kaí állōn mûthon ákoue.* (Hom. *Il.* 2.200)  
 be.seated:IMP.PRF.2SG and other:GEN.PL word:ACC hear:IMP.2SG  
 'Remain seated, and listen to the words of other men'.

Even with verb forms other than the imperative the context may indicate reference to a controlled activity, as in (15).

- (15) *hestaótos mèn kalòn akouéin oudè éoiken*  
 stand:PTCP.PRF.GEN PTC good:ACC hear:INF.PRS NEG seem.good:PRF.3SG  
*hubbállein.* (Hom. *Il.* 19.79)  
 interrupt:INF.PRS  
 'It is appropriate to listen to someone who is standing, and it is not becoming to interrupt'.

In (13) the stimulus is expressed by a personal pronoun in the genitive, while in 0 the accusative encodes an inanimate stimulus. Both examples refer to direct perception of an individual entity in the terms of Dik & Helgeveld (1991), as does example (15): the stimulus is referred to by an indefinite null object (someone), which is modified



by a participle, similar to (11). Note however that *hestaótos* ‘standing’ refers to the situation in which the stimulus is involved, but it is not the object of aural perception.

Further occurrences in which the verb indicates a controlled event include other passages with imperatives (*Od.* 6.325, *Od.* 24.265, *Il.* 6.334), occurrences with the verb *ethélō* ‘want’ or adverbs that indicate obligation (*Il.* 6.281, *Il.* 15.199), and passages with descriptions of audiences listening to some speaker (*Il.* 2.98, *Il.* 19.256), and in general passages that suggest a controlled activity, such as example (36) discussed in section 5.2.

In several other occurrences in which we find type (c) stimuli, the verb refers to an uncontrolled event, and indicates acquisition of knowledge (type (iv) in Dik & Hengeveld, 1991: 238ff). In such cases, *akoúō* is equivalent to English ‘come to know, learn’, as shown by (16) and (17).

- (16) *è autèn pothésai kaí aphormēthéntos*  
 or DEM.ACC.F miss:INF.AOR and depart:PTCP.AOR.PASS.GEN  
*akoûsai.* (Hom. *Od.* 2.375)  
 hear:INF.AOR  
 ‘Either in case that she misses (me) or learns that (I) have departed’.

- (17) *all’ étôi keînos ge séthen zóontos*  
 but PTC DEM.NOM PTC 2SG.GEN live:PTCP.PRS.GEN  
*akoúōn khaírei t’ en thumôi.* (Hom. *Il.* 24.490–91)  
 hear:PTCP.PRS.NOM be.happy:PRS.3SG PTC in heart:DAT  
 ‘But he, learning that you are still alive, is happy in his heart’.

In (16) and (17), the experiencer does not perceive the situation directly, but relies on reports heard from someone else. Thus, *akoúō* no longer indicates the physical perception of hearing, but refers to the telic situation of learning some propositional content from hearing a report from someone else. In this type of occurrences, *akoúō* acquires the function of hearsay evidential. Indeed, the source of information is most often not specified: it can occasionally be indicated by a genitive NP with a human referent as in (18), but this only happens with indefinites, that is, uncertain sources. Notably, the difference between genitive of source (adverbials) and genitive stimuli (second arguments) remains clear, as shown in (19), where two genitive NPs in the two different functions co-occur.

- (18) *è autòs pareòn è állou*  
 either DEM.NOM be.present:PTCP.PRS.NOM or other:GEN  
*akoúsas.* (Hom. *Od.* 8.491)  
 hear:PTCP.AOR.NOM  
 ‘(As though) you had been present yourself, or had heard from someone else’.

- (19) *autàr Odussêos talasíphronos oú pot' éphasken,*  
 but Odysseus:GEN stout.hearted:GEN NEG ever say:IMPRF.3SG  
*zōoû oudè thanóntos epikhtoníōn teu*  
 alive:GEN NEG dead:GEN mortal:GEN.PL INDF.GEN  
*akoúσαι.* (Hom. *Od.* 17.114–15)  
 hear:INF.AOR  
 ‘Yet concerning Odysseus steadfast heart, whether living or dead, he said he had heard from no man on earth’.

Another such example is *állou* in (20), which also contains an inanimate stimulus in the accusative.<sup>7</sup> The same construction also occurs with *punthánomai*, cf. example (36).

- (20) *eí pou ópōpas ophthalmoísi teoîsin è állou*  
 if PTC see:PRF.2SG eye:DAT.PL POSS.2SG.DAT.PL OR other:GEN  
*mûthon akoúsas.* (Hom. *Od.* 3.93–94)  
 word:ACC hear:AOR.2SG  
 ‘If you saw with your eyes or heard the word from someone else’.

This passage is also interesting because it contrasts knowledge acquired from sight with knowledge acquired from hearing. The former is clearly more reliable: indeed, knowledge from hearing can be acquired from someone else, as also shown in (18), in which the situation of hearing a report is contrasted by the situation of having taken part to an event in person. Note, too, that *ópōpas* ‘you saw’ is a perfect, and indicates a state, while *akoúsas* ‘you heard’ is an aorist, and indicates the very moment of learning: knowledge from sight is conceptualized as a lasting acquisition, while from hearing one can acquire information, but nothing is implied about its becoming part of permanent knowledge.

Occurrences in which *akoúō* takes an infinitive or a subordinate clause also refer to the acquisition of knowledge from some indirect source, as in (21) and (22).

- (21) *kaì sè géron tò prîn mèn akouómen*  
 and 2SG.ACC old.man:VOC DEM.ACC before PTC hear:PRS.1PL  
*ólbion eînai.* (Hom. *Il.* 24.543)  
 happy:ACC be:INF.PRS  
 ‘You too old man, we know, were happy before’.

<sup>7</sup> Note that we have translated *állou* ‘from, of another’ in (20) as indicating the source, and this is the most likely interpretation of this passage, but it could also be an adnominal genitive.

- (22) *Atreídēn dè kaī autoì̄ akoūete, nósphin*  
 son.of.A.:ACC PTC and DEM.NOM.PL listen:PRS.2PL away  
*eóntes, hós t' êlth' hós t' Aígisthos*  
 be:PTCP.PRS.NOM.PL how PTC go:AOR.3SG how PTC A.:NOM  
*emésato lugròn ólethron.* (Hom. *Od.* 3.193–94)  
 devise:AOR.MID.3SG terrible:ACC destruction:ACC  
 ‘Concerning the son of Atreus, you too, though being far, know how he came, and how Aegisthus devised his terrible destruction’.

Example (22) contains an accusative adverbial, *Atreídēn*, which indicates the topic of the predication contained in the subordinate clause. A similar topic expression is also found with a prepositional phrase, *perì nóstou*, in (23).<sup>8</sup>

- (23) *hōs édē Odusēos egō̄ perì nóstou akousa*  
 so PTC Odysseus:GEN 1SG.NOM about return:GEN hear: AOR.1SG  
*agkhoū, Thesprōtōn andrōn en pióni démōi,*  
 near T.:GEN.PL man:GEN.PL in rich:DAT land:DAT  
*zōō̄.* (Hom. *Od.* 19.270–73)  
 alive:GEN  
 ‘Thus I heard, concerning his return, that Odysseus is near and alive, in the rich land of the Thesprotians’.

In example (24), the NomGen construction indicates indirect knowledge without the addition of a predicative verb form that encodes the event in which the stimulus is involved. As we will see later on, this meaning of the NomGen construction is frequent with *punthánomai*.

- (24) *dákru d' apò blephárōn khamádis bále*  
 tear:ACC PTC from eyelid:GEN.PL to.the.ground throw:AOR.3SG  
*patrós akousas.* (Hom. *Od.* 4.114)  
 father:GEN hear:PTCP.AOR.NOM  
 ‘Tears from his eyelids he let fall upon the ground, when he heard about his father’.

Finally, as shown in Table 2, the Homeric poems also feature one occurrence of a human stimulus coded by the dative in (25).

<sup>8</sup> The adverbial status of the prepositional phrase becomes clear when one compares this passage with *Od.* 17.525, which does not contain it: *steútai d'Odusēos akousai agkhoū Thesprōtōn andrōn en pióni démōi, zōō̄* ‘And he declares that he has heard about Odysseus, near, in the rich land of the Thesprotians and alive’.

- (25) *dúnasai dè sù pántos'*  
 can:FUT.2SG PTC 2SG.NOM everywhere  
*akoúein anéri kēdoménōi.* (Hom. *Il.* 16.515–16)  
 hear:INF.PRS man:DAT suffer:PTCP.PRS.M/P.DAT  
 ‘But everywhere you can listen to a man that is in a sorrow’.

As argued by Ebeling (1885: 66), the contexts suggests that the verb here has another meaning, ‘fulfill a prayer’, also clear from the context in (26), which features a mismatch between the two constructions.

- (26) *hótti hoi ōk' ékouse mégas theòs*  
 that 3SG.DAT quickly hear:AOR.3SG great:NOM god:NOM  
*euxaménoio.* (Hom. *Il.* 16.531)  
 pray:PTCT.PRS.M/P.GEN  
 ‘(And was glad) that the great god had quickly fulfilled his prayer’.

In (26), the stimulus is referred to by the predicative participle *euxaménoio* ‘praying’, inflected in the genitive, and by the pronoun *hoi* ‘him’, in the dative. Another such occurrence mentioned by Ebeling (*Il.* 1.381) also features the participle *euxaménou* (genitive), but the co-referential pronoun *toîo* is in the genitive.

The NomDat construction is frequent in Homeric Greek, and it consistently features human second arguments. It is connected with verb classes that refer to various types of human interaction (see Sausa, 2015), such as ‘meet’, ‘trust’, ‘obey’, ‘fight’, ‘help’, and so on. The context in (25) suggests a meaning of *akoúō* which could easily fit into this group of verbs, that is, ‘fulfill a prayer’. Thus, one can view the occurrence in (25) as a sporadic extension of the construction connected with verbal semantics.

## 6.5 Hear, listen, learn

We have shown different contextual meanings of *akoúō*. In addition to the meaning “hear”, which can be considered basic, we have shown two secondary meanings, ‘listen’ and ‘learn’. We have shown that reference to a controlled activity of listening is indicated either by the occurrence of the imperative or by some other contextual feature. When the stimulus is an event, *akoúō* may indicate direct evidence through aural perception, or indirect evidence learned from hearsay. Concerning possible constructions, we have shown that variation does not bring about any semantic difference with inanimate stimuli. With animate stimuli, on the other hand, we almost only found the NomGen construction, both when the verb must be taken to have its basic meaning, and in the meanings of ‘listen’ and ‘learn’. Nevertheless, although infrequent, these meanings are also possible with the NomAcc construction. In this

section, we compare what we have seen for *akoúō* with the usage of two verbs that share its extended meanings, that is, *klúō* ‘listen’, and *punthánomai* ‘learn’, and show similar patterns of construction variation.

### 6.5.1 *klúō*

The verb *klúō* indicates the controlled activity of listening, and mostly occurs in formulaic contexts: out of 84 occurrences with a second argument, 35 contain imperative verb forms and the pattern shown in (27), 16 contain imperatives without a second argument, while 23 follow the formula *hôs éphato* ‘so s/he said’, as in (28).

(27) *kluthí*                      *meu.*  
 hear:IMP.AOR.2SG 1SG.GEN  
 ‘Listen to me!’

(28) *hôs éphat'*,                      *hoì*                      *d' ára toû*  
 so speak:IMPRF.M/P.3SG DEM.NOM.PL PTC PTC DEM.GEN  
*mála mèn klúon*                      *ēdè píthonto.* (Hom. *Il.* 14.133 and other six  
 occurrences)  
 readily PTC listen:IMPRF.3PL PTC obey:IMPRF.M/P.3PL  
 ‘So he spoke, and they readily listened to him and obeyed’.

Attested constructions with *klúō* are shown in Table 3. As with *akoúō*, this verb most often occurs with a noun phrase as second argument and only infrequently with a subordinate clause. Occurrences in which it does not take a second argument are mostly imperatives.

**Table 3:** Constructions of *klúō*

	NO OBJ.	NOMACC	NOMGEN	SUB. CLAUSE	TOTAL
<i>klúō</i>	15	9	75	4	103

Table 4 shows the distribution of genitive and accusative stimuli with *klúō*. As with *akoúō*, the accusative is limited to inanimate stimuli, while genitive stimuli can be either animate or inanimate. Differently from *akoúō*, inanimate stimuli are much less frequent than animate ones, and there is no preference for accusative encoding, as they are divided in equal parts between the two cases.

**Table 4:** Occurrences of *klúō* with different argument structure constructions

	TOTAL OCCURRENCES	ANIMATE STIMULUS	INANIMATE STIMULUS
NOMGEN	75	66	9
NOMACC	9	-	9

An example of the NomGen construction with an inanimate stimulus is (29).

- (29) *kékluté*                      *meu*                      *muthôn*. (Hom. *Od.* 10.189)  
 hear:IMP.AOR.2PL              1SG.GEN              word:GEN.PL  
 ‘Listen to my words!’

This example is particularly interesting because it contains an imperative with an inanimate genitive stimulus, a pattern we have not found with *akoúō*.

An occurrence of *klúō* with the NomAcc construction is (30).

- (30) *ēē tin’*              *aggeliēn*              *stratoû*              *ékluen*  
 if INDF.ACC news:ACC army:GEN hear:IMPRF.3SG  
*erkhoménoio*              *hén*              *kh’ hēmîn*              *sápha*,  
 come:PTCP.PRS.M/P.GEN REL.ACC.F PTC 1PL.DAT clearly  
*eípoi*              *hóte*              *próterós*              *ge púthoito*. (Hom. *Od.* 2.30–31)  
 tell:OPT.AOR.3SG when first:NOM PTC learn:OPT.AOR.MID.3SG  
 ‘Perhaps he has been listening to some news of the army returning, and now wants to report it to us, as he first learned (about it)?’

In comparison with *akoúō*, *klúōklúō* does not only display a high number of occurrences in formulaic or semi-formulaic expressions, it also shows a more limited range of meanings, being virtually restricted to controlled situations, and indicating activities, rather than states or inchoative situations. In fact, even in passages such as (30), one of two occurrences which refer to coming to know some information (the other one is *Od.* 3.42), the verb takes the second argument *aggeliēn* ‘announcement, news’, which is then specified by an adnominal genitive, so it refers to concrete perception of a report, and not to the acquisition of the propositional content of the report. This is indicated in the second part of the sentence by *púthoito* ‘he learned’ (see also below).

### 6.5.2 *Punthánomai*

The verb *punthánomai* indicates direct perception and acquisition of knowledge. This verb has a metrical variant (cf. Chantraine, 1942: 111), *peúthomai*, which supplies almost all occurrences of the present stem. It displays a similar range of constructions as *akoúō* and *klúō*, as shown in Table 5.

**Table 5:** Constructions of *punthánomai* and *peúthomai*

	NO OBJ.	NOMACC	NOMGEN	PP	SUB. CLAUSE	TOTAL
<i>punthánomai</i>	20	25	19	1	4	69
<i>peúthomai</i>	6	8	0	0	2	16

Again, like *akoúō* and *klúō*, *punthánomai* (*peúthomai*) shows a pattern of construction variation connected with animacy. The distribution is closer to that of *akoúō*, as the NomGen construction can occur both with animate and with inanimate stimuli but with the latter the NomAcc construction is much more frequent. Animate stimuli occasionally also occur in the NomAcc construction: the number, although limited, is more relevant than with *akoúō*. Frequency of constructions is shown in Table 6.

**Table 6:** Occurrences of *punthánomai* and *peúthomai* in different argument structure constructions

		TOTAL	ANIMATE STIMULUS	INANIMATE STIMULUS
<i>Punthánomai</i>	NOMGEN	19	15	4
	NOMACC	25	4	21
<i>Peúthomai</i>	NOMACC	8	0	8

The verb *punthánomai* can occasionally refer to direct perception. Even though sensory modality is not specified by the lexical meaning of the root, the context most often indicates that the verb refers to aural perception, as shown in (31). However, (32) suggests that this is not necessarily the case. Apparently, direct perception is connected with the NomAcc construction and inanimate stimuli, as in (31); an animate stimulus occurs in (32).

- (31) *eí pōs érga ídoimi brotôn enopén te*  
 if ever work:ACC.PL.N see:OPT.1SG mortal:GEN.PL voice:ACC PTC  
*puthoímēn.* (Hom. *Od.* 10.147)  
 learn:OPT.AOR.MID.1SG  
 ‘If I ever saw works of mortals or I heard the voice’.

- (32) *all’ aièn opíssō kházonth’ hōs epúthonto*  
 but always backward give.ground:IMPRF.M/P.3PL when learn:AOR.MID.3PL  
*metà Tróessin Árēa.* (Hom. *Il.* 5.702)  
 among Trojans:DAT.PL Ares:ACC  
 ‘But they always gave ground backward, when they realized that Ares was among the Trojans’.

In (31), *punthánomai* indicates a type of perception triggered by human voice, and is contrasted with *ídoimi* ‘I saw’, hence the implication that aural perception is involved. Other similar stimuli occur in *Il.* 15.379, 17.102, and 18.530. In (32), there is no contextual clue implying that perception modality is hearing rather than sight: rather, the choice of *punthánomai* leaves it unspecified.

More frequently, *punthánomai* indicates acquisition of knowledge, both with the NomAcc and with the NomGen construction. Occasionally, the stimulus can be indicated by a noun phrase that refers to the message, with its content in a further specification, as in (33). In some other occurrences, the pattern is the same as with *akoúō*: the verb refers to the acquisition of a propositional content, with the main participant encoded as stimulus and the event indicated by a predicative participle. Examples are (34) with the NomAcc construction, and (35) with the NomGen construction.

- (33) *óu min oíomai ou dè pepústhai*  
 NEG 3SG.ACC think:PRS.M/P.1SG NEG PTC learn:INF.PRF.M/P  
*lugrês angeliês, hōti hoi phílos óleth'*  
 sad:GEN.F news:GEN.F that DEM.DAT dear:NOM die:AOR.MID.3SG  
*hetaîros.* (Hom. *Il.* 17.641–42)  
 comrade:NOM  
 ‘I do not think he had already known about the sad news, that his dear comrade died’.

- (34) *eí ken emè zoòn pepúthoit' epì*  
 if PTC 1SG.ACC alive:ACC learn:OPT.AOR.MID.3SG at  
*nēusìn Akhaiôn.* (Hom. *Il.* 10.381)  
 ship:DAT.PL Achaean:GEN.PL  
 ‘If he knew that I am alive at the ships of the Achaeans’.

- (35) *dúo d' óu pō phôte pepústhēn anére*  
 two PTC not PTC man:NOM.DU learn:PPF.M/P.3PL man:NOM.DU  
*kudalīmō Thrasumédēs Antilokhos te*  
 famous:NOM.DU Thrasymedes:NOM Antilochus:NOM PTC  
*Patrōkloio thanóntos amúmonos.* (Hom. *Il.* 17.377–379)  
 Patroclus:GEN die:PTCP.AOR.GEN noble:GEN  
 ‘Two men that were famous warriors, even Thrasymedes and Antilochus, had not yet known that noble Patroclus was dead’.

Example (33) contains the second argument *aggeliês* ‘news, announcement’, similar to *aggeliēn* (in the accusative) with *klúō* in (30). Notably, the latter example also contains a form of *punthánomai* highlighting that information has been acquired, and not only listened to.



Like *akoúō*, *punthánomai* may take a genitive adverbial that indicates the source of information, as shown in (36) with the NomAcc construction (with *peúthomai*). In three formulaic passages (*Od.* 10.537, 11.50, 11.76) an adverbial genitive indicates the source of information, while the direct stimulus, i.e., the second argument of the verb, is omitted.

- (36) *polláki gâr tó ge mētròs epeútheto*  
 often PTC DEM.ACC.N PTC mother:GEN.F learn:AOR.MID.3SG  
*nósphein akouōn* (Hom. *Il.* 17.408)  
 by.far hear:PTCP.PRS.NOM  
 ‘I often heard that from my mother, listening [to her] secretly’.

A frequent function of the NomGen construction with *punthánomai* is to indicate the topic about which some information is acquired, as in (37). In other occurrences, the verb refers to a controlled situation, in which an experiencer/agent actively tries to inquire about someone or something, as in (38), in which the verb is followed by a subordinate clause.

- (37) *eis agorēn iénai, ópbra xeínoio*  
 to square:ACC.F go:INF.PRS in.order.to guest:GEN  
*púthēsthe*. (Hom. *Od.* 8.12)  
 learn: SBJV.AOR.MID.2PL  
 ‘Go to the square in order to learn about the guest’.

- (38) *dē tot’ egōn hetárous proíein*  
 PTC then 1SG.NOM comrade:ACC.PL send:INF.PRS  
*peúthesthai ióntas, hoí tines*  
 learn:INF.PRS.M/P go:PTCP.PRS.ACC.PL DEM.NOM.PL INDF.NOM.PL  
*anéres eîen epì khthonì*. (Hom. *Od.* 9.88 = 10.100)  
 man:NOM.PL be:OPT.PRS.3PL in land:DAT  
 ‘I sent forward my comrades to go and learn about the people who lived in that land’.

When the verb does not take a second argument, it mostly indicates learning through an intentional action as in (39).<sup>9</sup>

<sup>9</sup> Example (39) contains an occurrence of *peúthomai*. Note that the wider context could also support an intentional reading of the verb.

- (39) *ouk ídon, ou puthómēn, allā stónon oíon*  
 NEG see:AOR.1SG NEG learn:AOR.MID.1SG but groaning:ACC alone:ACC  
*ákousa kteinoménōn.* (Hom. *Od.* 23.40–41)  
 hear:AOR.1SG slay:PTCP.PRS.M/P.GEN.PL  
 ‘I did not see, I did not inquire; I only heard the groaning of men that were being slain’.

Example (39) contrasts the activity indicated by *punthánomai* with sensory perception. The speaker, Penelope’s nurse Eurycleia, has not acquired knowledge by direct visual perception, nor has she intentionally tried to acquire it: she has evidence from hearing and knows that killing must have happened, but cannot explain how.

## 6.6 Discussion

We have discussed several occurrences that illustrate the use of the three verbs *akoúō*, *klúōklúō* and *punthánomai* and the patterns of construction variation. In this section, we discuss the distribution of aspectual stems in relation to the verbs’ actionality, and show that the three verbs differ in the extent to which they can have an atelic, inchoative, or resultative meaning. We then turn to construction variation, and compare the three verbs with other verbs of perception and cognition. Finally, we discuss the role of embodiment in the semantic extension of perception verbs to cognition.

### 6.6.1 Aspect and actionality

We have argued that perception verbs can indicate both states and activities, that is, atelic situations. In addition, we showed that *akoúō* can have an inchoative meaning and refer to a telic situation in which the experiencer acquires knowledge. The verb *klúō* refers to the controlled activity of listening, while *punthánomai* most often refers to the telic situation of acquiring information. In this section, we show how different actionalities are matched by verbal aspect, and how they are kept distinct by lexical features of the three verbs. The distribution of aspectual stems for the three verbs is shown in Table 7. We also add *peúthomai*, whose occurrences must be counted as part of the total occurrences of *punthánomai* (see above, under *punthánomai*).

**Table 7:** Distribution of aspectual stems

	PRESENT STEM	AORIST STEM	PERFECT STEM	FUTURE	TOTAL
<i>akoúō</i>	64	115	0	2	181
<i>klúō</i>	53	50	0	0	103
<i>punthánomai</i>	2	46	9	11	68
<i>peúthomai</i>	16	0	0	0	16

As shown in Table 7, *punthánomai* is the only verb that features all aspectual stems. In particular, it is the only one that has perfect forms. The Homeric perfect has a resultative meaning, and indicates a state that results from a change of state. Perfect forms of *punthánomai* can be translated as ‘know’ but, contrary to *oída* ‘know’, which simply indicates the state of being conscious or having some expertise (see Luraghi & Sausa, 2017), these occurrences imply that knowledge has been achieved as the result of having been informed, or often of having actively sought information from some source.

Aorist forms, both with *akoúō* and with *punthánomai*, most often indicate sudden perception, or acquisition of some new information, and indicate telic, inchoative situations, in line with the perfective aspectual meaning of the aorist. While with *punthánomai* the acquisition of information is often actively pursued, and the situation is controlled, as in (39), this is never the case with *akoúō*, which indicates spontaneous events, both in cases of concrete perception, and in cases of acquisition of some propositional content. Notably, *akoúō* never occurs in the perfect. This does not mean that it cannot indicate a state: indeed, this is the basic lexical aspect of perception verbs when indicating uncontrolled situations, as argued in Viberg (1984). Cases in which *akoúō* occurs in the present stem (imperfective) can indicate states, but most often these are cognitive states, rather than concrete perception. In these cases, the verb can be translated as ‘know’. From the point of view of actionality, they are similar to occurrences of *punthánomai* in the perfect, without the resultative component: while with the latter verb knowledge is acquired as the result of having sought information, with *akoúō* it is simply the effect of perception, most likely with a habitual nuance. We have argued that *akoúō* can mean ‘listen’. In such cases, it denotes an activity: its actionality is atelic, and is often matched by imperfective aspect as indicated by the present stem. Occasionally, *punthánomai* (*peúthomai*) can also indicate an activity, in which the present stem has a durative meaning (it indicates the activity of seeking information from another party).

The verb *klúō* occurs with the same frequency in the present and in the aorist. In the case of this verb, the distribution of verbal mood is also significant. Indeed, occurrences of the aorist stem are almost all in the imperative, while the present stem features prominently in constructions like the one in (28). This distribution is in accordance with the fact that the verb indicates an activity, hence an atelic event, which is more coherent with imperfective aspect, while perfectivity in the imperative gives prayers and orders a stronger urgency.

### 6.6.2 The function of construction variation

We have shown that the NomAcc/NomGen alternation is typical of the syntactic behavior of the three verbs analyzed here. With all three verbs, inanimate stimuli can occur both in the NomAcc and in the NomGen construction. Construction variation

does not indicate any semantic difference, at least with *akoúō* and *klúō*. Nevertheless, animate stimuli are very infrequently encoded by the NomAcc construction.

More specifically, the frequency of the NomAcc construction with *akoúō* is rather high as compared with the NomGen construction (77 occurrences vs. 56). The verb can indicate states, activities and inchoative events, but this does not seem to be connected with either construction. In fact, even though the genitive displays more variation, we also found one occurrence with an imperative and one which indicates acquisition of knowledge with the NomAcc construction. The fact that the genitive more frequently displays the whole range of semantic variation depends on the higher likelihood that animate participants are being listened to, or being learned about. In a limited number of occurrences, the genitive can also indicate the source of information. In such cases, it is syntactically an adverbial, as shown by the possible co-occurrence of another genitive NP functioning as stimulus (hence as argument). Furthermore, the verb *akoúō* also occurs once in the NomDat construction with the meaning of ‘listen to, fulfill (a prayer)’. This meaning of the verb explains the occurrence of this construction, being compatible with the meaning of the NomDat construction itself, which is strongly connected with interaction between human participants in Homeric Greek (see Luraghi & Sausa, 2015; Sausa, 2015).

Like *akoúō*, *klúō* also occurs in the NomAcc construction with inanimate stimuli, and in the NomGen construction both with animate and with inanimate ones. In the case of this verb, not only the meaning, but also the frequency of the two constructions with inanimate stimuli is the same. Animate stimuli occur only in the NomGen construction, which is by far the most frequent construction with this verb (75 vs. 9 occurrences).

In the case of *punthánomai/peúthomai*, there seems to be a partial semantic motivation for construction alternation, as the NomAcc can occur both when the verb indicates direct perception, and when it indicates acquisition of knowledge. The NomGen construction, which, similar to the other two verbs, is preferred with human stimuli, is limited to the second meaning.

Summing up, construction variation has a very limited semantic function: basically, a difference in meaning only occurs with cases in which *punthánomai* indicates direct perception, which are limited to the NomAcc construction, and with the sporadic occurrence of the NomDat construction with *akoúō*, which triggers a special meaning of the verb. In other occurrences, construction alternation is triggered only by referential properties of the stimulus, whereby this only happens for animate stimuli, as inanimate ones can occur in either construction.

If we now broaden our observations to construction alternation with other experiential predicates, it is remarkable that it does not pattern in the same way. In particular, with verbs of cognition, alternation between the NomAcc and the NomGen construction may trigger some semantic difference in the verbal meaning, as with *oída* – or not, as with *mimnḗskomai* – but in any case, it is not connected with animacy (see Luraghi & Sausa, 2017). Among perception verbs, verbs of seeing display a different

behavior, as they do not allow construction variation, but virtually only occur with the NomAcc construction. Verbs of hearing, in spite of being characterized by a special pattern of construction variation, seem to be closer to verbs of cognition than verbs of seeing. Indeed, as we have seen in sections four and five, verbs of hearing, and in particular *akoúō* and *punthánomai*, do not only indicate perception, but also a complex cognitive activity, and the fact that they share, to some extent, the constructional properties of cognition verbs is a reflex of their meaning. In turn, the connection of construction variation with animacy, rather than being semantically motivated by some implications of partitivity, as has been suggested (cf. section 3), seems to be a common feature that singles out these three verbs as a coherent group in the wider field of experiential verbs.

### 6.6.3 Perception, cognition and embodiment

In the discussion of *punthánomai*, we have shown that *akoúō* frequently indicates acquisition of knowledge, and that it also often indicates that the new information does not derive from direct perception, but rather from hearsay. In this evidential function, *akoúō* is contrasted with *hóraō/ eîdon* ‘see’, which indicates knowledge deriving from direct visual perception. As we have argued, imperfective forms of the verb indicate a cognitive state, whereby the experiencer knows something that s/he has repeatedly learned from indirect sources. From the point of view of embodiment, it could be tempting to connect the meaning ‘learn’ with *akoúō* to the ‘MIND-AS-BODY’ metaphor mentioned above, by which knowledge is metaphorically understood as (a kind of mental) vision. In this framework, the polysemy of ‘hear’ and ‘learn’ could be explained as learning being metaphorically understood as (mental) hearing. However, we would like to suggest a different and simpler explanation. In our opinion, the meaning ‘learn’ conveyed by *akoúō* depends on a pragmatic inference: a person who hears some report acquires its propositional content. Note that this explanation can easily also apply to the extension of ‘see’ to ‘know’: someone who has seen something knows it. Common knowledge of perception modalities also explains why ‘see’ indicates certain knowledge, while ‘hear’ indicates knowledge by hearsay, as seeing is only possible in person, while hearing is possible both directly and from secondary sources.

This is not to say that the extension of perception verbs to cognition does not reflect embodied processes: in fact, pragmatic inference is based on our own experience of perception, and of the ways in which different perception modalities can be activated, and as such is fully embodied. Notably, pragmatic inference is a “lighter” explanation, that does not require positing a conceptual metaphor whose universality is far from being demonstrated.

Neither *klúō* nor *punthánomai* are used as evidentials in Homeric Greek. They both specialize in the denotation of controlled situations, brought about intentionally by an

experiencer/agent, and intentionality does not match the expression of the speaker's attitude toward the propositional content of an utterance. In fact, *punthánomai* can also indicate uncontrolled perception, but note that such occurrences only refer to direct perception, and not to indirect acquisition of knowledge from indirect sources.

## 6.7 Conclusion

In this paper, we have provided a discussion on the syntax and semantics of *akoúō* 'hear' in Homeric Greek in comparison with *klúō* 'listen to' and *punthánomai* 'learn'. Our aim has been two-fold. In the first place, we have discussed construction variation and tried to find its possible triggers. In the second place, we aimed to detect the connection between two experiential domains, i.e., perception and cognition, based on embodiment.

In section 2, we discussed experiential situations, arguing that they can be variously construed in terms of control and actionality. We have focused on peculiarities of perception verbs and on features of participants, based on the treatment of perception verbs by Viberg (1984) and the discussion carried out by Dik & Hengeveld (1991) on different types of perception situations, in particular, direct and indirect perception through hearing.

Then, we have provided some background information on argument structure variation in Homeric Greek, in particular between the NomAcc and NomGen constructions (in section 3). We argued that NomAcc/NomGen alternation typical of perception verbs in Homeric Greek can hardly be connected with the partitive meaning of the genitive; however, we found a connection between animate stimuli and the NomGen construction.

In section 4, we analyzed the meanings of *akoúō* in different constructions considering various parameters. We have observed that animate stimuli are almost exclusively encoded by the NomGen construction, with one occurrence of the NomAcc and one of the NomDat construction. With inanimate stimuli, *akoúō* shows NomAcc/NomGen alternation with no detectable semantic difference. We have argued that contextual factors can trigger different meanings of *akoúō*. In particular, the verb can indicate a controlled or uncontrolled situation, or it can refer to the situation of learning some propositional content from hearsay. In such occurrences, *akoúō* is contrasted with *horáō/eídon* 'see' in terms of different degrees of evidentiality.

We have devoted section 5 to the syntax and semantics of *klúō* and *punthánomai*, showing that *klúō* mostly occurs in the NomGen construction, often in the imperative form, and indicates the controlled activity of listening. As with *akoúō*, the accusative is limited to inanimate stimuli, while genitive stimuli can be either animate or inanimate, even though genitive stimuli are much more frequently animate. The verb *punthánomai/peúthomai* indicates acquisition of knowledge and, to a limited extent, direct perception. Similar to the other two verbs, construction alternation is

connected with animacy, but there is also a partial semantic motivation for it, as direct perception can only be expressed through the NomAcc construction, including with animate stimuli. To the contrary, acquisition of knowledge can be indicated by both constructions. Contrary to *akoúō*, *punthánomai* mostly denotes a controlled situation, and implies that acquisition of knowledge is actively pursued by an experiencer/agent.

In section 6, we discussed the data presented in the previous sections, and compared the three verbs in terms of actionality, construction variation, and possible evidential function. Concerning the interaction between aspect and actionality, we argued that inchoative situations are mostly indicated by the aorist stem with *akoúō* and *punthánomai*, while stative situations are characterized as resultative with *punthánomai*, hence by the perfect stem, while with *akoúō* the present stem indicates that there is no such implication. The verb *klúō* indicates an atelic activity, hence the occurrence of the present stem. The aorist is also frequent, but virtually limited to orders. Construction variation with these verbs is significant only to a very limited extent in the case of *punthánomai*. In the majority of occurrences, the trigger is animacy of the stimulus, but this is not connected with other semantic features. Finally, with regard to the overlap between the domains of perception and cognition which results from the extension of the meaning of *akoúō* from hearing to learning and acquiring knowledge we have argued that, rather than advocating the ‘MIND-AS-BODY’ metaphor, this is a consequence of pragmatic inference, based on our bodily experience of different perceptual modalities.

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**Maria Papadopoulou**

## **7 The role of spatial prepositions in the Greek lexicon of garments\***

The Greeks have no word for “space”. This is no accident, for they do not experience the spatial according to *extensio*, but instead according to place (*topos*) as *chora*, which means neither place, nor space, but what is taken up and occupied by what stands there.

Heidegger, *Introduction to Metaphysics*<sup>1</sup>

**Abstract:** Ancient Greek expressions belonging to the vestimentary domain are typically verbs and nouns prefixed by locative prepositionals. This paper analyses the role of spatial prepositions in the Greek lexicon of garments, i.e., the cluster of words in Greek pertaining to ‘dressing’ and ‘dress’ prefixed by the spatial affixes *amphi-* ‘on both sides’, *ana-* ‘up, upon’, *apo-* ‘away from’, *en-* ‘in’, *ek-* ‘away from, out off’, *epi-* ‘upon’, *peri-* ‘(all) around’, and *hypo-* ‘under’. The aim is to show that the particular usage of spatial prepositions within this terminological field reveals a particular “spatiality” of the clothed body, and more specifically, that the Greeks understood the clothed body in terms of a particular image schematic structure that divided the body into a number of regions.

**Keywords:** Greek vestimentary terminology, locative prepositions, image schema, construal of the clothed body, conceptualization of space, conceptual metaphor

### **7.1 Introduction**

How do speakers of ancient Greek conceptualize ‘dressing’ and ‘dress’? Ancient Greek expressions belonging to the vestimentary domain are typically verbs and nouns prefixed by locatives (e.g., *endúō* ‘to put on’ for clothes, lit. to ‘to go in’, *amphibállō* lit. to ‘to put around’, *énduma* ‘garment’, lit. ‘that which is entered’, *epíblēma* lit.

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\* The research for this paper has been conducted during the course of a two-year Marie Skłodowska-Curie Research Fellowship Project at the University of Copenhagen with the generous funding of the European Commission-Marie Curie Actions (Grant agreement no. 657898).

<sup>1</sup> Heidegger, 2000: 50.2. The AG nouns for space and place are *khōra*, *khōros* (cf. verb *khora(e)ō* combining the notions of moving and space) and *topos* (cf. the compound verb *topothet(e)ō* ‘assigning place’) whereas the notion of infinite space was represented by *kenon* ‘void’, literally, ‘that which has been empty’ or *apeiron* ‘that which has never been experienced’. On the concepts of space and place in AG, see Patricios, 1971; Cornford 1976; Keimpe 1994 and Barker et al., 2016.

‘that which is put on’), and multi-word constructions arising from tmesis (e.g., *Od.* 16. 457 *ligrà héimata hésse perì khroí* ‘she put squalid clothes around his body/skin’).<sup>2</sup> Consider the following Homeric description of Agamemnon getting dressed after waking up from a treacherous dream:

- (1) *malakòn d’ éndune khitôna*  
*kalòn nēgáteon, perì dè méga bálleto phâros·*  
*possì d’ hupò liparoîsin edésato kalà pédila,*  
*amphì d’ ár’ ómoisín báleto xíphos arguróēlon.* (*Hom. Il.* 2.42–45)  
 ‘He (sc. Agamemnon) put on his soft tunic,  
 fine and brand new, put around him his great cloak,  
 and beneath his bright feet he bound his beautiful sandals  
 and cast his sword with nails of silver by his shoulders’.

Agamemnon dresses in a *chiton* (*éndune khitôna*), casts his wide long cloak around his body (*perì bálleto phâros*), binds his sandals (*pédila*) to his feet down below (*hupò edésato*), and hangs his sword on his back (*ómoisín amphì báleto*) (cf. Abrahams, 1908: 1–38; Bennett, 1997). The description could not be more accurate in terms of identifying the relative position of Agamemnon’s accoutrements in relation to his body. This account of Agamemnon’s attire reflects a specific conceptualization of the spatial relations between Agamemnon’s dress and body. Let us take a closer look at Agamemnon’s actions as described by verbs compounded with locative prepositions:

- (2) *én-dune khitôna.* (*Hom. Il.* 2.42)  
 in-go:IPFV.3SG chiton:ACC.M.SG  
 ‘He put on a chiton’.
- (3) *peridè méga bálleto phâros.* (*Hom. Il.* 2.43)  
 around large put:IPFV.3SG overgarment  
 ‘He put on a large overgarment’
- (4) *possì d’ hupò edésato pédila.* (*Hom. Il.* 2.44)  
 foot:DAT.PL under bind:PFV.SG sandals  
 ‘He wore sandals on his feet’.

<sup>2</sup> On *tmesis* in IE syntax see Boley, 2004; on *tmesis* in Homer, see Hajnal, 2004. On the term *tmesis* see Bortone, 2010: 135, n. 50. In Homer prepositional elements have an adverbial position. In classical Greek prefixes merged with the verb and prepositions govern nouns, see Smyth, 1956, paragraph 1638. Luraghi, 2003: 76 uses the term “particles” to solve the problem of assigning these words to the category of preposition or preverb.

Agamemnon's body is conceptualized as an entity contained within his *khitōn*, and surrounded by a more loosely fitting second layer of cloth, his *pharos*. This spatial conceptualization of the relationship between his torso and his clothes is complemented by the sandals he is strapping onto his feet, which are conceptualized as something bound at a lower level from the one that is contained in his *khitōn* and enveloped in his *pharos*. Lastly, his sword is conceptualized as a thing placed on either side of each of his shoulders, i.e., in between them.

This paper discusses Greek's vocabulary cluster of garments prefixed by the following locative prepositions: *amphi-* 'on both sides', *ana-* 'up, upon', *apo-* 'away from', *en-* 'in', *ek-* 'away from, out off', *epi-* 'upon', *peri-* '(all) around', and *hupo-* 'under'. Previous research on the semantics of locative prepositions has shown that more abstract domains are construed through the domain of space, e.g., *ek-* denotes a spatial source, a spatial or a temporal origin, and cause (Luraghi, 2003: 106), *epi-* extends its meaning from the spatial domain to that of purpose (Luraghi, 2003: 213).<sup>3</sup> This paper aims to show that the vocabulary cluster examined here displays a semantic structure which enables linguistic mappings that highlight the spatiality of the (clothed) body, more specifically that:

1. the Greeks imagined the (clothed) body in terms of an image schematic structuring which divided it into a number of regions or registers (see sections 2 and 3 of the present paper);
2. second, in terms of a body-centric, two-dimensional, bounded view of body and space motivated by the conceptual metaphor: 'DRESSING IS (BEING IN/ GOING INTO) A LOCATION' (see section 4).

This close examination of the role of locative compounds in the vocabulary of dressing seeks to contribute to a fuller understanding of how the Ancient Greeks conceptualized dress through space and body through dress, in more specific terms, how they conceptualized the act of dressing in connection to their motor and perceptual experiences. The specificities of the materiality of Greek garments as physical objects from the point of view of the experiencer are, I argue, co-constitutive parameters in the process of forming spatial conceptions. Insight into how the Greeks conceptualized the clothed body will thus benefit greatly from acknowledging agentially enacted and materially conditioned aspects of Ancient Greek dress.

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<sup>3</sup> For a concise list of references on the polysemy of prepositions, see Short, 2013a: 378, n. 1; Wackernagel, 2009: 589–711; on the adverb-preposition continuum in Greek see Seiler, 1999. On a cognitive approach to the semantics of Greek prepositions see Luraghi, 2003; 2004; Bortone, 2010. On the spatial concepts and spatial grammar of Greek, see Nikitina & Spano, 2013.

## 7.2 The image schematic construal of the clothed body

Cognitive semantics recognizes that culture is the basis of lexical meaning and embodied experience through interaction with objects.<sup>4</sup> One of its central tenets is that grammatical structures do not form an autonomous level of representation, but instead represent embodied conceptual content (Langacker, 1986: 4; 2008: 31). As language speakers and users, we make meaning through, and with the help of, the body. Embodied knowledge does not happen *in abstracto*. In embodied construction grammar making meaning of linguistic utterances is linked to embodied performance and simulation (Bergen, 2012: 233–246; Bergen & Chang, 2013: 135): e.g., the embodied knowledge, performance and simulation of how to wear a garment – tie a scarf, wrap in a sari, or wear a tie – emerge through interaction with objects, require a combination of sensory, cultural, and social knowledge, and rely partly on the performativity of the objects. As Lakoff & Johnson (1999: 102) succinctly put it: “What we understand the world to be like is determined by many things: our sensory organs, our ability to move and to manipulate objects, the detailed structure of our brain, our culture and our interactions in our environment, at the very least.”<sup>5</sup> To quote Lakoff & Johnson (1999: 19) once more: “What is important is not just that we have bodies and that thought is somehow embodied. What is important is that the peculiar nature of our bodies shapes our very possibilities for conceptualization and categorization”.

Conceptualization serves as a cover term for categorization (the grouping of entities by the “embodied mind” based on common characteristics), as well as schematization (the cognitive representation of a whole by means of selected aspects) (see Rosch, 1978; Sharifian, 2011; Talmy, 1983). Embodied cognition is closely related to the development of image schemas, which Mandler & Págan Cánovas (2014: 1) define as an umbrella term for a) spatial primitives, i.e., the first conceptual building blocks formed in infancy, b) the simple spatial stories built from them, and c) the schematic integrations that use the first two in order to build concepts that include non-spatial elements, e.g., force and emotion. Image schemas are recurring and readily retrieved mental images, sometimes iconic, that generalize and abstract embodied or social experiences and perceptions of similarly structured objects and events. They consist in simple elements and relations between these elements (Johnson, 1987: 28).

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4 As Geeraerts & Cuyckens, 2007: 45 write, “conceptualization is central for linguistic structure – and conceptualization goes further than mere reference. It involves imagery in the broadest sense of the word: ways of making sense, of imposing meaning. Also, the conceptualizations that are expressed in the language have an experiential basis, that is, they link up with the way in which human beings experience reality, both culturally and physiologically.”

5 On the role of cultural knowledge in the way people make, and extend meaning see Langacker, 1994; 2014. Cognitive models can emerge from cultural patterns, e.g., for metaphors of time and alimentary metaphors in Latin and Roman culture see Short, 2013b; 2016. On the role of culture in conceptualization see Palmer, 1996; Sharifian et al., 2008.

Linguistic evidence suggests that two main types of image schemas recur and structure the experience of dress and getting or being dressed in ancient Greek: PATH and CONTAINMENT.<sup>6</sup> The PATH schema, as illustrated in Figure 1, enables spatial conceptualization of the elements of two points in space (the source and the goal) and the motion directed from a source along a path, i.e., a number of contiguous locations connecting the source to the goal (destination).<sup>7</sup>

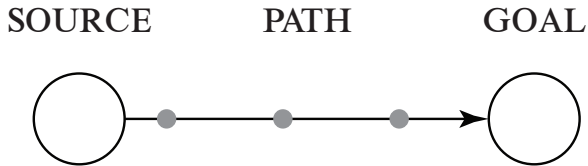


Figure 1: SOURCE-PATH-GOAL image-schema.

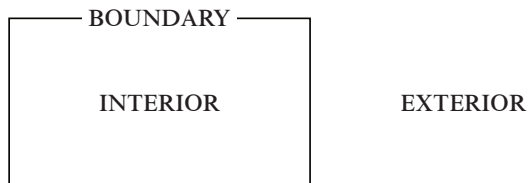


Figure 2: CONTAINER schema.

The CONTAINER schema (one possible version is illustrated in Figure 2) instead consists of three structural elements: a contained space (i.e., a fully or partly enclosed area, a partly or fully accessible area) which enables a spatial division of space into ‘locations in’ (i.e., accessed by means of a point of entry) and ‘locations out’ (accessed by means of a point of exit). The CONTAINER schema enables a conceptualization of the body as contained within the boundary of clothes: space is divided into in-regions and out-regions, clothes mark the external boundary of the inner region and the liminal point of contact between the inner and the outer region. According to Mandler, English *in* is mapped to the image schemas of CONTAINER, ENTER and EXIT, and *on* is mapped to the image schema of support, e.g., (*ap*)*ek-duō*, see Figures 3.1 and 3.2 (cf. Cuyckens, Dirven

<sup>6</sup> The list of image-schemas is open-ended. For a short list see Oakley, 2007; Langacker, 2008: 32, note 6.

<sup>7</sup> Johnson, 1993: 166 considered the SOURCE-PATH-GOAL schema to be fundamental to human thought.

& Taylor, 2003: 409). The SUPPORT schema enables a conceptualization of the body as a surface upon which clothes are placed (*epi-/ anaballō*), see Figure 4.

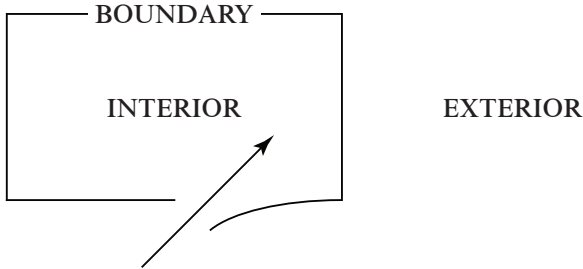


Figure 3.1: ENTER schema, 1 'in' or 'into'.

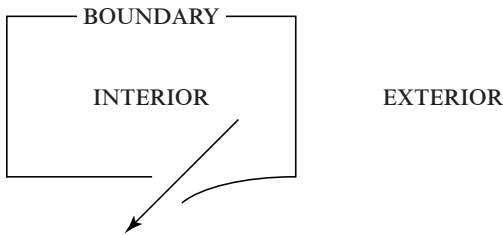


Figure 3.2: EXIT schema, 2 'out' or 'out of'.

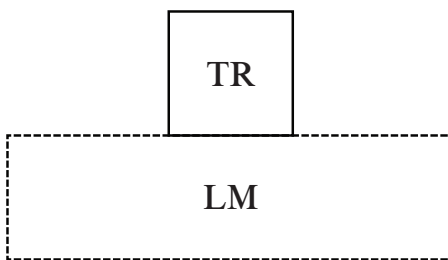


Figure 4: SUPPORT image schema, 'on' / '(up)on'.

By means of these image schemas DRESS is mapped to SPACE and the CLOTHED BODY is imagined and structured in terms of SPACE as follows:

- as a torso that enters, or is located inside a piece of handwoven cloth with multiple attaches, so that the cloth or the act of placing the cloth around one's (own) body or another's body landmark the interior space bounded by the cloth;
- as a torso surrounded by the handwoven garment, loosely hanging or draping supported by (parts of) the body without being attached, or with a single point of attachment;
- the head and feet are imagined as located in higher or lower regions or spatial registers in relation to the torso and, by consequence, so are various types of headgear and footgear.

Cognitive semantics describes the meanings of spatial prepositions in terms of image schemas and their “transformations”, especially figure/ground construal (Talmy, 1978; Langacker, 1987: 231). According to Langacker prepositions profile relationships between a dynamic moving trajector (TR), which receives conceptual focus, and a reference object or landmark (LM) (see Langacker, 1986; 2009: 9–13). The preverbs associated with locative prepositions in the vocabulary cluster of dressing foreground a spatial relation between a foregrounded trajector (the entity that is located) and a landmark (the entity in the background, in relation to which the trajectory is located). The trajector and the landmark may be uniplex (one object) or multiplex (many objects) (Talmy, 2000: 177–254).

Greek prepositions are grouped into proper, i.e., those that can be preverbs, and improper ones, i.e., those that cannot become preverbs). In the Greek vocabulary cluster of dressing, spatial prepositions become preverbs and can be separated from the stem, especially in Homeric Greek (Pinault, 1995: 40). The vocabulary of dressing under study here is comprised of a set of compounds<sup>8</sup> normally prefixed by one of the following locative prepositions or preverbs: *amphi-* ‘on either/both side of’, of’, *ana-* ‘upon’, *en-* ‘in’, *epi-* ‘upon’, *peri-* ‘a(ll)round’, *apo-* ‘away from’, *ek-* ‘away from’, or *hupo-* ‘under’. The prepositional or preverbal constituents combine with one of the following verbs: *bállō* ‘to put’, ‘to place’, ‘to cast’, *dúō* ‘to enter’, literally ‘to sink’, ‘to plunge in’, *ékhō/ ískhō* ‘to have’, *hénumi* ‘to dress’ (of which only *hénumi* has a dress-related sense in its simple form). The pairing of the prepositional and verbal

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<sup>8</sup> The analysis of the morphological complexity and the word formation patterns of the garb word cluster under study is outside the scope of this paper. Having said that, these noun and verb compounds with a prepositional modifier are compositional, endocentric, attributive, right-headed. For a typology of compounds see Scalise & Bisetto, 2011: 46.

constituents is dependent upon constraining factors placed by the image schemas on the construal of the dressed body.<sup>9</sup>

The Ancient Greek vestimentary vocabulary conceptualizes the different regions related to dress and accessories in a two-dimensional space as relational pairs of regions. The prepositional prefixes or preverbs define relationships within different regions of the space (*chôros* or *chóra*) occupied by the dressed body. They indicate a conceptualization of the clothed body structured according to a series of spatial binaries as follows:

A) IN/OUT REGIONS<sup>10</sup>

- IN: *en-* compounds with *dúō*, such as *endúō*, literally ‘to dress in’; the deverbals *énduma*, *endútēs* denoting ‘garment, article of clothing’, *embás* lit. ‘a step-in shoe’, and its diminutive form *embádion*, which denote a type of footwear that is imagined as entered by the foot.<sup>11</sup>
- OUT: *ek-* compounds with *dúō*, such as *ekdúō* ‘to strip of’, ‘to undress’;<sup>12</sup> *apo-* compounds with *dúō*, such as *apodúō* ‘to strip of’, ‘to undress’; the deverbals *apódusis* ‘stripping off’, ‘undressing’.

B) ALL-ROUND (SURROUNDING)/ ON EITHER SIDE OF

- ALL-ROUND (SURROUNDING): *peri-* compounds with *hénnumi*, *bállō*, and their deverbals, such as *periénnumi* literally ‘to wear all round’, *peribállō* lit. ‘to place all around’, ‘to wear’, *periblēma* ‘wrap’, ‘outer garment’, *peribolaia* ‘clothes’, *peribolé* ‘garment’, literally ‘that which is placed around’.
- ON EITHER SIDE OF: *amphi-* compounds with *ékhō*, *bállō*, and *hénnumi*, such as *ampékhō*, *amphibállō*, *amphiénnumi*, which denote ‘to wear’, literally, ‘to put on either side or on both sides of’ and their respective deverbals which denote ‘garment’, literally ‘that which is placed on either side or on both sides of’: *ampekhnōnē*, *amphiblēma*, *amphíesis*.

<sup>9</sup> From the IE root *Fes-* (*\*ues*) come the Homeric verb *hénnumi* ‘to clothe’, the Homeric noun *heanós* ‘garment’, the nouns *hímátion*, *esthēs*, *ésthēma* and *heíma* - all denoting ‘garment’. The PIE root is *\*wes-m̥-* according to Sihler, 1995: 72. The Latin verb *vestire* ‘to clothe’, from which French *vêtir* and English *to wear* are also etymologically linked. For *hénnumi* see Beekes, 1988 and Chantraine, 2009. From the IE root *dy-* come *endúō*, *-omai*. The simple verb form and the *ek-* compound are first attested in Homer, the noun *dúma* is first attested in POxy. 929.8, 15 (2nd/3rd CE) and the deverbals *énduma* appears quite late also. *Testamenta XII Patriarcharum* 3.10.3.3 *allà skhísai tò énduma toú naoú* ‘but tear the dress of the temple’ (2nd c. BCE/3 CE).

<sup>10</sup> Cf. Beekes’, 1988 note on *dyō* relating the Greek verb to the Sanskrit verb *upā-du-* ‘to put on’.

<sup>11</sup> This shoe name has been translated as ‘felt-shoe or slipper’ (*LSJ*), ‘boot’ in Cleland, Davies & Llewellyn-Jones, 2007 and ‘slipper or sandal; (later) ankle boot’, see Montanari, 2015 s.v.

<sup>12</sup> Cf. Modern Greek (MG) *gdúnō* ‘to strip’.



## C) UP/DOWN REGIONS

- UP: *ana-* compounds with *bállō*, such as *anabállō* ‘to wear’, ‘to put on’, literally ‘to throw up (on)’, and the deverbals *anabolé* i.e., ‘that which is literally thrown<sup>13</sup> or laid up(on) the shoulders’, *anaboládon*, a diminutive of *anabolé*; *epi-* compounds with *bállō*, such as *epiblēma*, *epibolé* (it is also involved in the compound noun *ephestris* denoting ‘garment’ or a specific type of outer garment); *ana-* compounds with *dēnō*, such as *anadēnō* ‘to bind round the head’, e.g., a crown (it is also involved in the compound noun *anádēma* or *ándēma* ‘that which is bound (up) round the head’).
- DOWN: *hupo-* compounds with *dúō* denote ‘to wear an undergarment’ (the deverbals are *apóduma* ‘undergarment’); *hupo-* prefixing *dé(n)ō* denotes ‘to tie, fasten, bind (a shoe) under’, which can be glossed as ‘to put on shoes’; the deverbals are *hupódēma* ‘shoe’, literally ‘that which is tied under’.

From an onomasiological point of view, these locative prepositional compounds belong to the higher rank of the taxonomy of dress. They denote the generic class ‘garments’ and ‘shoes’,<sup>14</sup> not the ‘kind-of garment/shoe’ level of cognitive categories (e.g., *chiton*, *peplos*, for garments and *árbulla*, *kóthoroi*, for footwear). The data surveyed for this study span the Greek language from the time of Homer until late antiquity and include evidence from all types of textual sources. A diachronic survey of this vocabulary goes beyond the scope of the present paper. It is worth noting, however, that some of these lexical items have been attested throughout almost three millennia and are still in use in Modern Greek.<sup>15</sup> Table 1 gives an overview of the locative prepositional compounds categorized according to their first and second constituents and word classes.

<sup>13</sup> ‘Throw’ is a literal translation of AG *bállō*. The same conceptualization in the MG expression colloquial expression *bázō/ rikhnō káti (e)pánō mou* literally ‘to put/throw something on me’, i.e., ‘to put something on’ (for garments).

<sup>14</sup> The basic level model was developed for the categorization of folk taxonomies of natural kinds and was applied to clothes by Geeraerts, 2010: 200–202.

<sup>15</sup> Modern Greek (MG) is a textbook case of *diglossia*, i.e., a term in sociolinguistics used for linguistic communities who use two distinct varieties of the same language. The learned variety inherited a great part of the lexicon from ancient Greek (AG). Here follows a list of some of those in use today by the speakers of (the learned variety of) Modern Greek. AG *amphiesis* MG *amphiesē* ‘dress’, ‘attire’; AG *apodutéria* MG *apodutéria* ‘changing room’; AG *énduma* MG *énduma* ‘garment’; AG/ MG *lōpodútēs* ‘thief’, ‘one who enters another person’s *lōpē* (outer garment)’; AG/ MG *peribállō* ‘place x around y’, ‘surround’, AG/ MG *peribolé* ‘dress’, ‘attire’; AG *hupódēma* MG *upódēma* ‘shoe’. However not semantically transparent to the speaker of Modern Greek, some members of this cluster, and their dress-related senses, are well established and not marginal in the vocabulary of MG. These words belong to the active everyday Modern Greek vocabulary and their constituents are semantically transparent or semi-transparent, with the exception of the first constituent of *lōpodútēs*, *lōpē*, not used in Modern Greek; the deverbals *dútēs* < *dúō*, denotes ‘diver’ in Modern Greek, cf. AG *lōpodútēs* ‘a thief of clothes’, lit. ‘one who dives into another person’s clothes’, thus leaving no room for their rightful owner. The English equivalent is ‘pickpocket’, see Langacker, 2008: 197, fig. 7.9.

Table 1: Ancient Greek compound dress terms with locative prepositions (by first and second constituents).

dress		undress				
amphi-	peri-	en-	epi-	+ amphi-	apo-	ek-
bat- 'place'	amphibállō amphíblēma	peribállō períblēma	epibállō epíblēma		anabállō anabolē anaboládon	
ekh- 'have'	ambékhō ambékhonos				apambískhō	
Fes- 'wear'	amphiénnumi amphíesma			epamphiénnumi	apamphiénnumi	
du- 'enter'		endúō énduma éndusis endutēr endutérios endútēs endutós		ependútēs	apodúō apekdúō apodutērion ekdútēs ekdutērion	ekdúō

## 7.3 Spatialities of the clothed body in ancient Greek

### 7.3.1 The clothed body in and out-of-bounds: *en-*, *ek-*, *apo-* compounds

As shown in the previous section, ancient Greek uses space to conceptualize the clothed body, clothes marking the boundary between an interior (body) and an exterior (world). *En* is a preposition that never takes the dative. *Eis* is the directional equivalent of *en* in some Greek dialects and in the literary sources, except for a limited number of cases in Homer. Preverbal *en-* encodes containment.<sup>16</sup> In the image schema that constitutes the meaning of *endúō* the contained (bounded) region is salient, whereas *ekdúō* profiles the path from a region of origin to a region of destination. *Endúō* implies location within a bounded area and profiles trajectories within a bounded landmark, which are underspecified or non-transparent for trajectory movement.

Greek *en-* and English *in* are roughly equivalent in terms of the fact that they primarily profile containment (see Vandeloise, 1994 for the spatial sense of ‘in’). *En* denotes a location viewed as a bounded area with contents (see Horrocks, 1981: 198; Talmy, 2000: 177–254). The knowledge of the contents does not necessitate visual contact with the interior of the location. The enclosed object has a relatively fixed position. The enclosed object can be fully enclosed or there can be an entry point in the enclosure left open after the enclosed object has found itself inside. *En-* also conveys the meaning of ‘being in’, especially in the form of *eis-* thus fluctuating between a fixed ‘(with)in’ and a directional ‘into’ meaning. It may conceptualize stillness within the bounded area (Figure 5) or motion towards a point in the bounded area, and thus a combination of the container schema and the source-path-goal schema discussed in the previous sections (Figure 6).

Both *ek-* and *apo-* describe a trajectory away from a source in a SOURCE-PATH-GOAL schema. Greek *ek* is elative (it supports an outward motion from the interior of location) or ablative (i.e., supports a motion away from a source); *apó* is ablative (Luraghi, 2003: 95). *Ekdúō* supports an elative meaning of exiting a contained area or an ablative meaning of exiting an area (Figure 7), whereas *apodúō* supports an ablative meaning emphasizing the separation from the source (Figure 8).

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<sup>16</sup> On prepositions of containment with items of clothing see Tyler & Evans, 2003: 182. On the use of the CONTAINER schema in Homer, see Luraghi, 2004.

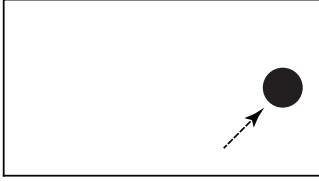


Figure 5: CONTAINMENT schema: *enduō* (locative).

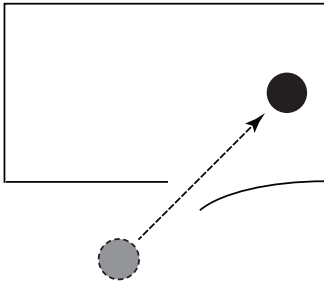


Figure 6: ENTER schema: *enduō* (with *en-* fluctuating between the inessive and illative semantic roles).

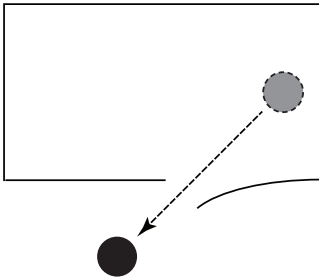


Figure 7: EXIT schema: *ekduō* (elative).

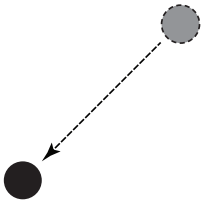


Figure 8: SEPARATION schema: *apoduō* (ablative).

(5) and (6) illustrate the different conceptualization of dressing in ancient Greek and English. The (fictive or imaginary) motion described by the Greek verb is directed towards the landmark, which is an item of clothing, whereas in the English translation the clothing item is the trajector and the body is imagined as the supporting surface.

(5) *stolèn kalèn en-éduse.* (Xen. Cyr. 1.3.3)  
 stole:ACC.SG nice in-go:PFV.3SG  
 ‘He put on a nice-looking stole’.

(6) *esthêta thaumastèn leptótēti kai baphaís en-dedukós.*  
 (Plut. Ages. 12.2).  
*esthês:ACC.SG remarkable finess:DAT.SG and color:DAT.SG in-go:PTCP.M*  
 ‘He had (put) on an *esthês* remarkable in fineness and color’.

(7) and (8) are illustrations of how *en-dúō* (*en-dú-omai*) licences the motion of the moving entity (*lógos* ‘word’ and *phthóngos* ‘voice’ in 7; *psukhê* in 8) towards the landmark (*ôta* ‘ears’ in 7, *sôma* in 8) and the moving entity is the *lógos* of the speaker:

(7) *ho lógos te kai ho phthóngos parà tou légontos en-dúetai*  
 the *lógos* and the voice of the speaker in-go:PRS.3SG  
*eis tà ôta.* (Pl. Menex. 235bc)  
 into the ears.  
 ‘The words and the voice of the speaker enter the ears’.

(8) *hōsper endekhómenon katà tous Puthagorikoūs múthous tèn tukhoûsan psukhèn*  
*eis tò tukhòn en-dúesthai sôma.* (Arist. An. 407b21–3)  
 into any in-go:INF body:ACC.N  
 ‘As though it were possible, as in the Pythagorean stories, that any soul could enter any body’.

In (7) and (8) the landmark is a container with an inside and an outside region. The motion event has an inward direction. In (9), the moving entity tracing the trajectory towards this region is Agamemnon’s body.

(9) *én-dune perì stēthessi khitōna.* (Hom. Il. 10.21)  
 in-go:IPFV.3SG around breast:DAT.PL chiton:ACC.SG  
 ‘HE PUT ON A CHITON’.

*Endúō* can be used both for the action of dressing in garments and in a warrior’s armour.

In (10) and (11) *thōrax* ‘cuirass’ and *knēmís* ‘greave’ illustrate the metonymic relation (motivated by virtue of their placement in contiguity) to the homonymous part of a warrior’s body they cover and protect. The cuirass often came with a linen

lining (*linothōrax*). The cuirass was considered *énduma* ‘dress’ by the ancient Greeks. Example (12) is one of the earliest attestations of the verb *endúō*.

- (10) *tòn linoûn thōraka, hōs epikhōrios ên autoîs, en-dúesthai.*  
 (Xen. Cyr. 6.4.2.3)  
 ‘the linen cuirass which local was they:DAT.PL in-go:INF.MID.PRS  
 ‘To wear the linen cuirass, which was particular to them’.

- (11) *ho dè thōraka en-dúetai, ho dè knēmīdas ê krános*  
 one thorax:ACC in-go:PRS.3SG another greaves or helmet  
*ê zōstēra peritithetai.* (Arist. [Mund.] 339b.5)  
 or belt around-put:PRS.3SG  
 ‘Another dresses in a thorax, another one puts on greaves or a helmet or a belt’.

- (12) *en teúkhessin édunon.* (Hom. Il. 23.132)  
 in armor:PL.DAT GO:PFV.PL  
 ‘They put on their armor, lit. they got into their armor’.

THE VERB *dunō* often takes an expression of direction in the accusative or the preposition *eis* followed by the accusative. In (13), as Luraghi (2003: 84) notes, the dative profiling the end of the movement “seems particularly appropriate for describing the position of the bodies in the armors.”

When prefixed by *eis-* (which corresponds to English *to* or *into*) *dúō* emphasizes the endpoint of the motion expression by prepositional phrase *eis* + accusative, and does not support a body landmark:<sup>17</sup>

- (13) *eis-dūs (toikhōrúkhos) gár pote . . . eis tèn oikían.* (Ar. Plut. 205)  
 into-go.PTCP into the house  
 ‘When (a burglar) broke into the house’.

Stripping off (*ekdúō*, *apekdúō*, *apodúō*) and dressing (*endúō*) differ in terms of directional information and viewpoint. Consider the following instantiations of the EXIT schema: in (14) through (17), the body is conceptualized as ‘exiting’ the the garment, which is conceptualized as an enclosure containing the body. In (18) the garment (*heímata*) is the source point, or point of departure for the body which moves away from the garment.

<sup>17</sup> Another difference between *eis-* and *en-* is that the former supports actual motion, whereas the latter supports fictive motion, which is static and with no inherent directionality, but with the conception of actual spatial motion applied to it. On fictive versus actual motion see Langacker, 2008: 529.

- (14) *malakòn d' ék-dune khitôna.* (Hom. *Od.* 1.437)  
 soft outside of-go:IPFV.3SG chiton:ACC.SG  
 'And he took off his soft *chiton*'.
- (15) *ek-dùs khlaînan.* (Hom. *Od.* 14.460)  
 out of-go:PTCP chlaina:ACC.SG  
 'After taking off the *chlaina*'.
- (16) *tèn exômíd' ek-duómeth'.* (Ar. *Lys.* 662)  
 the exomis:ACC.SG out of-go:IMP.1PL  
 'Let us cast off the one-shoulder garment'.
- (17) *e-gdûsai me hò periebeblémên himátion.* (P. Lille 242 = P. Enteux. 83 [221 BCE])  
 out of-strip:PFV.SG me which around-put:IPFV.SG himation  
 'Stripped off me the *himation* I had wrapped myself with'.
- (18) *egó se labôn apò mèn phíla heímata*  
 I you:ACC take:PTCP away from your own clothes:ACC.N.PL  
*dúsō.* (Hom. *Il.* 2.261–62)  
 go:FUT.1SG  
 'I will strip you of your own clothes'.

### 7.3.2 'Around' vs. 'on either side of': *peri-* and *amphi-* compounds

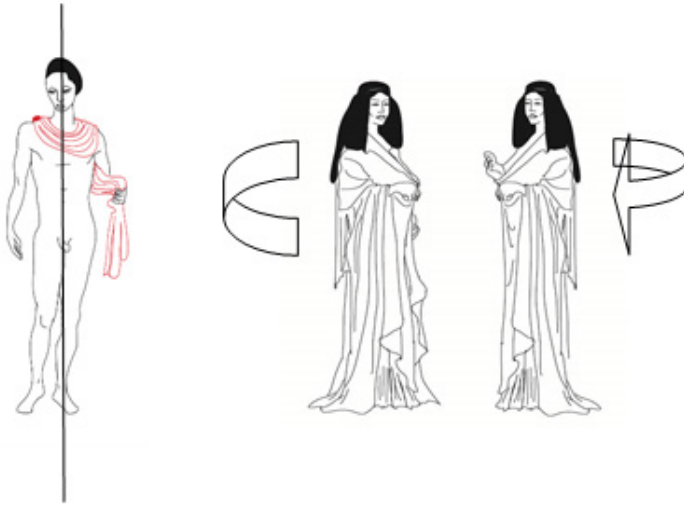
Clothes are not solid and straight containers. Ancient Greek dress consisted of multiple layers of loose fitting cloth that was draped round the body. The shoulder area was focal in order to keep the cloth in place. AROUNDNESS configures the area round the body without distinguishing between the right and left poles, even though the right side was clearly more marked than the left one: outer clothes were usually worn fixed with a brooch or pin on the right shoulder, so as to permit free use of the right hand.<sup>18</sup>

*Amphi-* and *peri-* imply a source, and a continuous or discontinuous path. *Amphi-* and *peri-* are equivalent to 'around'. By its etymology 'around' evokes primarily a circular path. *Amphi-* and *peri-* can support an arc trajectory and contact between LM and TR. The main preposition in Greek referring to a region around an object is

<sup>18</sup> The prepositional compound *exómís* (*ek* + *ómos* 'shoulder') denotes a garment worn mostly by people who worked manually and slaves. It covered only the left shoulder, was fastened over it by means of a brooch, while leaving the right side of the body bare. On the *exomis* in Call. 192, see Papadopoulou, 2016b: 217–221.

*peri*, equivalent to the English *about*. It denotes ‘along the perimeter of’, also more generically “everywhere or somewhere within the region around” (Bortone, 2010: 166). By virtue of its etymology, *amphi-* is identified with embodied duality, i.e., the duality of organs in the human body (two eyes, ears, nostrils, lungs etc.) and the ‘either-or’ or ‘both’ metaphorical extension.<sup>19</sup>

A prototypical scene or proto-scene is a distinct and discrete highly abstracted spatio-geometric mental representation. It differs from an image schema in that the latter is an iconic mental representation across many similar or recurring spatial scenes.<sup>20</sup> Figure 9 illustrates the proto-scenes of *amphi-* and *peri-* compounds.



**Figure 9:** *Amphi-* ‘on either side of’ / ‘in between’ vs. *peri-* ‘around’.

On the left of Figure 9, the garment attached hangs loosely from the shoulders down to the side of the body. The left shoulder is covered, the right shoulder is free and thus affords full use of the right hand. The protoscene of *amphi-* compounds supports a discontinuous trajectory profiling the sides of the body. On the right, the outer garment hangs down from the shoulders and covers the body all round. The protoscene of *peri-* compounds supports a continuous trajectory around the landmark.

<sup>19</sup> According to Beekes, 1988: 94, “this old adverb is originally a word for ‘face’”.

<sup>20</sup> Compare this with the diagrammatic representation of the proto-scenes of *amphi* and *peri* in Bortone, 2010: 161. See definition of prototypical scene in Evans & Green, 2006: 346.





Terracotta statuette of a standing female figure recalling the so-called Tanagraian women. Dressed in a chiton and himation. c. 200 B.C.E. Object number: 56.AD.11. Dimensions: H. 26.7 cm (10 1/2 in.). Credit line: Getty J. Paul. 1965 *The Joys of Collecting*. New York: Hawthorn Books, Inc., p. 66.



Statuette of a Standing Woman. A himation draping over her left shoulder envelops her body. From Canosa, South Italy, 325 - 200 B.C.E. Object number: 81.AD.158 The J.P. Getty Museum. Dimensions: 23.5 × 7.3 cm (9 1/4 × 2 7/8 in.). Credit line: Gift of Robert Blaugrund, The J. P. Getty Museum

*Amphékhō* (< *amphi-* + *ékh-ō/-omai* = ‘around’ + ‘have’) denotes ‘to wear’ and is complemented by a noun profiling the torso or the head:

(19) *peri-elíxanta hò amp-ékhetai perì tèn kheîra*. (Xen. Cyn. 6.175)  
all around-wrap:PTCP which on-either-side-have:IND.SG all around the arm  
‘Wrapping the outer garment he was wearing round his arm’.

(20) *tò tês gunaikòs d’ amp-ékhei khitónion*; (Ar. Eccl. 375)  
the woman.GEN.SG on-either-side-have:3SG chitonion  
‘Are you wearing your wife’s chitonion?’

(21) *kunê prósōpa Thessalís nin ampékhei*. (Soph. OC. 313–314)  
hat Thessalian around-have:3SG  
‘She wears a Thessalian hat on her head’.

*Amphiénnumi* (< *amphi* + *hennumi* = ‘around’ + ‘dress’), as opposed to the simple form *hénnumi*, in the following examples refers to wrapping the body with wrap-around type of dress. An additional layer of cloth was often taken to be a sign of riches.

(22) *aphiénmusthai hóste éxō mèn mēdèn mállon Kallíou toutou tou plousiôtátou rhigouîn*. (Xen. Sym. 4.37)  
‘Have on enough clothes so that when I am out I do not tremble from the cold any more than my very wealthy friend here, Callias’.

(23) *out’ amphiénnuntai pleiō è dúnantai phérein*. (Xen. Cyr. 8.2.21.8)  
‘They do not put on more clothes that they can carry’.

The compound nouns *ampekhónē*, *ampekhónion*, and *ampékhonon*, which appear in temple inventories listing the dedicatory garments to the gods denote different types of outer garments (e.g., IG II<sup>2</sup> 1514, mid. 4th c. BCE from Attica). They are also used with the general meaning of ‘garment’:

(24) *all’ou mèn thruptikós ge oudè alazonikòs èn out’ ampekhónēi, outh’ hupodései oute tēi állēi diaitēi*. (Xen. Mem. 1.2.5.1)  
‘He (Socrates) was not self-indulgent and pretentiousness in the fashion of clothes or shoes or in the rest of his ways’.

(25) *kai kourás ge kai ampekhónas kai hupodéseis kai hólon tòn tou sómatos skhēmatismon*. (Pl. Symp. 4.25b4)<sup>21</sup>

<sup>21</sup> On the dress-related sense of schema and denominal verb *skhēmatízō* see Papadopoulou, 2016a.

‘The haircut and the garment and the footwear and the overall external appearance’.

Luraghi (2003: 256) explains that very early in its history *amphi-* extended its meaning from ‘either side’ or ‘both sides’ to ‘all sides’. In this respect, the spatial construal of *amphi-* compounds overlaps with that of *peri-* compounds. *Perí* unlike *amphí* denotes the completion of path at the starting point and does not necessitate a circular path.<sup>22</sup> Its proto-scene supports a non-circular ‘perimeter’. In *Od.* 2.93–95 Penelope’s web (*histós*) is described as *leptós* (fine) and *perímetros* (with a long perimeter). Both are signs of the high quality of the woven textile. Even though weaving to shape was also possible, woven textiles had rectangular selvages (Granger-Taylor, 1982). *Perímetros* and *perímetron* denote ‘(any) (fitting) outline’, e.g., the perimeter of the earth (Ptol. *Geog.* 1.2.7.15): *Peri-* compounds profile a unidirectional path around a bounded landmark.<sup>23</sup> *Amphiénnumi* and *amphibállō* can support uniplex and multiplex trajectories: there is no difference in conceptualization between (26), (27), (28), and (29).

(26) *amphì dé min phâros kalòn bálon ēdē khitōna.* (Hom. *Il.* 24.588)  
 on either side overgarment nice put and chiton  
 ‘He put around him a nice mantle and chiton’.

(27) *amphì dè heímata hēssan epérata.* (Hom. *Od.* 8.366)  
 ‘And they clothed her in lovely garments’.

(28) *heímata d’ amphiésaimi posín th’ hupodémata doiēn.* (Hom. *Od.* 18.361)  
 ‘I would clothe you with garments and give you sandals to wear’.

(29) *perì d’ ámbrota heímata hēsson.* (Hom. *Il.* 16.67)  
 ‘And clothed him with immortal garb’.

Constructions with *amphibállō* profile the clothed body only when there is explicit reference to clothes and thus the action denotes ‘to put on *x*’ (where *x* is an object denoting ‘clothes’ or a type of dress), as in examples (30) and (31). In (32) the compound *amphibállō* profiles an area on either side of Jocasta’s breast:

<sup>22</sup> *Amphí* was no longer used at the time of the New Testament. It survives in Modern Greek as the first constituent in compounds. *Perí* survives in the diachrony of Greek and is used as a free morpheme and in compounds in the learned variety of MG.

<sup>23</sup> The first constituent in *peri-* compounds does not necessarily imply a round trajectory as straightforwardly as in the English expression all round. The path can be semantically determined by the second constituent, e.g., as in *perístulos*, *perístulon* denoting a colonnade.

(30) *dòs dè rhákos amphi-balésthai.* (*Od.* 6.178)

give rag:SG on either side-put.INF

‘Give me rags to put around me’.

(31) *phárea tád’ amphi-bállomen.* (*Eur. El.* 1230)

robes these on either side-put

‘I am putting on these robes’.

(32) *amphíballo ma-/ stòn olénaisi matéros.* (*Eur. Phoen.* 306–307)

‘Put the hands on either side of your mother’s breast’.

The compound noun *períblēma* (< *peri* + *b(a)l-* = ‘all around’ + ‘put’) reifies the process of wrapping *x* round *y*, where *x* is cloth and *y* is a body part. It appears in inscriptions (Samos 133 IG XII, 6 *períblēma línou rhákinon*) and papyri (PCairo Zen. 1.59092 *períblēma linoûn pepuluménon* ‘one linen wrap’). Persian luxury garments (*períblēmata*) are mentioned in Democr. *Eph.* 1. *Peribólaion* is a multipurpose cloth used as cover for the dead (*E. HF* 549), for the feet (*Plut. Arat.* 43), and for the bed (*Gal.* 18.1.103).

(33) *Tarantînon peribólaion.* (ID 104(24bis) Delos (IG XI and ID)

‘A Tarantine wrap’.

*Períblēmata*, the plural form of the garb term *períblēma*, denotes a festival of Lyttos, a polis in Crete, which may also have celebrated rites of passages. Details concerning these rituals were celebrated are now known. The term packs the concepts of what must have been the central ritual, which was connected to a garment, with ancient Greek conceptualizations of space, time, and ritual. Its conceptualization can be compared to those of *endumátia* (a plural diminutive of *énduma* denotes a festival taking place in Argos and involving the investiture of Hera)<sup>24</sup> and *ekdúsia*, a festival taking place in Phaistos, Crete. Those who took part were of an age-group *hoi ekduómēnoi* (those who were stripped). The *ekduómēnoi* had to take off an assumed adolescent or female garb. The festival celebrated the rite of passage to manhood from adolescence. All three prepositional compound nouns blend the spatiality of clothes with a spatio-temporal event of ritualistic significance.

<sup>24</sup> Scheid & Svenbro, 1995: 31; Wilamowitz’s view that this festival could be identified with the Bath of Pallas is refuted by McKay, 1962: 81–82.

### 7.3.3 Dress and the vertical axis

The VERTICALITY schema distinguishes between high(er)-regions and low(er)-regions. *Ana-* implies a source in a region lower than the goal, hence an upward path, whereas *epi-* implies a downward motion, and additional surface contact at one or more points. The vertical axis enables a binary trajector up or down. Eye-level and frontness construct a vertical axis along which headwear is conceptualized as placed ‘up’, e.g., *anadé(n)ō* ‘fasten’, and footwear as placed ‘down’ or ‘under’ (e.g. *hupodé(n)ō*, *hupodēma*):

- (34) *khitônās te linoûs epaúsanto phoroûntes kai khrusôn tettigôn enérsei krōbúlon anadoúmenoi tōn en tēi kephalēi trikhôn* (Thuc. 1.6.3)  
 ‘(The Athenians) stopped wearing linen chitons and binding their hair up in a *krobylos* with gold cicadas’.

An example of a top-down construal profiling downward motion is the compound verb *hupodénō* ‘to wear shoes, lit. to tie under’. It is not to be confused with *hupóduma*, lit. ‘the cloth worn under another garment’ (e.g., IG V,1 1390 from Messenia, of 92/ 91 BCE). Yet its construal as a synonym of *embás* is possible as is shown in (35) (see Vaio, 1971):

- (35) BDELYCLEON *áge nun, hupo-lúou tās katarátous embádas,*  
 under-untie the wretched shoes  
*tasdi d’ anúsas hupó-duthi tās Lakōnikás.*  
 under-go the Laconian  
 PHILOCLEON *egò gār àn tlaíēn hupo-dúsasthaí pote*  
 under-go  
*ekhthrōn par’ andrōn dusmenē kattúmata;* (Ar. *Vesp.* 1157–1160)  
 ‘BDELYCLEON Take off then these wretched slippers  
 and put on these here quick, the Laconian ones.  
 PHILOCLEON I wouldn’t bear it,  
 if I ever had to wear shoes made by our enemies’.

Like *epibállō* ‘to put on an outer garment’ and *epiblēma* ‘outer garment’, *hupodúō* ‘wear an undergarment’ and *hupóduma* ‘wear an undergarment’ conceptualize an intrinsic vertical orientation of the body in space.

The prepositional prefixes of the garb vocabulary canvassed here are translated into English equivalents. Table 2 compares and contrasts the semantic coverage of English and Greek prepositions specifying locations whose LM lies along the horizontal axis and whose trajector lies along the vertical axis. The thick line visually marks ground zero. The higher regions are occupied by ABOVE (*ana-*) and OVER (*epi-*), while the lower regions are represented by a single region represented by *hupo-*,

which merges the regions occupied by UNDER and BELOW in English. The relative spatial locations of ABOVE or OVER coincides with that of *ana-* (literally ‘up and over’) and of *epi-* (literally ‘down(ward) on’).

**Table 2:** Spatial regions along the vertical axis in English and ancient Greek (adapted from Evans, 2007: 49).

ABOVE	<i>ana-</i>
OVER	<i>epi-</i>
UNDER	<i>hupo-</i>
BELOW	

The construal of the human body along three axes of human anatomy consists in front-back, right-left, up-down localizations. *Epi-* compounds construe contact of the trajector to the outer-upper surface of the landmark (moving), profiling of source, e.g., *epibállō*; contact of the trajector to the outer-upper surface of the landmark (moving), profiling of destination, e.g., *anabállō*; the front back axis is activated in *ana-* compounds, e.g., *anabolé* (that which is thrown up and over the shoulder, mantle), *anaboládion* ‘mantle’.

The compound verb *anabállō* profiles the upward motion along the top/down axis. Its senses include the spatial sense of dress, the spatial non-dress related sense.<sup>25</sup> *Anabállō* (*anō* + *bal-* = ‘upwards’ + ‘put’) means ‘put on’ and *anabolé* denotes a type of outer garment.<sup>26</sup>

(36) *tēndī dē khlaīnan anabaloū*. (Ar. *Vesp.* 1131–1132)

‘And throw on you this *chlaina*’.

(37) *brakheías anabolàs phoroûsin*. (Pl. *Prot.* 343)

‘They wear short throws’.

(38) *epibaloûsa tougkuklon*. (Ar. *Eccl.* 537)

‘As soon as you put on the *enkyklon*’.

(39) *dià tí . . . oukh hoi tà pleîsta tôn himatiōn epi-ballómenoi hidroûsin*; (Arist. [Pr.] 870b5)

‘Why . . . do the people who put the most clothes on not sweat the most?’

<sup>25</sup> Cf. the metaphorical extension (SPACE → TIME) ‘to put off, postpone’ of *anabállō* and *anabolé* ‘postponement’ (Thuc. 2.42.4).

<sup>26</sup> Cf. the dress term *abóllo* etymologically derived from the Greek < *ambolé* < *anabolé*. See Liddell & Scott, 1996 s.v. and Lewis & Short, 1996 s.v. *abolla*. The English equivalent for *anabolé* is ‘throw’ (a kind of outer garment).

The compound dress term *epíblēma*, which appears in temple inventories listing the dedicatory garments to the god (e.g., IG<sup>3</sup> 403 line 61, 416/5 BCE from Attica), means ‘outer garment’.

#### 7.4 The conceptual metaphor ‘DRESS(ING) IS (BEING IN/GOING IN/COMING OUT OF) A LOCATION’

As shown in the previous sections, space and the vocabulary of dressing examined here are inextricably linked. In (40), the exit from an enclosed area is conceptualized by means of the compound *ekdúo* + genitive of a noun denoting a location. In (41), *ekdúo* + accusative of the garment name construes undressing in precisely the same locational terms.

(40) *ek-dùs*                      *megároio*. (Hom. *Od.* 22.334)  
 out of-go:PTCP      great hall:DAT.SG  
 ‘Exit the great hall’.

(41) *ek-dùs*                      *khlaînan*. (Hom. *Od.* 14.460)  
 out of-go:PTCP      chlaina:ACC.SG

In (42), ‘clothes’ and ‘walls’ are conceived as external boundaries containing the body of basically equal status. According to Plutarch, the inquisitive person can not only strip others of their himatia and chitons, but can also remove the walls of the buildings they live in. Both are imagined not only as containing but also as blocking the eye in such a way that the contents of the bounded area remain invisible to those outside:

(42) *ho dè poluprágmon ou tà himátia tôn pélas oudè toùs khitônas, allà toùs toîkhous apamphiénnusi*. (Plut. *Mor.* 516F8)  
 ‘Not only does the busybody strip off the himatia and chitons of those near, but also their very walls’.

The following examples will further show that ancient Greek construed dress as a locating device by virtue of the following conceptual metaphors:

‘DRESS IS A LOCATION IN SPACE’  
 ‘DRESSING IS FIXING A LOCATION IN SPACE’

These are instantiations of ancient Greek conceptualizations of dressing and clothing as a space which contained, enclosed and surrounded the body in the same way as other physical boundaries such as the walls of the *oikos* or of the *polis*. The morpho-semantic symmetry between the masculine and neuter compound nouns

*endutós* and *endutón* denoting 'garment' (literally 'that which *x* can be inside of')<sup>27</sup> and *ádatos* ~ *ádu-ton*, *ábatos* ~ *ábaton* 'not to be entered or accessed', 'off limits', 'innermost sanctuary', denoting a space that is not to be entered, is a case in point. The asymmetry in stress is a minor morpho-phonological variation, which, however, may be considered as marking the semantic difference between an actual location and the clothing item that is metaphorically construed as a location.

Table 3:

DRESS-RELATED MEANING	SPATIAL MEANING	
<i>en-du-</i>	<i>a-du-</i>	<i>a-ba-</i>
<i>endutós</i>	<i>ádatos</i>	<i>ábatos</i>
<i>endutón</i>	<i>ádu-ton</i>	<i>ábaton</i>

Further evidence is provided by the dress and non-dress related senses of the following members of the dressing vocabulary cluster: *peribolē*, *períblēma*, *peribállō*, *amphíblēstron*, *anabolē*, *peribolē* and *períblēma* denote both an enclosure and a garment (cf. IG XII.6 line 18, 346/5 BCE from Samos). They support these mappings of the space enveloping the body which is defined as enclosed by a physical boundary imagined as consisting in a variety of materials, such as woven cloth or stone.

(43) *peribolà líthōn kai hierōn Poseidānos*. (IG IX 1, 690, Kerkyra, 182 BCE)  
 'Stone enclosure and sanctuary of Poseidon'

*Peribállō* (< *peri* 'around' + *ballō* 'put', i.e. 'to put on a garment') conveys dress-related meanings as well as non-dress-related meanings:

(44) *kai tines kai teikhē perieballonto hōs plousiōteroi heautōn gignómenoi*. (Thuc. 1.8.3.4)  
 'Some surrounded themselves with walls as they had now become richer'.

(45) *hótan dè kósmon peribálēsthe sómasin, / hēxō pròs humàs*. (Eur. *Heracl.* 334–335)  
 'As soon as you put on clothes, I will come back to you'.

(46) *doraísi thērōn sōma peribalōn emòn*. (Eur. *Cyc.* 330)  
 'When I put wild beasts' skins around my body'.

<sup>27</sup> Aesch. *Eum.* 1029 *phoinikobáptois endutoís esthémasi* 'in purple-dyed garments'.



In (47), the body is spatially construed as surrounded by walls that form an external boundary. In (48) the rags of the shipwrecked are construed as hanging from either side of the body:

(47) *amphíblēstra gàr toíkhōn horḗs/ hupsēlá.* (Eur. *IA* 97)

‘You see that the surrounding walls are high’.

(48) *kai mēn tād’ amphíblēstra sómatos rhákē  
xummarturéseí nautikōn ereipíōn.* (Eur. *Hel.* 1079)

‘These rags hanging from either side of my body  
will surely tell you that I have been in a shipwreck’.

The compound verb *anabállō* and its derivatives can have a spatial non-dress related sense and a spatial dress related sense describing the upward motion of dress along the vertical axis. Compare

(49) *ek dè toû orúgmatos anébalon anti teíkhous tòn khoûn.* (Thuc. 4.90)

‘From the trench they piled up the earth in lieu of walls’.

and

(50) *anabolè*                      *khómatos.* (BGU. 2.362, 215–216 C.E)

upward-put:F.SG      of earth

‘Mound of earth’.

(51) *anabolè diōrúgōn.* (BGU 2.513, 178 C.E)

‘Mound of earth due to canal digging’.

(52) *kai gàr táphros ên perì autò eureía anabeblēménē kai skólopes epì tês anabolês.*  
(Xen. *An.* 5.2.5.4)

‘There was a trench around it, wide, with mounds of earth, and palisades upon  
the mounds’

where *anabolè* means ‘mound of earth that has been piled up’, with the quite different sense of

(53) *toút’ anabaleîs tò Krētikón.* (Eup. 311)

‘You will put on this Cretan cloak’.

## 7.5 Conclusion: Towards a spatial grammar of the clothed body

Taking Bierwisch's (1997) question "How much space gets into language?" as a starting point, this paper looked at the locative prepositions underpinning much of ancient Greek's vocabulary of 'dressing' in order to demonstrate that this vocabulary reflects the bodily experience of being dressed as a spatially defined one. The linguistic evidence provided has shown a) that the language of space and the language of dress intersect in the ancient Greek garb vocabulary cluster of locative prepositions and b) that in the Greek mindset dress provides a mode of fixed spatial references, i.e., that the spatial construals pertaining to dress in ancient Greek contain mappings of clothes as containers surrounding the body fully or partially, specifying or underspecifying contact and/or support. Close examination of the dress-related vocabulary cluster showed that Greek conceptualizes the acts of dressing the body spatially mainly as a) containment or entry within a bounded area (by means of *en-* compounds), b) exit by means of *ek-* and *apo-* compounds), c) aroundness (by means of *amphi-* and *peri-* compounds), d) contact with supporting surface (*epi-* compounds), and e) location up or down on the vertical axis (*epi-*, *ana-*, *hupo-* compounds).

Ancient Greek conceptualization of clothing as a locating device and a receptacle, an entity that contains or surrounds the body, was arguably motivated both by the way clothes were 'constructed' and made, and by the experience of dressing in these clothes: the prototypical conceptualization of the act of dressing in the Greek culture, which was to put on an inner garment through an opening for the head, and to drape cloth around the body as an outer garment.<sup>28</sup> Ancient Greek clothes did not outline and reshape the body the way modern Western clothing does. Ancient Greek clothing was put on over the head or placed around the body. It consisted of lengths of handwoven draped fabric which wrapped the body and was fastened by pins, thus hanging from the shoulders down. The embodied language of dress revealed the presence of image schemas conceptualizing the cloth as an entity containing, bounding, surrounding, not defining the contour of the body. It is no news to historians of ancient Greek dress that Greek clothing consisted of lengths of fabric, mostly wool or linen, usually rectangular in shape (Cleland, Davies & Llewellyn, 2007: 39).<sup>29</sup> Outfits were not tight-fitting, so as to render the contour of the body. Inner garments were shaped, folded and altered by belting at the waist or chest. The first layer of garments, the peplos and the chiton, were termed *endúmata*. Outer garments, i.e., *periblēmata* or *epiblēmata* came in a variety of shapes and lengths and were fixed by brooches for activities that required free use of the arms (Lee, 2015: 97). The most common styles of outer outfits were: the simple wrap-around type of garment, the open-front type of garment,

<sup>28</sup> Cleland, Davies & Llewellyn-Jones, 2007: 36 s.v. 'cloaks'.

<sup>29</sup> Cleland, Davies & Llewellyn-Jones, 2007: 39, s.v. 'construction of clothes'; for a succinct introduction to studies of ancient Greek dress, see Lee, 2015: 10–19.

the fixed-by-means-of-a-brooch type of garment. The fabric was placed around the body, wrapping or surrounding it. It was fixed by brooches, not tied. It was draped, not tailored and required little or no stitching. While ancient Greek dress consisted in layering pieces of cloth one on top of the other (e.g., a himation over a chiton), standard footwear consisted in a piece of leather secured to the sole of the feet with laces which pulled the top together when tied.

This paper has shown what aspects of the Greek language about clothes map dressing as a sub-category of spatial entities, that can surround the body and that mark a visible boundary that demarcates an area enclosed by it. Due to their spatial construal, afforded by the locative prefixes, the Greek garment vocabulary construed dressing as situating the body as a spatial entity. Clothing the body is a universally human characteristic, but there is cultural and linguistic variation in experiencing and expressing it, as Melissa Bowerman (1989) was the first to note. Some languages distinguish between containment and surface contact, others between support and tight and loose fit. English uses *put on* for clothing items (e.g., a hat, a shirt, a coat, shoes); Korean and Estonian include the body part concerned in words for donning clothes.<sup>30</sup> The use of prepositions in order to conceptualize dress is not specific to Greek: e.g., English *put on* and Danish *tager på* also construe wearing through prepositional locative constructions. English conceptualizes dress as containment, as is evidenced by the construction “to dress in *x*”, where *x* denotes a type of garment. English, too, conceptualizes the body as a surface on which the fabric can be placed, i.e., ‘to put *x* on’.

Whereas lexicographic categorization of linguistic items often implies a box or file-like storage, cognitive semantic analysis can help tease apart elements that would otherwise go unnoticed. Embodied cognition and image-schema theory can help explain how the Greek language conveyed meaning through situated body practices. What the analysis of the ancient Greek garment vocabulary cluster has shown is that spatial location, evoked through the prepositional affixes, was “good to think with”: it illustrates, in the most immediate way, the extricate connections and analogies between corporeal experience, image-schematic structuring of interactions between self and world, linguistic constructions and cognitive patterns. The extent to which the speakers using these prepositional constructions were aware of the spatial meaning of the components is quite difficult to determine. One can assume that their ability to analyze these constructions into the compositionality of their semantic components was on a par with that of any natural language speaker of any linguistic community.

Dress is a culturally defined and culture-specific element and one of the major “things” the ancient Greeks got entangled with. This investigation of the Greek garment vocabulary cluster demonstrated that entanglement with the materiality of dress shaped the spatial mindset of the Greeks, enriched their concepts of space,

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<sup>30</sup> Bowerman, 1996: 166–167; Bittner & Ruhlig, 2013: 24.

and stocked their inventory of cognitive metaphorical mappings. In the mind of the ancient Greeks, lived space was a set of physical boundaries. Ancient Greek dress was conceptualized as a "thing-in-place", marginally differing from any other space-occupying material entity that was conceptualized as containing, or surrounding the body. Clothing the body was understood as assigning place within lived space. The Greek view of dress as a location is perfectly compatible with the ancient commonsensical view of space as finite, bounded, and segmented into performatively and socially experienced – and thus, meaningful – chunks.<sup>31</sup> Space and place were experienced as relativistic but not discontinuous, and were conceptualized by means of visible boundaries. Clothes were conceptualized as framing the space around human bodies, thus capturing the territoriality of the human body.

Contemporary approaches to ancient Greek dress bring into relief the inherent difficulty to substantiate definite pairings between iconography and garment terminology and typology. The problem is exacerbated by the fact that no complete garments, only small, often mineralized, fragments, survive. Research has to rely primarily on the rich textual and iconographical evidence, which on occasion may reflect artistic or poetic license (Lee, 2015: 89). What is more, the iconography of divine, heroic and other types of nudity, placed this concept at the centre of modern concepts about dress in the ancient Greek world thus creating a somewhat erroneous picture about aspects of dress in everyday life (Bonfante, 1989; Gherchanoc, 2008; Lee, 2015: 172–197). Nudity was, of course, an integral part of male social identity, but, most importantly, it was the clothing that defined the location of the body within Greek social and cultural space.

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<sup>31</sup> Luraghi, 2004: 8, "Cities are consistently conceived as containers and occur with all three prepositions *en*, *ek*, and *eis*"; cf. Cornford, 1976.

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Greg Membrez

## 8 Metaphor by any other name. A cognitive linguistic reassessment of Aristotle's theory of metaphor

*pántes gàr hoi metaphérontes katá tina homoiótēta metaphérousin*  
'For everyone who uses words metaphorically does so based on some sort of likeness'.  
– Arist. *Top.* 140a11<sup>32</sup>

**Abstract:** Aristotle, according to the dominant view in the field of cognitive linguistics, is the father of an old, defunct and now refuted “classical” theory of metaphor based on literal similarity. But is the theory of metaphor put forward by Aristotle really so antithetical to the contemporary theory of metaphor in cognitive linguistics? Scholars in and out of this field have begun to question this depiction. In this paper, I take advantage of the very tools afforded by cognitive linguistics to reinterpret Aristotle's theory of metaphor. I argue that Aristotle has been misrepresented and suggest an alternate view which will be of interest to philosophers, philologists and cognitive linguists alike.

**Keywords:** Aristotle, *metaphorá*, metaphor, conceptual metaphor, cognitive linguistics, embodiment, construction, source frame, target frame, *ónoma*

### 8.1 Introduction

“Aristotle, the father of the traditional theory, was a literalist” who “was mistaken about metaphorical language being only poetic and rhetorical in nature and not part of ordinary everyday language”. With these words, Lakoff & Johnson (1999), in staking out their contemporary theory of metaphor, have pigeon-holed Aristotle. This statement sums up the now-standard approach to Aristotle among cognitive linguists, setting him up as a sort of strawman representative of the “classical” theory – that metaphors are predicated on literal similarities between tenor and vehicle – against which the embodied approach is then positioned. In fact, the cognitive psychologist Eleanor Rosch, whose work has been foundational for cognitive linguistics, declared that:

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32 All translations, unless otherwise noted, are the author's own.



Prior to my work, categories and concepts were simply assumed, from philosophy, to be something explicit and formal, that is, to be arbitrary logical sets with defining features and clear-cut boundaries. This is what is now called the classical view of categories, which comes down from Aristotle through Locke and the British empiricists (Rosch, 1999).<sup>33</sup>

The Lakovian view has become almost reflexive, and it is probably fair to say that today a majority of cognitive linguists believe that since the mid-1970s the “classical” Aristotelian theory has been proven wrong – and that a window has opened for an empirically sound theory of categorization and metaphor.<sup>34</sup> These conclusions are hardly surprising, inasmuch as they reflect the way Aristotelian scholarship has understood Aristotle’s theory of metaphor even up to the present day. For instance, two recent studies still conclude that Aristotle used metaphor to “uncover similarities between entities in the world” (Marcos, 1997) or to reveal things that “bear some perceptible similarity to one another” (Wood, 2015).

A minority in the cognitive sciences, however, has attempted seriously to reconcile Aristotle’s thinking on such topics as categorization, polysemy, definition and metaphor. As early as 1984, Swiggers (1984) argued that “one must take into account that it was Aristotle’s intention to understand metaphorical communication within its broader cognitive and even ontological context”. More recently, Geeraerts (2006) has suggested that “the views of Aristotle also contain features that correspond rather with a cognitive than with a ‘classical’ approach” (see also Crittenden, 2003; Marcos, 1997; Wood, 2015). The traditional view of Aristotle has even been questioned among classical scholars too. The Aristotelian scholar Debora Modrak (2001) has recognized in her study of Aristotle’s theory of language and meaning that “Under the influence of the much later Cartesian tradition, philosophers have too quickly found in Aristotle notions that are alien to his epistemology”. Nevertheless, such attempts at recuperation among cognitive linguists have neglected to take full advantage of the available theoretical apparatus from cognitive linguistics itself. Instead of merely poking holes in the dominant view of Aristotle as the father of an old and now-defunct system, a more fruitful approach may be to try to appreciate Aristotle’s views of metaphor by using the very tools afforded by cognitive linguistics.

For this reason, by making full use of this theoretical apparatus, I am presenting a reassessment of Aristotle’s views of metaphor which should prove to be useful to philologists, philosophers and cognitive linguists alike by (1) demonstrating the analytic potential of cognitive linguistics for the interpretation of ancient texts; (2)

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<sup>33</sup> Sullivan, 2013 has recently declared, “Aristotle presents metaphor as a linguistic ornamentation akin to the use of foreign words in a text, not as a way of thinking or a cognitive strategy. It is only relatively recently that metaphor has been reinterpreted as primarily a cognitive process that surfaces in language, rather than a rhetorical strategy that exists only at the level of language itself”.

<sup>34</sup> Taylor, 2003 outlines what he calls the “Aristotelian” theory touted as the basis for “mainstream twentieth-century linguistics”.

allowing cognitive linguistics to answer the question of “what” Aristotle represents to it, in its own terms.

## 8.2 The embodied basis of constructions and metaphor

One of the defining terms of this volume is embodiment. Embodiment, the involvement of our human bodies in the physical world, is considered in cognitive linguistics to be the basis of our ability as humans to think (Lakoff & Johnson, 1999). Another is construction, which I take to be equivalent to grammatical construction. According to Lakoff (1987), a construction is understood as “a form-meaning pair (F, M), where F is a set of conditions on syntactic and phonological form and M is a set of conditions on meaning and use”. Constructions are formed at various levels of complexity and abstraction. They range from prefixes and suffixes to complex syntactic constructions such as the passive (Goldberg, 2013). Once learned, a construction (F) when uttered, evokes a meaning (M) in the mind. However, the meaning that is evoked is not singular, but a conceptual complex called a semantic frame. It is within a semantic frame that constructions gain meaning (Goldberg, 2010; Ziem, 2014). There is a similar phenomenon in listening to musical pitches. When one strikes the middle ‘c’ key on the piano, one does not hear a single pitch MIDDLE C, but a series of 16 different pitches, called overtones. MIDDLE C is heard as the dominant pitch within the 16. Just as MIDDLE C only gains recognition within this series of overtones, so also a construction (F) only gains meaning (M) within a semantic frame.

Semantic frames are idealized cognitive models of our embodied involvements, and are individually formed from repeated participation in specific cultural events. For example, the verb *pay*, when uttered, evokes the semantic frame COMMERCIAL TRANSACTION. This event contains a series of participants and objects: buyer, seller, goods, money, and so on. And just as when one strikes the middle ‘c’ key on a piano and hears MIDDLE C as the dominant pitch of the series, so also when one utters (F) *pay*, the meaning (M) PAY becomes salient within the semantic frame COMMERCIAL TRANSACTION.

A third term that plays the pivotal role in this study is metaphor. In cognitive linguistics, there are (at least) two types of metaphor: a conceptual metaphor and an image metaphor. Both types of metaphor take the basic form: ‘TARGET IS SOURCE’. In a conceptual metaphor, semantic frames play an important role in the transference of meaning from the SOURCE to the TARGET, because it is the *inferential structure* of the source frame that is transferred to and gives structure to the target frame.<sup>35</sup> The transfer of inferential structure from the source frame to the target frame is called

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<sup>35</sup> Dancygier & Sweetser, 2014 suggest using the terminology “source frame” and “target frame”, rather than “source domain” and “target domain”.

mapping. Generally, the transference of meaning is from a SOURCE that is concrete and tangible, an experience we share with others, to a TARGET that is abstract, something we understand in terms of our embodied experience of a SOURCE. The mapping is asymmetrical. As Sullivan (2013) puts it, a conceptual metaphor is “a cognitive process that allows one domain of experience, the target domain, to be reasoned about in terms of another, the source domain”. A famous example is ‘ARGUMENT IS WAR’, wherein we view the abstract target, ARGUMENT in *terms of* the semantic frame of the concrete source WAR. As a result, we create constructions like, ‘They shot down all my arguments’, or ‘I defended my argument’,<sup>36</sup> by employing terminology from WAR to shape the way we understand and talk about the event of ARGUING (see Dancygier & Sweetser, 2014). An image metaphor is instead a transference between two domains of sensory experience without necessarily involving a mapping of inferential structure: e.g., *an hourglass figure* or *a sweet voice*.<sup>37</sup>

In this chapter, I interpret the embodied basis of grammatical constructions for an analysis of the semantic frames and metaphors in the ancient Greek of Aristotle. My goal is to invite the re-reading of Aristotle’s texts in order to bring attention to what Aristotle had to say about metaphor. A comparison is helpful in illustrating why this is important. It is physically evident that sites of ancient Greek city-states have been destroyed or covered over by nature or man. With tools of greater precision being developed and used by archaeologists, these ancient sites are being more carefully uncovered, surveyed, analyzed and understood in an effort to *reconstruct* them (Trigger, 1996). Likewise, the thought of Aristotle has been distorted or covered over by anachronisms we inherit from received tradition. A glaring example of an anachronism, one that I take up in detail later in the present study, is that of the literal/metaphorical dichotomy imported into a reading of Aristotle in order to make sense of his theory of metaphor. The usual method is to translate into ancient Greek “literal” and “metaphorical”. This method of “translating into” is a backward and anachronistic approach to the problem and adds to the distorted picture. However, with the advancements in the understanding of human language brought about by cognitive science, more precise tools are at the disposal of the philologist and philosopher for taking on the task of reconstructing the ancient Greek frames and metaphors that founded Aristotle’s theory of metaphor. Thus, instead of putting words into Aristotle’s words, instead of trying to reconcile his view, as I intend to demonstrate, the reader will be in a better position to allow Aristotle to speak.

In what follows, I present a reconstruction of Aristotle’s theory of metaphor as it pertains to everyday (non-poetic) language use and point out what, I argue, has been

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<sup>36</sup> Googling these sentences, or ones like them, will reveal how pervasive this conceptual metaphor is.

<sup>37</sup> The metaphor is not used in a reasoning process. For a recent and comprehensive discussion of metaphor in cognitive linguistics see Dancygier & Sweetser, 2014.

largely misconstrued. Although we lack a treatise in which Aristotle directly discusses metaphor in everyday language, there exist writings outside of *Poetics* and *Rhetoric* in which he uses the term *metaphorá* ‘metaphor’ or its verbal form *metaphéreîn* ‘to transfer’. These texts are useful for gaining a broader understanding of his view of metaphor. The approach I adopt in examining these texts could be compared to the study of how a famous chef uses a cutting knife. Though this chef may not have produced a video that directly demonstrates the use of such a knife, one can systematize her technique by viewing videos wherein she uses a cutting knife in the preparations of various foods. Likewise, I systematize Aristotle’s theory of metaphor for everyday language use based on his use of the term *metaphorá* in such texts.

I begin with his discussion of metaphor in *Poetics* and *Rhetoric* from which I reconstruct the source frame, namely, the transference of physical objects from one location to another, within which the term *metaphorá* gains meaning and examine the inferences which structure the metaphorical use of *metaphorá* in the target frame of *lógos*. From Aristotle’s discussion, in these two texts, it will become clear that the metaphorical use of *metaphorá* is embedded in a larger conceptual metaphor of word use which is based in the intersubjective embodied experience of dwelling in the city-state (*pólis*), and the household (*oikos*). ‘DWELLING IN THE HOUSEHOLD’ is the source frame which Aristotle uses to give structure to the target frame, ‘THE LEXIS OF EVERYDAY LOGOS’. In addition to the term *metaphorá* there are three other terms that are central to this source frame: *kúrion*, *allótrion*, and *oikeíon* (these will be translated in the relevant sections). Aristotle has chosen terms that, as an ensemble, evoke the intersubjective embodied experience of living in a community and family. These terms each specify a certain role played by individuals in a hierarchical organization and are mapped onto and give structure to the three types of word use that, according to Aristotle, occur in the everyday use of language.

The larger conceptual metaphor that I will be arguing for, of which *metaphorá* is only a part, is diagrammed in Figure 1 below. For ease of explanation, I will be using the experience of dwelling in the household as the model. In the diagram, the inferential structure of the source frame ‘DWELLING IN THE HOUSEHOLD’ is shown mapping onto and giving structure to the target frame ‘THE LEXIS OF EVERYDAY LOGOS’. The diagram outlines my argument and can be a useful reference throughout the article. The Greek terms will be fully defined in what follows.

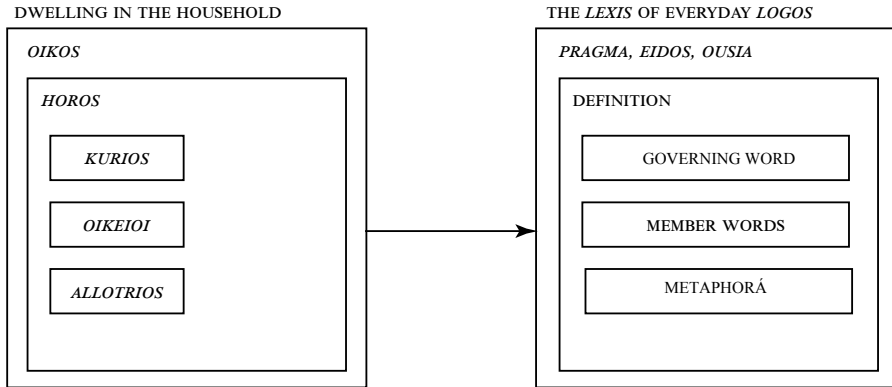


Figure 8.1: Metaphorical mappings in Aristotle's metaphor of *metaphorá*.

I then proceed to Aristotle's usage of the term *metaphorá* in texts *outside of Poetics and Rhetoric*. In this regard, I consider a number of related texts, the most important of which are Aristotle's analysis of power (*dúnamis*) found in the *Metaphysics Delta* 1019a15–1020a6 and *Theta* 1046a4–1046b7, and his discussion of likeness (*homoiotês*) in *Eudemian Ethics* (*EE*, 1222b16–42). Though metaphor itself is not the topic of discussion, the use of this term in these assorted texts clarify where metaphor falls within Aristotle's theory of language. It is in his discussion of the meaning of the term *dúnamis* that it becomes clear what the *kúrion* use of a word means in contrast to its metaphorical use. The discussion in the *Eudemian Ethics* gives us a view of what Aristotle means by *homoiotês* with regard to metaphor.

Based on this analysis, I will demonstrate that: (1) Aristotle recognized metaphor as more than a literary device on the level of language, and not only included it in everyday language use, but also *sanctioned* its use in rhetoric upon the fact that metaphor is a part of everyday language; (2) Aristotle himself used metaphor as a part of his philosophical discourse, and he, in fact, elaborated his description of metaphor in metaphorical terms; (3) there is no literal/metaphorical dichotomy in his theory of metaphor, only the *kúrion*/metaphorical. The *kúrion* use of a word is itself polysemous; (4) he understood likeness in metaphor not only as a correspondence of literal properties but also as a kind of asymmetrical conceptual mapping, akin to conceptual metaphor.

### 8.3 Aristotle's metaphor of *metaphorá*

Of all those animals that form communities, Aristotle says that the human animal (*zôion*) is a political animal (*politikón zôion*) to the greatest degree, because humans alone possess *lógos*, i.e., the ability to deliberate and speak about these deliberations

with oneself and with one another. As opposed to the mere voice with which other political animals, such as bees, signify the mere pleasant and the harmful, outside of any moral implications, it is the *lógos* that makes known to the human community the perception of what is moral. The sharing (*koinōnía*) of these moral precepts through *lógos* creates the household (*oikía*) and the city-state (*pólis*) (Arist. *Pol.* 1253a10ff).

We have in our possession two treatises of Aristotle entitled *Poetics* and *Rhetoric* in which he discusses the different ways this *lógos* is expressed in the form of words (*onómata*). Aristotle used the metaphor of seasoned and unseasoned food to describe the use of words. *Poetics* includes a discussion of what Aristotle called “seasoned *lógos*” (*hēdusménon lógon*). By this he means poetic *lógos*, and he describes it as, “*Lógos* that has rhythm, harmony and melody” (Arist. *Poetics*, 1409b29). *Rhetoric* is a discussion of ‘unseasoned’ (*psilós*) *lógos*, by which he means *lógos* lacking rhythm, harmony and melody (Arist. *Rh.* 1404b32–33). Aristotle used the term *léxis* to signify one's style of expressing *lógos* (Arist. *Poetics* 1450b14).

In both these treatises Aristotle discusses at length how metaphor fits into both the *léxis* of poetry and rhetoric. In *Poetics*, he describes how the poets form and use metaphors, along with many other word uses (Arist. 1457b1ff); in *Rhetoric* he prescribes how a public speaker should form and use metaphors. At the outset of the discussion of metaphor in *Rhetoric*, Aristotle makes a comment worthy of note, in which he identifies what sort of word use he recommends for the *léxis* of rhetoric. This statement clearly answers the question of whether or not Aristotle recognized metaphor as an occurrence in everyday, ordinary language:

*tò dè kúrion kai tò oikeíon kai metaphorà móna khrésima pròs tèn tôn psilôn lógōn léxin. sēmēion d' hōti toutois mónois pántes khrōntai: pántes gār metaphoráis dialégontai kai tois oikeíois kai tois kuríois.* (Arist. *Rh.* 1404b32–34)

‘Only [words that are] *kúrion* and *oikeíon*, and metaphor, are useful for the *léxis* of the unseasoned (*psilós*) *lógos*. The reason for this is that everyone, while in conversation, uses [words that are] *kúria* and *oikeía* and metaphors’.

Contrary to the received tradition that Aristotle only saw metaphor as a poetic and rhetorical device, I argue that he not only places the use of metaphors in the *léxis* of everyday *lógos*, but he also considers the use of metaphor in rhetoric to be derived from and sanctioned by its everyday use. The rhetorician is to mimic the plain, unseasoned (*psilós*) everyday use of *lógos*, by using words that are metaphorical, *kúria* and *oikeía*.

From this text in *Rhetoric*, it becomes clear that Aristotle not only used the form (F) *metaphorá*, but also used the two forms, *kúrion* and *oikeíon*, to define the *léxis* of everyday *lógos*. But what do these forms (F) mean (M)? Or rather, what frame/s do they evoke? Before answering this question, it is necessary to zoom in on the form (F) ‘*metaphorá*’ more closely and study Aristotle’s definition of it.

## 8.4 Aristotle's definition of *metaphorá*

The conceptual foundation i.e. the source frame of Aristotle's definition of metaphor is found in the construction of the Greek form, *metaphorá*. In what follows, it is important to keep in mind that Aristotle's definition of *metaphorá* is itself a metaphor. The form *metaphorá* is a nominalization of the verb form *metaphérein* and evokes the same frame. A nominalized verb represents an activity and all the participants as a snapshot, as opposed to a moving picture. The nominalized form could be a snapshot of the process in whole or at any point of the moving picture. Langacker (1991) calls nominalization the "conceptual reification" of an activity. It is much easier to reconstruct a frame from studying the uses of the verbal form in context. The Greek verb *metaphérein* (to transfer) evokes a frame that will be very familiar to an English speaker. A concrete example is found in Plato's *Timaeus* (*Tim.* 73c). God was interested in constructing a human skeleton. As a part of God's involvement in this endeavor, he formed the bones by transferring (*metaphérein*) a mixture of earth and marrow back and forth between fire and water several times. One engages with one's body in this activity regularly: in a person's effort to create something, she transfers an item from one location and puts it in another.

Aristotle's seemingly simple definition of metaphor in *Poetics* – *metaphorà dé estin onómatos allotríou epiphorà* 'metaphor is the *epiphor* of another (thing)'s name' (1457b6) – exhibits in full the source frame. In the definition, parts of the frame structure are implicit, others explicit. Implicit are the locations of the transfer, that there is an agent that does the transferring and the concern that initiated the transfer. Though these parts of the frame are not explicitly stated as part of the definition, a speaker of the language would understand that location, agent and concern are present in the background. Aristotle does, indeed, mention these in other parts of *Poetics* and *Rhetoric*.<sup>38</sup> What Aristotle does make explicit is the end result of the process. To do this he uses another nominalization, *epiphorá* 'a placing upon', to identify this result. As regards the term *epiphora*, Aristotle had in mind the sense 'assigning of words'. His teacher Plato had used the term *epiphorá* in this very way (Plat. *Stat.* 307b). Aristotle also used the verb form *epiphérein* in this sense: 'to assign a word to' (Arist. *Rh.* 1408a11). Thus, as Aristotle defines it, "metaphor is a (re)-assigning of another (thing)'s name". This process may be simply illustrated like this: suppose one is at a party and everyone has a name tag. The host, concerned with creating a

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<sup>38</sup> Aristotle's further discussion of this definition explicitly mentions the possible types of DOMAIN involved in the transfer: *genos* to *eidos*, *eidos* to *genos*, *eidos* to *eidos* or transference based on analogy (*Po.* 1457b7–9). The concern that initiates the transfer is discussed as *persuasion* in *Rhetoric*, "Let rhetoric be, then, the capacity of considering every possible device of persuasion [éstō dē hē rhētorikē dúnamis perī hékaston toū theōrēsai tō endekhómenon pithanón]" (Arist. *Rh.* 1355b26), and imitation in *Poetics*, "All [forms of poetry] add up to being an imitation [*pásai tugkhánousin oúsai miméseis tò sú-nolon*]" (Arist. *Po.* 1447a15). Of course, the agent in *Poetics* or *Rhetoric* would be the poet or rhetorician.



mood of merriment, takes the name tag off of John, brings it over (*metaphorá*) and places it on (*epiphorá*) Mary.

From this definition of metaphor, two things become evident: (1) as Lloyd (1996) noticed, Aristotle's very use of the term *metaphorá* is itself a metaphor, i.e., a transfer of the term "from its own strict application, which would be to the transport of physical objects". Aristotle transferred the term *metaphorá* from its use in the physical domain to its use in the abstract domain of *lógos*. However, as I attempted to make clear above, it is not just the term *metaphorá* that is transferred, but the entire source frame that the form (F) *metaphorá* evokes; (2) Aristotle identifies another type of word use: the *allótrion*. This yields then, three types of word use that define the *léxis* of everyday *lógos*: the *kúrion*, the *oikeíon* and the *allótrion*. From Aristotle's definition of metaphor, it is clear that an *allótrion* *ónoma* (a word that belongs to another) is a word used metaphorically. The next section will deal specifically with the meaning of *kúrion* and *oikeíon*.

## 8.5 Aristotle's metaphor of the *léxis* of everyday *lógos*

Lloyd (1996) states: "The basic vocabulary for describing what *metaphorá* is is thus full not just of what we might term the 'metaphorical' but of what Aristotle himself treats as *metaphorá*". According to Lloyd, in addition to the term *metaphorá* itself, this "basic vocabulary" includes the adjectives *kúrion*, *oikeíon* and *allótrion*. The larger conceptual metaphor, of which the term *metaphorá* is only a part, I identify as the metaphor of 'THE LEXIS OF EVERYDAY LOGOS'. But this raises the question: What do *kúrion* and *oikeíon* mean in this context?

In the context of *lógos*, *kúrion* is usually translated as 'ordinary' (O'Rourke, 2005) or 'strict' (Crittenden, 2003; Lloyd, 1996). *Oikeíon* is translated as 'regular' (O'Rourke, 2005), 'appropriate' (Lloyd, 1996), 'ordinary' (Crittenden, 2003). Wood (2015) and Kirby (1997) claim that the two are synonyms. Lloyd (1996) and Crittenden (2003) acknowledge that these three adjectives are used metaphorically, but their translations do not show any change in interpretation as a result. One can readily see that the usual translations of *kúrion* and *oikeíon*, and *allótrion*, hide what Aristotle means, rather than being helpful. The reason for this lack of transparency is that the translations do not evoke a comprehensible source frame i.e. the conceptual foundation, from which these adjectives gain meaning in the target frame of the *léxis* of everyday *lógos*. (The *léxis* of everyday *lógos* is itself a part of the larger domain of *lógos*). So, it becomes the philologist's task to reconstruct this ancient Greek semantic frame. How would one proceed? Once again constructions are helpful.

Sullivan (2013: 5.3 and 2) has researched the roles that frames and syntactic constructions play in metaphorical language in English. She noticed that when a predicating adjective/noun construction is used in a metaphor, the predicate adjective evokes the source domain and the noun evokes the target domain. This applies to ancient Greek as well. The adjectives *kúrion*, *oikeíon* and *allótrion*, used as



an ensemble, evoke the source frame of *oikeîn* ‘dwelling’ in the city-state/ household (see Lloyd, 1996). The noun *ónoma* ‘word’ evokes the target frame, *lógos*.

### 8.5.1 The source frame: ‘DWELLING IN A HOUSEHOLD’

Aristotle saw dwelling in the city-state as the natural end of a series of human partnerships (*koinōníai*). By natural end, he means that which has grown to full maturity. Just as a rose bush has reached its natural end in the blossoming rose, so also human partnerships reach their natural end in the blossoming city-state. Every partnership is composed of the ruler and the ruled. A city-state is a partnership composed of, and is the natural outgrowth of, a number of households. The household is the smallest partnership (Arist. *Pol.* 1252b29ff). The structure of all partnerships is composed of: (1) the *kúrios* as governor, (2) the *oikeíos* as one who is governed in and a member of the partnership, (3) the *allótrion* as one who, once having been a member (*oikeíos*) in another partnership and under the rule of another *kúrios*, is presently part of the partnership. Aristotle says that one may find in the structure of the household a model (*parádeigma*) of the city-state (Arist. *EN* 1160b22–35). Thus, to simplify, I will use the model of the ancient Greek household in the discussion which follows.

The orator Isaeus provides us with a wealth of information about dwelling in the Athenian household. He lived and worked in Athens at roughly the same time as Aristotle. He was engaged in writing speeches for those who were defending themselves in disputes of inheritance. Eleven of his speeches still survive. The speech *De Apollodoro* gives us a glimpse of this *kúrios*, *oikeíos*, *allótrios* structure in the household. Thrasyllus, in arguing why he is the legitimate heir of the household of Apollodorus, says,

For [Apollodorus] knew well how I had behaved for my father and mother, knowing, as well, the care I had for the members (*oikeíoi*) and how I managed my personal affairs . . . so it was not in ignorance, but with clear knowledge, that he appointed me governor (*kúrios*) of his household (lit. ‘of his things’, *tôn hautou*). Moreover, I am not an *allótrios* but a nephew”. (Isaeus *De Apoll.* 34.2–35.7)

### 8.5.2 The target frame: ‘THE LEXIS OF EVERYDAY LOGOS’

Using this outline of the source frame as foundation, we are in a position to ask how it helps a reader understand what Aristotle means in using *kúrion*, *oikeíon* and *allótrion* in the target frame. A basic structure is established in the mapping of the roles played by the *kúrios*, the *oikeíoi* and the *allótrios* in the source frame ‘DWELLING IN THE HOUSEHOLD’ onto the target frame ‘THE LEXIS OF EVERYDAY LOGOS’. The *kúrion* *ónoma* in some way rules or governs the ‘household’. The *kúrios* is the ‘source’

(*arkhē*).<sup>39</sup> The *oikeion ónoma* in some way belongs to the ‘household’ and is governed by the *kúrion ónoma*. The *allótrion ónoma* creates otherness in the ‘household’ by being transferred from another ‘household’. This, then, leads to the next question: in the target frame, what is this metaphorical ‘household’? The answer is found in what, according to Aristotle, words (*onómata*) signify, namely the *ousía*, the *prâgma*, the *hóros*, and the *eídos*.

## 8.6 The metaphorical household

The question of what the Greek terms *ousía*, *prâgma*, *hóros*, and *eídos* mean loom large in Aristotle’s philosophical discourse. Be that as it may, for the purpose of this study, I will narrow the focus to what these important ideas mean in relationship to the term *ónoma* (word). The three concepts *ousía*, *prâgma*, and *eídos* overlap in their role as the metaphorical household and *hóros* defines it. This section deals with the *prâgma* and the *hóros*. *Ousía* and *eídos* will appear in section 8.6.1, where the *kúrion* is defined.

In relation to *prâgmata* Aristotle presents words (*onómata*) as functioning in two ways: (1) as a ‘symbol’ of the *prâgma* (*súmbolon*); (2) as encapsulating the ‘definition’ (*hóros*) of the *prâgma*. The noun *prâgma* is a nominalization of the verb *prâssein*. *Prâssein* has a general meaning, ‘to be involved with the affairs or concerns of living’. Thus, the *prâgmata* are snapshots of involvements in living, or the accomplishments of whatever is of concern for living.

Aristotle’s account of the function of words is largely found in his treatises *Perí Ermēneías* ‘Concerning Expression’, more commonly entitled in the Latin translation *De Interpretatione*,<sup>40</sup> and in the *Sophistical Refutations*. In *De Interpretatione* he sets a semiotic triangle: humans use words as symbols to signify the ‘thought processes’ (*pathēmata*) of the ‘mind’ (*psukhē*) (Chriti, 2018). The thoughts are ‘likenesses’ (*homoiómata*) of the *prâgmata*. (Arist. *De Interp.* 16a 3–8). So, the ‘word’ signifies the *prâgma* via the *páthēma*. And, as he notes in the *Sophistical Refutations*, ‘Since it is not possible to carry on a conversation by bringing in the actual *prâgmata*, we use words (*onómata*) as symbols’ (Arist. *SE* 165a 6–7). That is, since it is usually impossible to have the actual events occurring as we speak about them (as a sportscaster does),

<sup>39</sup> Note that as pointed out in the *Pol.* the *kurios* of an *oikos* is the *arkhē* (Arist. *Pol.* 1278b37). Aristotle also says that the *dunamis* (‘power’ or ‘potential’) of an *arkhē* is a *kuria* (of something) (Arist. *Pol.* 1300b5–12).

<sup>40</sup> *Hermēneia*, which I have translated as ‘expression’, usually titled by the misleading Latin translation *De Interpretatione*, is used here in the same sense as Aristotle used it in *Poetics* 1450b14, “*Lexis* is the *hermeneia* “expression” [of *logos*] through the use of *onomata* ‘words’ [*légō dé, hōsper próteron eírētai, léxin eínai tēn dià tēs onomasías hehermēneían*]”.

humans use words to signify events (*prâgmata*) as conceived in the mind.<sup>41</sup> As symbols, words (*onómata*) give us the ability to talk about the affairs or concerns of living, the *prâgmata* – past, present, and future.

Aristotle also identifies an intrinsic relationship between words (*onómata*) and *hóroi* (plural of *hóros*) in *Topics* and *Posterior Analytics* (cf. Deslauriers, 2007; Devereux, 1988; Lewis, 2013). This also introduces another term, *hóros*, that he transferred from the source frame of ‘DWELLING IN A HOUSEHOLD’ into the domain of *lógos*. In the Greek world of Aristotle’s time, there were stones called *horoi*, used in marking boundaries. The *hóroi* were an important part of one’s embodied experience of dwelling in the household. They ‘defined’ or ‘gave boundaries to’, not only the physical space of a household (or a city-state), but also the people and property within, i.e., the *ousia*, as assigned to a particular governor (*kúrios*). These boundary markers were assigned to mark a space as private, public, sacred, leased or to indicate a lien on a piece of property (Fine, 1951; Ober, 1995). Aristotle used the term *hóros* in the domain of *lógos* to mean those (metaphorical) stones that mark the boundaries of a specific *prâgma*. “A boundary stone (*hóros*)”, as Aristotle states, “is a statement (*lógos*) that makes clear the essence of a *prâgma*” (Arist. *Topica* 153a15–16). Aristotle uses the term *lógos* here to mean a concept that has been brought to expression in the form of a statement. He also wrote that the “*horismos* (a type of *hóros*) is a statement (*lógos*) of what a word (*ónoma*) signifies”. As an example, he points out that the term ‘triangle’ (*trígōnon*), signifies, in a single word, the definition (*hóros*) of “triangle” (Arist. *A.Po.* 93b 29–32).<sup>42</sup>

So, a single word signifies the *prâgma* doubly. As a symbol, it evokes the concept of a *prâgma* and, at the same time, encapsulates the definition (*hóros*), i.e., the statement (*lógos*) of what a particular *prâgma* is. Just as these boundary stones (*hóroi*) divided Greece into several city-states and the city-states into several households, so also words (*onómata*) symbolize the conceptual divisions of the world into *prâgmata*. Thus, ‘household’ from the source frame maps onto the *prâgma* in the target frame and places it within the inferential structure as it pertains to word use.

This, now, leads to the how questions: How does the *kúrion ónoma* “govern” the metaphorical household, i.e., the concept of the *prâgma*? How is the *oikeîon ónoma* a “member” of it? And how does the *allótrion ónoma* “create something different” within it?

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<sup>41</sup> De Rijk (2002) presents a similar view of the *prâgma*: “To [Aristotle], the word’s meaning is purposely ambivalent, its focal meaning (‘state of affairs conceived of’) happily oscillating between referring to ‘a real state of affairs’, which happens to be conceived of and ‘a conceived state of affairs qua conceived of (irrespective of its being, or not being, the case)’”.

<sup>42</sup> The term *horismos* is derived from *horos* and Aristotle uses it with little difference from *horos*.

### 8.6.1 *Kúrion ónoma*

In what manner does the *kúrion ónoma*, as a symbol, “govern” the concept of the *prâgma*? Who “appoints” any single word as “governor”?<sup>43</sup> Aristotle divides the *kúrion* use of a word into three parts: (1) “conventional” (*katà sunthêkên*); (2) “the clearest” in reference, (*saphestâtê*); (3) in contrast to a metaphor. In *Poetics* Aristotle gives his definition (*horos*) of the *kúrion ónoma*:

The definition of the ‘governing [word]’ (*kúrion*) is [a word] which people in one location use [to refer to something]. [This same word] is an ‘unfamiliar word’ (*glôtta*) to those in another location. Thus, it is clear that both the unfamiliar word and the governing word [can] be the same in the power [of signification],<sup>44</sup> but this same word [form] in one location is governing, and in another location unfamiliar. For example, for those who inhabit Cyprus the word ‘spear’ (*sigunon*) is the governing word, but for us (in Athens) it is an unfamiliar word (Arist. *Po.*1457b3).

Aristotle is speaking about those who dwell in a particular city-state or region choosing a word form to signify a *prâgma*. As his example shows, when conversing about spears in the region of *Cyprus*, the Cypriots have chosen the word form *sigunon*, to signify ‘spear’. *Sigunon* is not a word used in Athens. There, it is an unfamiliar word. But in the city-state of Athens, one could use *hakóntion* to signify a ‘spear’; *hakóntion* is an unfamiliar word in Cyprus. Thus, words are “appointed” as governing words by those who dwell in a city-state to signify a given *prâgma*. It is interesting to note that Isocrates 346–338 BCE, an orator in Athens, calls this use of governing words ‘the words of the city-state’ (*politikà onómata*) (Isoc. *Ev.* 9.10). Aristotle and Isocrates, in their definitions, indicate that members of a city-state “appoint” the governing words. Words are ‘conventional’ (*katà sunthêkên*), (Arist. *De Interp.* 16a 19ff). It is because each governing word (*kúrion*) is “appointed” to signify a particular *prâgma* by those dwelling in a city-state, that Aristotle declares, “The clearest [reference], therefore, is when using governing words (*saphestâtê mèn oûn estin hê ek tôn kurîôn onomatôn*)” (Arist. *Po.* 1458a 18–19).<sup>45</sup> So, it appears as though the governing word (*kúrion*) has a single unambiguous signification, and is perhaps equivalent to what we mean by “the literal” sense of a word. This is not the case. There is no literal/metaphorical distinction in Aristotle’s thought. There is only the distinction between the governing

<sup>43</sup> Recall, that one of the inferences, potentially transferred, is that a *kurios* is appointed. As *Thrasylus* argued, [Apollodorus] appointed me *kurios* of his [*oikos*]. See 2.4.

<sup>44</sup> An alternate translation could be ‘able to be the same thing’ i.e., be the same in reference.

<sup>45</sup> See also Arist. *Rh.* 1404b 5–6, “Of the *onomata* and *rhêmata* the *kuria* [*onomata*] create clearness [*tôn d’ onomatôn kai rhrhêmátôn saphê mèn poiêi tà kúriátôn d’ onomatôn kai rhrhêmátôn saphê mèn poiêi tà kúria*].” It should be mentioned, at this point, that Aristotle used the term *onoma* to specifically refer to a noun as opposed to a *rhêma*, a verb. However, *onomata* is also a general way of referring to all types of words.

and the metaphorical use of words. The governing word is *itself* polysemous. How is this so?

The general phrase Aristotle uses at the outset of a discussion of the meaning of a word is “[a word] is said in many ways (*légetai pollakhôs*) (Arist. *Meta.* 1046a4–5). This means, *a word has many potential senses*. Two ways of expressing potential senses are contrasted as the governing use of a word (*kúrion*) and the metaphorical use (*allótrion*). In *Topics* he expresses it this way, *légetai . . . kuriôs è katà metaphoràn* ‘expressing [a word] either in the governing or the metaphorical manner’ (Arist. *Top.* 158b10–12). *Kuriôs* (‘governingly’) is the adverbial form of the adjective *kúrios*; *legetai kuriôs* is another way of expressing that one is using a governing word.

According to Aristotle, using a word in the governing manner evokes what he calls *prôs hén* meaning, literally translated ‘towards one thing’ (Arist. *Meta.* 1061a11). The *prôs hén* use of a word has been dubbed “focal meaning” or “core-dependent homonymy” in recent Aristotle scholarship. Beere (2009) describes focal meaning this way, “Aristotle thinks that there is a family of connected usages of a term, that cluster around a single, primary usage to which all others make reference”. Or, in line with the metaphor, there is a ‘household’ in which the ‘governor’ (*kúrios*) rules a ‘family’ of senses. These [sub]senses are dependent on and derive from the governing (*kúrios*) sense. If one is speaking “governingly”, the single form of a word can evoke any one of these senses, depending on context. Aristotle says that this ‘family’ is formed by ‘belonging to the same *eidôs*’ (*prôs tò autò eidôs*) (e.g., Arist. *Meta.* 1046a9). He also refers to this ‘household’ in which the ambiguous ‘family’ of senses resides as the *ousia*, stating, “One must not overlook the fact that at times it escapes one’s notice if a word (*ónoma*) signifies the *ousia* as a composite whole or just its actuality and form . . . thus, [the *ousia*] is not being signified (*legomenon*) by means of a single definition (*lógos*), but by means of focal meaning (*pros hen*)” (Arist. *Meta.* 1043a 29–38). So, *eid os* and *ousia* along with *prâgma* are three ways to express what the governing use of a word signifies: the metaphorical ‘household’.<sup>46</sup> In this household there are a ‘family’ of senses; however, Aristotle does *not* consider any of these senses to be a metaphor; a metaphor is an *allótrion*. It belongs to another household.

Aristotle’s analysis of *dúnamis*, which I translate as ‘power’, is a clear example of the contrast between focal meaning (*kúrion*) and metaphor and touches on the important topic of “likeness” which will be addressed in detail in 8.7 below (Arist. *Meta.* 1019a 15–1020a 6, 1046a 4–b 7). In Aristotle’s account, the governing (focal) use of the word *dúnamis* includes *all* the senses that somehow are the ‘source’ (*arkhé*) of movement and change (*Meta.* 1019a 15–16). All these senses belong to this same *eidôs*, i.e., household (Arist. *Meta.* 1046a9). But, he notes, there is one use of the word *dúnamis* that does not belong to this ‘household’: its use in geometry. In *Metaphysics*

<sup>46</sup> In fact, Aristotle identifies the *eidôs* as the *ousia*, stating “I define *eidôs* as the essence and the primary *ousia* [*eidôs dè légō tò tí ênên êinai hehekástou kai tèn prôtên ousia*]” (Arist. *Meta.* 1032b1).

there are two discussions about the meaning of the word *dúnamis*. In both discussions he talks about the use of *dúnamis* in geometry. In *Delta* he calls it ‘metaphorical’, *katà metaphoràn dè hē en geōmetríai* ‘in geometry [*dúnamis*] is used metaphorically’ (1019b33), and in *Theta* he calls the use ‘according to some likeness’, *homoiotētī tini légontai katháper en geōmetríai* ‘[*dúnamis*] is used according to some likeness, just as [it is used] in geometry’ (1046a7–8). Thus, there are three ways of referring to the metaphorical use of a word: (1) *metaphorá*, (2) *allótrion*, (3) *homoiotēs* (‘likeness’). When used ‘according to likeness’ in geometry, ‘power’ (*dúnamis*) metaphorically refers to the line segment *AB* of any square. The ‘power’ of this line determines the size of any square, but it is *not* the source of movement or change. The size of a square remains static, subject to this ‘power’, i.e., the length of line segment *AB*. This metaphorical use of the term *dúnamis* will be expanded in 8.7.

### 8.6.2 *Oikeîon ónoma*

What would it mean to be an *oikeîon ónoma*? In what manner is the *oikeîon ónoma* a “member of” the ‘household’? Aristotle never directly defines the ‘member word’ (*oikeîon ónoma*); however, there are two texts that give us a glimpse at what it might mean. These texts strongly suggest that a ‘member word’ (*oikeîon*) signifies an attribute or a part of a whole ‘household’ (*ousia-eidos-prágma*) as established by the governing word. This is similar to the concept of profile and base as introduced by Langacker (1987; 1991). The governing word identifies the base, e.g., *wheel*, and member words (*oikeia*) profile some part of the wheel, e.g., *hub* or *spoke*.

The first of these two texts under consideration is in *Poetics*. In it Aristotle presents the example of the metaphor of the word *phialē* ‘offering cup’. The two poets *Anaxandrides* and *Antiphanes*, contemporaries of Aristotle, used this metaphor, so it is likely that it was familiar to his audience. The ‘offering cup’, was one of the attributes of Dionysus. In Aristotle’s interpretation, both these poets used the word *phialē* metaphorically to signify the *aspís* ‘shield’, an attribute of Ares (Arist. *Po.* 1457b20–33).<sup>47</sup> Aristotle continues his discussion by pointing out that not only does one use a member word (*oikeîon*) in a metaphor, one can make it more interesting ‘by removing an attribute from the member words [themselves]’ (*apophêsai tôn oikeiōn tī*), like calling the shield not just an offering cup but a ‘wineless offering cup (áoinon phialē)’ (Arist. *Po.* 1457b31–33). This would be equivalent to calling the hub of a wheel a ‘spokeless hub’. The second text is found in *Rhetoric*. Here, Aristotle advises the orator ‘to carry out a metaphor by [use of] the member words’ (*apò oikeiōn*) (Arist. *Rh.* 1412a11–12).

47 He also discusses this example of Dionysus and Ares in *Rh.* 1407a15–13; *Rh.* 1412b33–1413a3.

It seems clear that Aristotle sees in metaphor the transfer of a member word (*oikeïon*) from one ‘household’ to another ‘household’. Once transferred, the member word (*oikeïon*) becomes a word belonging to another (*allótrion*) ‘household’ and is (re)-assigned (*epiphora*) as a signifier of some attribute in the new ‘household’. This (re)-assignment of a member word is not random, but as Aristotle indicates, is based on ‘likeness’.

## 8.7 According to likeness

In *Topics*, Aristotle states “For metaphor makes that which is signified in some manner evident by means of likeness, for everyone who uses words metaphorically does so based on some sort of likeness (*hē mēn gār metaphorā poiēi pōs gnōrimon tò sēmainómenon dià tēn homoiótēta [pántes gār hoi metaphérontes katá tina homoiótēta metaphérousin]*).” (Arist. *Top.* 140a8–11). In this section, I broach the question of what Aristotle meant by *homoiotês* ‘likeness’ as regards metaphor. In the discussions of metaphor in *Poetics* and *Rhetoric*, Aristotle appears to base metaphor on an objective, literal, and preexisting similarity of two images in a symmetrical relationship. Dancygier & Sweetser (2014) call this an “image metaphor”, explaining that, “this [type of] metaphor doesn’t seem to have significant structure mapped beyond the image similarity” e.g., a women’s waist being referred to as an *hourglass*. Aristotle’s example of the metaphor of the offering cup (*phialē*) (2.5.3) is, in fact, an image metaphor. The offering cup is a bowl-shaped object that looks like a shield. Aristotle even states that there is a symmetrical relationship between the two images, noting that one could equally call the offering cup of Dionysus a shield (Arist. *Po.* 1457b20). Based on such discussions in *Poetics* and *Rhetoric*, image metaphor, often called the “traditional view” of metaphor, wherein there is an objective, literal, pre-existing, symmetrical likeness between images (Kövecses, 2010), is popularly ascribed to Aristotle.

However, the discussions in these texts are not the whole story. Based on an account in the *Eudemian Ethics*, I will argue that Aristotle does recognize a type of metaphor in which likenesses are asymmetrical correlations in experience that reflect nonobjective, nonliteral, and non-pre-existing similarities.

As discussed in 8.6.1, Aristotle mentioned that in geometry the term *dúnamis* is used according to likeness/metaphorically. This use was in opposition to the governing (*kúrion*) use of *dúnamis*. The reason he calls its use in geometry a metaphor, is because the term is being transferred from the *eidos* of the *physical perceptible domain* that has movement and change, to the *eidos* of the *noetic domain* where no movement or



change occurs. Geometry, as a part of mathematics, is in the noetic domain.<sup>48</sup> But what ‘likeness’ is there between *dúnamis* used in the physical ‘household’ of movement and change and *dúnamis* used in the mathematical ‘household’ where no movement takes place (Arist. *Meta.*1046a7–8; 1019b33)?

The answer is found in Aristotle’s discussion of necessity in *Eudemian Ethics*. Recall that Aristotle says that a power (*dúnamis*) is the source (*arkhê*) of movement (*kínēsis*) (2.5.2). According to Aristotle, in order for there to be movement (*kínēsis*) there must be a governor (*kúrion*) to govern that movement. An example he gives is the obvious fact that a human, by necessity, gives birth to humans. The human *ousia* is the source (*arkhê*), the explanation (*aition*) and governor (*kúrion*: another metaphorical use of the term) of movement (*kínēsis*). From a human source *only* a human will grow and develop into a human. This is necessarily the case. But what about the use of the term *arkhê* in mathematics? In mathematics, a triangle is a source (*arkhê*), and explanation (*aition*), but since there is no movement, it is not a governor (*kúrion*). So, Aristotle says, in mathematics the term *archê*, “is being obviously used *according to likeness* ([*légetai ge kath’ homoiótēta*])” (Arist. *EE* 1222b24–25), i.e., *metaphorically*. The idea is this: as in the perceptible domain a source (*arkhê*) is an explanation (*aition*) of things changing into and out of a given form, i.e., the reason why “things come into and go out of existence”, so in the noetic domain a source (*arkhê*) is an explanation (*aition*) of why things don’t change, i.e., why “they exist in the manner that they do” (*EE* 1222b30–31). So, he concludes, a triangle is metaphorically a source (*arkhê*) in the sense that it is an explanation (*aition*) of why the other geometrical figures do *not* by necessity change (*EE* 1222b40–41). Therefore, since power (*dúnamis*) is a source (*arkhê*), the term *dúnamis* in geometry metaphorically (according to likeness) refers to a line segment that had the power (*dúnamis*) to be the source (*arkhê*) for the explanation (*aition*) of *why* any square was and remained a certain size; the size of any square is always and by necessity based on the size of the line segment *AB* (Beere, 2009; Heidegger, 1995; Mugler, 1958). So, based on his account of *dúnamis* in the *Metaphysics* and *arkhê* in *Eudemian Ethics*, Aristotle demonstrates that terms mathematicians used are metaphorically based on experience in the physical world. These terms *arkhê*, *dúnamis* and *aition* are used “according to likeness” based upon asymmetrical correlations in experience “that reflect nonobjective, nonliteral, and non-pre-existing similarities”.

In the explanation of the meaning of the term *homoiotês*, Aristotle is recognizing that some inferences are carried over in the metaphor but others are not. He points to a constraint placed on what the terms *arkhê*, *dúnamis* and *aition* mean in mathematics. The constraint, lack of movement and so lack of a governor (*kúrion*), is found in the target frame itself. The lack of a governor in the domain of mathematics constrains

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48 “I mean *noetic* like [branches] of mathematics [*légō dè noētoûs mèn hoíon toûs mathēmatikóus*]” (Arist. *Met.* 1036a3).



what these terms metaphorically mean. The fact that Aristotle recognizes a likeness between the use of these terms in the physical and the noetic domains strongly suggests that he saw an abstract generic conceptual structure that is shared by both the source frame and the target frame in this metaphor.

## 8.8 Conclusion

Using the embodied basis of constructions as an aid in a re-reading of the ancient Greek of Aristotle's texts, I have set out to accomplish two objectives: (1) to present an example of the analytic potential of cognitive linguistics for the interpretation of ancient texts; (2) to allow cognitive linguistics to answer the question of "what" Aristotle represents to it, in its own terms. To obtain these objectives, I presented a reassessment of Aristotle's theory of metaphor. Its aim was to bring into question the traditional view of Aristotle which prevails among both those in Aristotle studies and those in the cognitive sciences. Traditionally Aristotle is assumed to have believed that: (1) metaphor is literary device on the level of language and is not included in everyday language use; (2) one should not use metaphor as a part of philosophical discourse; (3) there is a literal/metaphorical dichotomy; (4) likeness in metaphor is only based on a correspondence of literal properties between things in the concrete perceptible world.

This reassessment was based in the relationship between human embodied involvement in the concrete world and linguistic meaning. Linguistic meaning (M) is expressed in the form (F) of grammatical constructions which can be of any size. Once learned, an uttered construction evokes an idealized cognitive model of our participation in cultural events called frames. Metaphor is based on the transference (mapping) of constructions between a source frame and a target frame and comes in two forms: One is conceptual metaphor which is the asymmetrical mapping of the terminology and inferential structure from a source that is more intersubjectively available to a source that is less intersubjectively available. These are respectively called the source frame and the target frame. Conceptual metaphor gives us the ability to reason and communicate about experiences that are less intersubjectively available. The other is image metaphor which is the symmetrical transference of sensory experience that does not necessarily involve the transference of inference.

Assuming this model of meaning, I proceeded to reassess Aristotle's theory of metaphor. The question of whether or not Aristotle recognized metaphor as a part of everyday language use is addressed in his discussion in *Rhetoric*. I argued (section 8.3), based on *Rh.* 1404b32–34, that not only did Aristotle include metaphor in the everyday use of language, he sanctioned its use by the rhetorician on its use in everyday language. From this text, I was also able to find the terminology that Aristotle used in his categorization of word use in everyday language: the *kúrion*, the *oikeïon* and

*metaphorá*. Based on this terminology, I set out to gain a broader understanding of his theory of metaphor.

The next step (section 8.4) was to examine Aristotle's definition of metaphor in *Poetics* 1457b6. From this text, I concluded that Aristotle's use of the term *metaphorá* in the context of *lógos* is itself a metaphor, that is, a transference of the term from the source frame of the moving of concrete objects from one physical space to another to the target frame of *lógos*. It was also from this text that it became clear that a metaphor is also called an *allótrion*.

At this point it became clear that if the term *metaphorá* is itself used metaphorically, then perhaps other terms he used in his writings about word use are used metaphorically as well. With the insight from Karen Sullivan that in predicate adjectives/noun constructions the adjective determines the source frame and the noun determines the target frame, I looked for a context in which the terms *kúrion*, *oikeíon* and *allótrion* were used as an ensemble in order to determine the probable source frame (section 8.5) which I concluded is dwelling in the city-state and household. Once the source frame was in place (section 8.5.1), I was able to examine what these terms meant in the context of *lógos* based upon their use in the intersubjectively accessible (embodied) experience of dwelling in the Greek household. It also became clear the Aristotle's theory of metaphor is a part of a larger conceptual metaphor of word use.

Based on the mappings of this conceptual metaphor (see Figure 1), I concluded that: (section 8.6.1) as the *kúrion* is the governing element in a household, so a *kúrion* word is a "governing" word that is assigned by those in a city-state to refer to a given *prâgma* in whole. Based on the examination of Aristotle's discussions of meaning in texts outside of the *Poetics* and *Rhetoric*, I argued that there is no literal/metaphorical dichotomy in his philosophy because the *kúrion* is a polysemous family of senses that all belong to the same 'household'; each individual sense derives from one central sense; this is what is known as focal meaning. Aristotle did not consider these derived senses to be a metaphor. A metaphor is an *allótrion*, that is, a word that is transferred from another 'household' for re-assignment. This re-assignment is based on likeness. It also became obvious in this section, that Aristotle did in fact use metaphor in his philosophical discourse. I pointed out that the philosophically central terms *ousia* and *horos* are both transferred from their use in the source frame of dwelling in the household to their uses in various discussions throughout Aristotle's philosophy. An *oikeíon* (section 8.6.2) is a word that refers to some attribute or part of the whole, once established by the *kúrion*. Aristotle suggests that metaphors are best carried out via the *oikeíon*. In section 8.7, I argued that Aristotle saw likeness in metaphor as based not only on objective, literal, pre-existing, symmetrical likenesses between images exclusively, but also on asymmetrical correlations in experience that reflect nonobjective, nonliteral, and non-pre-existing similarities.

I conclude, then, that the two objectives I have set out to attain have been reached: (1) The analytical potential of cognitive linguistics has been demonstrated

to be useful for doing a careful reading of ancient texts. Its use in this reassessment introduces a new view to our understanding of the possible conceptual foundations of Aristotle's philosophy, provides new avenues of inquiry and raises many questions; (2) "what" Aristotle is to cognitive linguistics has been answered in its own terms. I would say, based on this reassessment, that Aristotle has in many ways anticipated the cognitive turn in the philosophy of human language. His theory of metaphor has many similarities to conceptual metaphor. But even more interesting are some of the differences, e.g., he sees in polysemy word senses that cluster around and derive from a central sense that are not metaphorical. With more research into Aristotle's discussions of language and meaning along these lines we can gain deeper insights into the mysteries of meaning.

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Christopher Collins

## 9 Animus inscriptus

### An out-of-body embodiment?

**Abstract:** As a means of storing speech deemed to contain valuable thoughts, writing became associated with a retentive mind, which itself was likened to a writing surface, such as a papyrus scroll. Having first set forth various idiomatic iterations of the “mind-as-writing” analogy as found in Greco-Roman texts, I examine this analogy from the perspectives of cognitive linguistics, language evolution, phenomenology, and neuroscience. Then, applying criteria first formulated by Lakoff & Johnson ([1980] 2011), I address the question of whether “mind-as-writing” is indeed a metaphor and, if so, what implications this may hold for cognitive embodiment theory.

**Keywords:** authorial present, evolution, instrumentality, literacy, metaphor, metonymy, mirror neurons, phenomenology, similarity, simulation

#### 9.1 The textual evidence

In principle, embodied cognition is a very ancient idea. On the testimony of Homer, archaic Greeks believed that thoughts, emotions, and memory were situated in the thoracic and abdominal organs, while the head, as the site of hearing and vision, served rather as a lookout tower than as a center of consciousness. Mental operations were carried on somewhere within the chest by two conscious entities, the *thumós* and the *phrên*. In moments of perplexity, these could advise the outwardly perceiving self, manifested in the face. In *Iliad* 1.188–194, Achilles is first aware of his external conflict with Agamemnon, then of an internal conflict in which his *khólos*, the spleen as organ of anger, threatens to float upward from his abdomen toward his *thumós*, the conscious center naturally primed to respond to threats with self-assertive indignation. Having now to decide whether to run Agamemnon through with his sword or to ‘stop his *khólos* and keep his *thumós* in check’, he turns his attention from the outer debate to the inner debate already in progress ‘down in his *phrénes* and *thumós*’. Then, as though situated in his head, he looks down, not only at the sword that his hand is about to wrench from its scabbard, but also at his “shaggy chest” within which this debate is taking place. It is at this point that Athena intervenes. Invisible to the assembled army, she steps behind him, grabs him by his hair, and

pulls him back, a sudden lifting of the head that ancient Greeks understood as “No”, a gesture equivalent to our side-to-side shaking of the head.<sup>49</sup>

Besides the irascible *thumós*, there was that other organ of consciousness, the *phrên* (pl. *phrénes*). Identified with the diaphragm and lungs, this was associated with breathing and therefore with speech, not only the production of speech, but also its reception and retention. As Sullivan (1997: 29) interpreted it, “*phrénes* act as the seat of memory: if events are placed within in a ‘deep’ and ‘calm’ way, they are able to affect future action positively . . . [I]n Homer, we find the *phrénes* acting often as a location where topics are ‘placed’ or ‘held’ for consideration”. Circe tells Odysseus that in the land of the dead only the blind prophet, Tiresias, has been granted *phrénes* that are unimpaired (*empedoi*) and a mind (*nous*) able to draw breath (*pepnusthai*) (*Od.* 10.490–495). The latter verb apparently implied prudent speech, which in this context derives from the inner resources of the *phrénes*, specifically its intelligent aspect, the *nous*.<sup>50</sup>

The introduction of the Phoenician alphabetic script toward the end of the Greek “Dark Ages” (ca. 700 BCE) provided a means of storing spoken discourse for future use. The contents of mind (*nous*), embodied in the *phrên* could now be offloaded into text. On the basis of functional similarity, it seemed appropriate to consider the *phrên* as a kind of writing surface, either a wax tablet (*déltos*) or a papyrus scroll (*bíblion*). The *phrên*, after all, had always been believed responsible for preserving whatever knowledge one had acquired from experience and from the teaching of others. Now closely identified with writing, it became the internal registry of internalized wisdom. Thus, ‘to write on the *phrên*’, i.e., to memorize another’s words verbatim, meant converting outer speech into inner text, a practice that might appropriately be termed *phrenography*.

By the fifth century, the retentive mind is regularly represented as a written surface. As Svenbro (1976: 200) observed, choral and dramatic poets were especially inclined to use this analogy. Since their texts had to be learnt verbatim by hired performers, “the interior of the actor [became] a space for writing”. Pindar, as early

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**49** Later, Zeus seems to perform the opposite gesture, the nod, suggesting assent (or resignation): *Hom. Il.* 17.442, *kinêsas de karê proti hon muthêsato thumon*, ‘He moved his head and spoke toward his *thumós*’. In seven other instances besides *Iliad* 1, Homeric heroes enter into, or refer to, dialogues with their *thumós* – in the *Iliad*: Odysseus (11.401–410), Menelaus (17. 89–105), Agenor (21.553–70), Hector (22.91–130), and Achilles (22.385); in the *Odyssey*: Odysseus (9. 299–302 and 20.9–24). When a hero heeds the voice of his *thumós*, he acts according to deeply held, socially coded impulses (cf. Plato’s designation of the warlike, spirited soul, the *thumoeidês* in *Republic* 4.435e, 439e).

**50** Even before he is given the blood to taste, Tiresias demonstrates his speech capacity when he advises Odysseus on how to use that blood to revive the speech of the otherwise strengthless heads (*amenêna karêna*) of the shades. As in life, the blind Theban prophet, who was said to have understood the speech of birds, continued in the House of Hades to perceive the truth. See also Sullivan, 1988: 51–53.

as 474 BCE, had declared: “Read (*anágnote*) the name of the Olympic victor where it is written (*gégraptai*) in my *phrên*” (*Olymp.* 10.1–3). Aeschylus seemed especially fond of this analogy. In *The Suppliants* King Danaus tells his daughters to preserve his advice to them well “entabletted (*deltoumenas*)” (178–179). Consider Elektra’s words to Orestes in the *Choephoroi*: “Listen and write this in your *phrénes*” (450), “precisely what a dramatist might have said to an actor in the rehearsal” (Svenbro, 1976: 201). In his *Eumenides* (273–275) “Hades’ *phrên* is a careful transcriber (*deltógraphos*) of the accounts of human lives” and in *Prometheus Bound* (788–789), the tormented Titan commiserates with the Zeus-betrayed Io: “I will tell you, Io, the wanderings of your turbulent course: inscribe them on the mindful tablets (*mnêmosin deltois*) of your *phrénes*”.

Plato regarded the relation of mental processes to writing as problematic. For him, writing was at best a means of making memoranda and at worst a fad detrimental to the arts of memory and spontaneous philosophizing. In the *Theaetetus*, shortly after Socrates declares that thought is a dialogue of the soul with itself (190a), and a few pages before his aviary metaphor, he presents the image of a square of wax within the soul, a gift of Mnemosyne, mother of the Muses. “Whenever we wish to remember anything we see, hear, or think, we subject this wax to sensations and thoughts and imprint them on it just as we form impressions from signet rings” (191c9–191d8). If thought is a dialogue of the soul with itself, and what Plato is referring to is rationally controlled inner *speech*, not inner *writing*, then the wax impression represents the intensity of the perceptual input, not its meaning.<sup>51</sup> As Plato’s Socrates saw it, a text presents speech in the absence of a speaker and, like a poor bastard child, it cannot explain or defend itself without the active intervention of its father (*Phaedrus* 275a–e).

When importing their psychological concepts from Greek philosophy and medicine, the Romans modeled their vital principle, *anima*, upon the Greek *psuché* and their conscious principle, *animus*, upon both *phrên* and *thumós*. Consequently, *animus* comprised such a wide range of cognitive activities that it is usually translated in English by the comprehensive term “mind”. Onians ([1951] 2011) drew up a representative list that was as broadly inclusive as Sullivan’s (1997: 169) listing for the *phrên*:

Consciousness with all the variations of emotion and thought is a matter of *animus*. To contemplate some action is “to have it in one’s *animus*;” to turn one’s attention to something, an idea within or an object in space, is “to turn the *animus* toward it;” courage, despair, etc., are matters of *animus*; to feel faint, to be on the way to losing consciousness, was in the Plautine phrase . .

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<sup>51</sup> When later, adding pun to metaphor, Socrates says that the wax (*kêros*) of memory is located in the heart (*kêr*) of the soul (194c6–10), he does seem to acknowledge, albeit fancifully, the traditional belief that auditory memories of speech somehow lodge in the chest. We still speak of rote learning as learning by heart. The Latin verb *recordari* ‘to remember’ meant to retrieve something from one’s heart.

. “it goes ill with one’s *animus*,” when a man loses consciousness his “*animus* leaves him;” to collect one’s faculties and spirits is “to collect one’s *animus*” – and so we might continue.

Located in the chest like its Greek counterparts, the *animus* was regarded as an inner writing surface. We find idiomatic usage of this concept as early as 166 BCE when, in his *Andria*, Terence has a character ask: “Should I be mindful (*memor essem*)?” then answer: “Those words . . . that were told to me were written on my *animus* (*scripta illa dicta sunt in animo*)” (282–283). Cicero repeats this trope in *De oratore* when he advises attorneys to develop a verbatim memory for opponents’ public statements, which should not simply be poured into one’s ears but inscribed on one’s *animus* [*non infundere in aures tuas orationem, sed in animo videantur inscribere* (2.355)].

The reading of an inscribed *animus* is specifically associated with the manipulation of papyrus scrolls rather than waxed tablets. In order to visualize the *animus* as a writable and readable text, we should therefore consider the nature and use of the scroll, or bookroll, the dominant textual medium until the last centuries of the Roman Empire when the spine-bound codex became the new standard. Schubart (1921: 110) summarized the ways in which reliefs and statues depict the reader:

[He] sits and holds with both hands the open scroll, which lies on his knees. He does not have the scroll extended to its entire length: instead, the beginning and the end are each rolled up, the latter securely grasped by the right hand, the former by the left. In the middle, between these two rolled portions, lies one small open surface, the portion of immediate reading, that is, one column of script or, if they are narrow, as many as four. In this way a scroll of several meters’ length could be held as a small object no bigger than a [modern] book. As one proceeds to read a scroll, one’s left hand draws the read column and rolls it up, while the right hand loosens its grip on the cylinder it holds and lets a new column slide toward the left.

Reading a scroll always implied *rolling* it, hence the noun *volumen* (volume), from the verb *volvere* ‘to roll’. So, when Cicero suggests that ‘Cato’s books ought to be read’, he actually says that his books ought to be rolled – *volvendi . . . sunt libri . . . Catonis* (*Brutus* 298). When a scroll is rolled forward, the text passing toward the left, the proper verb is *evolvere* ‘to unroll’. That is, the rows of letters were optically read from left to right, but the rectangular blocks of text, the *paginae*, were manually propelled from right to left – which, by the way, is exactly how the modern spine-bound book is read. When it is rolled backwards (the read text passing to the right), the verb is *revolvere*, an action necessary for a rereading of an earlier passage or completely rewinding the papyrus onto its rod. Since the *animus* includes verbal memory as one of its functions and since this memory is likened to a scroll, the recollection of verbally mediated information is represented as an act of manipulating that scroll.



So, 'to read in the *animus*' is not expressed as *legere in animo*, but rather in terms of the hands moving a scroll in the manner described by Schubart.<sup>52</sup>

As a trope of mind, this scroll turning is not tense- or time-constrained. One can scroll not only through one's personally inscribed experiences but also one's cultural memory, as when Statius speaks of a person who 'rolls the admonitions [*volvitur monitus*] that the sage of Gargettus (sc. Epicurus) gives' (*Silv.* 2.2) or when Silius portrays Hannibal recalling his noble lineage by 'rolling the ancient chronicles of his ancestors (*volvens veterum memorata antiqua parentum*)' (*Pun.* 13.35). Nor is it confined to records of the past: it may also represent expectation or planning, as when Tacitus describes a person as *futura volvens*, implying the act of reading ahead in the scroll (*Ann.* 1.64).

The actual perusal of one's scroll-like *animus* is, however, a temporal process. Hence the verb *volvere*, when it refers to mental rehearsal, is often presented in its durative aspect, i.e., the present participle (*volvens*) and the imperfect tense, e.g., *olvebat*, and in its frequentative aspect (*volutare*). An early example of the latter, from Plautus' *The Captives*, vividly conveys the obsessive effects of anxiety: 'The more I keep rolling this business in my chest, the more my distress builds up in my mind' (*quanto in pectore hanc rem meo magis voluto/ tanto mi aegritudo auctior est in animo*) (781–782). In a similarly conversational context, Vergil's *Ninth Eclogue*, Lycidas asks his friend Moeris to sing a particular song for him. Moeris agrees, saying: 'Right now, Lycidas, I am silently rolling it over and over within myself to see if I can remember it' (*id quidem ago et tacitus, Lycida, mecum ipse voluto/ si valeam meminisse*) (37–38). That shepherds, presumably non-literate, would use this expression strongly suggests that it now functions as a conventional expression. The adjective *tacitus* may also be significant. When, for example, Livy tells us that he has often wondered how the Roman state would have fared in a war with Alexander of Macedon, he phrases it this way: 'During these periods of thought, I often kept silently rolling my mind' (*tacitus volutavi animum*) (*AUC.* 9.17.2). Here his knowledge of history, inscribed on his *animus*, may be accessed and read silently, i.e., subvocally.<sup>53</sup>

So far, I have explored this figurative idiom as it appears in the Latin verbs for 'roll', derived from the \**volv-* root, as in *volvere*, *evolvere*, *revolvere*, and *volutare*. There is yet another verb associated with scroll reading. As rolling is what the reader's hands do to a scroll, turning is how they do it. For this, the verb *vertere* is used, often in the frequentative (*versare*, or *vorsare*) to signify a rapid, repetitive turning. Plautus has one of his characters declare, 'I keep turning at once many items of business in

<sup>52</sup> When a person is represented in a text as thinking and the verb *volvere* is used, it is customarily translated in English as 'to ponder' and, when paired with *animus*, as 'to turn over in the mind'. These English translations, while acceptable, cancel out the analogical implications of this idiom.

<sup>53</sup> Silently reading one's mind, as Vergil and Livy indicate, may have bearing on the question of silent reading in antiquity. For a review of this debate, see Collins, 2016, 181–187.

my heart' (*multas res simitu in meo corde vorso*) (*Trin.* 223). When Horace in *The Art of Poetry* advises those two aspiring playwrights, the Piso brothers, to read and reread the Greek classics, he tells them 'to keep turning them by nightly and daily hand' (*vos exemplaria graeca/ nocturna manu, versate diurna*) (*Ars* 268–269). In so doing, he re-literalizes this figurative idiom.

A passage from his contemporary, Livy, however, suggests that this expression may have already begun to lose its connection with scroll-manipulation. When the historian refers to the public viewing in 451 BCE of the first ten of the Twelve Tables engraved in bronze and erected in the Forum, he recounts how the citizens were asked to 'go and read (*legere*) the proposed laws' and were then to 'turn about in their minds within themselves each particular item' (*versarent in animis secum unamquemque*) (*AUC.* 3.34). When it was asked that they think over – *versarent* – these laws, this could not by any means be imagined as repeatedly turning a scroll, since these laws were engraved in bronze. Livy's verb choice suggests that *versare* (*in animo* or *animis*) had already become a conventional idiom decoupled from any embodied simulation of physical action.

## 9.2 Internal embodiment

Metaphor has two separate principles, similarity and simulation – similarity appears when one recognizes that entity A resembles entity B, simulation when one associates entity A with experience B. In Aristotle's lexicon, *mimēsis* would encompass both similarity and simulation, but for *literary* metaphor, as distinct from dramatic enactment, similarity was for millennia accepted as its one underlying principle, a tradition reinforced in the 20<sup>th</sup> century by structural linguists, such as Jakobson (1960). With the advent of cognitive linguistics and poetics, however, metaphor theory underwent a radical revision and, thanks to the efforts of George Lakoff and his colleagues, beginning in the late 1970s, the simulation principle gained ascendancy. Accordingly, metaphor, i.e., conceptual metaphor, was said to associate 1) a *target* concept, typically an abstract entity to which language assigns a name, a placeholder for an otherwise elusive set of connotations, with 2) a *source* domain embodied in one or more sensorimotor simulations on or below the threshold of consciousness. While maintaining as its central insight the dependence of conscious thought on sensorimotor traces, the theory of cognitive embodiment responded to and incorporated other lines of cognitive research. Over the past four decades it has evolved considerably, reconstructing its scaffolding while strengthening its foundations.

Such talk of "scaffolding" and "foundations" illustrates the 'THEORIES ARE BUILDINGS' metaphor that was the introductory focus of Joseph Grady's *Foundations of Meaning: Primary Metaphors and Primary Scenes*, his 1997 dissertation directed by George Lakoff. As Grady claimed, this conceptual metaphor cannot be interpreted as

embodied without decomposing this complex source concept, “buildings”, into what he termed “primary metaphors”. These atomistic elements, he argued, represent the early childhood association of subjective states, e.g., affection with the sensation of bodily warmth and knowing with the sense of seeing and with the motor program of grasping. The conceptual/conventional metaphors that form the basis of adult speech thus reproduces a child’s conflation of general concepts with sensorimotor episodes, or “primary scenes”. As for ‘THEORIES ARE BUILDINGS’, this, Grady (1997: 66) argues, may be reducible to the primary metaphor ‘VIABILITY IS ERECTNESS’, grounded in the experience that standing upright signifies physical health. Two years later, Lakoff & Johnson (1999) updated their original theory (1980) and, in a meta-analysis of what had become a widely collaborative enterprise, endorsed Grady’s findings.

Though phrases such as ‘write this on your *phrên*’ or ‘I roll this in my *animus*’ strongly imply sensorimotor simulation, their underlying analogy, “mind-as-writing” or any approximation thereof fails to appear in any list of conceptual metaphors compiled by George Lakoff and his associates over the decades. I must therefore hesitate to identify this phrase as metaphor, choosing for now to refer to it as an idiomatic analogy or a trope. There are several reasons for suspecting that any metaphoricality it may possess is atypical:

1. “Mind” (*phrên*, *animus*), as a subjective abstraction would make it an ideal candidate for metaphor, yet the wide variety of cognitive actions and states this word encompasses make it a target that no single source term can be adequately mapped onto.
2. Writing, as its source domain, presupposes two distinct actions: writing and reading, which, when imagined as mental activities, correspond to the initial reception and storage of verbal information and its subsequent retrieval as re-hearing or re-saying. While the context in which this analogy appears usually makes clear whether writing or reading is the focus, each action is a correlative of the other: writing *on* the mind is meaningless unless the “text” is also readable and reading *from* the mind is impossible unless one has already “inscribed” something there.
3. Just as the conscious activity of thought is verbally mediated, so also, needless to say, are the activities of writing and reading. This means that the activity of ‘mind’ and of ‘writing’, both rooted in language, are not sufficiently distinct semantic domains to trigger that sudden conceptual epiphany we associate with metaphor.
4. Due to their categorial similarity, the two terms can be reversed: the formula “writing-as-mind”, in the sense that a text constitutes a piece of mental discourse, is as meaningful as “mind-as-writing”, thus violating the principle of directionality (Lakoff & Johnson, 1980; Grady, 1999)
5. For “mind-as-writing” to qualify as metaphor according to Grady-revised embodiment theory, the source concept, WRITING, i.e., the inscribing and reading of words, would need to be reducible to the sort of primary-scene elements a one-to-three-year-old child could link to the concept MIND’. But a child of that age

would not yet have had the experience of writing or reading words, much less formed an abstract notion of mind.

This fourth objection is especially telling, because the hand-eye control of a writing instrument on a flat writing surface and the coordinated movements involved in reading it presuppose a perceptuomotor system extendable into an external object – an instrument. According to Grady (1997: 249–250), “The notion of Instrumentality . . . does not fit the characterization of primary scenes in that it is not immediately and directly apprehensible [as are] pushing, squeezing, shaking, etc. . . . Instrumentality relates to purposes and larger frames than the action itself, and therefore by definition, cannot be an element of a single primary scene”.

This exclusion of instruments, or tools, from the catalog of source domains seems odd, however, since the (meta)metaphorical phrase “metaphor is a tool [or an instrument]” appears throughout the theoretical literature, e.g., “Metaphor is a tool so ordinary that we use it unconsciously and automatically, with so little effort that we hardly notice it” (Lakoff & Turner, [1989] 2009: xi) “[C]onceptual metaphor is one of our central intellectual tools. It is the principal instrument of abstract reason” (Lakoff & Johnson, 1999: 155).<sup>54</sup> One plausible explanation is that, like ‘METAPHOR IS A TOOL’ and ‘THEORIES ARE BUILDINGS’, ‘MIND IS WRITING’ is a composite metaphor, but, if it is, it cannot be composed of any primary elements, since tools are external “things”. That is, writing and reading are activities not completed wholly within the sensorimotor systems of the brain, but require external appurtenances.

At a level even more basic than ‘METAPHOR IS A TOOL’ is ‘LANGUAGE IS A TOOL’, an expression so ubiquitous now as to seem a categorical statement, not a metaphor.<sup>55</sup> Cliché or not, there is some truth to it: language is a means by which humans accomplish something, viz. information sharing. As a tool, spontaneous spoken language lacks palpable materiality, yet it exists outside the individual user as a social utility (Borghi et al., 2013). Moreover, like any skillfully deployed tool, its users learn to operate it largely below the level of conscious intention: we sense an impulse to utter a thought or express a feeling and nanoseconds later hear our words and sentences filling the space between ourselves and others.

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<sup>54</sup> This metaphor, though a favorite of Lakovian linguists, is not restricted to this school. Using the phrases ‘metaphors are tools’, ‘a metaphor is a tool’, ‘tools are instruments’ and ‘a metaphor is an instrument’ a Google search, as of August, 2017, yielded close to a quarter million results.

<sup>55</sup> As of August 2017, a Google search returned 8,560,000 mentions of ‘language is a tool’ and 397,000 for ‘language is an instrument’.

### 9.3 External embodiment

If the phrase, ‘mind is writing’, cannot be resolved into primary metaphors that simulate internal experiences, perhaps it represents another kind of embodiment. In order to explore the possibility that those Greeks and Romans who used this analogy understood it as tool use, i.e., as *external* embodiment, I will now consider instrumentality from three perspectives: 1) human evolution, 2) phenomenology, and 3) contemporary neuroscience.

Compared with that of other genera, the evolution of genus *Homo* has been remarkably rapid. Following the anatomical readjustment of bipedalism over an estimated period of from 6 to 4 million years ago, the adaptation that most accounts for its successful survival was no doubt tool making (circa 2.5 million years ago), a skill that seems to have co-evolved with gestural communication. In captivity, chimps and bonobos show a capacity to use fingers and hands to point to objects of interest, but there is little evidence that they do so in the wild. Pointing as a means of directing attention, which human infants exhibit almost from birth, mimics a reaching out to touch and grasp an object. This action becomes spatially extended by means of hand-held objects, e.g., stones, spears, and other projectiles that the eyes aim, the arm swings, and the hands release, an external embodiment implied in the (meta) metaphor of source and target (Rizzolatti & Arbib, 1998; Soylu et al., 2014).

As their tool use improved, humans came to rely more on the right hand for accuracy, an asymmetry that in the brain corresponds to left-hemispheric dominance and correlates with the evolution of language (Arbib, 2009; 2011; Calvin, 1993; Corballis, 2002). The adoption of arbitrary sounds and rule-governed grammar, perhaps as early as 150 thousand years ago, led to the naming and sharing of general concepts, such as introspected feelings, and notions of social responsibility. Once language fully emerged, the mechanisms of biological evolution became increasingly fine-tuned by cultural evolution. Natural selection had provided rich internal sensorimotor resources, but our *external* resources had to be invented, practiced, and taught to others.

All of us have the natural aptitude to acquire language, but we do not achieve that skill without the help of others. Once we do master it, though, we can say almost anything. This impromptu outpouring of meanings is possible because words, phrases, and grammar seem always available, a fact that makes spontaneously uttered verbal elements correspond to found tools, such as a stick one might pick up to steady one’s steps, a stone to crack nuts, or leaves to cup water. Like a landscape strewn with *bricolage*, our brains and social environment are stocked with an inexhaustible supply of usable verbal items. But unlike the found tools that nonhuman species (higher apes and some birds) can also employ, uniquely human tools are *made*, i.e., modified to perform particular tasks or to fashion other objects and tools, for which purposes they are preserved, reused, copied, and redesigned. The linguistic tools that specifically correspond to made tools are verbal artifacts, complex structures of

words one saves to resay either to oneself or to others or rethink in the form of inner, subvocal speech (Collins, 2013).

As a customized tool, a verbal artifact is grasped, as it were, by the language centers and sensorimotor networks of the brain. This inward embodiment allows us to perform yet another function: to simulate perceptions and actions identifiable with the narrator and/or particular characters, extend *outward* into those thereby empathetically imagined others, and assume their perspectives within their imagined worlds (Collins, 2016). In an oral culture such verbal artifacts are preserved in memory and transmitted to others through conversational exchange, storytelling, and performance, but whenever and wherever literacy is introduced, these artifacts become standalone tools, no longer modifiable by memory lapses or improvising performers.

As a systematic inquiry into our experience of ourselves-in-the-world, phenomenology posits that first-person consciousness is ever linked to concrete or abstract objects, be they sensed in the present, recollected from the past, projected into the future, or merely imagined. Subjective awareness thus comprises a range of cognitive activities as varied as those attributed to the *phrên* and the *animus*. Whatever the mind at any moment directs its attention toward, i.e., ‘intends’, constitutes that mind and, insofar as language signifies our being-in-the-world, it signifies intentionality.

This merging of inner and outer seems to have drawn phenomenologists to analyze the function of tools and instrumentality generally. As Heidegger ([1927] 1962) wrote, tools are sometimes simply “present-to-hand”, e.g., a hammer in a toolbox. But “the less we just stare at the *hammer-Thing*, and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it is – as equipment. The hammering itself uncovers the specific ‘manipulability’ [Handlichkeit] of the hammer. The kind of Being which equipment possesses – in which it manifests itself in its own right – we call ‘readiness-to-hand’ [Zuhandenheit]. . . . [When] we deal with [tools] by using them and manipulating them, this activity is not a blind one; it has its own kind of sight” (I. 3. 69, p. 98).

Merleau-Ponty ([1945] 1962: 143) picked up on this suggestive passage with his own example of the blind man and his cane: “The blind man’s stick has ceased to be an *object* for him, and is no longer perceived for itself; its point has become an area of sensitivity, extending the scope and active radius of touch . . . To get used to a hat, a car or a stick is to be transplanted into them, or conversely to incorporate them into the bulk of our own body. Habit expresses our power of dilating our being in the world, or changing our existence by appropriating fresh instruments”.

Merleau-Ponty’s reference to a car as a tool brings to mind some of the instances of Lakoff & Johnson’s ([1980] 2011) metaphor ‘LOVE IS A JOURNEY’. But as a philosopher of technology, Leroi-Gourhan (1993), made a useful distinction between direct and indirect tool-augmented motor functions. In a direct function, the hand (occasionally

some other part of the body) moves and exerts force on a tool, causing it to move in the same direction as the hand, but now with enhanced speed, force, accuracy, etc. The motor schemas that hand and arm combine into an action program, are reproduced in the movements of the tool, e.g., a hammer, a pair of pliers, a rake – or a pen. An indirect motor function, such as driving a car, is one in which the motion of the body and the tool are *not* aligned.<sup>56</sup>

In the process of assessing the unconscious substrate of the waking brain as “tacit knowledge”, Polanyi (1958: 55–56) alluded to Merleau-Ponty’s example: “Think how a blind man feels his way by the use of a stick, which involves transposing the shocks transmitted to his hand and the muscles holding the stick into an awareness of the things touched at the point of the stick”. Then, returning to Heidegger’s hammer, he proposed another useful distinction:

When we use a hammer to drive in a nail, we attend to both nail and hammer, *but in a different way*. We *watch* the effect of our strokes on the nail and try to wield the hammer so as to hit the nail most effectively. When we bring down the hammer we do not feel that its handle has struck our palm but that its head has struck the nail. Yet in a sense we are certainly alert to the feelings in our palm and the fingers that hold the hammer. They guide us in handling it effectively, and the degree of attention that we give to the nail is given to the same extent but in a different way to these feelings. The difference may be stated by saying that the latter are not, like the nail, *objects* of our attention, but *instruments* of it [my italics]. They are not watched in themselves; we watch something else while keeping intensely aware of them. I have a *subsidiary awareness* of the feeling in the palm of my hand which is merged into my *focal awareness* of my driving in the nail. (Polanyi, 1958: 57)

In other words, internally embodied sensorimotor feedback guides our tool, which as a prosthetic device permits us now to achieve *external* embodiment.

My third perspective on the “mind-as-writing” analogy is that of neuroscience, specifically those studies that have shown how language is embodied on two levels, the semantic and the physiological. On the semantic level, language conveys information through lexical and syntactical signs that trigger simulations – of perceptions, predominantly visual, in response to most nouns and of sensorimotor effects in response to action verbs, directional prepositions, and many adverbs. On the physiological level, both heard speech and spontaneous thought, mediated by speech, activate perceptual simulations in auditory cortex and in the sensorimotor networks responsible for articulation (Oppenheim & Dell, 2010; Sokolov, 1972; Vygotsky, [1934] 1986).

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<sup>56</sup> Driving a car may involve over-learned motor routines and turning the wheel may indeed reproduce the arm and shoulder swing used in turning the body while walking, but a car is a hand (and foot)-activated machine that requires indirect control and an energy source independent of the driver’s body.



Silently recalling from memory a *non*-spontaneous (pre-composed) discourse, e.g., a traditional oral narrative, a joke, a proverb, or text, requires the same embodiment as inner speech. Rehearsing to oneself any verbal artifact, oral or literate, therefore activates the same areas of the brain responsible for controlling the articulatory muscles of the diaphragm, chest, larynx, jaw, and tongue as well as the auditory system associated with phonemic recognition. Moreover, since reading also enlists the visual system to recognize graphemes and the motor networks to control discrete eye movements, opening a book and perusing its words initiates a complexly coordinated interaction of motor, auditory, and visual systems (Mellmann, 2015).

The direct linkage of visual and auditory input with motor output is a well-researched feature of vertebrate biology that psychologists have long sought to study in the human animal. One of its more recent breakthroughs came in the 1980s when a team of neuroscientists at the University of Parma under the leadership of Giacomo Rizzolatti reported that in monkey brains certain premotor neurons, associated with reaching and grasping, fire as soon as an animal observes an experimenter's reaching and grasping hand movements. (Subsequent research has indicated that sounds associated with such actions evoke similar neural activation). This cortical response by what they named "mirror neurons" demonstrates embodied simulation externally prompted.

Later brain imaging experiments have supported the hypothesis that mirror neurons fire in our human brain as well, not only when we observe objects of interest, but also when we think about them using inner speech. Moreover, if we observe a hand tool, e.g., a hammer or pliers, or subvocally "say" its name, our corresponding motor areas light up (Gallese & Lakoff, 2005; Grafton et al., 1997). Nonhuman primates, unless they are laboratory-trained to use a simple tool, show no neural response when they observe an experimenter using that tool to manipulate an object, suggesting that our primate cousins are locked into minds restricted to a primary-scene repertoire of responses. As Grady (1997: 28) stated, the target concepts that embodied sensorimotor-based sources simulate, "reflect the operation of extremely basic cognitive mechanisms – many of which we share with 'lower' animals". If this is true of target concepts, it is equally true that the source domains of primary metaphors also reflect the pre-tool, pre-linguistic stage of our own hominin evolution.

## 9.4 Discussion

Having surveyed internal and external embodiment from various perspectives, we need now to examine more closely that classical analogy, "mind-as-writing", to determine whether or not it may be classified as metaphor and reframed as 'MIND IS WRITING'.

The claim that conceptual (i.e., correlation) metaphors are cognitive universals seems true of their source domains, but not necessarily true of their target concepts.



LOVE, FREEDOM, JUSTICE, HAPPINESS, and similarly abstract concepts are targets that change meaning across time and cultures. Inherent instability such as theirs is precisely why metaphor was invented. But, though it must be continually re-grounded in nature, culture has always adhered to metaphor – to targets and sometimes also to sources. Greek and Latin, like all other natural languages, are filled with nouns and verbs grounded in internally embodied experiences, but the explicit metaphors most often found in Homer and later classical texts tend to represent culturally defined external entities. When Aristotle, borrowing from Homer, chose ‘ACHILLES IS A LION’ (*Rhetoric* 3.4.1) to exemplify this trope, he must have understood that his readers were far less likely to have experienced a lion (or a Cyclops or a three-headed dog or a demigod) in a face-to-face encounter than in a culturally transmitted narrative.<sup>57</sup>

Viewed as metaphor, ‘MIND IS WRITING’ appears anomalous in that both target and source are culturally grounded, which is to say, both are unstably grounded. As I pointed out earlier, the classical target, *phrên* or *animus*, encompasses a wide array of cognitive processes and its source domain, writing, does not depend on “primary scenes” for its content. Writing instead presupposes the practiced experience of manually controlling and visually monitoring culturally specific objects and actions – productive implements (pen, stylus, wax tablet, papyrus scroll, etc.) and receptive conventions (performance, scroll manipulation, recitation, silent reading, etc.).

Instrumentality raises yet another issue: since writing and reading tools, when in use, are physically connected to writer and reader, the “principle of contiguity” (Jakobson, 1960) suggests that ‘MIND IS WRITING’ may not be metaphor at all, but metonymy, or that at least it lies on the border between the two tropes. If it were traditional metonymy, literally “name transfer”, the tool would simply substitute for its user, as in “the pen is mightier than the sword”. If metonymy is more broadly defined to include synecdoche, a writer’s pen and paper or a reader’s scroll, as extensions of each user, become parts of a composite whole, a temporary bodily augmentation like a blind man’s stick or a carpenter’s hammer.

There is indeed something metonymic about this metaphor-like analogy, but a stronger argument still remains for classifying it as metaphor. As it turns out, Lakovian theory has reserved one category that may fit ‘MIND IS WRITING’. This would be “image metaphor” or, more recently styled, “resemblance metaphor” (Grady, 1999), the Aristotelian model that Jakobson (1960) had rechristened as the “similarity principle”. In its classical exemplar, ‘ACHILLES IS A LION’, “Achilles” shares some of the features of “lion”. Were we to illustrate this resemblance metaphor by a Venn diagram, target and source would be represented by two ovals that partially overlap

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<sup>57</sup> Cultural factors in metaphor have emerged in recent decades as indicated by publications with titles such as “Taking Metaphor Out of Our Heads and Into the Cultural World”, see Gibbs, 1999; “Culture Regained: Situated and Compound Image Schemas”, see Kimmel, 2005; and *Metaphor in Culture: Universality and Variation*, see Kövecses, 2007.

in a space, the *tertium comparationis*, containing such shared properties as strength, bravery, and bloodthirsty intent. ‘MIND IS WRITING’ also asserts resemblance and does so in such simile-like comparisons as ‘MIND IS [LIKE] TEXT’, ‘LEARNING IS [LIKE] INSCRIPTION’, and ‘THOUGHT IS [LIKE] REREADING A TEXT’. As for its overlapping area, this is verbally mediated thought as represented in both inner speech and outer text.

It is also worth noting how metaphor reproduces the asymmetrical structure of the simple sentence. When processing a sentence, our primary attention is focused on the subject, since it represents the topic of the ongoing discourse, whereas the predicate supplements or clarifies that subject. Similarly, a typical metaphor first introduces its target, then the source chosen to momentarily illuminate that target before fading away. The subject–predicate asymmetry correlates with that of figure/ground perception in Gestalt theory, the focalized figure corresponding to the target and the peripheral ground that situates it corresponding to the source.

Unlike conceptual metaphor, resemblance metaphor is readily reversed, for if A shares certain properties with B, B shares identical properties with A. Thus if ‘MIND IS WRITING’, then ‘WRITING IS MIND’, since their shared properties are the same language-mediated states and activities. My mind can store another’s words as though they were a written text *and*, by reversing the process, I can access through another’s text that other’s mind, a transformation as magical as the figure-ground reversal of the Rubin vase and the Necker cube.

To experience text-as-mind is to enter a quasi-oral discourse space, the same mental trick we perform whenever we read a personal letter. This sense of epistolary presence is the probable origin of “authorial present”, the convention that non-epistolary writers adopted when citing other authors. Thus, when Plato refers to writings of Pindar or Heraclitus, he uses the idiom ‘says’ (*legei*) (*Meno* 81b; *Cratylus* 402a). Latin antiquarians such as Valerius Maximus and Gellius, were especially fond of the *dicit*, as were commentators, such as Servius and Macrobius, and Christian theologians who regularly introduced proof-texts with *ut Scriptura dicit*. This sense of presence may also explain the use of an author’s name for that author’s book(s), which appears increasingly in Latin texts from the 4th to the 9th centuries. Though now commonly designated metonymy, there is a significant difference between “We’ve a lot of Vergil in our collection” and “I’ve read a lot of Vergil”. The former represents the book as product, but the latter represents its writer as person and, like the *legei* and *dicit* idioms, is consistent with the ‘WRITING IS MIND’ formula.

## 9.5 Conclusions

Theories of mind, when not dualistic, supernatural, or otherwise disembodied, have been modeled on whatever technology seemed at the time the most innovative. In the early eighteenth century, electricity seemed key to the brain’s functioning and in the late twentieth it was computer circuitry. Greek and Roman philosophers of mind were

intrigued by mathematical and geometric models, but the broad prestige of rhetoric favored a linguistic model, viz., alphabetic script. Though writing was never viewed (except perhaps by Plato) as radically opposed to orality, its relation to mind seemed particularly meaningful to professional writers, the literate class to whom we owe virtually all our knowledge of the past.

‘MIND IS WRITING’ apparently began as a novel metaphor before becoming a conventional one associated with the physical acts of writing and reading a papyrus scroll. By the time that spine-bound codices became the state-of-the-art medium, it had already become a dead metaphor. Yet, thanks to its power to reverse itself into ‘WRITING IS MIND’, it could survive and guarantee the makers of verbal artifacts the kind of afterlife that empowers them to “speak” within the minds of readers in a perpetual present.

‘MIND IS WRITING’, like ‘WRITING IS MIND’, is difficult to categorize. It asserts resemblance, but is not a one-shot resemblance metaphor in which two items are momentarily linked by a novel act of imagination, e.g., “Juliet is the sun”. Though it shares with embodied metaphor the capacity to generate a variety of metaphorical expressions and conventional idioms, its embodiment is outwardly projected into the instruments of writing and reading. Though its contiguity of user and instrument implies metonymy, it does not link mind *to* tool, but mind *through* tool to text.

To conclude: ‘MIND IS WRITING’ began as the conversion of outer speech to inner text. Its mirror image, ‘WRITING IS MIND’ was, and continues to function as, the conversion of outer text to inner speech. At this point, the only satisfactory conclusion I can offer is that this reversible metaphor-like analogy, deeply embedded as it is in literate culture, is wholly unique and *sui generis*.

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Luca D'Anselmi

## 10 Metaphorical word order

**Abstract:** Following the seminal work of Lakoff and Johnson (1980), cognitive linguists have theorized that visual forms, or “image schemata,” and the metaphorical interpretations of these forms constitute the basis for much of the structure and organization of language. In this paper, I argue that image schemata provide and constrain the underlying structures that naturally govern metaphorical word order in Latin. Following a review of scholarship, I review and describe these constructions across genres and authors and compare them with image schemata to suggest that the image schemata theorized in cognitive linguistics conceptually motivate metaphorical word order constructions in Latin.

**Keywords:** image schema, mimetic syntax, word order, word position, visibility, metaphor, imagery, poetry, iconicity, Virgil, Horace, Seneca

### 10.1 Introduction

Latin frequently expresses meaning through the spatial arrangement of words. This “metaphorical” word order, as I term it, reinforces, illustrates, or mimics the lexical denotations of words. Metaphorical word order also conveys content of its own – meaning apart from and in addition to lexical meaning. In contrast to the previous approaches of Lateiner (1990) and Dainotti (2013; 2015), I argue that the spatial arrangements of words in Latin are derived from experientially based image schemas metaphorically mapped onto the linear word order of a line or linguistic expression. Metaphorical word order in Latin is ubiquitous. Groups of Latin words surround, embrace, entrap, and consume one another. They sneak away, band together, and shatter apart. In fact, many Latin words can be said to live meaningful visual lives apart from their entries in a dictionary.

A few examples will best illustrate how metaphorical word order expresses meaning. In Horace’s famous ode to Pyrrha, the word order creates an image that visually represents an amorous embrace. A slender boy (*gracilis . . . puer*) surrounds or embraces Pyrrha (represented in the text by *te*) in the word order of the line. The roses, in turn, surround the lovers (*multa . . . in rosa*):

- (1) *quis multa*<sub>ABL.SG</sub> *gracilis*<sub>NOM.SG</sub> *te*<sub>ACC.SG</sub> *puer*<sub>NOM.SG</sub> *in rosa*<sub>ABL.SG</sub>  
*perfusus liquidis urget odoribus.* (Hor. *Carm.* 1.5.1–2)  
 ‘What slender boy, doused with liquid perfumes, urges you, in many a rose’.<sup>58</sup>

In the next line, we visually see Pyrrha within the pleasing grotto:

- (2) *grato*<sub>ABL.SG</sub> *Pyrrha*<sub>NOM.SG</sub> *sub antro*<sub>ABL.SG</sub>? (Hor. *Carm.* 1.5.3)  
 ‘**Beneath a pleasing grotto, Pyrrha?**’

Although the words in (1) do not semantically designate an embrace,<sup>59</sup> we are made to understand that the boy is holding Pyrrha because we see the action visualized in the order of the words. In his translation of these lines, Rudd (2004: 35) in fact chooses to express this implied embrace verbally: ‘Pyrrha, what slender youngster, soaked with perfume, **holds you in his arms**, lying on a heap of roses in a delightful grotto?’. Mackail (1938: 65) also verbalized the embrace: ‘The picture, the *chose vue*, is a couple in a rose-arbour, just seen; a slim boy **with his arms clasped tight round a girl**, who sits knotting back her hair’. In Horace’s Latin, however, this embrace is only communicated in the visual arrangement of the words, rather than through their semantic meanings.

Another example of metaphorical word order can be found in Statius’ epithalamium for Stella and Violentilla, where a visual “tangling” of the words expresses the entrapment of Venus and Mars when they are caught *in flagrante*:

- (3) *Lemnia*<sub>NOM.P</sub> *deprento*<sub>ABL.SG</sub> *reperunt uincula*<sub>NOM.PL</sub> *lecto*<sub>ABL.SG</sub>. (Stat. *Silv.* 1.2.60)  
 ‘**Lemnian chains** snaked over the entrapped bed’.

While *reperunt* expresses the creeping movement of the chains, the imbricated (abAB) word order of the nouns and their modifiers pictures the net-like entangling of the chains about the bed. These examples show how the visual word order of a linguistic expression can convey meaning at a level different from the merely semantic.

A few scholars have examined the visual aspects of word order in Latin. However, one major deficit of their studies is that they do not suggest an underlying mechanism for visual word order, nor do they provide a motivated account of the typology of visual orderings of words that tend to characterize Latin texts. Instead,

<sup>58</sup> All translations are my own unless otherwise specified. I wish to extend special thanks to William Michael Short, whose patient guidance with a non-specialist was invaluable throughout every aspect of this project. Furthermore, I wish to thank Charles Kuper for the examples from Jerome and Lucretius and Collin Hilton for a number of suggestions and corrections.

<sup>59</sup> The verb *urgere* typically means to ‘press (down); push; exert pressure’ or ‘urge’ (*OLD*), rather than ‘embrace’ or ‘hold’.

they assume that the visual ordering of words is a technique refined and practiced by a few highly skilled poets. By contrast, I suggest that the conceptual forms, known in cognitive linguistics as “image schemas,” govern visual word order throughout Latin literature, and not only in poetry. Thus, the embrace pictured in Hor. *Carm.* 1.5 is the result of the image schema of CONTAINMENT transferred to linear word order. Similarly, the imbricated word order in Stat. *Silv.* 1.2.60 is the result of the application of the MERGING schema. An image-schematic approach explains the visual aspects of Latin word order coherently and describes metaphorical ordering effects within a consistent, systematically defined, and psychologically realistic semantic framework. My study thus builds upon – and extends to an entirely different level of symbolic expression of – the kind of approach to meaning in Latin that has been staked out by scholars like Short (2013). In this paper, I review previous classical scholarship treating word order visualizations in Latin. I then go on to provide an overview of the cognitive-linguistic approach I adopt in explaining this phenomenon. Finally, I survey and describe selected arrangements in Latin literature and correlate them with image schemas, in order to suggest that the image schemas theorized in cognitive linguistics conceptually motivate and constrain word order constructions.

## 10.2 Previous approaches to “metaphorical” word order

Although individual word order effects such as those in Hor. *Carm.* 1.5 have been recognized, the visual ordering of words in Latin has received relatively little scholarly attention, especially as a widespread semantic (or, rather, supra-semantic) phenomenon in Latin (see Knox, 2013: 539–540). Young (1933) christened the phenomenon as the “pictorial arrangement of words”; however, he mistakenly attributed it to Vergil exclusively: “Since this practice of depicting in the order of the words something of the meaning of the verse is, by and large, particular to Virgil, it constitutes . . . a touchstone of his craft”.<sup>60</sup> Wilkinson (1963) briefly touched on “metaphor from word-order” in Latin and English poetry and claimed “The flexibility of Latin word-order lent itself to such effects”.<sup>61</sup> Holtsmark (1987: 130–132) remarked on “logotactic iconicity” in Catullus, asserting that, in *Carm.* 1 and 47, the “physical placement of words is at least as important as their lexical denotation”.

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<sup>60</sup> Young, 1933 provided several examples from Vergil that demonstrate CONTAINMENT through metaphorical word order.

<sup>61</sup> Wilkinson, 1963: 65–66 chose an example from Cicero to support Young’s examples of CONTAINMENT from Vergil: *publice me praesidio* (Cic. *Catil.* 1.5.11). I have found no other discussion of metaphorical word order in Latin or Greek prose, an indication of the study still to be undertaking on this topic.



A dizzying array of *ad hoc* or specialized terminology – from West’s (1975) “syntactical onomatopoeia”<sup>62</sup> to Dainotti’s (2013) “visual iconicity” – poses a significant challenge for a unified treatment of this subject.<sup>63</sup> I have decided to use the term “metaphorical word order” since it describes the phenomenon without the use of overly technical vocabulary.

Of the few scholars who have considered the visual aspects of Latin word order in any detail, some argue that they are aesthetic effects contrived to mimic lexical meaning for the enjoyment of the reader. In his seminal article on what he calls “mimetic syntax” in Ovid, Lateiner (1990: 206) argued that Latin poets deploy metaphorical word order as one of many “sources of linguistic pleasure”. In Lateiner’s (1990: 204) view, visual word order illustrates lexical meaning: “Syntax pictures sense. The reader synaesthetically experiences, by the spatial relationship of the words, what the lexical denotation of the words describes”.<sup>64</sup> A typical example from Lateiner (1990: 215) is the “momentary physical separation” expressed by the distance of *manus* and *te* in:

(4) *uix a te uideor posse tenere manus.* (Ov. Am. 1.4.10)

‘I scarcely seem to be able to keep **my hands off you**’.

Even here, it is arguable that the spatial separation of *te* and *manus* does not just “mimic,” spatially, the lexical denotations of the words. Rather, as demonstrated in (1) and (2) above, the separation actually contributes to meaning by expressing the uneasy distance between the hands and the object of their desire. Regardless, Lateiner (1990: 206) rightly argued against those who dismissed “mimetic” effects as “farfetched or inadequately demonstrated” phenomena: “Some critics will wonder whether an effect is calculated or demand poet’s statements about intentions. Accumulation of examples should persuade the wary of the phenomenon’s reality”.<sup>65</sup> Lateiner’s study demonstrated the pervasive presence of visual word order in Ovid

<sup>62</sup> Regarding metaphorical word order in Lucr. *DRN* 3.421–424, West, 1975: 96 claims that “This syntactical play is relevant to the sense, indeed a linguistic embodiment of it”. See also Sedley, 1998: 46–48.

<sup>63</sup> Besides scattered references in commentaries, cursory treatments of metaphorical word order also occur in Harrison, 1991: 288–290; Freudenburg, 1996: 200; Traina, 1997: 196–197, s.v. *icona* and *ipérbito*; Califf, 2002: 38–43. For the pedagogical application of “word pictures” see Markus & Ross, 2004: 79–81.

<sup>64</sup> Lateiner’s analysis includes the following categories: verse positioning of ordered words, juxtaposition and separation, enclosure and concealment, imbrication, balancing and ordering, sequence, interval, enjambment and acceleration.

<sup>65</sup> Yet this is problematic; an accumulation of examples can certainly demonstrate the *existence* of a phenomenon, but not the *intentionality* of a phenomenon.

and provided compelling reasons for a renewed study of the spatial aspects of Latin word order.

Following Lateiner’s analysis of “mimetic syntax”, however, skeptics continued to insist that the visual arrangement of words was inconsequential to the study of Latin literature. In an introductory sub-chapter on poetic hyperbaton, for instance, Adams & Mayer (1999: 17) admitted, “It seems likely that some Latin poets had, up to a point, a spatial concept in the structure of their verses”. Yet even after reviewing examples of metaphorical word order, they concluded, “It would not do . . . to make too much of spatial symbolism in the structure of verses” (Adams & Mayer, 1999: 18). Their skepticism is perhaps understandable due to the inability of English to engage in similar verbal pyrotechnics; however, their undefended dismissal left an opportunity for a thorough assessment of the phenomenon’s importance in Latin.

Dainotti’s (2013) examination of what he terms “verbal expressiveness” in Vergil and other hexameter poets registers a similar skepticism regarding the spatial aspects of word order. Building on Lateiner’s work, Dainotti initially argued that “iconic word order” was an “elegant stylistic device . . . by which the poet, in order to reinforce the semantics of a word or expression, creates a suggestive correspondence between the sense and the word placement”.<sup>66</sup> Thus, metaphorical word order does not constitute meaning in its own right, but only elegantly illustrates or reinforces meaning in poetry.<sup>67</sup> Consequently, in his recent book, Dainotti (2015) focused on Vergil, whose elegant and expressive poetry presumably offered the most promising ground for the collection of poetic devices.<sup>68</sup> Yet in his introduction, Dainotti (2015: 13) claimed that metaphorical word order is not a visual phenomenon at all: “It is important to specify that iconic diagrams of the visual type in Latin poetry – poetry intended in general to be listened to – are not really ‘visual’ but rather acoustic”.<sup>69</sup> Furthermore, Dainotti (2015: 13, n. 40) cited Adams & Mayer and similarly admitted that, “[we] cannot . . . completely deny the spatial and typographic value of lines in ancient poetry”. It is

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<sup>66</sup> Dainotti, 2013: 174 repeated this claim: “I would like to consider [iconic word order] a stylistic device, a deliberate strategy adopted to reinforce the *expressiveness* of a poetic image, an elegant invitation to the reader to engage in the synaesthetic experience of the poetic text”. He more or less followed the reasoning found in Lateiner, 1990: 204: “The reader synaesthetically experiences, by the spatial relationship of the words, what the lexical denotation of the verse describes”.

<sup>67</sup> Dainotti’s categories included enclosure, spatial hyperbaton, percolation, separation/opposition, and mixture. Thus, Dainotti mainly employed Lateiner’s categories; however, he renamed them and included an additional analysis of lines that describe snakes and weapons. Neither Lateiner nor Dainotti mentioned work done in cognitive linguistics. Lakoff and Johnson, for instance, are absent from their bibliographies. Adams and Mayer, however, are aware of Lakoff and Johnson.

<sup>68</sup> Dainotti, 2015 is invaluable for its perceptive assembly of examples from Vergil and other hexameter poets. See the review by Lee Fratantuono, 2012, *BMCR* 2016.05.42.

<sup>69</sup> Furthermore, regarding hyperbaton, Dainotti, 2015: 13 argued: “The reader, in order to join the adjective to its noun, is obliged to ‘listen’ to the line in its entirety and, as a result, perceives it as longer than the other lines in the context”.

difficult to understand how Dainotti could argue that the “visual level” of iconicity is really “acoustic,” while still claiming that the spatial value of poetic lines in Latin cannot be denied. Lateiner (1990: 208) preemptively challenged this view: “Ovid expected his poetry to be read by the eye on the page as well as recited and heard. Mimetic syntax is more commonly visual than aural, although not always a matter for the eye”.

Thus, previous approaches to the visual aspects of word order in Latin have left ample room for improvement in several regards. Although scholars such as Dainotti have gathered and categorized word order effects in individual authors, they have defined the nature of these spatial effects inconsistently or unclearly. Are these phenomena visual or aural? Are they sometimes visual and sometimes aural? The lack of a coherent approach has led to inconclusive statements such as “We cannot . . . completely deny the spatial and typographic value of lines in ancient poetry”. The lack of consistent terminology only makes matters worse: are these effects mimetic, iconic, logotactic, or acoustic? Second, no systematic motivation has been posited that explains the range of visual word order effects. Why do certain meaningful visual patterns of words appear? What constrains their typology and range?

### 10.3 A cognitive-linguistic approach to visual word order

In contrast to previous approaches, I argue that an image-schematic explanation provides both a precise understanding of the nature of the visual aspects of word order, as well as a systematically motivated account of the typology of effects that appear. In this view, visual word order effects are guided by a metaphorical projection of schematic spatial structures onto the sequence and “topography” of word order. The kinds of metaphorical effects that appear in Latin (and in other languages) are constrained by the range of applicable image schemas. In other words, through this image-schematic approach we can explain what metaphorical word order is, and we can coherently describe (and predict) the range of visual constructions in Latin.

Lakoff & Johnson’s (1980) study of how metaphor gives meaning to linguistic form provides a theoretical foundation for this approach. First, according to Lakoff & Johnson, language is naturally conceptualized in spatial terms. Thus, the spatial concepts that apply to the form of language are not primarily rhetorical flourishes employed by the most expressive poets. Rather, spatial metaphors should occur throughout a language to the extent that the syntax of the language is able to accommodate them.<sup>70</sup> Second, they argue that “Linguistic forms are themselves

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<sup>70</sup> Lakoff & Johnson, 1980: 127 2011 suggest that metaphor gives meaning to form in other languages besides English: “We would expect . . . that some metaphorical spatialization of language would occur in every language”.

endowed with content by virtue of spatialization metaphors” (Lakoff & Johnson, 1980: 126). Hardly an inconsequential or decorative aspect of language, metaphorical spatialization constitutes meaning apart from and in addition to semantic meaning. From this perspective, form and content are necessarily interconnected: they both contribute to the meaning of a linguistic expression. This contrasts with Dainotti’s (2015) “iconicity” approach, which sees such effects as rhetorical devices used to mimic semantic meaning.<sup>71</sup> Third, in contrast to Dainotti’s theory, Lakoff & Johnson (1980) claim that spatial metaphors apply directly to the sequencing of a sentence, whether the sentence is spoken or written; writing only serves to reinforce the application of spatial metaphors to language.<sup>72</sup> Thus, metaphorical word order should not be seen merely as a set of poetic or rhetorical embellishments.

More broadly, Lakoff & Johnson (1980: 1–6) argue that metaphor is a pervasive aspect of our conceptual system, integral to the way we think and express our thoughts. They provide numerous examples of basic metaphors such as ‘LIFE IS A JOURNEY’ that structure the conceptualization of a target domain (i.e., life) in terms of a source domain (i.e., journey). Furthermore, metaphor has an experiential basis. For instance, the frequent use of containment metaphors throughout language is derived from our experience of inhabiting houses, rooms, cribs, and the other spaces, as well as the lived experience of being a bodily container that holds other objects. Thus, numerous concepts, from emotions to arguments, are metaphorically understood in terms of containment metaphors (e.g., *I’m full of rage!* and *Your argument doesn’t hold water*) (see Lakoff & Johnson, 1980: 29–30). Importantly, Lakoff & Johnson (1980: 87–105) insist that metaphors are typically coherent; they form non-random systems arising from our embodied experience of the world. To reiterate, metaphor is an integral conceptual phenomenon, experientially based, and generally coherent.

In *The Body in the Mind* Johnson (1987) develops an aspect of the study begun in *Metaphors We Live By*. He argues that cognitive forms known as “image schemas” and the metaphorical interpretations of these forms constitute the basis for much of the structure and organization of language (Lakoff, 1987; Oakley, 2007: 214–235). These image schemas are natural, in that they arise from the embodied experiences that constitute human life:

[I]n order for us to have meaningful, connected experiences that we can comprehend and reason about, there must be a pattern and order to our actions, perceptions, and conceptions. A *schema* is a recurrent pattern, shape and regularity in, or of, these ongoing ordering activities. These patterns

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71 Dainotti, 2015: 7: “When . . . word order, rhythm, and figures of metre and sound mirror and amplify the sense of a passage, expressiveness becomes iconicity, ‘Form Miming Meaning’”. Dainotti follows Nänny & Fischer, 2006: 462–472, who provide numerous examples of iconicity in English poetry.

72 Lakoff & Johnson, 1980: 126: “[W]riting a sentence down allows us to conceptualize it even more readily as a spatial object”.

emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulations of objects, and our perceptual interactions. (Johnson, 1987: 29, *his emphasis*)

Johnson provides a partial list of many important image schemas including CONTAINER, BALANCE, COMPULSION, BLOCKAGE, COUNTERFORCE, ATTRACTION, PATH, CENTER-PERIPHERY, PART-WHOLE, MERGING, SPLITTING, MATCHING, SUPERIMPOSITION, ITERATION, and CONTACT (Johnson, 1987: 126).

Finally, Lakoff & Johnson argue that spatial concepts (such as image schemas) metaphorically apply to linguistic forms (such as word order):

We speak in a linear order; in a sentence, we say some words earlier and others later. Since speaking is correlated with time and time is metaphorically conceptualized in terms of space, it is natural for us to conceptualize language metaphorically in terms of space. Our writing system reinforces this conceptualization. Writing a sentence down allows us to conceptualize it even more readily as a spatial object with words in a linear order. Thus our spatial concepts naturally apply to linguistic expressions. We know which word occupies the *first position* in the sentence, whether two words are *close* to each other or *far apart*, whether a word is relatively *long* or *short* (Lakoff & Johnson, 1980: 126, *their emphasis*).<sup>73</sup>

Lakoff & Johnson provide examples in English using the underlying metaphor ‘LINGUISTIC EXPRESSIONS ARE CONTAINERS’. Since we expect small containers to have little content and large containers to have more content, the length of a linguistic expression can be metaphorically descriptive of amount. A good example of the visual application of the metaphor ‘MORE OF FORM IS MORE OF CONTENT’ expressed through ITERATION is the following:

*He ran and ran and ran and ran.*

This indicates more running than

*He ran.*

The first sentence expresses duration through the application of ITERATION directly to the spatial form of the sentence. It is important to note that the ITERATION expressed is not necessarily a highly calculated rhetorical effect, but an everyday application of a spatial metaphor to the form of a sentence. Numerous image schemas can be metaphorically applied to linguistic expressions. In the following section, I examine the presence of several of Johnson’s image schemas represented in Latin word order.

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<sup>73</sup> It is interesting to note that, in the study of metaphorical syntax, this conclusion renders it largely irrelevant whether a text was originally composed for aural performance or not.

## 10.4 Image-schematic structuring of word order in Latin

First, I provide a few examples of the application of the simple PATH, CONTACT/SEPARATION, and BALANCE image schemas to Latin word order. Second, I will examine several complex image schemas, such as CONTAINMENT, MERGING, and SPLITTING and their adaptation to two-dimensional linear word order. These complex image schemas cannot be easily expressed in English, due to the limitations of English word order; however, they are frequently expressed through metaphorical word order constructions in Latin.

### 10.4.1 PATH

The PATH schema (Lateiner, 1990: 209–214) expresses a spatial or temporal sequence. In the basic structure of this image schema, a trajector traces a path from a starting point to an end point, passing through a series of intermediate points. Since we also understand that a linguistic expression has a starting point, an end point, and a series of intermediate points, the metaphorical application of this schema to word order is relatively straightforward. We can see and hear what words come first in a line (as Lakoff and Johnson point out), what words come in the middle, and what words come last. As we read, our eyes pass from one point to another. A particularly clear application of the PATH schema representing spatial sequence illustrates the law of poetic unity in Horace's *Ars Poetica*. The word *primo* stands first; *medium* and *medio* surround the caesura; *imum* is placed last:

- (5) *primo*<sub>ABL.SG</sub> *ne medium*<sub>ACC.SG</sub> *medio*<sub>ABL.SG</sub> *ne discrepet imum*<sub>ACC.SG</sub>. (Hor. *Ars* 152)

'That **the beginning** is not discordant with **the middle**, nor **the middle** with **the end**'.

In the following example, Lateiner points out the medial positioning of *medias* and the final positioning of *imas*, "with an intentional double pun of placement" (Lateiner, 1990: 213):

- (6) *tum lino medias*<sub>ACC.PL</sub> *et ceris alligat imas*<sub>ACC.PL</sub>. (Ov. *Met.* 8.193)

'Then [Daedalus] binds the **middles** and the **ends** of the feathers with flax and wax'.

Lucretius' causes sequentially follow each other in the order of the words:

- (7) *ex infinito ne causam*<sub>ACC.SG</sub> *causa* *sequatur*. (Lucret. *DRN* 2.255)

'That **cause** may not follow cause from infinity'.

Metaphorical extensions of the PATH schema also structure word order. Frequently, PATH metaphorically expresses temporal sequence via the metaphor 'TIME IS A PATH' through the ordering of linguistic elements. As Short (2013: 386) has recently

argued, “Latin speakers’ conceptualization of time exemplifies . . . image-schematic structuring”. This conceptualization is reflected in Latin and English word order. Consider the different meanings expressed by the following sentences that differ only in their word order:

*He stood up and died.*

*He died and stood up.*

In “He stood up and died,” it is understood that the standing up happened before the death; in “He died and stood up,” the opposite is implied. The former might describe a heart attack; the latter, zombification. A famous Latin example of a PATH image schema metaphorically expressing temporal sequence in a linguistic expression is Caesar’s dictum *veni, vidi, vici* (Suet. *Jul.* 37.2).<sup>74</sup> Similarly, Tacitus expresses the temporal sequence of the rout of the Britons through the PATH schema. The Romans follow, wound, capture, and kill their captives:

- (8) **sequi<sup>1</sup> uulnerare<sup>2</sup> capere<sup>3</sup>, atque eosdem oblatis aliis trucidare<sup>4</sup>.** (Tac. *Ag.* 37.2)  
 ‘**They pursued<sup>1</sup>, wounded<sup>2</sup>, captured<sup>3</sup>**, and – as others presented themselves – they **slaughtered<sup>4</sup>** their captives’.

Any change in the word order of these examples would distort the meaning.

#### 10.4.2 CONTACT and SEPARATION

The CONTACT image schema transposed to linear word order frequently expresses closeness, similarity, or unity. In a line or linguistic expression this effect occurs when words denoting conceptually or physically close objects, people, or concepts are associated through spatial proximity. Metaphorically, CONTACT can express intensity (‘CLOSENESS IS STRENGTH OF EFFECT’). Lakoff & Johnson (1980: 130) provide the classic example in English, comparing *I taught Greek to Harry* with *I taught Harry Greek*. They argue, “In the second sentence, where *taught* and *Harry* are close, there is more of a suggestion that Harry actually learned what was taught him – that is, that the teaching had an effect on him”. Another well-known example demonstrates how CONTACT implies causation and how increased SEPARATION implies diminishing causation:

*Sam killed Harry.*

*Sam caused Harry to die.*

---

<sup>74</sup> Scrambling the order of the words in English results in a sexual innuendo.

*Sam brought it about that Harry died.* (Lakoff & Johnson, 1980: 131)

The progressive syntactic distancing of Sam from Harry indicates a weakening of the causal link between Sam's actions and Harry's death. Importantly, Lakoff & Johnson (1980: 132) remind us that "The subtle shades of meaning that we see in the examples given above are thus the consequences not of special rules of English but of a conceptual metaphor applying naturally to the *form* of the language".

Similarly, CONTACT frequently applies to the form of linguistic expressions in Latin. Dainotti provides several excellent examples of the application of CONTACT in Vergil. As the battle lines of the Trojans and Latins come together, the physical closeness of battle is communicated through the application of the CONTACT schema to word order. The battle lines collide in the line, the feet of the men press against each other, and the men themselves are densely packed together (Dainotti, 2015: 226):<sup>75</sup>

- (9) *haud aliter Troianae **acies aciesque** Latinae  
concurrunt, haeret **pede**<sub>ABL.SG</sub> **pes**<sub>NOM.SG</sub> densusque **uiro**<sub>ABL.SG</sub> **uir**<sub>NOM.SG</sub>.* (Verg. *Aen.*  
10.360–61)  
'Scarcely otherwise did the Trojan **battle lines and the battle lines** of the Latins/  
charge together; **foot** clung to **foot**, and **men** were densely-packed with **men**'.

Similarly, when Dido prays that everlasting enmity will remain between Carthage and Rome, the close relationship between the two cities is conveyed through the CONTACT schema (Dainotti, 2015: 226):

- (10) *litora*<sub>ACC.PL</sub> *litoribus*<sub>DAT.PL</sub> *contraria, fluctibus*<sub>DAT.PL</sub> *undas*<sub>ACC.PL</sub>  
*imprecor, arma*<sub>ACC.PL</sub> *armis*<sub>DAT.PL</sub> : *pugnent ipsi*<sub>NOM.PL</sub> *que nepotes*<sub>NOM.PL</sub> *que.* (Verg. *Aen.*  
4.628–29)  
'I call on **shores** to be opposed to **shores**, **waves to waves**,/ **arms to arms**: may  
**they and their grandchildren** be in conflict'.

In Curtius' *Historiae Alexandri Magni*, the battle lines of Alexander and Darius crush against each other:

- (11) *duae quippe acies ita cohaerebant, ut armis*<sub>DAT.PL</sub> *arma*<sub>NOM.PL</sub> *pulsarent, mucrones in  
ora dirigerent.* (Curt. 3.11.5)  
'Then the two battle lines were so closely pressed, that **arms** beat against **arms**,  
and they pointed their blades at each other's faces'.

<sup>75</sup> See Dainotti's, 2015 sub-section on "significant juxtapositions," for interesting examples, primarily from the *Aeneid*.



In Ennius, the juxtaposition of *uestras* and *meas* expresses Medea's burning desire to take her children's hands physically in her own:

- (12) *saluete, optima corpora,*  
*cette manus uestras measque accipite.* (Enn. *Trag.* 289–90)  
 'Good-bye, you dearest little things; there now!/ Give me **your hands** and you take **mine**'. (Warmington, 1956: 322–323)

The physical closeness of Seneca's Orpheus and Eurydice is reflected in the word order:

- (13) *Orpheus, Eurydicen dum repetit suam* (Sen. *Her. F.* 571)  
 '**Orpheus**, when he returns to his **Eurydice**'.

CONTACT can also be metaphorically extended to refer to the similarity or "closeness" between concepts or ideas, such as "love" and "desire". When Jerome discusses the difficulty of being virtuous, the metaphorical closeness of virtue and vice is expressed through CONTACT:

- (14) *uicina sunt uitia* NOM.PL *uirtutibus* DAT.PL. (Jer. *Lucif.* 15)  
 '**Vices** are similar to **virtues**'.

Jerome would probably disapprove of the physical CONTACT expressed in Lucilius:

- (15) *cum poclo bibo eodem, amplector, labra* NOM.PL *labellis* DAT.PL  
*fictricis conpono, hoc est cum psōlokopoûmai.* (Lucil. *Sat.* 331–32)  
 'When I drink from the same cup, embrace her, lay **my lips to her little ones**/  
 (the scheming jade!) – that is, when I'm lustful'. (Warmington, 1967: 102–103)

As Pompey marches in haste to reach Dyrrachium, night is joined to day in the visual ordering of the words:

- (16) *quod properans noctem* ACC.SG *diei* DAT.SG *coniunxerat neque iter intermiserat.* (Caes. *Civ.* 3.13)  
 'Because in haste [Pompey] had joined **night to day** and had not interrupted his journey'.

In contrast to CONTACT, spatial distance can be expressed through SEPARATION. When Ovid's ghostly Orpheus looks back at Eurydice with impunity, metaphorical word order illustrates the spatial distance between the two. Here, SEPARATION combines with an application of the PATH schema. Eurydice spatially remains at the beginning of the line, while Orpheus has progressed towards the end:

(17) *nunc praeuius anteit*

**Eurydicenque** suam iam tuto respicit **Orpheus**. (Ov. *Met.* 11.65–66)

‘Now he goes before her,/ and **Orpheus** safely now looks back on his **Eurydice**’.

Martial’s Eurydice sends a bear to get Orpheus from the overworld. The impossible physical distance between the two is expressed by an extreme application of the SEPARATION schema:

(18) **Orphea** quod subito tellus emisit hiatu

*ursam inuasuram, uenit ab Eurydice*. (Mart. *Sp.* 25.1–2)

‘Earth through a sudden opening sent/ a bear to attack **Orpheus**. She came from **Eurydice**’. (Shackleton Bailey, 2003: 28–29)

Like CONTACT, spatial SEPARATION can be extended metaphorically to refer to the dissimilarity or distance between concepts or ideas, such as “hate” and “love” or “cowardice” and “bravery”. Seneca’s Eurybates shrinks from recalling the storm that befell Agamemnon’s fleet. His mind is separated from the evils he has endured to the maximum extent allowed by the trimeter:

(19) **mens aegra tantis atque inhorrescit malis**. (Sen. *Ag.* 418)

‘My sick **mind** is terrified of such **evils**’.

Lateiner (1990: 215) gives the example of guilt (*nocens*) and innocence (*insonti*) being separated to the greatest extent allowed by the pentameter:

(20) *a, quotiens finxit culpam, quantumque licebat*

**insonti, speciem praebuit esse nocens!** (Ov. *Am.* 2.19.13–14)

‘Ah, how oft has she feigned a charge, and put on the air/ as far as she could with a **guiltless** man – of **attacking** me!’ (Showerman, 1977: 439)

In poetry, SEPARATION can also be expressed through enjambment, taking advantage of the spatial break between lines (Latenier, 1990: 206). When Creon recounts the necromancy to Oedipus, Pentheus appears as part of the catalog of famous Thebans. The unfortunate king of Thebes is torn from his adjective, visualizing his horrifying dismemberment at the hands of his mother:

(21) *sequitur et Bacchas lacer*

**Pentheus** tenetque saeuus etaimnunc minas. (Sen. *Oed.* 617–618)

‘And **torn Pentheus**/ follows the Bacchantes, still holding savagely to his threats’.

## 10.4.3 BALANCE

So far, I have examined two of Johnson's basic image schemas, PATH and CONTACT/SEPARATION, expressed in linear word order. These are relatively simple, easily visualized and constructed in a one-dimensional linguistic form. Other simple effects such as BALANCE occur frequently (Lateiner, 1990: 223–226). According to Horace, in poetry, what is pleasing must be brought together equally with what is profitable; this is mirrored in the balanced expression:

- (22) *lectorem **delectando**<sub>ABL</sub> pariterque **monendo**<sub>ABL</sub>*. (Hor. *Ars* 344)  
 'Equally **by delighting** and **by teaching** the reader'.

Horace commands the Pisones to study their Greek models. The regularity of his recommendation (that they study both day and night) is represented by an application of the BALANCE schema applied to the line:

- (23) *uos exemplaria Graeca  
**nocturna**<sub>ACC.PL</sub> **versate**<sub>IMP,2PL</sub> **manu, versate**<sub>IMP,2PL</sub> **diurna**<sub>ACC.PL</sub>*. (Hor. *Ars* 268–269)  
 'For yourselves, go over Greek models/ **nightly**, go over them **daily**'

## 10.4.4 COLLECTION

Similarly, the COLLECTION image schema is relatively straightforward in its application to linear word order. Through asyndeton, the tight assembly of words in a line or linguistic expression demonstrates the close spatial assembly of related objects, people, or characteristics. Venantius Fortunatus lists the paraphernalia of Christ's passion through an application of the COLLECTION schema:<sup>76</sup>

- (24) *Hic **acetum fel arundo sputa clavi lancea***. (Ven. Fort. *Carm.* 2.2.19).  
 'Here **vinegar, gall, reed, spit, nails, lance**'.

The numerous awful traits of Virgil's Polyphemus are emphasized through COLLECTION (and further emphasized through elision):

- (25) *monstrum<sub>ACC,N,SG</sub> **horrendum**<sub>ACC,SG</sub> **informe**<sub>ACC,SG</sub> **ingens**<sub>ACC,SG</sub> cui lumen ademptum.*  
 (Verg. *Aen.* 3.658)  
 'A **dreadful** monster, **deformed** and **huge**, whose eye was gone'.

<sup>76</sup> Example taken from Roberts, 1989: 60.

This effect appears frequently in prose as well as poetry. As the inhabitants of Marseilles prepare for the arrival of Caesar, the assemblage of repairs is expressed through the COLLECTION schema:

(26) *armorum officinas in urbe instituerant, **muros portas classem** reficiebant.* (Caes. Civ. 1.34.5)

‘They established workshops for the production of arms in the city, and were rebuilding the **walls, gates, and fleet**’.

#### 10.4.5 MERGING and SPLITTING

As with the PATH, CONTACT/SEPARATION, BALANCE, and COLLECTION schemas, MERGING and SPLITTING provide the conceptual motivation for countless metaphorical word order constructions throughout Latin literature. Interlocking (abAB) word order and its variants often manifest these image schemas, but asyndeton and simple juxtaposition can express MERGING as well. Through its numerous entailments, MERGING expresses mingling, mixing, confusion, weaving, and interlocking. SPLITTING, also frequently expressed through interlocking word order, describes dissolution, splattering, and scattering (Dainotti, 2015: 248–249; Lateiner, 1990: 222–223). Below are several examples of the MERGING and SPLITTING schemas applied to word order in Latin poetry and prose.

MERGING frequently expresses mingling of liquids, people, or objects. In the battle for Massilia, Lucan’s drowning soldiers drink their own blood mixed with sea-water. Within the line, the sea mingles with the blood of the dying soldiers and sailors:

(27) *hauseruntque **suo** <sup>ABL.SG</sup> permixtum <sup>ACC.SG</sup> **sanguine** <sup>ABL.SG</sup> pontum <sup>ACC.SG</sup>.* (Luc. BC. 3.577)  
‘They drank down the sea mixed with their own blood’.

In a similar line, Manilius describes how those born under the constellation Cetus will become fishermen and taint the waters of the sea with the blood of its own creatures:

(28) *inficiturque **suo** <sup>ABL.SG</sup> permixtus <sup>NOM.SG</sup> **sanguine** <sup>ABL.SG</sup> pontus <sup>NOM.SG</sup>.* (Man. Astr. 5.667)  
‘The sea is dyed, mingled with its own blood’.

The Parcae foretell the bloody deeds of Achilles at Troy:

(29) ***alta** <sup>ACC.PL</sup> tepefaciet permixta <sup>ABL.SG</sup> **flumina** <sup>ACC.PL</sup> caede <sup>ABL.SG</sup>.* (Catul. Carm. 64.360)  
‘[Achilles] will warm **the deep rivers** with intermingled slaughter’.

Vergil's ill-fated Halaesus strikes Thoas in the face, mingling the bones of his skull with his brain:

- (30) *ossa*<sub>ACC.PL</sub> **que dispersit** *cerebro*<sub>ABL.SG</sub> **permixta**<sub>ACC.PL</sub> *cruento*<sub>ABL.SG</sub>. (Verg. *Aen.* 10.416)  
 'He shattered apart **his bones mixed** with the bloody brain'.

The gods have abandoned a world whose moral degradation is expressed by the MERGING schema through imbricated word order and asyndeton:

- (31) *omnia*<sub>NOM.PL</sub> **fanda**<sub>NOM.PL</sub> **nefanda**<sub>NOM.PL</sub> *malo*<sub>ABL.SG</sub> **permixta**<sub>NOM.PL</sub> *furore*<sub>ABL.SG</sub>. (Catul. *Carm.* 64.405)  
 'All things, good and unspeakable, mixed together with impious fury'.

Interspersed with poppies, lilies grow in the garden where Hylas meets a watery fate:

- (32) *et circum irriguo surgebant lilia prato*  
*candida*<sub>NOM.PL</sub> *purpureis*<sub>ABL.PL</sub> **mixta**<sub>NOM.PL</sub> *papaueribus*<sub>ABL.PL</sub>. (Prop. *Carm.* 1.20.37–38)  
 'And round about lilies were growing in the well-watered meadow, / **white lilies mixed with dark red poppies**'.

The soldiers in Hannibal's battle line are confused and set upon by the enemy in a narrow pass:

- (33) *deinde, ut trepidationem in angustiis suo* **que ipsum**<sub>ACC.SG</sub> **tumultu**<sub>ABL.SG</sub> *misceri*  
*agmen*<sub>ACC.SG</sub> *uidere, equis maxime consternatis, quidquid adiecissent ipsi terroris,*  
*satis ad perniciem fore rati.* (Liv. *AUC.* 21.33.3–4)  
 'Then, when they saw the helter-skelter in the pass and the battle line itself embroiled **in its own confusion**, the horses especially being frightened, they thought that whatever they could add themselves to the consternation of the troops would be sufficient to destroy them'. (Foster, 1963: 97, adapted)

Frequently, asyndeton can express the MERGING schema, when rapid-fire word order expresses the mingling and confusion of people, objects, or concepts. Jugurtha's Numidians offer Metellus' legionaries a day of confused fighting:

- (34) *dispersi a suis pars cedere, alii insequi; neque signa neque ordines obseruare;*  
*ubi quemque periculum ceperat, ibi resistere ac propulsare; arma tela equi uiri*  
**hostes atque ciues permixti; nihil consilio neque imperio agi, fors omnia regere.**  
 (Sal. *Jug.* 51.1)

‘Scattered from their comrades, some retreated, others followed, they observed neither standards nor ranks; where danger overtook each man, there he stopped and resisted; **arms, weapons, horses, men, enemies and citizens mixed together**; nothing done with intention or command, fortune ruling everything’.

The MERGING schema frequently expresses weaving, intertwining, or binding through imbricated word order. Tiresias prepares a necromantic sacrifice, tying up the horns of a bull:

- (35) *tum fera* <sub>ACC.PL</sub> *caeruleis* <sub>ABL.PL</sub> *intexit cornua* <sub>ACC.PL</sub> *sertis* <sub>ABL.PL</sub>. (Stat. *Theb.* 4.449)  
 ‘Then he wove **the fierce horns** with dark garlands’.

The slithering appearance of Erictho’s hair is terrifying:

- (36) *et coma* <sub>NOM.SG</sub> *uipereis* <sub>ABL.PL</sub> *substringitur horrida* <sub>NOM.SG</sub> *sertis* <sub>ABL.PL</sub>. (Luc. *BC.* 6.656)  
 ‘And her **frightful hair** is bound up with entwined vipers’.

The SPLITTING schema is also applied to a linguistic expression through imbricated word order; it represents splattering, sprinkling, and scattering. Following the murder of Clytemnestra in Accius’ *Aegisthus*, Orestes’ hands are splattered with his mother’s blood:

- (37) *cui manus* <sub>NOM.SG</sub> *materno* <sub>ABL.PL</sub> *sordet sparsa* <sub>NOM.SG</sub> *sanguine* <sub>ABL.SG</sub>.  
 (Acc. *Trag.* 12)  
 ‘His **hand** was soiled **with spots** of his mother’s blood’.

Octavia bemoans the death of her mother:

- (38) *ora* <sub>NOM.PL</sub> *que foedo* <sub>ABL.SG</sub> *sparsa* <sub>NOM.PL</sub> *cruore* <sub>ABL.SG</sub>. ([Sen.] *Oct.* 17)  
 ‘And **her face** **sprayed** with ghastly gore’.

Poppaea’s nurse describes how the Senate was astonished at her beauty:

- (39) *sacras* <sub>ACC.PL</sub> *que grato* <sub>ABL.SG</sub> *spargeres aras* <sub>ACC.PL</sub> *mero* <sub>ABL.SG</sub>. ([Sen.] *Oct.* 701)  
 ‘[As] you sprinkled the **sacred altars** with pleasing wine’.

#### 10.4.6 CONTAINMENT

Although the image schema of CONTAINMENT (see Dainotti, 2013: 182–185; 2015: 245–248; Lateiner, 1990: 217–223) is derived from experiences of three-dimensional space, a one-dimensional line or linguistic expression can express CONTAINMENT, as Johnson (1987: 21–22) suggests:

The most experientially salient sense of boundedness seems to be that of three-dimensional containment (i.e., being limited or held within some three-dimensional enclosure, such as a womb, a crib, or a room). If we eliminate one or two of these dimensions, we get equally important two- and one-dimensional containment. In these latter cases, however, the relevant experience is chiefly one of differentiation and separation, such as when a point lies *in* a circle or *in* a line segment. Whether in one, two, or three dimensions, physical *in-out* orientation involves separation, differentiation, and enclosure, which implies restriction and limitation.

Thus, although linear word order is unable to express three- or two-dimensional CONTAINMENT, it is possible to express one-dimensional CONTAINMENT in a line or linguistic expression. Most commonly, this occurs when a word and its modifier surround another word or when a word is separated from others. Unlike PATH, CONTACT, and SEPARATION, the limitations of English word order make it difficult, if not impossible, to express CONTAINMENT spatially in the form of a sentence; Latin, by contrast, is ideally suited to express complex image schemas through the flexibility of its word order.

Indeed, CONTAINMENT provides the conceptual motivation for countless metaphorical word order constructions throughout Latin literature, expressing enclosure, desire, consumption, protection, oppression, and other senses of boundedness and limitation. For instance, through metaphorical word order, the physical features of an environment, such as mountains, rivers, streams, or oceans can be surrounded by other features of the environment, such as land or water (e.g., *the river ran through the mountains*). An object or person can also be held within an enclosing environment (e.g., Hor. *Carm.* 1.5.3). This external CONTAINMENT can be metaphorically extended to psychological conditions and abstract situations, such as emotions or an aspect of life or fate (e.g., *I'm held by indecision*). Furthermore, since human beings and other objects are also conceptualized as containers, internal CONTAINMENT expressed in metaphorical word order can communicate pregnancy, wounding, consumption, digestion, and internal emotions.

CONTAINMENT expressed through metaphorical word order is ubiquitous throughout Latin literature and frequently portrays the arrangement of geographical features. Amphitryon recalls how Hercules broke open the land mass that separated the Mediterranean Sea from the Atlantic, resulting in the Straits of Gibraltar. The flowing Ocean (*ruenti Oceano*) lies physically between the broad path (*latam uiam*), and *latam* is separated from *uiam* to the maximum extent allowed by the trimeter:

- (40) *latam*<sub>ACC.SG</sub> *ruenti*<sub>DAT.SG</sub> *fecit Oceano*<sub>DAT.SG</sub> *uiam*<sub>ACC.SG</sub>. (Sen. *Her. F.* 238)  
 ‘[Hercules] made **a broad path** for the rushing ocean’.

CONTAINMENT expresses countless variations of topographical enclosure. A Priapus is constructed within the fruit-bearing garden:

- (41) *pomosis*<sub>ABL.PL</sub> *que ruber*<sub>NOM.SG</sub> *custos*<sub>NOM.SG</sub> *ponatur in hortis*<sub>ABL.PL</sub>. (Tib. *Carm.* 1.1.17)  
 ‘The red-painted guardian is placed **in the fruit-rich gardens**’.

Instead of a feature of topography, CONTAINMENT can express surrounding groups of people, statues, or gods. Statira stands grieving in the midst of a crowd of noble women:

- (42) *ingens*<sub>NOM.SG</sub> *circa eam*<sub>ACC.SG</sub> *nobilium*<sub>GEN.PL</sub> *feminarum*<sub>GEN.PL</sub> *turba*<sub>NOM.G</sub> *constiterat laceratis crinibus abscessaque ueste*. (Curt. *Hist.* 3.11.25)  
 ‘Around her **a vast crowd of noble women stood** with their hair torn and their clothing rent’.

Seneca describes how Cornelia lost her son to an unknown killer in the midst of the household gods:

- (43) *Cornelia Liui Drusi clarissimum iuuenem iulustris ingenii, uadentem per Gracchana uestigia imperfectis tot rogationibus intra penates*<sub>ACC.PL</sub> *interemptum*<sub>ACC.SG</sub> *suos*<sub>ACC.PL</sub>, *amiserat*. (Sen. *Dial.* 6.16.4)  
 ‘Cornelia, the wife of Livius Drusus, lost her illustrious son of outstanding character, who was treading in the footsteps of the Gracchi, and was assassinated among his own household gods, with so many proposed measures still unpassed’.

Although Varius is syntactically departing from the company en route to Brundisium, he is surrounded by a group of his mourning friends in the word order of the line:<sup>77</sup>

- (44) *flentibus*<sub>ABL.PL</sub> *hinc Varius*<sub>NOM.SG</sub> *discedit maestus*<sub>NOM.SG</sub> *amicis*<sub>ABL.PL</sub>. (Hor. *Serm.* 1.5.93)  
 ‘From here unhappy Varius departed **from his weeping friends**’.

Tragedy is like a blushing matron commanded to dance in the company of impudent Satyrs:

<sup>77</sup> See Gowers, 2012: 210, “Word order wraps Varius in a huddle of grieving amici”.



- (45) *intererit Satyris*<sub>ABL.PL</sub> *paulum pudibunda*<sub>NOM.SG</sub> *proteruis*<sub>ABL.PL</sub>. (Hor. Ars 233)  
 ‘Blushing a little, [the matron] will be among **the shameful Satyrs**’.

Although Livius Drusus is surrounded by a great group of friends, he is assassinated by an unknown hand and dies shortly thereafter, to the consternation of the Italians. The vastness of the surrounding crowd is expressed through broad CONTAINMENT:<sup>78</sup>

- (46) *tum conuersus Drusi animus . . . ad dandam ciuitatem Italiae. Quod cum moliens reuertisset e foro, immensa illa et incondita*<sub>ABL.SG</sub>, *quae eum semper comitabatur, cinctus*<sub>NOM.SG</sub> *multitudine*<sub>ABL.SG</sub> *in area domus suae cultello percussus, qui adfixus lateri eius relictus est, intra paucas horas decessit.* (Vell. Hist. 2.14)

‘Drusus turned his attention . . . to granting the citizenship to the Italians. While he was engaged in this effort, and was returning from the forum **surrounded by the large and unorganized crowd** which always attended him, he was stabbed with a knife in the area before his house and died in a few hours, the assassin leaving the weapon in his side’. (Shipley, 1924: 77)

CONTAINMENT can be expressed in combination with CONTACT. As Clytemnestra wavers in her resolve to kill her husband in Seneca’s *Agamemnon*, Aegisthus urges her toward revenge by reminding her of Agamemnon’s past and future infidelity. Metaphorical word order vividly expresses a possible future in which Clytemnestra will share a marriage bed with Cassandra (perhaps at the same time). Both Clytemnestra (*uicta*) and Cassandra (*consortem*) are placed together within Clytemnestra’s bed:

- (47) *feresne thalami*<sub>GEN.SG</sub> *uicta*<sub>NOM.SG</sub> *consortem*<sub>ACC.SG</sub> *tui*<sub>GEN.SG</sub>? (Sen. Ag. 256)  
 ‘Will you, defeated, allow a consort in your bed?’

A similar effect describes incest in the *Metamorphoses*. When Myrrha tricks her father Cinyras into sexual intercourse, they lie together, “snugly ensconced in their incestuous bed-frame” (Lateiner, 1990: 21):<sup>79</sup>

- (48) *accipit obsceno*<sub>ABL.SG</sub> *genitor*<sub>NOM.SG</sub> *sua uiscera*<sub>ACC.PL</sub> *lecto*<sub>ABL.SG</sub>. (Ov. Met. 10.465)  
 ‘The father accepted his own flesh in a polluted bed’.

<sup>78</sup> Compare the CONTAINMENT in SEN. *Dial.* 6.16.4 above, where the tight closeness of *interemptum* within *penates . . . suos* expresses the intimacy of the setting in which the young man was slain.

<sup>79</sup> See Ov. *Met.* 6.517.

In the *Hercules Oetaeus*, the nurse laments the madness to which Deianira is driven when Hercules returns with Iole. A single house surrounds both Iole (*paelici*) and Deianira (*nuptae*) together:

- (49) *cum patuit una*<sub>NOM.SG</sub> *paelici*<sub>DAT.SG</sub> *et nuptae*<sub>DAT.SG</sub> *domus*<sub>NOM.SG</sub>. (Sen. *Her. O.* 234)  
 ‘When a **single house** lies open for a mistress and a wife’.

Not only incest and potential threesomes, but also the enduring alliance of spirit and mind can be expressed by a combination of CONTAINMENT and CONTACT (further enhanced by elision):

- (50) *hoc*<sub>ABL.SG</sub> *anima*<sub>NOM.SG</sub> *atque animus*<sub>NOM.SG</sub> *uincti sunt foedere*<sub>ABL.SG</sub> *semper*. (Lucret. *DRN.* 3.416)  
 ‘Spirit and mind are always bound **by this alliance**’.

External CONTAINMENT can express clothing, armor, or adornment. Lucretius describes the headdress of battlements worn by the Magna Mater:

- (51) *murali*<sub>ABL.SG</sub> *que caput summum* *cinxere corona*<sub>ABL.SG</sub>. (Lucret. *DRN.* 2.606)  
 ‘They encircled the top of her head **with a crown of walls**’.

In Petronius’ *Satyricon*, we find enclosure used to express clothing or girding. Trimalchio’s porter, for instance, is girded by his flashy belt:

- (52) *in aditu autem ipso stabat ostiarius prasinatus, cerasino*<sub>ABL.SG</sub> *succinctus*<sub>NOM.SG</sub> *cingulo*<sub>ABL.SG</sub>, *atque in lance argentea pisum purgabat*. (Petr. *Sat.* 28.8)  
 ‘Also in the very doorway stood a green-clothed porter, girt with a cherry-colored belt, and he was shelling peas on a silver plate’.

Fear, hope, and other abstract concepts can be conceptualized metaphorically using a CONTAINMENT schema transposed to linear word order. Sallust’s Catiline desperately hopes for victory:

- (53) *cum uos considero, milites, et cum facta uostra aestumo, magna*<sub>NOM.SG</sub> *me*<sub>ACC.SG</sub> *spes*<sub>NOM.SG</sub> *uictoriae tenet*. (Sall. *Cat.* 58.18)  
 ‘When I look at you, my soldiers, and when I consider your deeds, **a great hope of victory** holds me’.

Wilkinson (1964: 66) and Lateiner (1990: 222, n. 22) give the example of Cicero, who has not been secured by the public guardianship:<sup>80</sup>

(54) *non publico*<sub>ABL.SG</sub> *me*<sub>ACC.SG</sub> *praesidio*<sub>ABL.SG</sub>, *sed priuata diligentia defendi*. (Cic. *Cat.* 1.5.11)

‘I defended myself not **by public protection**, but by private diligence’.

Instead he was held by great fear that could only be alleviated by the removal of Catiline from the city:

(55) *magno*<sub>ABL.SG</sub> *me*<sub>ACC.SG</sub> *metu*<sub>ABL.SG</sub> *liberaueris*. (Cic. *Cat.* 1.5.10)

‘You will free me **from great fear**’.

Octavia is held by great sorrow:

(56) *nunc in luctus*<sub>ACC.PL</sub> *seruata*<sub>NOM.SG</sub> *meos*<sub>ACC.PL</sub>  
*magni resto nominis umbra*. ([Sen.] *Oct.* 70–71)

‘Now, preserved in my lamentations,/ I remain, the shadow of a great name’.

Pregnancy is often expressed through internal CONTAINMENT. Seneca’s nurse tries to dissuade Phaedra from her love of Hippolytus. Phaedra must take care lest she too bear a Minotaur. Within the line, the hypothetical chimeric offspring (*prolem confusam*) is surrounded by the impious womb (*impio utero*):

(57) *miscere thalamos patris et gnati apparatus*

*utero*<sub>ABL.SG</sub> *que* *prolem*<sub>ACC.SG</sub> *capere* *confusam*<sub>ACC.SG</sub> *impio*<sub>ABL.SG</sub>?

(Sen. *Phaed.* 171–72)

‘Do you prepare to combine the bed of your father and son,/ and take a confused offspring in your impious womb?’

Similar CONTAINMENT depicts Pasiphae’s pregnancy in Ovid:

(58) *Pasiphae mater, decepto subdita tauro,*

*enixa est utero*<sub>ABL.SG</sub> *crimen onusque suo*<sub>ABL.SG</sub>. (Ov. *Ep.* 4.57–58)

‘The mother Pasiphae, when she submitted to a deceived bull,/ bore a crime and a burden from her womb’.

<sup>80</sup> This is the only example of metaphorical word order in prose provided in all of previous scholarship.

As Canace prepares to commit suicide, the words and touch of her brother and lover Macareus revived her and encouraged her to bring forth her child:

(59) *mortua, crede mihi, tamen ad tua uerba reuixi:*

*et positum est uteri*<sub>GEN.SG</sub> *crimen onusque mei*<sub>GEN.SG</sub>. (Ov. *Ep.* 11.63–64)

‘Believe me, I was dead – but I revived when I heard your voice,/ and the burden and the crime of my womb was brought forth’.

Consumption is also frequently expressed through the application of a CONTAINMENT schema to word order. Tereus unwittingly fills his belly with his own child. Notice the additional effect of the CONTACT schema in the juxtaposition of *suam* and *sua*:<sup>81</sup>

(60) *uescitur inque suam*<sub>ACC.SG</sub> *sua*<sub>ACC.PL</sub> *uiscera congerit aluum*<sub>ACC.SG</sub>. (Ov. *Met.* 6.651)

‘He eats, crowding his own flesh into his own belly’.

Atreus plans to feed Thyestes his own children. Within the word order we see that Thyestes “plays . . . in an ugly parody of childbirth, the woman” (Littlewood, 2008: 45).

(61) *totum*<sub>ACC.SG</sub> *que* *turba*<sub>ABL.SG</sub> *iam* *sua*<sub>ABL.SG</sub> *implebo* *patrem*<sub>ACC.SG</sub>\*

(Sen. *Thy.* 979)

‘And then I will fill the father entirely with his own multitude (of children)’.

Tiresias gives the washed-up Odysseus some advice for legacy-hunting:

(62) *crescentem*<sub>ACC.SG</sub> *tumidis*<sub>ABL.PL</sub> *infla* *sermonibus*<sub>ABL.PL</sub> *utrem*<sub>ACC.SG</sub>\*

(Hor. *Serm.* 2.5.98)

‘Puff out the swelling windbag with turgid phrases’.

CONTAINMENT can also describe a metaphorical enclosure when applied to word order. An external situation, condition, or emotion can metaphorically surround a subject, enclosing him or her in anger, misery, desire, or paranoia. Although, as the subject, Phaedra syntactically “holds” the “obstinate intention” within the following line it is clear that she also is held in the grips of a situation from which there is no escape:

(63) *tenet obstinatum*<sub>ACC.SG</sub> *Phaedra*<sub>NOM.SG</sub> *consilium*<sub>ACC.SG</sub> *necis*. (Sen. *Phaed.* 854)

‘Phaedra holds to an obstinate intention of death’.

<sup>81</sup> Example from Lateiner, 1990: 220.

### 10.4.7 Combinations of effects

Frequently, visual constructions combine and complement each other throughout a passage. For instance, metaphorical word orderings add pathos and meaning to the scene of Ovid's departure into exile in *Tristia* 1.3.81–84. In the first line, Ovid's wife clings to him even as he leaves; her embrace is communicated by an application of the CONTAINMENT schema. The mingling of her tears with her words in the following line is illustrated by the MERGING schema. Then, ITERATION expresses the intensity of her desire to depart together with him for Tomis. Finally, the CONTACT of *exulis exul*, expresses her wish to remain by Ovid's side. We even see an additional instance of CONTAINMENT in *coniunx exulis exul*, perhaps expressing another embrace:

(64) *tum uero*     *coniunx*<sub>NOM.SG</sub>     *umeris*<sub>ABL.SG</sub>     *abeuntis*<sub>GEN.M.SG</sub>     *inhaerens*<sub>NOM.SG</sub>  
CONTAINMENT  
*miscuit*     *haec*<sub>ACC.PL</sub>     *lacrimis*<sub>ABL.PL</sub>     *tristia uerba*<sub>ACC.PL</sub>     *suis*<sub>ABL.PL</sub>  
MERGING  
'*non potes auelli: simul ah!*     *simul ibimus*', *inquit*,     ITERATION  
'*te sequar et*     *coniunx*<sub>NOM.SG</sub> *exulis*<sub>GEN.SG</sub> *exul*<sub>NOM.SG</sub> *ero*'.     CONTACT/  
CONTAINMENT  
'Then indeed my wife, clinging to my shoulders as I left  
Mingled these sad words with her tears:  
You can't be taken away: together, oh! Let's go together, she said  
I will follow you, and I will be an exile, the wife of an exile.

Taken together, the repeated embracing, pleading, and pathetic involvement of tears and words are visually expressed in the word order as much as they are in the semantic meanings of the words.

## 10.5 Conclusions

This paper has provided a systematic theoretical background for the phenomenon of visual word order in Latin, building on the previous work of Lateiner (1990) and Dainotti (2013, 2015). First, I argued that the spatial relationships between words within a line or a linguistic expression constitute meaning in addition to lexical semantics. Indeed, the positioning of each and every word, whether deliberate or unconscious, impacts meaning. As Lakoff & Johnson (1980: 136) claim, "Almost any change in a sentence – whether a change in word order, vocabulary, intonation, or grammatical construction – will alter the sentence's meaning, though often in a subtle way". Due to the flexibility of its word order, Latin is ideally suited to the communication of sense through the visual aspects of syntax. Going beyond Lateiner's claim that "syntax pictures sense," I have argued that "syntax expresses sense". Returning to

Hor. *Carm.* 1.5, an appreciation of the CONTAINMENT displayed by the concatenated word order is essential for an appreciation of the subtle layers of meaning expressed by the initial lines of the poem.

Second, I posited a psychologically realistic basis for the typology of these word order effects, suggesting that the image schemas theorized in cognitive linguistics provide and constrain the metaphorical patterns of words that appear in Latin literature. In contrast to Dainotti's approach, metaphorical word order in Latin is fundamentally visual and spatial, in line with Lakoff & Johnson's (1980: 136) "spatialization of form hypothesis," namely that "[w]e conceptualize sentences metaphorically in spatial terms, with elements of linguistic form bearing spatial properties (like length) and relations (like closeness). Therefore, the spatial metaphors inherent in our conceptual system . . . will automatically structure relationships between form and content". Throughout Latin literature we see groups of Latin words expressing similar meanings (such as splattering or scattering) through similar constructions (such as abAB word order). These structures, consistently patterned across time periods and genres, have a coherent basis: the metaphorical application of an underlying image schema (such as SPLITTING) governs and constrains these visually ordered patterns of words.

Consequently, I reviewed the application of several conceptual image schemas in Latin word order (ITERATION, PATH, CONTACT/SEPARATION, BALANCE, COLLECTION, MERGING, SPLITTING, and CONTAINMENT), arguing that these image schemas govern visual word order constructions throughout Latin literature. Other image schemas such as COUNTERFORCE, ATTRACTION, LINK, NEAR-FAR, MATCHING, and COMPULSION can be visualized in similar constructions. This study includes visual word order within the same embodied semantic approach that scholars have recently used in their analyses of other aspects of Latin language, literature, and culture (see Short, 2016). In conclusion, it is likely that metaphorical word order effects also operate in "everyday" Latin, not just in highly rhetorical and "literary" texts. This concurs with Lakoff and Johnson's analysis of the everyday structuring of language in spatial terms.

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# Index

## A

'ACTION IS MOTION' 112  
agreement marker 85, 86  
*allotrión* 215, 216, 217, 218, 220, 221, 222, 225  
allusion 55  
ambiguity 65  
analogy 228, 229, 234, 236, 238, 239, 240, 242  
*ánima* 230  
animacy hierarchy 132  
*ánimos* 230, 231, 232, 234, 237, 240  
aorist 17, 18, 19, 22, 23, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39  
Apollonius Dyscolus 44  
asymmetrical 210, 212, 222, 223, 224, 225  
attention 125, 133, 135, 141, 144  
authorial present 228, 241  
*autós* 127

## B

BALANCE (image schema) 252, 253, 258, 259, 269  
belonging to another 222

## C

categorization 179, 184, 202  
center-periphery (image schema) 126, 128, 130, 133, 134, 135, 136, 137, 138, 141, 142, 143, 144, 145  
'CHANGE OF STATE IS CHANGE OF DIRECTION' 107, 112, 122  
'CHANGE OF STATE IS CHANGE OF LOCATION' 96, 120  
city-state 211, 213, 215, 216, 218, 219, 225  
'CLOSENESS IS STRENGTH OF EFFECT' 255  
clothes as containers 190, 200  
codex 231  
cognitive linguistics 16, 19, 20, 22, 24, 39  
cognitive-pragmatic level of communication 143  
COLLECTION (image schema) 250, 259, 269  
comedy 42, 45, 55, 58, 66, 67  
conceptual integration 144  
conjunction 45, 55, 66  
construal 176, 179, 182, 183, 193, 195, 196, 201  
construction grammar 19, 20, 21, 24, 28, 41, 42, 43, 45, 67  
constructions 202, 209, 214, 215, 224; daughter 43, 44, 48, 52, 56, 57, 59, 60, 61, 63; inheritance 43, 61; parent 43, 44, 52, 58, 60, 61, 63

CONTACT (image schema) 252, 253, 255, 256, 257, 258, 259, 262, 265, 267, 268, 269  
CONTAINMENT (image schema) 180, 186, 187, 200, 201, 202, 247, 248, 251, 253, 262, 263, 264, 265, 266, 267, 268, 269  
contiguity, principle of 240  
coordinator, syntactic 46

## D

deixis: centrifugal 80, 84, 86, 87; centripetal 80, 84; orientation 77, 80, 86  
focus marker 84, 85  
*origo* 77, 79, 86  
presentative marker 84, 86  
*dé* (particle) 45, 53, 59, 60, 61, 63  
direction 189  
directionality, principle of 234  
discourse 27, 29, 31, 33, 39; marker 42, 44, 66, 72, 73, 82, 85, 86, 87, 88, 89; prominence 131, 137; units 126, 146  
dress 176

## E

*eidós* 214, 220, 221, 222  
embodiment 16, 19, 20, 39, 40, 179, 201, 202, 207, 209, 210, 211, 218, 224, 225, 228, 233, 234, 236, 237, 238, 239, 242  
'EMOTIONS ARE FORCES' 121  
Euripides 45, 46, 49, 58, 60, 63, 65, 66, 67, 68  
evolution: human 228, 236, 239; exchange verbs of 69, 70; EXIT (image schema) 181, 190, 197

## F

figure-ground perception 241  
focal meaning 218, 220, 225  
frame 209, 211, 213, 214, 215, 216, 218, 223, 224, 225  
frequency (lexical) 46, 47, 55, 56, 57, 58, 60, 63, 65

## G

genericity 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 33, 34, 35, 36, 37, 38, 39  
*ge* (particle) 61, 63  
gnomic aorist 16, 17, 18, 33, 35, 36, 37, 38  
governor 216, 218, 220, 223

## H

habituality 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 29, 31, 32, 33, 38, 39  
*horos* 217, 218, 225



- household 211, 213, 215, 216, 217, 218, 220, 221, 222, 223, 225
- I
- iconicity 245, 248, 250, 251, 270
- identity 132, 133, 142, 143, 144
- illocutionary force 52, 65, 70, 76, 81, 86, 240
- image metaphor 209, 222, 224
- image schema 126, 128, 129, 130, 133, 135, 142, 144, 145, 146, 178, 179, 180, 181, 182, 183, 185, 186, 191, 201, 202, 252
- EXCHANGE OF OBJECTS 69, 70, 72, 79, 88, 89
- MOVEMENT ACROSS SPACE 69, 70, 71
- imperative 13, 70, 73, 74, 75, 76, 77, 78, 81, 83, 84
- imperfect 16, 17, 18, 25, 27, 28, 29, 30, 31, 32, 33, 37, 38
- indirect reflexives 131
- individuals 135, 137, 138
- inner speech 230, 239, 241, 242
- instrumentality 235, 240
- intensification 105, 106, 108, 109, 110, 113, 114, 115, 118, 119, 121, 122, 128, 130, 131, 132, 133, 135, 141
- intersubjective 211
- ITERATION (image schema) 252, 253, 268, 269
- iterativity 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 38, 39
- K
- kaí* (particle) 42, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 58, 59, 62, 63, 64
- kurion* 212, 213, 215, 216, 217, 218, 219, 220, 222, 223, 224, 225
- L
- landmark 196
- lexis* 211, 213, 215, 216
- 'LIFE IS A JOURNEY' 251
- likeness 207, 212, 217, 220, 222, 223, 224, 225
- 'LINGUISTIC EXPRESSIONS ARE CONTAINERS' 252
- literality 207, 210, 212, 219, 222, 224, 225
- locatives 176
- logos* 211, 212, 213, 215, 216, 217, 218, 220, 225
- M
- MERGING (image schema) 247, 252, 253, 259, 260, 261, 268, 269
- metaphor 69, 70, 71, 75, 78, 79, 80, 81, 82, 84, 86, 87, 88, 89, 90, 91, 92, 245, 247, 251, 252, 253, 254, 255; composite 235; conceptual 233, 241; conceptual metaphor 178, 197, 209, 210, 211, 215, 224, 225, 226; primary 234, 236, 239; resemblance 240, 241, 242
- CONDUIT 79
- TEXT-AS-SPACE 90
- THOUGHTS ARE PHYSICAL OBJECTS 79
- VERBAL COMMUNICATION IS TRANSFER OF OBJECTS 79
- metaphora* 211, 212, 213, 214, 215, 221, 225
- metonymy 141, 142, 145; 228, 240, 241, 242
- mimetic syntax 248
- mirror neurons 228, 239
- 'MORE IS BETTER' 110
- 'MORE OF FORM IS MORE OF CONTENT' 252
- motion, induced 101, 102, 119
- movement, verbs of 69, 78, 82, 90; 220, 222, 223
- N
- neuroscience 228, 236, 238
- nous* 229
- O
- objects 131, 132, 141, 142, 144, 145
- oikeion* 213, 215, 216, 218, 221, 222, 224, 225
- onoma* 215, 216, 217, 218, 219, 220, 221
- onomata* 213, 217, 218, 219
- ousia* 217, 218, 220, 221, 223, 225
- P
- parody 57, 58
- particles 42, 44, 45, 46, 53, 54, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68
- combinations of 51, 53, 63, 67
- definition 42, 44, 45
- multifunctionality 42, 46, 53, 64
- partnership 216
- PATH (image schema) 180, 186, 191, 193, 194, 195; 252, 253, 254, 257, 258, 259, 262, 263, 269
- perspective 19, 22, 25, 35, 39
- phenomenology 228, 236, 237
- phrên* 228, 229, 230, 234, 237, 240
- polysemy 128, 129, 130, 145
- power 212, 219, 220, 223
- prâgma* 217, 218, 219, 220, 221, 225
- pragmaticalization 69, 72, 73, 74, 76, 78, 79, 83, 86, 88, 90, 91
- pragmatic implications 128, 130
- pragmatic marker 72, 75, 78, 86, 89; pragmatic markers 42, 44
- verbal prefixation 93, 94, 95, 96, 97, 99, 108, 111, 114, 115, 121

- present 16, 17, 18, 19, 22, 23, 27, 29, 32, 33, 34, 35, 36, 37, 38, 39, 40
- primary scene 234, 235, 240
- profiling 189, 192, 195, 196
- R
- reditive 93, 101, 102, 103, 104, 105, 106, 108, 110, 112, 122
- referent 127, 131, 132, 133, 135, 136, 137, 138, 140, 142, 144, 145
- reflexive pronoun 130, 140
- repetitive 105, 108, 122
- resonance 61, 65
- responsive 106, 111, 112, 122
- reversivity 93, 94, 96, 97, 98, 99, 106, 112, 113, 114, 118, 119, 121, 122, 123
- S
- sameness 130, 144
- alphabet 229, 242
- scroll 228, 229, 231, 232, 233, 240, 242
- selfness 130
- semantic bleaching 76
- sentence structure 241
- SEPARATION (image schema) 248, 249, 253, 255, 257, 258, 259, 262, 269
- separative 98, 99, 121
- similarity, principle of 228, 229, 233, 234, 240
- simulation 228, 233, 234, 239
- social hierarchies 137
- Sophocles 45, 46, 59, 66, 67
- source 209, 211, 214, 215, 216, 218, 220, 223, 224, 225; source frame 209, 211, 216, 224, 225
- space 176, 178, 180, 182, 183, 186, 195, 196, 197, 198, 199, 200, 202, 203; spatial configuration 128; spatial relations 177
- spatialization of form hypothesis 269
- SPLITTING (image schema) 252, 253, 259, 260, 261, 269
- subject of consciousness 131, 142
- symmetry 222, 224, 225
- synecdoche 240
- T
- target frame 209, 211, 215, 216, 218, 224, 225
- taxonomy of dress 184
- te* (particle) 42, 45, 55, 56, 57, 58, 63
- third person pronoun 128, 133, 140, 143, 145
- thumos* 228, 229, 230
- 'TIME IS A PATH' 254
- tools, 236
- tragedy 42, 45, 53, 55, 58, 66, 67
- trajector 182, 186, 188, 192, 195, 196
- turns, of speaking 53, 55, 60, 61, 65; turn-yielding marker 82, 87
- V
- verbal artifact 237, 239
- versare* 232, 233
- vertere* 232
- viewpoint 142, 146
- visual field 135, 136
- volutare* 232
- volvere* 231, 232