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MOTION EVENT ENCODING IN ANCIENT GREEK

A TYPOLOGICAL CORPUS-BASED STUDY OF PATH AND MANNER EXPRESSION

Tutor:
Ch.mo Prof.
Claudio Iacobini

Dottoranda:
Noemi De Pasquale

Co-tutor:
Ch.ma Prof.ssa
Anetta Kopecka

Coordinatrice:
Ch.ma Prof.ssa
Lucia Perrone Capano

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“Alla tenerezza e alla furia,
a quel che vuole sottrarsi e a quel che vuole aderire”

Freedom, Zenos Froudakis (2001)

«Il y a en nous du mouvement pour aller plus loin»

Henri Bergson, *L'évolution créatrice*, 1907

Abstract

This dissertation is a corpus-based study of motion encoding in Ancient Greek. Among the conceptual components of motion identified in the relevant literature, the focus is on Path, i.e. the trajectory traced by the Figure during its displacement, and Manner, i.e. the mode of motion.

Based on a fine-grained analysis of five Ancient Greek texts belonging to the historical and dramatic genres, and dating back to the 5th century BC, this study investigates the lexical, grammatical and constructional strategies involved in motion expression, as well as the distribution of the spatial information across five morphosyntactic and functional categories, namely the verb, the noun, the modifier, the satellite, and the adnominal.

Exploiting the conceptual tools and theoretical premises of the functional-typological approach, the data analysis shows that, regardless of the traditional attribution of Ancient Greek to the Satellite-Framed type (cf. Talmy 1991; 2000) based on its rich inventory of directional preverbs and verb particles, several lexicalization patterns coexist in the language, and prevail over one another depending on the features of the motion event. Such patterns form a cline proceeding from a more overt to a more covert type of encoding. As far as Path is concerned, the hypothesis on the existence of an asymmetry between Source and Goal (cf., *inter alia*, Ikegami 1987; Stefanowitsch & Rohde 2004) is confirmed.

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A desire path[1]

This dissertation is the result of a long *desire path* which began long before the start of my PhD program at University of Salerno in 2014.

My interest for the domain of space and motion can be traced back to my years at the University of Palermo and, in particular, to the General Linguistics and Linguistic Typology classes I attended as a Bachelor and Master student with Michele Longo, Annamaria Bartolotta e Luisa Brucale.

Since the very beginning of my studies in Classics, I have always been torn between my passion for ancient languages, especially Ancient Greek, and a growing interest in Linguistics. This interest can be linked to the first time I read George Orwell's *1984*.[2] It is, in fact, since then that I started pondering the nature of the link between language and thought. Did people from different linguistic backgrounds perceive the world differently? Were there any cognitive universals behind similar linguistic structures? Still I wonder such questions every day.

After the first class in Linguistic Typology, my curiosity turned into a scientific purpose, namely analysing the processes according to which languages verbalize experience, as well

1 «A *desire path* (formally referred to as *desire line* in transportation planning) can be a path created as a consequence of erosion caused by human or animal foot fall or traffic. The path usually represents the shortest or most easily navigated route between an origin and destination. Width and erosion severity can be indicators of how much traffic a path receives. Desire paths emerge as shortcuts where constructed ways take a circuitous route, have gaps, or are non-existent» (cf. Wikipedia). Here the term is metaphorically employed to describe the genesis of this dissertation.

2 Perhaps a little bit too poetically, I tend to interpret the reading of George Orwell's novel as a sort of epiphany, which contributed to help me figure out what I wanted to do as an adult.

as the range of cross-linguistic variation in the achievement of this goal.

Despite the paradoxical, yet traditional, separation between the study of classical languages, and the theoretical background of General Linguistics and Typology, my PhD project, formulated in agreement with my advisor, allowed me to combine the two areas under the lens of the motion domain.

During the first two years in Salerno, I revised the existing literature on the topic, I collected the data, and I participated in three main conferences to present the preliminary results of my analysis. A decisive moment in my research was the semester spent in Lyon at the *Laboratoire Dynamique Du Langage*, under the supervision of Anetta Kopecka, Associate Professor of Linguistics at *Université Lumière Lyon 2*. As a matter of fact, I ended up staying there a whole year, which allowed my thesis to gain its final shape, and its goals to become definite.

The end of an experience often coincides with the time to take stock of what has been done. If someone asked me to summarize the last three years of my life, I would describe them as a long sequence of trains, planes, towns, doubts, findings, houses, buses, conferences, notes, messy suitcases, phone calls, words, encounters. Despite the hard times, I would not change much, especially as for the people I had the chance to meet during this adventure.

Among them, I would like to thank my advisor, Claudio Iacobini, for his help and support during the years at Salerno University. Without him, I would never have gone to Lyon, and this period has represented a fundamental turning point in my life in several respects.

I would like to express all my gratitude to my co-advisor, Anetta Kopecka, for being such a patient, meticulous and inspiring scholar, and such an amazing woman. Every moment spent working with her has enriched me from both a professional and a personal point of view.

Finalising this dissertation would not have been possible without a professional and stimulating environment such as the one I found at *Laboratoire Dynamique Du Langage* during

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Furthermore, I would like to express my appreciation for the valuable comments I received from the reviewers, Luisa Brucale and Francesca Masini, which helped me improve this work.

My thanks also go to the members of the committee, Professor Anna M. Thornton from University of L'Aquila, Professor Silvia Bonacchi from University of Warsaw, and Professor Anna Pompei from University of Roma Tre.

From a financial point of view, this thesis was made possible by three sources of funding which I would like to mention here, namely the three-year fellowship provided by University of Salerno, a short visit grant provided by the *European Science Foundation* (*NetWordS* group) during my two-weeks stay in Vienna, and a six-month fellowship provided by the 'laboratory of excellence' *ASLAN* (*Advanced Studies on Language Complexity*) during my stay in Lyon.

Along with the scientific aspects, this thesis has required a strong human effort made possible only by the love and patience of the people accompanying me in my personal life. Among them, special thanks go to Laura, for her great reliability, and for sharing every joy and sorrow of the last three years and a half; Floriana, for being my lifelong friend (it has now been more than twenty years!); Maria Luisa and Federica, for their sharp irony and limitless creativity; my group of friends in Palermo, especially Chiara, Dorella, Francesca, Giovanni and Valentina, for still being there despite the distance between us; Aesna and Ros(s) for the time spent together during the first months of my new life in Lyon; Natacha, for showing me that you are never out of time (or place) to meet a soul sister; Yoonmi, for

being herself, as well as the best office mate I could never hope to find.

I am also much indebted to my mother, Graziana, my father, Salvatore, my sister, Martina, and my brother Filippo, for their confidence in my skills and choices, and for always being careful towards my needs, despite the difficulties. Together with them, I would also like to express my deep gratefulness to the other members of my family, namely *nonna Lina*, Anna, Giulia, Gabriele, Cinzia, Gaetano, Andrea, for their unconditional affection.

Last but not the least, I thank Sébastien for his constant encouragement, for the huge practical help he provided during the final phase of my PhD, without which this work would never have been accomplished, and for being the sweet, handsome, wise, lovely man he is.

A little bit less seriously, quoting the beginning of the speech Paolo Sorrentino gave after winning the Oscar for his *The Great Beauty*, I would like to thank «my sources of inspiration», namely João Gilberto, for whispering the most delicate Brazilian songs in my ears while I was collecting the data; Mariangela Gualtieri, for her perfect words on some recycled papers at night; *Saint Felicien*, because life can be tasty and soft sometimes; the volunteers of *Bric à Brac du Foyer de Notre Dame des Sans-Abri* for recommending the nicest and most fruitful old writing desk I had never used before.

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List of Abbreviations

Grammatical glosses

ACC	accusative
AOR	aorist
ART	article
DAT	dative
DEM	demonstrative
DU	dual
F	feminine
FUT	future
GEN	genitive
IMPF	imperfect
IMP	imperative
INDEF	indefinite
INF	infinitive
M	masculine
M/P	medio-passive
N	neuter
NEG	negation
NOM	nominative
OPT	optative
P	passive
PART	participle
PF	perfect
PL	plural
PLPF	pluperfect
POSS	possessive
PRES	present
PTC	particle
RECP	reciprocal
REFL	reflexive
REL	relative
SG	singular
SUBJ	subjunctive
VOC	vocative
SG	singular

Ancient Greek authors

Aristoph.	Aristophanes
Dem.	Demosthenes
Eur.	Euripides
Hdt.	Herodotus
Plb.	Polybius
Soph.	Sophocles
Thuc.	Thucydides
Xen.	Xenophon

Ancient Greek works

Anab.	*Anabasis*
Ba.	*Bacchae*
Hel.	*Helen*
Il.	*Iliad*
Od.	*Odyssey*
Thes.	*Thesmophoriazusae*
Trach.	*Trachiniae*

Introduction

The present work constitutes a typological exploration of Path and Manner encoding in Ancient Greek. In this respect, its main aim is to apply the functional-typological approach to the study of a closed-corpus language, which is traditionally considered as a prerogative of Classical Philology and Indoeuropean Linguistics.

Overall, not much work has been done so far on Ancient Greek within the framework of Linguistic Typology. However, some attempts going in this direction exist and prove the growing need to apply the methodologies and advances of contemporary linguistics to the study of ancient languages.

Among the most recent contributions, some research focuses on the topic of polysemy (cf., *inter alia*, Luraghi 2003; 2010 on prepositions and cases; Allan 2003 on grammatical categories); some authors investigate morphological phenomena (cf., *inter alia*, Napoli 2006 on aspect and actionality; Grandi & Pompei 2012 on derivation and compouding); some studies are more syntax-oriented (cf., *inter alia*, Cristofaro 2008 on complementation; Bary & Haug 2011 on participles).

Besides the individual contributions mentioned so far, a collective effort to combine traditional philological and new linguistic approaches for the study of Ancient Greek is represented by the *Encyclopedia of the Ancient Greek Language and Linguistics* (*EAGLL*), edited by Georgios K. Giannakis, and published in 2013 with the aim of exploring the main features of this language from different perspectives.

In the field of Linguistic Typology, the conceptual domain of space and motion has proven privileged for the analysis of Ancient Greek, as shown by the increasing, yet little, number of studies on this topic (cf., *inter alia*, Luraghi 2003; Nikitina 2013; Pompei 2014*)*.[3] The works in questions are all animated by the same premise: being situated at the intersection of morphology, syntax, lexicon and semantics, the topic of motion event expression can be considered as a favored domain to explore the features of a written language like Ancient Greek, the fine-grained description of which, despite the curiosity recently displayed in the field of general linguistics, is still lacking in the field of semantic typology.

In this light, the present thesis comes within a "young" framework established, in

3 A short review of the literature on motion expression in Ancient Greek is provided on page 36.

particular, by two works, namely Imbert's dissertation from 2008, *Dynamique des systemes et motivations fonctionnelles dans l'encodage de la Trajectoire*, and the volume edited in 2014 by Silvia Kutscher and Daniel A. Werning, *On Ancient Grammars of Space*, which collects some papers by the members of the research cluster *Topoi*, based in Berlin, on the expression of spatial relations in ancient languages (cf. https://www.topoi.org/area/c/).

By resorting to Talmy's groundbreaking typology of motion event expression (1985; 1991; 2000) and to the subsequent revisions to the original model as its theoretical framework, the present work aims to provide a description of the main components of displacement, i.e. Path and Manner, in Ancient Greek. More specifically, the main goals of this corpus-based study are three. The first one is to present the inventory of the lexical and grammatical tools employed for Path and Manner encoding. For this purpose, both qualitative and quantitative data will be provided, and the differences between the linguistic system (as it is described by traditional grammars and dictionaries) and the concrete use of individual linguistic items will be explored.

The second goal of the present research is to examine the constructions in charge of motion expression, as well as the functional foundation of the competition between different strategies. More specifically, based on Bybee's *semantic relevance hypothesis* (1985), we will investigate the syntactic and semantic compatibility between the various slots involved in motion encoding, namely the satellite, the adnominal, and the verb, and we will account for both the most "central" and the most "peripheral" templates (in terms of frequency and contextual applicability). Contextually, we will analyse the distribution and the semantic granularity of Path and Manner information, in order to grasp the conceptual (and linguistic) weight of the finer-grained subcomponents of motion.

The third goal of this work is to explore the Ancient Greek data in the light of the debate on the Source-Goal asymmetry. In particular, the investigation of this hypothesis is expected to show how a fine-grained analysis of motion event encoding in individual languages may be exploited for the study of various linguistic phenomena.

With regard to the structure, this thesis consists of six chapters plus the conclusions. Chapter 1 is devoted to the review of the main contributions on the topic of motion event encoding from a typological perspective. In particular, the framework proposed by Talmy (1985; 1991; 2000) and the main subsequent proposals are discussed, as well as the few, yet relevant, works on space expression in Ancient Greek. In the last section of this chapter, a

short introduction on *Construction Grammar* is provided as a further analytical tool preliminary to the discussion on the data.

In Chapter 2 the methodological reflection characterizing the first phase of this work is presented. Specifically, the following issues are addressed: the choice of a corpus-based analysis; the data selection (i.e. the language, the variety, the literary genres, and the texts); the process of data extraction; the development of a coding grid adapted to the Ancient Greek language; the data outline (i.e. the norms of transliterations, and the glossing system).

In Chapter 3 the inventory of morphosyntactic devices in charge of Path and Manner expression is described in details in order to allow for the subsequent analysis at the constructional level. The categories of satellites, adnominals and verbs are treated in greater details compared to nouns and modifiers, since they serve as the core of motion encoding in the language at issue.

Chapter 4 focuses on the Path component and, after an analysis of the main semantic combinations occurring within the so-called *Intransitive Motion Construction* (cf., *inter alia*, Goldberg 1995), approaches the topic of the constructional encoding of displacement. Among the patterns in which the expression of Path is not fully compositional, three types of construction receive special attention, namely the *Parallel-Goal* construction, the so-called *constructio praegnans*, and two idioms expressing displacement.

In Chapter 5, following the original approach of *Distributed Spatial Semantics* presented by Sinha and Kuteva (1995), the distribution of Path and Manner information across the motion clause is investigated. The different statuses of these two components are explored, as well as the specific behaviour exhibited by each part of the Path component, i.e. Source, Median and Goal.

At last, Chapter 6 explores some of the research questions that may arise from a detailed analysis of motion expression in a language like Ancient Greek. Within the wide range of phenomena related to the motion domain, the Source-Goal asymmetry has been selected by virtue of its typological relevance and cognitive implications.

Chapter 1. The Typology of Motion Event Encoding

By virtue of the basic role it plays in human experience, the semantic domain of space and motion represents a privileged field to study the strategies through which languages map cognitive notions onto linguistic items. In fact, as stated by Filipović (2013: 18): «motion is ubiquitous in human experience and speakers talk about motion in all languages of the world».

Due to such a cognitive and linguistic centrality allowing for large-scale comparison, over the last decades the topic of motion event encoding has animated a prolific debate in the fields of linguistic typology and cognitive linguistics.

Most of the studies belonging to this research branch find their milestone in Talmy's groundbreaking works (1985; 1991; 2000), whose influence and value remain indisputable despite the criticism and revisions they have produced over the years.

In the light of such premises, this chapter has a threefold purpose:

- defining the state of the art in the field of motion event expression by providing an overview of the literature on this topic;

- presenting the main semantic components of motion, as well as the lexical and grammatical means crosslinguistically employed for their encoding;

- introducing the conceptual tools exploited for the data analysis.

The chapter is structured as follows: section 1.1 and 1.2 will be devoted to the rising and development of motion event typology from Talmy's original proposal and following reformulations, to its main revisions (cf., *inter alia*, Wälchli 2001; Slobin 2004; Beavers *et al.* 2010; Croft *et al.* 2010); section 1.3 will be concerned with the conceptual architecture of motion events, with a specific focus on the components of Path and Manner; in section 1.4 the most controversial linguistic devices crosslinguistically available for Path encoding will be presented, i.e. satellites and adnominals; section 1.5 will be consecrated to a review of the main typological contributions on space and motion expression in Ancient Greek; finally, in

section 1.6, we will provide a brief introduction to *Construction Grammar* in the version formulated by Goldberg (1995; 2003), whose principles have been applied to the analysis of the main constructions expressing spontaneous motion in Ancient Greek (cf. Chapter 4).

1.1 The genesis of the typology

No research on motion event encoding can disregard the onset work by Talmy (1972; 1985). The first version of the typology, however, has been challenged in several respects ever since, starting from the reformulations operated by the author himself (Talmy 1991; 2000), which represent the consequential steps of a progressively refined typological research.

1.1.1 Talmy (1972): a generative approach to motion expression

Leonard Talmy is unanimously regarded as the father of a wealth of linguistic studies on motion lexicalization patterns. Although some precursors can be identified in Tesnière (1959) and Malblanc (1966) (cf. Fortis & Fagard 2010), as stated by Fortis & Vittrant (2011: 71), «*c'est cette typologie qui a fixé les termes du débat, les travaux antérieurs procédant du même esprit étant restés apparemment inconnus, du moins au début*».

The very first theory elaborated by Talmy dates back to 1972 and has its roots within the field of generative semantics. With a special focus on English and Atsugewi, an extinct polysynthetic language of northeastern California, the study aims to demonstrate the existence of a universal deep structure behind the language-specific surface realizations of a *translatory situation* (1972: 13). Under the label of translatory situation, Talmy groups all the events in which an object moves along a path. The underlying structure consists of the following four components:

- **Figure** → the object which is considered as moving or located with respect to another object;

- **Ground** → the object with respect to which a first object (i.e. the Figure) moves or is

located;

- **Directional** → the spatial relation between the Figure and the Ground;

- **Motive** → the moving or located state of the Figure with respect to the Ground.[4]

In (1) *he* corresponds to the Figure, *the bedroom* identifies the Ground, *into* is the Directional and *ran* specifies the Motive.

(1) He ran into the bedroom

From a linguistic point of view, the four components are respectively realized by means of a noun (Figure and Ground), a preposition (Directional), and a verb (Motive). Furthermore, the structural components in question may merge either with each other or with further components which are external to the translatory situation itself, through an operation of *conflation*. According to Talmy (1972: 257), this can be defined as «any syntactic process - whether a long derivation involving many deletions and insertions, or just a single lexical insertion - whereby a more complex construction turns into a simpler one». While in Atsugewi the Motive element typically fuses with the Figure, as in the English verb *rain*, other languages tend to conflate Motive and Directional, such as in Spanish *entrar* 'enter', or Motive and Manner, such as in English *float*.

It is worth mentioning that the notion of satellite, which will be central in the new formulations of the theory from 1985, 1991, 2000, is already introduced by Talmy in his first work (1972: 269), without however being supported by an accurate empirical analysis.

1.1.2 Talmy (1985): the dawn of the typology

Talmy 1985 appears substantially renewed compared to the PhD dissertation from 1972:

4 Within the framework of cognitive linguistics, Figure and Ground are respectively referred to as *Trajector* and *Landmark*, two notions dating back to the Gestalt psychology. According to Langacker (1987: 215ff.), the former is a foregrounded movable entity, while the latter represents its point of reference in space. The relationship between the two can be either static (involving location) or dynamic (involving displacement).

the generative background is progressively abandoned in favor of a cognitive and typological approach that will constitute the final framework of the model.

The first difference between the two works is terminological. To begin with, the notion of *translatory situation* is replaced by that of *motion event*, defined as «a situation containing movement or the maintenance of stationary location» (1985: 60). Moreover, while the terms Figure and Ground are maintained, Directional and Motive are respectively replaced by Path (i.e. the course followed by the Figure with respect to the Ground) and Motion (i.e. the presence of either motion or location in the event).

In the attempt of accounting for the crosslinguistic differences (and similarities) in motion event encoding, Talmy (1985: 62ff.) adopts a semasiological perspective (i.e. proceeding from form to meaning) and develops a tripartite typology based on the semantic component preferentially expressed within the verb. Three main lexicalization patterns result from his analysis, namely:

- **Manner-incorporating languages**, which express Motion and Manner in the main verb, such as English:

  (2) The bottle **floated** into the cave

- **Path-incorporating languages**, which express Motion and Path in the main verb, such as Spanish:

  (3) *La* *botella* ***entró*** *a* *la* *cueva* *flotando*
  ART.F.SG bottle(f).SG enter.PST.3SG to ART.F.SG cave(f).SG float.GER
  'The bottle entered the cave (floating)' (Spanish)

- **Figure-incorporating languages**, which express Motion and Figure in the main verb, such as Atsugewi:[5]

  (4) *w-* *-ca-* ***-st'aq'-*** *-ic't-* *-a*
  3SG from.the.wind lie.runny.icky.material into.liquid 3SG
  'Runny icky material moved into liquid from the wind blowing on it' (Atsugewi)

5 This pattern is not limited to little-documented languages such as Atsugewi, but some traces can be found as well, for instance, in Italian verbs like *piovere* 'rain', *nevicare* 'snow', *stillare* 'drip', *gocciolare* 'trickle'.

Besides the lexicalization of the motion components within the verbal root, Talmy (1985: 102) briefly discusses the grammatical relations grouped under the label of satellites, which he defines as «certain immediate constituents of a verb root other than inflections, auxiliaries, or nominal arguments» that «relate to the verb root as periphery (or modifiers) to a head», giving rise to a verb complex. The notion of satellite will be further elaborated in the works from 1991 and 2000.

1.1.3 Talmy (1991): *Satellite-Framed* vs. *Verb-Framed* languages

Talmy 1991 is the result of a deep change of perspective the author operated after his first contributions (cf. Talmy 1972; 1985). In particular, Talmy now focuses on how an event complex is integrated into one clause.

From a conceptual point of view, motion events are described as a particular kind of *framing-event*. A framing event is characterized by the following properties (cf. 1991: 219):

a) it determines the aspectual and temporal profile of the macro-event;

b) it defines the domain in which the macro-event takes place;

c) it delineates the argument structure of the macro-event;

d) it constitutes the informational focus of the macro-event.

Consider the English example *he walked into the room.* (a) The aspectual features of the action are established by the combination between the past tense of *walk* and the prepositional phrase *into the room*, which underlines the bounded, telic character of the event (vs. *he walked* → atelic). (b) Both the verb and the preposition clarify the conceptual domain in which the event is integrated, i.e. space. (c) The prepositional phrase *into the room* introduces an argument. (d) The sentence *he walked into the room* can answer the question *did he walk into the room?* or *where did he walk to?*.

The minimal conceptual structure of a motion event, as already introduced in Talmy

(1972 and 1985), is supplemented with two possible external determinations or *co-events*, namely Manner (i.e. the way in which motion is performed) and Cause (i.e. what triggers motion itself). The examples in (5, 6) respectively show how Manner and Cause can integrate the core components of a motion event.

(5)	The pencil	**rolled**	off	the table
	FIGURE	MOTION MANNER	PATH	GROUND

(6)	The pencil	**blew**	off	the table
	FIGURE	MOTION CAUSE	PATH	GROUND

In addition to the modifications mentioned so far, the most remarkable innovation in Talmy 1991 concerns the passage from a tripartite typology derived from a semasiological approach to the dichotomic Path-centered typology which has strongly marked the subsequent research on motion event encoding.

By adopting an onomasiological perspective proceeding from meaning to form, and aiming at the identification of the linguistic forms employed in order to convey a given meaning, Talmy (1991: 486ff.) hypothesizes the existence of two language types based on the encoding of Path, which he considers as the most salient component of a motion event.[6]

According to the new version of the theory, languages of the world fall into two major groups, i.e. *Verb-Framed* languages and *Satellite-Framed* languages.[7]

Languages belonging to the first type, such as Turkish, Arabic, Hebrew and Romance languages, tend to encode the Path information within inherently directional verbal roots. The Manner component can be optionally expressed by means of non-finite verbal forms or modifiers. In the following example from Italian, the main verb *uscì* is in charge of Path encoding, while the gerund *correndo* describes Manner.

6 According to Talmy (1991; 2000), Path is the core information because motion events are defined in terms of change of location.

7 It is worth stressing that the typology formulated by Talmy is based on what he calls the languages' *characteristic* expression of motion. By *characteristic*, he means that «(1) it is colloquial in style, rather than literary, stilted, and so on; (2) it is frequent in occurrence in speech, rather than only occasional; (3) it is pervasive, rather than limited – that is, a wide range of semantic notions are expressed in this type» (Talmy 1985: 62; 2000: 27).

(7) *Il* *bambino* *uscì* ***correndo***
ART.M.SG child.M.SG exit.PST.3SG run.GER
'The child went out (running)' (Italian)

By contrast, *Satellite-Framed* languages, such as Germanic languages, Russian, Latin and Ancient Greek, resort to a satellite for Path description and save the verbal slot for the encoding of Manner information, as shown by the English example in (8).

(8) The child ran **out**

The notion of satellite, already introduced in Talmy (1985) with respect to the Manner-incorporating languages, is redefined in Talmy (1991: 486) as follows: «the satellite to the verb – or simply the satellite (...) - is the grammatical category of any constituent other than a nominal complement that is in a sister relation to the verb root».

By identifying in the satellite a grammatical category rather than a relation as in the previous version of the theory, the scholar stresses the fact that, although the linguistic items it comprises can be traced back to different word classes according to the language under analysis, they all share some syntactic and semantic properties. The macro-category of satellites comprise the following elements: affixes, preverbs, verbal particles, adverbs. Among the most problematic cases, some clitics appear, such as French *en*, Italian *ne*, as in the expression *s'en aller/andarsene*, meaning 'go away from a place' (usually the deictic center).

1.1.4 Talmy (2000): a focus on the Path component

The clinelike nature of the satellite category is one of the main integrations in Talmy (2000). However, despite the attempt to further systematize the classification, the author himself admits the need for more work to be done in this respect.[8]

Besides this reconsideration of the notion of satellite, Talmy (2000), which represents a

8 A great conceptual effort to define the category of satellite has been made by Imbert, Grinevald & Sőrés (2011) within the framework of the project *Trajectoire* (cf. Section 1.2.8 of the present chapter). Their proposal is adhered in this dissertation for the analysis of the Ancient Greek particles devoted to Path encoding.

general revision of the two previous works from (1985) and (1991), distinguishes two main types of motion (2000: 35), namely:

- **Self-contained motion**, in which «an objects keeps its basic or 'average' location»;

- **Translational motion**, in which «an object's basic location shifts from one point to another in space».

The examples in (9) and (10) respectively account for the two types of motion at issue: in (9) the Figure (i.e. *Romeo*) moves within a given area (i.e. *the pool*), without performing any change of location, while in (10) it approaches a Goal (i.e. *the throne room*).[9]

(9) Romeo swims in the pool

(10) Hamlet goes to the throne room

In addition to the distinction between self-contained motion and translational motion, the author proposes to decompose Path into the following three conceptual elements (Talmy 2000: 311ff.):

- **Vector**, i.e. the direction of the Figure's dislocation with respect to the Ground, comprising the basic Path elements AT, TO, FROM, VIA, ALONG, and ALENGTH;[10]

- **Conformation**, i.e. the spatial relation holding between Figure and Ground throughout the Figure's dislocation, comprising the main geometric schema of a Path;

- **Deixis**, i.e. the direction of the Figure's dislocation with respect to the speaker's position.

9 In this dissertation only events of translational motion will be analysed.

10 In Talmy (1985) Path is subdivided into three Ground elements, namely *Source* (i.e. the origin of the dislocation), *Goal* (i.e. the destination of the dislocation), and *Medium* (i.e. the median course between Source and Goal).

In this section the main points of Talmy's proposal on the lexicalization patterns of motion events have been presented. In the following paragraph the main reactions to this seminal proposal will be discussed, as they were central for the data analysis in this dissertation.

1.2 Rethinking the typology

The typology of motion event encoding as formulated by Talmy (1985 and 1991, in particular) has been challenged in a number of respects, ranging from terminological issues up to the need to account for languages which do not fit into the binary classification.

In this section, the main revisions to Talmy's model will be discussed, with a special focus on the aspects that were crucial for this dissertation's theoretical framework and data analysis. The different works will be presented in chronological order in order to show the evolution of the theoretical framework.

This overview of the most relevant criticism and alternatives to Talmy's theory, far from being exhaustive, aims to provide a solid background for the data analysis.

The main objections can be summarized as follows (in line with Fortis & Vittrant 2011):

1. some languages have both V-framed and S-framed constructions, e.g. Italian *uscire* 'exit' = *andare fuori* 'go out' (cf., *inter alia*, Aske 1989; Slobin 2004; Croft *et al.* 2010);

2. the verb/satellite opposition is potentially misleading since there may be cases in which the head of the sentence is not a verb or the satellite belongs to the verbal domain, e.g. secondary verbs in Japanese (cf., *inter alia*, Matsumoto 2003);

3. there are cases in which Path is encoded neither in the verb nor in the satellite (e.g. adnominals) (cf., *inter alia*, Wälchli 2001);

4. in some languages Path can be expressed simultaneously in the verb and the satellite (cf., *inter alia*, Croft *et al.* 2010);

5. in some languages, such as serial-verb languages, Path and Manner are expressed by means of equivalent grammatical forms (cf., *inter alia*, Slobin 2004);

6. there are constructions indicating a dislocation in which the motion component is absent from the verb (amotion verbs) (cf., *inter alia*, Goldberg 1995);

7. in some cases the spatial information is not encoded in a particular morpheme but depends on other factors, such as word order (cf., *inter alia*, Wälchli & Sölling 2013);

8. there are cases in which Path is encoded in a noun or a noun phrase (cf., *inter alia*, Fortis & Vittrant 2011).

In order to overcome the problems above, several alternative proposals were elaborated.

1.2.1 Wälchli (2001): the *loci* of motion encoding

Wälchli's work from 2001 addresses the expression of *basic intransitive motion* in Latvian and disregards several aspects of Talmy's typology. Basic intransitive motion is self-agentive motion «of humans (not animals or objects) moving without special haste and without vehicles» (2001: 301).

The differences between Talmy's and Wälchli's models concern both the conceptual level and the linguistic level. For Talmy, the Manner component is not included in the analysis, and the terminology employed to refer to the spatial roles is taken from Fillmore (1971).

With regard to the linguistic level, while Talmy's works focus on two main categories, namely the verb and the satellite, Wälchli's onomasiological approach is applied to the whole sentence, thus leading to the identification of three main slots devoted to motion encoding (2001: 301):

- the ***verbal locus***, i.e. «the verb deprived of all its derivational affixes encoding motion (but retaining other affixes)»;

- the ***adnominal locus***, i.e. adpositions and case markers;

- the ***adverbal locus***, i.e. all the elements that modify the motion verb, namely adverbs, verbal particles or verbal affixes.[11]

Besides the preference towards one of the three *loci*, another factor plays a role in determining the membership of a given language to a type, namely the number of *cardinal displacements* available at the system level. In particular, the scholar distinguishes six main directions, each one labeled by means of a Latin preposition (Wälchli 2001: 300) and associated to a specific displacement, as shown in Table 1.[12]

Cardinal kinds of displacement	Explicitation
AD	F *go to* G
IN	F *go into* G
SUPER	F *go onto* G
AB	F *come from* G
EX	F *come out of* G
DE	F *come down from* G

Table 1: Cardinal displacements according to Wälchli (2001)

The directions listed above have been subject to criticism in Berthele (2004). The main assumptions in Berthele's work will be discussed in section 2.4 of this chapter.

1.2.2 Matsumoto (2003): *Head-Framed* vs. *Nonhead-Framed* languages

In his paper from 2003, Matsumoto states the necessity to slightly reformulate Talmy's typology in order to better capture its intentions. For this purpose, the author proposes three main modifications to the original framework proposed in Talmy (1985) and (1991).

The first suggestion pertains to the distinction between Verb-Framed and Satellite-Framed languages. Aiming to encompass on the one hand the misleading use of the term

11 The tripartite typology proposed in Wälchli (2001) has considerably influenced the development of the coding grid presented in chapter 2. of this dissertation.

12 In the table at issue, F stands for Figure and G stands for Ground.

verb, and on the other the relatively unfamiliar notion of *satellite*, Matsumoto (2003: 408) sets forth a new terminology based on the opposition *head* vs. *nonhead*. The label of *Head-Framed languages* corresponds to Talmy's Verb-Framed languages, while *Nonhead-Framed languages* is considered a better name for Satellite-Framed languages. Among the advantages provided by this terminological substitution, the most relevant consists in the possibility to cover the cases that do not fit in the previous dichotomy.[13]

The second nodal point in Matsumoto's paper affects the link between the framing typology and the repertoire of Path and Manner verbs postulated in some of the subsequent interpretations of Talmy's model. According to this research branch, Manner languages are characterized by rich sets of Manner-of-motion verbs, as opposed to Path languages, which by contrast, typically exhibit wide inventories of Path verbs. According to the author (2003: 409) the dimension of the Manner/Path verb lexicon is independent of the head- vs. nonhead-framing typology at least to a certain extent.[14] The unrelatedness of the two factors in question is shown resorting to examples from different languages (e.g. French or Tswana, i.e. head-framed languages which boast a conspicuous number of Manner roots). With reference to the Manner component, an interesting contrast is proposed between *manner-in-verb* languages, such as English, which encode the information relative to the mode of motion performed by the Figure within verbal roots, and *manner-in-adverb* languages, such as Japanese, which exploit adverbs for the expression of the component at issue (Matsumoto 2003: 412).

Eventually, the option for a language to allow alternating framing possibilities is pointed out (2003: 413), and both the head-framed and the nonhead-framed types are better described as the dominant pattern rather than the only choice available for a given language. In this respect, the case of boundary crossing is mentioned (cf., *inter alia*, Aske 1989; Slobin & Hoiting 1994; Filipović 2007). A subsection of 3.1 will be devoted to this particular kind of Path.

13 With regard to the notion of satellite, Matsumoto (2003: 408) stresses that «all satellites are nonheads by definition (...), but not all nonheads are satellites». In this respect, he mentions prepositions and case markers as examples supporting his claim.

14 As it will be shown in section 1.3 devoted to the conceptual components of Path and Manner, a number of studies has been devoted to the size of the motion verb lexicon as a parameter to evaluate the typological status of a given language with respect to the motion domain (cf., *inter alia*, Ibarretxe Antuñano 2004, 2009; Verkerk 2013, 2015).

1.2.3 Slobin (2004): the gradient nature of the typology

Among the most influential revisions of Talmy's theory, Slobin's works play a prominent role by virtue of their empirical vocation, as opposed to the deductive reasoning characterizing Talmy's contributions.

In his paper from 2004, Slobin proposes a more flexible alternative to the first model and, more specifically, introduces at least two main innovations, namely a third linguistic type, and the idea of the typology of motion event as a continuum.

As for the first aspect, the existence of a further, in-between, type in addition to the Verb-Framed and the Satellite-Framed patterns individuated by Talmy is postulated, i.e. that of *Equipollently-Framed languages*. This label designates «languages in which both manner and path are expressed by "equipollent" elements - that is, elements that are equal in formal linguistic terms, and appear to be equal in force or significance» (Slobin 2004: 228). This is the case, for instance, of serial-verb languages, in which the presence of independent (morphologically unmarked) verbs in the chain prevents from deciding which one can be considered as a satellite, as in the following example from Mandarin Chinese taken from Slobin (2004: 224).[15]

(11) ***fēi*** ***chū*** *yīzhī māotóuyīng*
fly exit one owl
'An owl flew out' (Mandarin Chinese)

However, besides the discussion on the existence of a third type, the most significant integration to Talmy's provided by Slobin (2004) consists in the reconsideration of the typology in terms of a cline. In this respect, the main pattern displayed by a given language is described as a tendency rather than an evidence in favour of the membership to a fixed type. In particular languages can be placed at different points of a Manner-centered gradient proceeding from *high Manner salient* to *low Manner salient* languages (2004: 250): while the former encode Manner in the main verb and exhibit rich inventories of Manner verbs, the latter subordinate Manner to Path or omit it.

15 According to Lambert-Bretière (2009), Slobin's individuation of the Equipollent-Framed type represents the solution to a false problem. In fact, since in serialization Path verbs exhibit a lower degree of verbhood (cf. Hopper & Thompson 1984) compared to Manner verbs, and appear, so to speak, "satellized", constructions of this kind can easily fall into Talmy's Satellite-Framed type. This assumption is supported by Fortis & Vittrant (2011: 79).

In his work from 1996b, Slobin had already noticed that speakers of Verb-Framed languages and speakers of Satellite-Framed languages behave differently with respect to the attention they bestow to the different components of motion. Resorting to the visual stimuli contained in *Frog, where are you?*, a picture book for children by Mayer (1969), Slobin reached the following conclusion: the language-specific patterns exploited for motion encoding have both linguistic and cognitive implications, in that they may influence the speakers' attention and perception. This main finding is further developed within the framework of the so-called *Thinking for Speaking Hypothesis*, a lighter version of the well-known Sapir-Whorf debate on linguistic relativity which originated in the first half of the twentieth century (Sapir 1924; Whorf 1940). According to Slobin (1996a: 76),

> «the expression of experience in linguistic terms constitutes thinking for speaking - a special form of thought that is mobilized for communication. (...) We encounter the contents of the mind in a special way when they are being accessed for use. That is, the activity of thinking takes on a particular quality when it is employed in the activity of speaking. In the evanescent time frame of constructing utterances in discourse one fits one's thoughts into available linguistic frames. "Thinking for speaking" involves picking those characteristics of objects and events that (a) fit some conceptualization of the event and (b) are readily encodable in the language.»

In other words, the perspective through which the speakers of a given language verbalize their experiences is strongly conditioned by the resources available in their language. Consequently, speakers of Verb-Framed and Satellite-Framed languages will focus their attention on different aspects of the same motion events thus resulting in different *rhetorical styles*, i.e. «the ways in which events are analyzed and described in discourse» (Slobin 2004: 223). On the one hand, Satellite-Framed speakers tend to describe both Manner and Path frequently and in details, on the other hand, Verb-Framed speakers hardly refer to Manner, unless it is discursively very important (cf. Hijazo-Gascón & Ibarretxe-Antuñano 2013: 40).[16]

1.2.4 Berthele (2004): intratypologycal variation and diatopic dimension

In the spirit of Wälchli (2001), Berthele (2004) proposes a fine-grained typology of motion

16 It is worth mentioning that Slobin's contributions on the *Thinking for Speaking Hypothesis* (1996a; 2000; 2003) have given rise to a rich branch of studies in the motion domain (cf., *inter alia*, Papafragou *et al.* (2002; 2008), Soroli & Hickmann (2010).

event encoding which he applies to the analysis of dialectological data. The most original aspect of his work concerns the attention to the intratypological variation and, more specifically, to the diatopic dimension.

Moving from the core notions presented in the theoretical and empirical works by Talmy and Slobin, Berthele (2004: 98ff.) elaborates a new model which constitutes a slightly rephrased version of Wälchli (2001).

In particular, concerning the subcategorization of the different types of Path, the author edits the *six cardinal kinds of displacement* identified by Wälchli (cf. Table 1, on page 15) in the attempt of adapting them to his analysis of the data from Swiss German, Standard German and French. Table 2 shows the cardinal paths enumerated in Berthele (2004: 100).

Cardinal kinds of displacement	Explicitation Berthele	Explicitation Wälchli
AD	F *displace to* G	F *go to* G
IN	F *displace into* G	F *go into* G
SUPER	F *displace up*	F *go onto* G
AB	F *displace away from* G	F *come from* G
EX	F *displace out of* G	F *come out of* G
DE	F *displace down*	F *come down from* G

Table 2: Cardinal displacements according to Berthele (2004), after Wälchli (2001)

While in Wälchli's list motion along the vertical axis is conflated with motion away from or towards a given Ground, in Berthele's version the two pieces of information are separated and no specific Ground element is mentioned with respect to vertical direction (both upwards and downwards). The arbitrary nature of Wälchli's choice appears clearly in the French examples from (12) to (14), which illustrate the possibility for a motion verb encoding downward direction to co-occur with both the Source and the Goal of motion.

(12) *Le garçon tombe de l' arbre*
ART.M.SG boy(M).SG fall.PRES.3SG from ART.M.SG tree(M).SG
'The boy falls from the tree' (French)

(13) *Le garçon tombe sur le sol*
ART.M.SG boy(M).SG fall.PRES.3SG on ART.M.SG ground(M).SG
'The boy falls onto the ground' (French)

(14) *Le garçon tombe de l' arbre sur le sol*
ART.M.SG boy(M).SG fall.PRES.3SG from ART.M.SG tree(M).SG on ART.M.SG ground(M).SG
'The boy falls from the tree onto the ground' (French)

The second distinction put forward by Berthele concerns deixis and displacement, which appear associated in Wälchli, as shown by the employment of the deictic verb *go* for the explicitation of the different cardinal displacements. Since it is possible to have a Path such as F *come into* G, Berthele opts for the verb *displace*, and suggests to set deixis aside, «since the deictic center taken depends on the deictic stance taken in a particular narrative» (2004: 100).

1.2.5 Filipović (2007): *situation types*

Like Berthele (2004), Filipović (2007) aims to account for the typological complexity of individual languages, namely English and Serbo-Croatian. Although admitting the validity of Talmy's framework as a fundamental theoretical tool, the author reexamines different aspects of the original model, starting from the notion of satellite.

Her main claim involves the difficulty to distinguish between satellites and prepositions, especially in some languages. As a piece of evidence supporting this statement, Filipović (2007: 33ff.) provides a number of English examples showing the fuzzy character of this area of the lexicon. Furthermore, the discrimination between satellites and prepositions is considered pointless with respect to the purposes of the data analysis, since «they both play an important role in expressing direction of motion and will be treated as particles that express the Path of motion in expressions of motion events, with a tentative distinction between the expressions in which they form a unit with a verb and those when they seem to be forming a unit with a noun that follows» (2007: 35-36).

In the light of such premises, the conceptual architecture of Talmy's typology is revised and, following Slobin's approach, the hypothesized dichotomy is better understood as a continuum with regard to the salience of Manner. Crucially, in this continuum, «languages may show similarities in lexicalization on one level (e.g. lexical), but not on another (e.g. constructional)» (2003: 30).

For the purposes of her analysis on the lexicalization patterns exhibited by English and

Serbo-Croatian with respect to the motion domain, Filipović (2007: 37ff.) identifies a set of *situation types*, which represent the linguistically relevant features of events that are most likely to be verbalized across languages. The situation types resulting from the intersection of spatial and temporal factors are summarized in the English examples from (15) to (18) taken from Filipović (2007: 38).

(15) He ran into the room
(BOUNDARY CROSSING + CHANGE OCCURRED)

(16) He was running into the room when I saw him
(BOUNDARY CROSSING + MOMENT OF CHANGE)

(17) He ran/was running across the field for a while
(NO CHANGE + NO BOUNDARY CROSSING)

(18) He ran to the door
(BOUNDARY REACHING + CHANGE OCCURRED)

On the one hand, as far as the spatial dimension of an event is concerned, the presence/absence of a physical boundary constitutes a perceptually and linguistically salient information that can deeply affect the choice of the lexicalization strategy, as shown in a number of studies (cf., *inter alia*, Aske 1989; Slobin & Hoiting 1994).[17] On the other hand, looking at the temporal axis, situation types differ with regard to whether change of location occurred or is occurring (or none of the two) when a speaker observes and describes a given event (cf. Filipović 2013: 25).

1.2.6 Beavers *et al.* (2010): reconsidering the notion of *satellite*

In their rich paper from 2010, Beavers, Levin and Tham adopt a broader perspective on motion expression and elaborate an original alternative to Talmy's two-way typology.

17 The importance of the boundary crossing parameter will be discussed in further details in section 1.3.1 of the present chapter.

On the basis of wide crosslinguistic comparison, the authors reach two main conclusions, related respectively to the notion of satellite (among the most criticized in Talmy's framework), and to the main factors producing both inter- and intratypological variation in motion event encoding.

As for the first aspect, in line with the claims in Filipović (2007), Beavers *et al.* (2010: 339) object that satellites cannot be considered as proper constituents, but are better described as intransitive prepositions (i.e. prepositions which do not select any Ground, cf., *inter alia*, Jackendoff 1973; Palmer 1987). Thus, the authors (2010: 340) decide to «employ the term 'satellite' in a broader sense : any constituent that is sister to or adjoined to the verb (root)» and to disregard Talmy's distinction between satellites and adpositions.[18]

In relation to the second point, without denying the appeal of Talmy's and Slobin's typologies, the various options crosslinguistically exploited for motion encoding are attributed to more general features of the linguistic systems, namely:

- the motion-independent morphological, lexical, and syntactic resources languages make available for encoding Path and Manner;

- the role of the verb as the single clause-obligatory lexical category that can encode either Path or Manner;

- the extra-grammatical factors that yield preferences for certain options.

In this light, the crosslinguistic diversity in motion event encoding represents one of the possible manifestations of a more basic form of typological diversity (Beavers *et al.* 2010: 367).

1.2.7 Croft *et al.* (2010): *double-framing* and *symmetric coding*

According to Croft and colleagues (2010), the main source of criticism to Talmy's typology of motion event encoding is represented by its rigidity to accommodate languages

18 Croft *et al.* (2010: 206) reach analogous conclusions.

that display both Satellite-Framed and Verb-Framed constructions. In order to fill this theoretical and empirical gap, the authors introduce the notion of *double framing*, i.e. a construction «in which the path or framing expression is expressed twice, once as a detached satellite and once as part of the verb» (Croft *et al.* 2010: 207), as in the following French examples taken from Aske (1989: 14):

(19) *monter* *en haut*
climb.INF.PRES in high
'go up (above)' (French)

(20) *descendre* *en bas*
descend.INF.PRES in low
'go down (below)' (French)

In addition to the double framing strategy, Croft *et al.* (2010) argue in favor of a further expansion to Talmy's bipartite model, consisting in the addition of a further label comprising coordination, serialization and compounding, namely the *symmetric* coding, corresponding to the Equipollent-Framing in Slobin (2004).

With their proposal showing the existence of multiple strategies for the encoding of complex events in one and the same language, Croft *et al.* (2010) contribute to enrich a more general trend in typological research (cf., *inter alia*, Kopecka 2006; Beavers *et al.* 2010) away from typologizing languages as a whole. According to this trend, languages should be interpreted as continua and described in terms of «conglomerates of constructions and strategies, with complex overlaps» (Fagard *et al.* 2013: 365). Such a tendency, supported by usage-based methods such as corpus analysis and elicitation, portrays the spirit in which the project *Trajectoire* was born.

1.2.8 *Trajectoire*: a fresh look at the typology of motion events

It is not by chance that this overview of the relevant literature on motion event encoding ends with an introduction to *Trajectoire*. As a matter of fact, the conceptual foundations and the theoretical background of this project represent one of the main sources of inspiration for the present dissertation.

Trajectoire or, in its extended version, *Typologie de la Trajectoire - Complexité et Changements des Systèmes Typologiques*, is the title of a research program led by a group of scholars mostly based in Lyon at the *Laboratoire Dynamique du Langage* (founded by *CNRS* and *Université Lumière Lyon 2*), whose main interest is the typological description of Path expression from a crosslinguistic perspective. The linguistic sample on which the study has been conducted consists of 34 languages distributed across 15 families, with a prevalence of Amerindian and Indoeuropean languages. The guidelines, objectives and main results of the project have been presented in a special issue of the linguistic journal *Faits de Langue, Les Cahiers* 3/2011, which contains seven contributions on the topic of Path.

Within the scene of typological studies on motion event encoding, the project *Trajectoire* represents a breakthrough in at least four respects. To begin with, it combines the analysis of the synchronic variation in motion expression and the investigation of the possible diachronic evolutions of a given type, as in the case of the shift from Satellite-Framing to Verb-Framing registered in the Romance languages (cf. Iacobini & Fagard 2011).

Secondly, it proposes a new reflection on the notion of Path (cf. Grinevald 2011), which constitutes a basic conceptual tool for the subsequent data analysis.

Thirdly, it adopts a corpus-based approach exploiting the great genetic and typological diversity of the languages included in the sample. As a matter of fact, the languages analyzed by the researchers belonging to the *Trajectoire* group range from modern, standardized and well-documented varieties, to endangered languages of oral tradition, up to ancient, closed-corpus languages.

Last but not the least, the coding grid proposed by Fortis & Vittrant (2011) accounting for both morphosyntax and semantics, as well as for their internal articulations, restores a more complex picture of the typology of motion event encoding compared to the one provided by Talmy's useful, but quite simplistic model.[19]

Among the several theoretical and methodological contributions put forward within the frame of *Trajectoire*, two – in particular - have played a central role in guiding the data analysis provided in this dissertation, namely the conceptual reformulation of Path by Grinevald (2011) and the work on the category of satellite by Imbert, Grinevald & Sőrés (2011). The two aspects at issue will be focused in the following sections of the present chapter.

19 Another methodological specificity for which the project deserves credit is the creation of a set of video stimuli that have proven particularly useful for data elicitation (cf. Ishibashi, Kopecka & Vuillermet 2006).

1.3 The conceptual components of motion

As previously stated, one of the main merits of Talmy's groundbreaking works consists in the identification of the main conceptual components of a motion event, namely Figure, Ground, Motion, Path and Manner. Although all the elements participating in the conceptual architecture of motion have been taken into account in the data analysis, the focus of the present dissertation is Path and Manner. For this reason, a special section is devoted to each of these two components.

1.3.1 Path

Since the dawn of the research on motion expression, Path has appeared as an essential notion in all the studies on the topic. In particular, it was key in the first proposal of a typology of languages based on its mode of expression, which is either lexical (i.e. by conflation in verbs of motion) or grammatical (i.e. in the form of a satellite). In fact, as stated by Slobin (2004: 238) «because path is an obligatory component of motion-event expressions, we can't compare languages in terms of the accessibility of path as a category: without a path verb or satellite or other path element, there is no motion event».

The critical role played by Path in motion event encoding has produced a number of different interpretations in the literature. In this section, which aims to create the background for the discussion on the results of the data analysis, only the most relevant interpretations will be considered.

In its traditional definition, Path is described as the course followed by the Figure with respect to the Ground.[20] In this light, it can be considered as a relational concept, since it concerns the spatial link between the Figure and the Ground, whether static or dynamic (cf. Imbert 2012: 237).

Among the several reflections on Path, the one proposed by Grinevald (2011) for the project *Trajectoire* (cf. 1.2.8) deserves special attention, since it aims to dismantle the classical monolithic view of this semantic component. According to Grinevald (2011: 55), Path is

20 It seems worth underlining that Talmy's definition of Path is not the only use attested in the literature. The term Path can also indicate one of the segments of the Figure's trajectory, i.e. the Medium/Median (cf., *inter alia*, Dirven & Verspoor 2004).

> «a vector, consisting of a line in space that is continuous, delimited by two points and oriented between those points (...). This continuous line is conceived in relation to several grounds, which delimit a vector at both ends with end points (source X, goal Y) and allow for points in between (median Z). A process of windowing of attention (Talmy 1996) will result in the expression of any one or several of those points of the line (G = ground).»

Following Grinevald's definition, Illustration 1 shows the three Grounds of which Path is composed.

*	---------->	*
G1: X	G2: Z	G3: Y
Source	Median	Goal-oriented

Illustration 1: Path according to Grinevald (2011: 56)

Source is the starting point (or initial segment) of Path, while Goal represents its endpoint (or final segment). Median is the label used to indicate the points between these two extremities. The English example in (21) expresses the different parts of Path, as well as the other semantic elements of motion.

(21) The children ran out of the house through the camp towards the wood
Figure Motion + Manner **Source** **Median** **Goal**
Path

Besides the physical subdivision of its core into Source, Median and Goal, Path exhibits further conceptual complexities, which represent the main focus of attention in Grinevald's approach.[21] According to the latter (2011: 57ff.), Path is a «*super category* (...) made of the clustering of distinct spatial notions», such as *spatial orientation*, *deictic anchoring* and *boundary crossing*.

Spatial orientation is an attribute of the line representing Path, and it is related both to the physical properties of the Grounds and to the coordinate system whereby languages conceptualize and express spatial relations. In Levinson's work (2003: 24ff.), languages rely on three types of spatial frames of reference, namely:

21 As shown in section 1.1, the idea of Path as a complex notion is already outlined in Talmy (2000: 311ff.). It is, nevertheless, in Grinevald's work that it finds a deeper argumentation, thanks to the multidimensional approach she employs.

- the **Intrinsic System** (object-centered), where the coordinates are determined by the inherent features, sidedness or facets of the Ground (e.g. front-back, top-bottom, left-right);

- the **Relative System** (viewer-centered), based on which the Figure's location is construed according to the orientation of the observer and his body axes;

- the **Absolute System**, which exploits external coordinates which are independent from both the viewer's perspective and the Ground's properties (e.g. gravity or cardinal directions).

Deixis, or deictic anchoring in Grinevald's terms, is already identified in Talmy (200) as one of the Path subcomponents. According to Grinevald (2011: 56), rather than being linked to the motion of a Figure, rather than being calculated with respect to a Ground, or to the speaker of a sentence, the concept of deictic anchoring could be effectively compared to the choice – operated by the speaker - of a camera viewpoint on a scene. In this respect, the Figure's displacement may be centrifugal (i.e. away from the *deictic center*) or centripetal (i.e. towards the *deictic center*). In some languages deixis is lexicalized through the use of itive and ventive verbs (cf., *inter alia*, Ricca 1993). The former encodes centrifugal motion, the latter is used for centripetal dislocations (e.g. the opposition between the English verbs *go* and *come*, Spanish *ir* vs. *venir*, Italian *andare vs. venire*).[22]

The third conceptual subcomponent of Path is boundary crossing, a notion related to the conceptualization of the Ground. According to Grinevald (2011: 56-57),

> «Source, median and goal grounds can be conceived simply as points in space, i.e. as non-dimensional spatial entities; they are then considered to be non-bounded. However, the same grounds can be alternatively conceived as being two or three dimensional spatial entities with boundaries, in which case they are said to be bounded. In this case, one talks of boundary crossing, in or out of the ground»

As pointed out by some typological studies on motion expression (cf., *inter alia*, Aske 1989; Slobin & Hoiting 1994; Filipović 2007), the boundary-crossing parameter proves crucial

22 The topic of deixis, although belonging to the original research plan, has not been investigated in the present dissertation, due to the difficulty to grasp deictic nuances of verbs or satellites in an written language like Ancient Greek. However, as it will be stated in the section devoted to conclusions, the study of this phenomenon could open new perspectives on motion event encoding in closed-corpora languages.

in the choice of the lexicalization strategy of the different semantic elements of a motion event. As a matter of fact, the distinction between Verb-Framed and Satellite-Framed languages is fully realized only in the expression of motion events entailing the crossing of a boundary, either physical or conceptual.

The two examples in (22) and (23) show the different behavior of French (commonly classified as Verb-Framed) with respect to the use of a Manner verb according to the type of Path.

(22) *L'* *homme* *est* *entré* *dans la* *maison* *en courant*
ART.M.SG man(M).SG be.PRES.3SG enter.PTCP.PST.M.SG in ART.F.SG house(f).SG in run.GER
'The man went into the house running' (French)

(23) *L'* *homme* *a couru* *jusqu' à la* *maison*
ART.M.SG man(M).SG to run.PTCP.PST.M.SG up_to to ART.F.SG house(f).SG
'The man ran up to the house' (French)

When the Figure crosses a boundary (example 22), Verb-Framed languages forbid the employment of a Manner verb as the main verb in the clause, and resort to inherently directional roots (Fr. *entrer* 'enter') for Path expression, relegating, so to speak, the description of the mode of motion to adverbs, prepositional phrases, adjectives or non finite verbal forms (e.g. the French gerund *en courant* 'running'). Conversely, when the Figure's displacement does not imply any boundary crossing (e.g. in situations of *boundary reaching*, as the one described in example 23, cf. Filipović 2007: 37ff.), Manner can be lexicalized within the main verb (Fr. *courir* 'run').

The two examples at issue show, once more, how a closer look at the effective behavior of individual languages may confirm the excessive rigidity of Talmy's dichotomy. Rather than identifying fixed types, it would be better to speak of alternative options of encoding, which can coexist within the one and the same linguistic system.

As shown, among the others, by Aske (1989) and Imbert (2012), the functional explanation to the *split framing* (cf. Imbert 2012: 241) displayed by languages such as French or Spanish lies in the concept of Path telicity (evoked in Aske 1989 after Vendler 1957), not to be confused with the notion of lexical aspect as a feature of verbal roots. Telic Paths specify the Source and/or the Goal of motion and involve boundary crossing, while atelic

Paths delimit the area in which motion takes place and may involve approximation or detachment from a boundary. Only the former block the recourse to Satellite-Framed strategy (i.e. the recourse of a Manner root as the main verb in the motion clause): as claimed by Slobin & Hoiting (1994), the *boundary-crossing constraint* makes the use of a directional verb compulsory for Verb-Framed languages.

Some Italian exceptions to this restriction have been noticed in Iacobini & Fagard (2011). In fact, according to the authors, «a fair proportion of manner verbs may license a cross-boundary reading, given the appropriate context» (2011: 161), such as in the following examples.

(24) *Un orangotango salta fuori dal recinto*
ART.M.SG orangutan(M).SG jump.PRES.3SG out from-art.M.SG fence(M).SG
'An orangutan jumps out/bursts out of the pen' (Italian)

(25) *Lei è scappata via da una porta laterale*
3SG.F AUX.PRES.3SG run_away.PART.PST.F.SG away from ART.F.SG door(f).SG side.F.SG
'She ran away through a side door' (Italian)

According to Slobin (2004: 225), «verbs that encode a particular force dynamics – high energy motor patterns that are more like punctual acts than activities» do not adhere the boundary-crossing constraint, and can thus occur when a telic (i.e. bounded) Path is at issue. However, despite the preference shown in Italian for constructions involving a manner verb for the representation of punctual high force dynamics, the use of the same pattern for describing slow, careful movement is not ruled out (cf. Iacobini & Fagard 2011: 162), as in example (26), taken from Iacobini (2010: 500).

(26) *L' esofago scompare scompare anche*
ART.M.SG esophagus(M).SG disappear.PRES.3SG disappear.PRES.3SG too
il fastidio forte e tenace per quel tubo che
ART.M.SG discomfort(M).SG strong.M.SG and persistent.M.SG for DEM.M.SG tube(M).SG REL
mi scivola dentro e si muove e striscia
1SG.DAT slide.PRES.3SG inside and RECP move.PRES.3SG and slither.PRES.3SG
'The esophagus disappears, as well as the strong and persistent discomfort caused by that tube sliding inside and moving and slithering' (Italian)

From this short introduction on Path, it clearly appears that this conceptual component must be present in any description of a motion event, in one form or another. As stated by Hijazo-Gascón & Ibarretxe-Antuñano (2013: 42), although languages cannot be compared on the basis of their accessibility to Path information, they exhibit different degrees of elaboration for this semantic element. In other words, some languages describe Path more often and in a more fine-grained way than others.

An interesting contribution on the topic of Path granularity is represented by Ibarretxe-Antuñano's works (2004; 2009). Though a wide cross-linguistic comparison of the Path encoding strategies, the author hypothesizes the existence of a scale proceeding form *high-path-salient* to *low-path-salient* languages (2009), based on structural, discursive and typological features. Regardless of the main lexicalization pattern (Path-in-verb vs. Path-in-satellite), languages with accessible, easy to process and frequent Path-encoding tools will tend to exhibit more elaborate Path descriptions. Analogous conclusions are reached in Kopecka (2013: 177ff.), where Path information is analyzed according to three parameters, namely the degree of salience, the degree of explicitness, and the focusing of attention on specific portions.

Despite this attempt to describe languages in terms of Path salience, the semantic component which has been studied the most in this respect is Manner, by virtue of its optional character, at least for the Verb-Framed type, making it a good tool to test the habitual encoding of motion events across languages.

1.3.2 Manner

The conceptual subcomponents of Path have been investigated in detail in a number of works on motion event encoding. Conversely, Manner has received little attention in the literature, and a unanimous agreement on the dimensions pertaining to this semantic element is still missing. Such an unequal treatment has to do with the semantic nature of the two concepts.

According to Talmy (2000: 45), Manner constitutes «an additional activity that a Figure of a Motion event exhibits». In Slobin (2004: 255), the stress is on the lack of a common paradigm for Manner description, thus resulting in «an ill-defined set of dimensions that

modulate motion, including motor pattern, rate, rhythm, posture, affect, and evaluative factors». Among the most debated aspects related to this component of motion, the issue of the "conveyance (or vehicle)" needs to be clarified here. According to some authors (cf., *inter alia*, Levin 1993; Slobin 2006) this specific aspect of motion belongs to the Manner domain, while according to others it represents a separate semantic component (cf., for instance, Ikegami 1969). An analogous disagreement exists (a) at a conceptual level, with respect to the default motion of non-human entities, (b) at a linguistic level, with reference to a specific verb class, envisaging Path and Manner to be expressed by one and the same root (cf. Levin & Rappaport Hovav 1991, on the topic of Manner-Result complementarity; Zubizarreta & Oh 2007).

A third definition of Manner accounting for its internal complexity is proposed in Kopecka (2010: 230). According to the author, Manner is «the feature characterizing how the Figure moves as opposed to where the Figure moves to or from. This interpretation of Manner encompasses not only the different ways of moving the body, but also other semantic dimensions related to movement. More specifically, it includes various physical (e.g. effort, posture, velocity) and psychological (e.g. attitude or emotional state) features, as well as some more internal aspects such as the conveyance and the noise associated with the movement».

An interesting attempt to systematize the different subcomponents of Manner has been put forward by Slobin (1997) and Slobin *et al.* (2014). In his works, Slobin proposes a first distinction to classify Manner verbs: «languages seem to have a "two-tiered" lexicon of Manner verbs: the neutral, everyday verbs – like *walk* and *fly* and *climb*, and the more expressive or exceptional verbs – like *dash* and *swoop* and *scramble*». Accordingly, Satellite-Framed and Verb-Framed languages differ in the semantic granularity (Slobin *et al.* 2014: 705) of each of the two tiers: both share the first one, but while the former tend to have rich lexicons of expressive Manner verbs (i.e. second tier), the latter make limited use of, or do not have any access to, verbs encoding exceptional Manners of motion.[23] Based on this line of research, in a number of studies the size of the Manner verb lexicon is considered as a clue for typological classification (cf., *inter alia*, Berthele 2013; Verkerk 2013), together with the degree of Manner salience (cf. Slobin 2006).

23 Morimoto (2007: 288) proposes a different classification, in which Manner verbs fall into two main types, namely the walk-type (also referred to as external reference motion), which naturally implies a change of location, vs. the swim-type (also referred to as internal motion), which indicates a strictly internal motion of the Figure.

Already in Özçalışkan & Slobin (2003: 259), Satellite-Framed speakers were said to have «an accessible and easily codable linguistic option for indicating manner of motion», which leads them to «'habitually' encode manner, developing a rich lexicon of manner verbs and making fine distinctions within the domain of manner». In other words, Satellite-Framed languages can be described as high-manner-salient languages. In order to test the actual difference between Satellite-Framing and Verb-Framing with respect to the Manner component, the authors compare data from English and Turkish. The results of the data analysis reveal that, in addition to Manner verbs, various lexical means are available in both languages for providing information about the mode of motion (*Ibid.*: 266), namely:

- Adverbial expressions (e.g. *she walked* ***in a crippled way***);

- Descriptions of internal state or physical condition of a moving entity, allowing to infer Manner (e.g. *he was* ***exhausted***);

- Description of features of the physical setting that could influence Manner (e.g. *the trail was* ***steep and slippery***).

Despite the availability of such alternative means for Manner expression, however, Satellite-Framed English and Verb-Framed Turkish considerably differ in the function they assign to the strategies in question. In fact, while English specifies the Manner information that is already present in the verb, Turkish compensates «for what [it] cannot easily encode at the level of motion verb constructions» (*Ibid.*: 270).

It seems appropriate to conclude this brief overview of the literature on Manner of motion mentioning an original contribution by Stosic (2013), whose focus is the morphological encoding of this component. As a result of his analysis of Serbian data, the author (2013: 64) underlines the necessity of «a multilevel approach because Manner can be expressed by at least five means, syntactic, lexical, morphological, grammatical, and suprasegmental». Among the syntactic options, he includes adverbs (e.g. *quickly*), prepositional phrases (e.g. *with unbelievable ease*), subordinate clauses (e.g. *the birds were flying like bats fly*), gerunds or present participles (e.g. *he went home running*). Under the label of lexical Manner he includes verbs (e.g. *sneak*, *limp*), simple adverbs (e.g. *fast*, *hard*), nouns

(e.g. *way*, *speed*), and ideophones (e.g. *swish*, *thud*). As for the morphological encoding of Manner, he mentions derivative affixes that form adverbs (e.g. *brief-ly*, *frog-wise*), or evaluative morphology (e.g. French *sautiller* 'hop around' < *sauter* 'jump', *marchotter* 'walk with difficulty/taking small steps/unsteadily' < *marcher* 'walk'). Regarding the grammatical level, he refers to interrogative and indefinite adverbs or pronouns (e.g. *anyway*, *somehow*). With respect to the suprasegmental level, the use of pitch and prosodic phenomena are cited as a frequent means of Manner encoding in a number of languages.

1.4 Path-specific linguistic tools

The overview of the main revisions of Talmy's original typology (cf. Section 1.2) has shown that the most controversial Path-encoding categories are satellites and adnominals. In the following subsections, the theoretical bases behind their definition are discussed.

1.4.1 Satellites

As previously stated, according to Talmy (1985: 102), satellites are «certain immediate constituents of a verb root other than inflections, auxiliaries, or nominal arguments». In Talmy (2000: 102) satellites are said to «include English verbal particles, German and Russian prefixes, Chinese directional verbal complements and Atsugewi directional suffixes».

Let us observe the following examples taken from Slobin (2004: 224):

(27) An owl popped **out**

(28) ... *weil da eine Eule plötzlich raus-flattert*
- because from ART.NOM.F.SG owl(f).NOM.SG suddenly out-flap.PRES.3SG
'because an owl suddenly flaps out' (German)

(29) *Tam vy-skočˇila sova*
out jump.PST.3SG.F owl(f).NOM.SG
'an owl jumped out' (Russian)

As shown by both of Talmy's definitions, the term "satellite" is a cover term for forms of different morphosyntactic natures, ranging from autonomous linguistic items (usually adverbs) to agglutinated affixes or endings (e.g. case markers).

Due to its fuzzy nature, the concept of satellite has been strongly challenged in the literature on motion-event encoding. Specifically, the major sources of debate deal with the following questions:

- Is the category of satellites distinct from that of adpositions and from that of adverbs?

- Can verbs forming complex predicates (e.g. serial verbs) be considered as satellites?

- Do satellites correspond to a natural class of linguistic items in a given language?

According to Imbert, Grinevald & Sörés (2011), who apply the functional-typological approach to the study of satellites, the origin of the linguistic debate on the topic lies in the twofold use of the term in Talmy's work. On the one hand, that of satellites is a category consisting of elements that are somehow subordinate to verbs, on the other, the same term is employed to designate a lexicalization pattern (i.e. *Satellite*-Framing as opposed to *Verb*-Framing).

In order to settle the issue, the authors (*Ibid.*: 103-104) propose a definition of "satellite" based on the following three criteria:

- a **syntactic criterion**: the satellite is an element that depends on the verb. It does not introduce any syntactic argument, i.e. it is not followed by any overt Ground;[24]

- a **semantic criterion**: satellites prototypically encode the Path component of a motion event;

- a **lexical criterion**: a satellite is originally a lexical item (often an adverb)

24 It is worth stressing, however, that there is a particular class of satellites, i.e. the so-called *relational preverbs* (cf. Imbert & Grinevald 2008; Viti 2008) or *satpreps* in Talmy (2000: 108), which can introduce nominal complements.

grammaticalized into a dependent of the verbal head.

In the light of such premises and following the line of reasoning of Imbert, Grinevald & Sörés (2011), satellites will be considered as a cover term for different items, which may result from various diachronic processes of grammaticalization, and which may exhibit different patterns at the synchronic level, as a consequence of their various developments.

1.4.2 Adnominals

«Prepositions, postpositions, and case affixes—semantically relevant or not—are all in fact realisations of the same underlying element, say K (for Kasus).»

(Fillmore 1968: 30)

The second functional category implied in Path expression is adnominals (cf., *inter alia*, Wälchli 2001; Papahagi 2011), which include both prepositional phrases and noun phrases, in interaction with case markers or not.

In order to assign nouns with grammatical functions and semantic roles, some languages resort to combinations of both case markers and prepositions, and are thus classified as a *languages of mixed typology* in this respect (cf. Bortone 2010: 16). Combinations of adpositions and case markers can be described as instances of discontinuous morphology, since their interaction gives rise to unique combinatory meanings (cf. Bortone 2010: 20), ranging from concrete to abstract values.

As previously mentioned, and according to some authors, the distinction between adpositions and satellites is unnecessary, since both serve the expression of the same conceptual component of motion events, i.e. Path. As stated by Filipović (2007: 36), both intransitive particles (i.e. satellites which form a unit with a verb) and transitive particles (adpositions governing nouns) are employed for the expression of the direction or the location of motion. The only difference between the satellite function and the adpositional function pertains, thus, to the presence *vs.* absence of the Ground, i.e. the reference object with respect to which the Figure's motion is characterized.

More precisely, Slobin (1996b) distinguishes between *Minus-ground* and *Plus-ground*

constructions. In the former, the verb stands either alone or with a satellite, as in Eng. *The boy fell (down)*, while in the latter type there is an explicit mention of an additional Path element, as in Eng. *The boy fell down to the river*. While satellites entail an holistic encoding of Path in terms of direction of motion, adnominals are employed for the description of one specific portion of Path.

Assuming that the encoding of Path in the adnominal slot is more detailed than the one in the satellite slot, the *Trajectoire* project has proposed a classification of languages based on the semantic granularity that adnominals exhibit with respect to Path encoding. The results have highlighted the existence of three types of adnominal systems, which vary in complexity and richness (cf. Papahagi 2011: 121ff.), namely:

- **minimal systems**, which consist of a few elementary adnominals (i.e. one or two), whose function is to signal the Ground function performed by the noun;

- **middle systems**, which consist of three to five adnominals, that are either elementary or complex;

- **complex systems**, which consist of several simple adnominals, that encode both Path and Ground.

In this light, the heterogeneous nature of both satellites and adnominals proves evident. The functional-typological approach proposed within the frame of *Trajectoire* proved particularly suitable to account for such gradient categories involved in Path expression.

The following section presents the main studies on motion expression in Ancient Greek.

1.5 Motion, typology and Ancient Greek

Most of the research on motion event encoding has been led on modern spoken languages.

Among closed-corpora languages, Latin is privileged compared to Ancient Greek with respect to the conceptual domain of space. The most investigated aspects are the Latin systems of prepositions (cf., *inter alia*, Luraghi 2010) and preverbs (cf., *inter alia*, Lehmann

1983); the metaphorical shift from spatial to temporal meanings (cf. Pompei 2010); the evolution of motion expression from Latin to Romance (cf. Luraghi 2011; Stolova 2015) and the typological shift from Satellite-Framed Latin to Verb-Framed Romance (cf. Brucale *et al.* 2011; Iacobini & Fagard 2011).

As far as Ancient Greek is concerned, the literature on motion expression is quite recent, especially compared to the long tradition of philological and comparative studies on this language across the centuries. Nevertheless, some attempts to apply the methodology as well as the basic assumptions of general linguistics to Ancient Greek exist and are worth mentioning.

Among the typological works on the encoding of spatial relations, at least two deserve to be cited here. The first one is Luraghi's volume (2003). Based on a wide diachronic corpus-analysis of Ancient Greek texts from the Homeric poems to the Classical period (with some further remarks on *Koine* Greek), Luraghi investigates the meaning, semantic extensions and patterns of polysemy of the Ancient Greek prepositions and case markers through the lens of cognitive semantics and typology.

In the same spirit, the contributions by Nikitina (Nikitina 2013; Nikitina & Maslov 2013; Nikitina & Spano 2014) aim to integrate the study of the Ancient Greek language into the typological approach. In particular, in her 2013 paper, she explores diachronic data as a source for the classification of motion verbs, suggesting the existence of a lexical split between verb of self-propelled motion, verbs of externally caused motion, and verbs encoding a change of configuration.

Pompei (2010, 2014)'s work is characterized by a typological approach analogous to the one adopted by Luraghi and Nikitina. She deals with the topic of preverbation, and investigates the shift from spatial to aspectual values in Ancient Greek prefixed verbs, as well as in verb-particle constructions, with specific reference to the phenomenon of grammaticalization.

Similarly, preverbation is the main focus of Imbert's PhD dissertation (2008). Specifically, through a corpus study of two ancient languages, namely Homeric Greek and Old English, the author examines the main strategies of Path encoding in both languages, with a focus on the phenomenon of multiple preverbation. The main aim of Imbert's work is to check the impact of data from ancient languages on the typology of motion event expression, mainly with respect to the Path component.

The works by Romagno (2002; 2004), published in the *Archivio Glottologico Italiano*, analyze the main Ancient Greek motion verbs and directional preverbs in the light of their actional values and valency properties.

Besides the works mentioned so far, a recent important effort yearning to encourage the research on ancient languages with reference to space, is made within the frame of the *Topoi* project (*http://www.topoi.org*). This research cluster, based in Berlin, works on the interplay of space and knowledge in the formation and transformation of ancient cultures and societies. One of the main products of the research led by one of *Topoi*'s group is the volume edited by Kutscher & Werning (2014), *On Ancient Grammars of Space*, in which three contributions on the expression of space in Ancient Greek are featured (cf. Georgakopoulos 2014; Nikitina & Spano 2014; Stenger 2014).

In 2014 was also published the *Encyclopedia of the Ancient Greek Language and Linguistics* (*EAGLL*), edited by Georgios K. Giannakis. This collection gathers over 500 entries on the main aspects of Ancient Greek, explored in the light of the latest research, from a wide range of disciplines. Among the articles dealing with motion encoding, the following have proven particularly useful for the purposes of the present dissertation: Luraghi's on *Adpositions (Prepositions)*, Brucale's on *Space (Cases and Adpositions)*, and Crespo's on *Adverbial Constituents*.

To sum up, the common denominators for most of the research on motion in Ancient Greek are on the one hand a preference for the diachronic dimension (cf., *inter alia*, Skopeteas 2008; Nikitina 2013; Pompei 2014), and on the other hand, the tendency to focus either on one single morphosyntactic category (cf. Luraghi 2003; Viti 2008a; Bortone 2010) or on one single semantic component of motion at a time (cf. Imbert 2008).

In the light of such premises, it turns out that a systematic description of all the strategies used in Ancient Greek for both Path and Manner expression is still lacking. The main ambition of the present study is to fill this gap, as it will be shown in further details in the Chapter 2 of this dissertation.

1.6 *Construction Grammar*

In addition to the typology of motion event encoding elaborated in the studies

mentioned so far, another theoretical framework proved decisive for the data analysis, namely *Construction Grammar* in the version elaborated by Goldberg (1995; 2003).[25] Considering the strong empirical orientation of the present work and, more specifically, of the section devoted to the analysis of the Ancient Greek constructions involved in spontaneous-motion encoding, this section aims to provide a short overview on the aspects of the theory which are relevant for the investigation.[26]

Generally speaking, Construction Grammar is a usage-based linguistic model which considers constructions as the basic unit of analysis, consisting in conventionalized pairs of form and meaning. By virtue of its twofold nature, merging a clearly functional vocation and a solid formal equipment, this theory has recently achieved resounding success within different fields, such as typology, cognitive linguistics, psycholinguistics, sociolinguistics, language acquisition, computational linguistics.

Inspired by Saussure's notion of *linguistic sign* (1916), Construction Grammar originated in 1980 with the main purpose of handling cases which represented a challenge for the Generative Grammar framework, such as idioms. Among the works which contributed to the foundation of the theory (cf., *inter alia*, Fillmore *et al.*; 1988; Lakoff 1987), a prominent place is occupied by Fillmore, Kay & O'Connor's paper from 1988, *Regularity and idiomaticity in grammatical constructions: the case of let alone*. In this contribution, based on the investigation of a specific construction, the authors propose an hypothesis to account for the high productivity of idiomatic expressions crosslinguistically. Along with the classification of the main types of idioms on the grounds of semantic and pragmatic factors, a new model of grammar is put forward in which both central and peripheral patterns can be described and explained resorting to the same underlying mechanisms.

The core theory of Construction Grammar has been extended by Goldberg's volume from 1995, *Constructions. A Construction Grammar Approach to Argument Structure*, which constitutes one of the main references for the analysis of the Ancient Greek data (cf. Chapter 4). In this contribution, which explores the idea that argument structure constructions are a special subclass of constructions that provides the basic means of expression in a language, the main principles of the framework are outlined.

To begin with, constructions are defined as «form-meaning correspondences that exist

25 It is worth mentioning that the label of Construction Grammar is commonly employed to identify a "family" of linguistic theories, rather than a unified approach.

26 For an exhaustive introduction to Construction Grammar, cf. Masini (2017).

independently of particular verbs» (1995: 1). Their architecture, which connects formal and semantic elements, can be represented as follows:

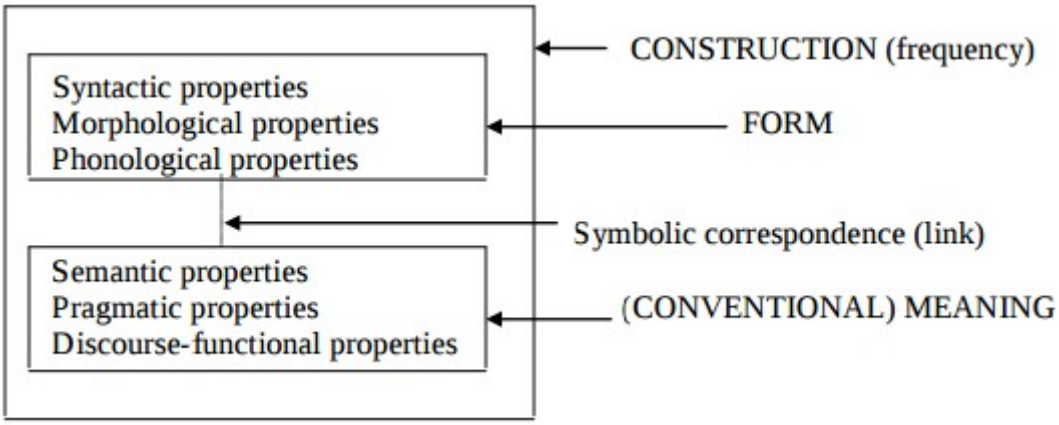


Illustration 2: The symbolic architecture of constructions according to Croft (2001: 18)

As Illustration 2 shows, the form side of a construction, which can be associated with different kinds of linguistic information (syntactic, morphological, or phonological), is linked to its meaning side via a symbolic correspondence link.

The claim according to which constructions are meaningful entities regardless of the linguistic items which instantiate them (*Ibid.*: 224) allows to account for the different meanings that a given verb can develop in unusual contexts of use, without positing implausible senses for each lexical entry. In order for verbs to fuse with the semantics of constructions, a certain degree of compatibility between the frame semantic knowledge they evoke and the semantics of constructions is required. In particular, two main conditions need to be satisfied (*Ibid.*: 50), namely:

1. the *Semantic Coherence Principle*, according to which only roles which are semantically compatible can be fused;

2. the *Correspondence Principle*, according to which each participant role that is lexically profiled by the verb must be fused with a profiled argument role of the construction.

In the light of such premises, grammar is seen as the repertoire of constructions of a given language, organised on the basis of systematic generalizations and inheritance

principles which give rise to coherent networks with varying degrees of complexity and abstractness (*Ibid.*: 67-100). Consequently the speakers' linguistic competence consists in the knowledge of the full inventory of constructions, whose general instantiation pattern is abstracted and generalized over several experiences of use.

Given that all form-meaning pairings, including morphemes, words, phrase structures and idioms, are constructions which differ only with respect to their internal complexity, the existence of a syntax-lexicon continuum is postulated against a strict separation between the two levels. Such a gradient conception of grammar challenges the modular view proposed within the generative framework.

Among the types of argument structure constructions analysed in Goldberg (1995), one is specifically related to the motion domain, namely the *Caused-Motion Construction* (*Ibid.*: 152-180). According to its basic sense, an agent causes a theme to move along a path to a new location. A full instantiation of the Caused-Motion Construction is exemplified by the English sentence *Joe hit the ball across the field*, in which the caused-motion verb *hit* appears. Nevertheless, verbs which do not directly encode motion can occur within this template too, since the constructional import allows for a certain degree of creativity. As a matter of fact, in sentences like *They laughed the poor guy out of the room* or *Mary urged Bill into the house,* the amotion verbs *laugh* and *urge* are coerced into a motion reading by the "power" of the construction (*Ibid.*: 159).

The *Intransitive Motion Construction*, which will be the main focus of our analysis (cf. Chapter 4), is considered as a sub-pattern of the Caused-Motion Construction in which the external cause of the movement is not present. Besides motion roots expressing Path or Manner, several verb types can occur within this pattern, such as verbs of sound emission (e.g. *siren* > *They sirened up to the accident site*), verbs of explosion (e.g. *burst* > *I burst into the room*), or other verbs (e.g. *sweat* > *The runners sweated up the hill*).

Starting from Goldberg's reflections on constructions, several contributions which apply the model of Construction Grammar to the study of motion event encoding arose. Among those, two deserve to be mentioned here by virtue of the importance they had for the analysis of the Ancient Greek data, namely Rohde (2001) and Stefanowitsch (2013).

Rohde's PhD thesis from 2001, *Analyzing path: The interplay of verbs, prepositions and constructional semantics*, explores the limits of constructional import in the expression of Path on the basis of an extensive corpus study. In particular, by determining the degree of

intrinsic dynamicity of 19 prepositions, the author demonstrates that coercion of non-dynamic prepositions into a dynamic interpretation is only possible if both the verb and the preposition inherently profile the endpoint of motion. The power of constructions to coerce the meanings of lexical items is thus limited by certain conditions.

Stefanowitsch's paper from 2013, *Variation and change in English path verbs and constructions: using patterns and conceptual structure*, investigates the diachronic evolution of the English directional motion verb *enter*, comparing its transitive and intransitive uses. As a methodological caveat, the author stresses the importance of combining a detailed construction-based analysis and broad typological considerations, in order to reach a deep understanding of motion expression in a given language.

The premises of the Construction Grammar as outlined in this section, combined with the analytical tools elaborated within the typology of motion event encoding will be applied to the analysis of the Ancient Greek data. The chapters devoted to the discussion of the empirical results of our investigation (i.e. chapters from 3 to 6) are preceded by a methodological section, in which the process of data collection and coding is presented.

CHAPTER 2. METHODOLOGICAL CLAIMS AND DATA COLLECTION

This dissertation is based on a corpus study led on five Ancient Greek texts written by the main historians and playwrights of the Classical period, i.e. Herodotus, Thucydides and Xenophon for the historical genre, Euripides and Aristophanes for the dramatic genre. All texts date back to the second half of the 5th/beginning of the 4th century BC and have been selected on the basis of their linguistic representativeness. In fact, based on their plots and linguistic features, these texts were expected to contain motion events in relevant percentages.

In this chapter, the methodology of data collection, coding and analysis will be discussed, as well as the choice of the language and the texts constituting the data set.

The present chapter is organized as follows: in section 2.1, we will argue for the use of a corpus-based analysis rather than a lexical research focusing on a single morphosyntactic category and motivate this choice on the basis of the aims of the present study; in 2.2, the data sources will be presented, with special reference to the morphosyntactic features of "Classical Greek", and to the selection of the authors. The main themes and the plots of the texts will be briefly introduced in 2.2.3. Section 2.3 will be entirely devoted to the discussion of the whole process of data extraction, from the first extensive reading of the five texts at issue to the export of the motion events from *Perseus 4.0*; in 2.4, we will describe the coding system developed for the qualitative and quantitative analysis of motion event encoding in Ancient Greek, with a focus on the morphosyntactic and semantic features of each linguistic item; section 2.5 will be eventually committed to the data outline and, specifically, to the norms of transliteration of the Ancient Greek alphabet and diacritics, as well as to the glossing rules.

2.1 A corpus-based study of motion event encoding

The final decision of basing the study of motion event encoding in Ancient Greek on a corpus analysis rather than on a lexical research on grammars and dictionaries was based on different factors.

To begin with, the original intention was to conduct an empirical analysis showing

bottom-up rather than top-down results. In this respect, a corpus-based research offered the inestimable chance to deal with a sample of "authentic" language.

It goes without saying that working on an ancient language implies facing several methodological issues, and raises a number of questions. What can be called authentic and natural in a language whose oral dimension cannot be investigated and whose tradition is mainly (if not only) literary? Is it possible to get a real impression of a language without resorting to the speaker's judgements?

In order to answer such questions, a banal metaphor may prove effective: linguistic corpora can be easily compared to portraits, as they both capture only some features of the objects they refer to. Thus, just like every representation of reality, partial by nature, a corpus does not always succeed in providing a faithful description of the language it depicts. However, as Fagard (2006: 177) states on the use of corpora for the study of ancient languages:

> «*La langue à laquelle nous avons accès grâce aux corpus n'est qu'une abstraction, un reflet de la langue utilisée à l'époque correspondante: rien ne nous empêche pourtant de travailler sur cette abstraction, qui est elle aussi un système, et peut nous révéler quelque chose du système linguistique le soustendant.*»

Of course, such an assumption entails that a careful reflection on the construction of the corpus is fundamental to grant the validity of the analysis. The choice of the corpus for the present thesis has demanded a deep inquiry into the Ancient Greek language. The different decisions related to the building of the corpus will be discussed in details in section 2.

The second advantage of adopting a corpus-based approach for the study of motion event encoding in Ancient Greek is strongly related both to the conceptual domain under analysis and to the approach that will be exploited across this dissertation.

As already shown in Chapter 1, Talmy's dichotomic typology distinguishing between Satellite-Framed and Verb-Framed languages (1985; 1991) underwent criticisms for its rigidity. After his groundbreaking works new proposals arose, in which languages were grouped on the basis of their tendency towards a strategy, i.e. depending on the preferential lexicalization pattern they resort to for motion expression. Since then, the typology of motion event encoding began to be seen more in terms of a cline.

Based on such a premise, since no languages exhibit pure types, a corpus-based analysis represents the only tool which can highlight the most common patterns employed for the

expression of different kinds of motion events, while dictionary-based surveys could provide misleading results based on the inventory of items available at the system level rather than on the actual language use. As stated by Rohde (2001: 44), in fact:

> «Corpora permit us to identify what is central and typical in a specific language. The use of corpora allows for the investigation of two extremely important aspects of language use: (i) it makes it possible to obtain frequency data; and (ii) it enables the extraction of recurring constructions and the range of patterns used in a language, and (iii) it makes possible to detect specific collocation patterns.»

The choice of basing the analysis on a corpus rather than on grammars and dictionaries was also motivated by intention to exploit the functional-typological approach for the analysis of Ancient Greek. Since a study on the linguistic encoding of displacement often requires to deal with fuzzy, dynamic morphosyntactic categories, traditional philological tools would have revealed themselves as partial and inadequate for the purpose of applying a functional-typological perspective to the investigation of an ancient language.

To provide an example, traditional grammars of Ancient Greek (cf., *inter alia*, Goodwin 1900: 254; Smyth 1920: 366) distinguish between *proper* (or *true*) vs. *improper prepositions*, depending on the capability of the particle to form verbal compounds. In pairs like *ex* 'out of' vs. *éxo:* 'out', *eis* 'into, to' vs. *eiso:* 'to within, to the inside', *aná* 'on, up' vs. *áno:* 'upwards', *katá* 'down' vs. *káto:* 'downwards', the two items are thought to belong to different categories. In our analysis, we will try to show that, in fact, such particles can all be connected to the functional notion of satellite (cf. Imbert, Grinevald, Söres 2011), since their "ambiguous" behaviour is nothing but the effect of a grammaticalisation process crosslinguistically well-attested, which reached different stages depending on the linguistic items involved.

The last consideration which played a crucial role in the decision of opting for a corpus-based study of motion events in Ancient Greek concerns the nature of spatial semantics. As underlined in Sinha & Kuteva (1995), spatial meaning is rarely (or never) confined to a single lexical or morphological item within the clause; rather, although to different extents in different languages, it is distributed across several elements, such as, in the case of Ancient Greek, verbal roots, preverbs, prepositions, case markers and modifiers. In addition to this, pragmatic inference strongly contributes to the building of spatial meaning, especially in assigning the Ground with certain properties. Since, quoting Ameka (1995:

161), «various elements (...) "conspire", so to speak, to provide information about spatial scenes», working with shots of actual language production, whatever this means for an ancient language, seemed to be the only way to investigate the construction of spatial meaning.

Moreover, in some cases it is not straightforward to grasp where the motion component lies. Consider examples such as the following taken from Goldberg (1995: 158):

(30) Sam urged Bill outside the house.

In (30) neither the verb *to urge*, nor the preposition *outside* independently express displacement. However, the whole sentence undoubtedly conveys a motion meaning, since «we attribute the caused-motion interpretation to a construction which combines the verb and directional preposition yielding a particular, conventionalized interpretation» (*Ibid.*: 159). Similar instances of "motion without explicit encoding of motion" in Ancient Greek (cf. Chapter 4 of the present work) e.g. the construction in which a *verbum dicendi* is assigned a motion reading by virtue of a directional complement (cf. *Kádmon ekkálei dómo:n* 'Call Kadmos out of the house!', Eur. *Ba.* 170) could not have been detected if not by means of a corpus-based study.

2.2 Data Sources

In this section the data sources selected for the present study will be outlined. Specifically, we will first motivate the choice of the language; secondly, we will describe the features of the linguistic layer under analysis; thirdly, we will present the sample of authors and texts.

2.2.1 The choice of the language

> «*Il arrive (...) que la langue littéraire soit une forme du parler courant (...) et les particularités qu'on peut observer (...) fournissent souvent un aperçu, au moins partiel, de l'usage ordinaire. Tel est le cas en Grèce*».
>
> Meillet (1965: 120)

As already stated in the introduction, the present dissertation was born after a long reflection on the possible contribution of ancient languages to typological research. The so-called *text languages*, as opposed to living languages, are still under-represented in the field of linguistic typology. Based on such a premise, there is still a strong need to investigate them using the analytic tools of modern linguistics to shed light on their morphosyntactic and semantic structure in order to provide new data to the discussion. After all, as stated by Fleischman (2000: 34),

> «the term 'text language' is intended to reflect the fact that the linguistic activity of such languages is amenable to scrutiny only insofar as it has been constituted in the form of **extant texts, which we might think of as its 'native speakers', even if we can't interrogate them quite in the same way as we can native speakers of living languages**».[27]

If we keep this assumption in mind, it goes without saying that without the theoretical and descriptive contribution provided by the study of ancient languages, an analysis of the strategies languages of the world deploy in order to speak about motion would certainly prove pitifully incomplete. Moreover, the development of new methodological tools for the coding of data from a language like Ancient Greek could favour the crosslinguistic comparison with respect to this basic experiential domain.

Among the features which make Ancient Greek particularly suitable for the kind of research questions raised by an investigation of motion expression, the following play a crucial role:

- its inventory of directional particles, behaving both as prepositions and as preverbs, based on which Ancient Greek is commonly classified as a Satellite-Framed language (cf. Talmy 1991; 2000; Nikitina 2013, *inter alia*);

- its fecund motion-related verbal lexicon, showing both Path and Manner nuances, as well as deictic information;

- its case system contributing, together with the prepositions, to the description of Ground elements;[28]

27 Emphasis mine.

- a great assortment of modifiers involved in the encoding of Path and Manner information.

2.2.2 The choice of the variety

Ancient Greek is an Indo-European language including the varieties spoken in Greece and in all the territories gravitating around its political and cultural influence between the 14th century BC and the 4th century AD.

Due to the temporal and spatial extension of the language, as well as to the strong link between dialects and literary genres, the choice of the period was not arbitrary. In fact, one could speak of "several Ancient Greeks", as a consequence of the strong diatopic and diastratic variation of the language (cf. Consani 2013).

Despite the methodological issues we will discuss in more details in 2.3, compared to Homeric Greek, Classical Greek seemed to offer at least two advantages for the aims of the present research. First of all, this stage of the Greek language is synchronically more stable than Homeric Greek, since the latter, as well known, is a stratified variety resulting from a long oral tradition and thus retaining some heritages of previous stages.[29] Moreover, during the 5th century BC, as a direct consequence of the literary development concerning different genres, a process of standardisation of the Greek language, multicentric in nature, was launched. As stated by Luraghi (2003: 3):

> «The two most important literary dialects were Ionic and Attic. Since these two varieties are closely related to each other, and literary Attic gave up a number of vernacular features under the influence of the more prestigious Ionic, the literary dialect is commonly known as Attic-Ionic.»

Considering the connection between dialects and literary genres during the Classical period, one could claim that focusing on this stage of the Greek language would be like tilting at windmills. However, two factors need to been taken into account: first of all, no

28 Among the five Ancient Greek morphological cases, three play a crucial role in motion encoding, namely the genitive (prototypically employed for Source), the dative (in charge of static relations), and accusative (mainly dedicated to Goal expression). A section of Chapter 3 is devoted to the analysis of the interplay between prepositions and case markers for the encoding of different Ground elements.

29 In order not to "flatten" the corpus, some examples from Homeric Greek will be occasionally provided, with special reference to the grammaticalisation processes in which directional particles take part across the history of the Greek language.

natural language is completely free from (diatopic) variation and Classical Greek is, of course, no exception in this respect. In fact, its Attic core «(...) is rarely found pure in any of the great authors» (cf. Pharr 1985: 24). Furthermore, the dialectal and stylistic peculiarities of each of the authors in the corpus, whose main impact is phonological, neither affect the Ancient Greek language as a system, nor alter its morphological, syntactic and lexical pillars to a great extent.[30]

In the following section the main morphosyntactic features of Ancient Greek relevant to the present research will be briefly presented for the readers who are not familiar with the language under analysis.

2.2.2.1 Typological features of Ancient Greek

Like all of the old ancient Indo-European languages, Ancient Greek is highly fusional. As for the nominal inflection, it has three genders (masculine, feminine, neuter), three numbers (singular, plural, dual) and five morphological cases (nominative, genitive, dative, accusative, vocative). In particular, three out of the five will be of interest for the aims of this study, namely genitive, dative and accusative, to which the encoding of Path is committed. Pronouns are also inflected according to the category of person (first, second, third).

As for the verbal morphology, Ancient Greek exhibits a high degree of complexity resulting in three voices (active, middle, passive), six moods (indicative, subjunctive, optative, imperative, infinitive, participle) and six tenses (present, future, imperfect, aorist, present perfect, pluperfect, future perfect), as well as in strong verbal allomorphy. It is worth mentioning that the semantics of Ancient Greek tenses is not straightforward: since the language fuses temporal and aspectual information, it is not always easy to determine the exact value of a verbal form. In addition to such morphological features, verbal roots can also be preverbed: the verbal particles capable to agglutinate to a verbal base can encode both spatial meanings and aspectual nuances, and they can attach to nouns as well.

Among the non-inflected items, Ancient Greek has a number of adverbs, prepositions,

30 As a methodological caveat, it is worth stressing that the authors' idiosyncrasies due to geographical or rhetorical reasons, deviating from the common uses in motion event expression, will be signalled together with *hapaxes*.

discourse particles, conjunctions, negations, some of which will be taken into account for their pertinence to the topic of motion event encoding.

As for word formation, both derivation and compounding are very productive processes in Ancient Greek: derivation makes large use of suffixes, compounding is very rich and complex.

From a syntactic point of view, the order of major constituents in a sentence is generally free, so that both Subject-Verb and Verb-Subject orders are found. Similarly, the object may precede or follow the verb or even the subject.

Such linguistic features are common to all authors belonging to the Classical period. Note that, henceforth, the label "Classical Greek" will be employed to refer to the average of the linguistic uses found in the texts of the corpus. In the following paragraph, we will argue for their selection.

2.2.3 The choice of the texts

Needless to say, building a corpus showing a fair degree of linguistic consistency and being, at the same time, representative of Classical Greek has been a difficult challenge to face. In fact, the great literary flourish taking place during the 5th century BC represents a double-edged weapon in this respect: on the one hand, it offers a wide variety of genres and texts resulting in a stimulating degree of synchronic linguistic variation to investigate, on the other, its richness may put the homogeneity of the corpus at risk.

The reflection on the authors and texts to include in the sample has yielded a number of choices, all meeting the need to reach what Ashdowne & Smith (2007: 194) refer to as a *"variable consistency",* that is variation within a fair degree of linguistic homogeneity.

First of all, despite the potential issues posed by metric, we decided to embrace both prose (historical genre) and poetry (dramatic genre), the latter imitating the speech modality and offering the chance to investigate deixis, by virtue of its dialogical trend. In particular, these two literary genres have been selected on the basis of their narrative and dynamic character generating a wide tank of motion events and spatial data.

On the historical side, the three most important authors belonging to the genre have been included, each of them showing some peculiar characteristics. Herodotus (484–425 BC)

is commonly considered as the "father" of history; after being exiled from the Doric town of Halicarnassus, he spent his life travelling between the Ionic island of Samos, Athens, the Persian empire, Italy and Sicily. His *Histories* (440 BC) narrate the causes and events of the Greco-Persian wars; the data collection has been limited to the first book of the text, where the mythical origins of the conflict between Athens and Persia are outlined. Herodotus' language, Ionic in its core, is not however free from Attic and poetic elements. As stated by Meillet (1965: 233), «*L'auteur qui se trouve représenter aujourd'hui la prose ionienne a écrit sans doute un ionien international*». His text is, after Homer, the first attempt to find a universal Greek language able to capture the new feeling of internationalism derived from Athens' victory against the Persian empire. After that, «the only step that remained to be taken was the replacement of Ionic by Attic» (Rodríguez Adrados 2005: 136).

A great leap towards this shift is made by the second author in the sample, i.e. Thucydides (c. 460 – c. 400 BC). His *History of the Peloponnesian War* is an historical account of the civil war which opposed the Peloponnesian League (led by Sparta) and the Delian League (led by Athens) between 431 and 404 BC. Given the length of the text, the analysis has been restricted to the first book, where the previous history of Greece is sketched as the background of the fight and some methodological claims are addressed. From a linguistic point of view, as a consequence of his Athenian origins, Thucydides' prose can be regarded as a transition towards to the great Attic style, which will only be reached in the 4th century BC.[31]

The last historian included in the corpus is Xenophon (c. 430 – c. 354 BC). With respect to the others, he shows some new linguistic features which anticipate the birth of *koiné*, i.e. the common variety of Greek spoken and written during the Hellenistic period. His language is based on an Attic core, but it exhibits Doricisms and Ionicisms due to the agitated life of the writer. Within his prolific historical production, we have chosen the first book of *Anabasis* (lit. 'Ascent'), that is the author's most famous work, where Cyrus' ascent to the throne of Persia is narrated.

As for the dramatic genre, we have based our selection of texts on the plots, including both tragedy and comedy, the former constituting the background of the Ancient Greek culture, the latter describing everyday situations which are particularly suitable for the

31 As stated by Rodríguez Adrados (2005: 153), Thucydides «does not display any complete phonetic or morphological regularisation, he can choose archaisms or Ionicisms (which are sometimes the same thing)».

purposes of a study on the motion domain.

The tragedy is Euripides' *Bacchae* (name of the female followers of Dionysus, also called Maenads) (405 BC, date premiered), based on the Greek myth of Pentheus, king of Thebes, and his punishment by Dionysus, the god of wine, fertility, instinct and religious madness. The text is permeated with dynamic scenes which portray the Maenads performing their ritual dance, running through the forest or feeding wild animals just before killing them. Moreover, the messenger's report of Pentheus' murder has proven one of the greatest sources of motion events in the whole corpus.[32] From a linguistic point of view, Euripides' *Bacchae* embodies the Attic tragedy retaining, on the one hand, some traits of the Ionic poetry, and exhibiting, on the other, a new interdialectal character: «*ce n'est pas seulement la culture d'Athènes, c'est une culture hellénique, de type athénien, comportant des éléments venus de tous les Hellènes et destinée en quelque mesure à tous les Hellènes*» (Meillet 1965: 222).

The last text belonging to the corpus at issue is a comedy by Aristophanes (c. 446 – c. 386 BC), an Athenian comic playwright who is thought to be the initiator of the genre. Before opting for the *Thesmophoriazusae*, a brilliant parody of Athenian society of that period, the choice had fallen on *The Birds*. However, the preliminary results of our analysis did not seem to mirror the actual use of the motion language, especially as for the type and token frequency of Manner verbs (e.g. the root for 'fly'), due to the plot and characters of the comedy. On the basis of such considerations, we have moved to a “less connoted” plot, in order to detect more colloquial expressions in the motion domain. As far as the language of the *Thesmophoriazusae* (lit. 'Women celebrating the Festival of the Thesmophoria') is concerned, it has a clear Attic grammar and lexicon to which some neologisms by the author are occasionally added. Since one of the main aims of the comedy is criticising the vanity of tragic authors, it is not always easy to determine where the satirical reproduction of the Attic language begins and ends.

As stated for the other authors in the sample, all linguistic peculiarities ascribable to stylistic choices, individual habits as speakers of the Ancient Greek languages, areal influences, or chronological reasons will be underlined and discussed.

Table 3 summarizes, following a chronological order, the authors, genres and texts included in the corpus:

32 The rhetorical expedient of assigning a messenger the task of verbalising the most cruel scenes in a tragedy was very common in the Ancient Greek theatre, since physical violence was not allowed to be played explicitly.

AUTHOR	GENRE	TEXT	PERIOD
Herodotus	Historical	*Histories*	440-429 BC
Thucydides		*History of the Peloponnesian War*	431-411 BC
Xenophon		*Anabasis*	401-400 BC
Euripides	Dramatic	*Bacchae*	411 BC
Aristophanes		*Thesmophoriazusae*	407-406 BC

Table 3: Texts included in the corpus

This section, far from being an exhaustive account of the language employed by the main historical and dramatic authors in the Greek literature of the 5th century BC, aimed at briefly presenting the texts on which our analysis has been led, as well as at justifying the choice of the corpus.[33] It seems worth stressing that the beauty of these texts has represented an inspiring and exciting support through the different phases of my research.

In the following paragraphs, we will argue for the extraction and coding of the data from the previously mentioned texts.

2.3 Data extraction

The actual corpus constituting the basis of this study consists of the excerpts of motion events collected through a systematic scrutiny of the five texts introduced in 2.3.

After a first reading aiming at capturing the general atmosphere of the works with a special focus on the spatial domain, the data extraction followed. All the linguistic forms, ranging from morphemes to constructions, involved in the expression of the basic conceptual components of motion have been selected.

As for the minimum unit of analysis, i.e. each portion of text to be imported into the coding system, it was fixed at the clausal level, following Berman & Slobin (1994: 26), according to whom a clause is «any unit containing a unified predication, whether in the form of a verb or an adjective».[34] In our sample, such a linguistic unit corresponded to a single motion event.

33 For a deeper insight into the history of the Greek language, see, among the others, Meillet (1965), Rodríguez Adrados (2005) and Horrocks (2010).

34 In our corpus we also encountered examples in which the predication was assigned to a noun (often a nominalization of a motion verb). This pattern will be discussed in chapter 3.

Both finite and non-finite forms were included (e.g. infinitives governed by *verba dicendi*); modal and aspectual verbs were counted together with the main verb in the clause, as well as non-finite forms participating in the encoding of one single event. For instance, in a sentence like (31), the participle *pléontes* 'sailing', providing a Manner specification, and the indicative of *oíchomai* 'go away' have been interpreted as belonging to the same clause, since they both refer to the same event:

(31) οἴχοντο πλέοντες ἐπὶ τῆς Θρηίκης
oíkhonto *pléontes* *epì* *tês* *Thre:íke:s*
go_away.IMPF.M/P.3PL sail.PTCP.NOM.M.PL upon ART.GEN.F.SG Thrace(f).GEN.SG
'they sailed away for Thrace' (*Hdt.* 1.168.1b)

After defining the final shape of the data, we proceeded to the extraction of the instances of motion events collected through the extensive reading of the five texts from the Classical Period.

For this aim, we have resorted to the online database of the *Perseus Project*. This project, hosted by the Department of Classics of Tufts University (Massachusetts), is an open source digital library of humanities resources. It was founded in 1987 with the aim of collecting and presenting materials of the language, literature and culture of Ancient Greece. Since then, four different versions of the project have been created. For the present research, I relied on *Perseus 4.0*, also known as *Perseus Hopper*, which is available online (http://www.perseus.tufts.edu/hopper/). The *Vocabulary Tool* proposed by the database has been exploited in order to double-check the collection of data and to examine the frequency of verbs and satellites. Here is a short summary of the different phases of data collection:

1) first extensive reading of the texts;

2) second reading and selection of motion events;

3) extraction of the Ancient Greek clauses encoding motion through *Perseus 4.0*;

4) importation of the English translation provided on *Perseus 4.0*.[35]

In total, 1627 motion events have been collected. Table 4 shows the number of motion events per text:

AUTHOR	TEXT	NUMBER OF MOTION EVENTS
Herodotus	*Histories*	521
Thucydides	*History of the Peloponnesian war*	398
Xenophon	*Anabasis*	338
Euripides	*Bacchae*	202
Aristophanes	*Thesmophoriazusae*	168
		Total number of motion events 1627

Table 4: Number of motion events per author

2.4 Coding system

For the data analysis, a coding system relating to both the morphosyntactic and the semantic dimension of motion encoding has been developed. As demanded by the adoption of an onomasiological perspective taking conceptual components as the starting point for the investigation of linguistic forms, the grid was directed at answering the question of how the conceptual material related to the motion domain is packed into linguistic items ranging from morphemes to constructions.

Much of the coding effort required by the analysis was devoted to a preparatory theoretical reflection on the level of coding to adopt. A broad coding was the first option we decided to explore. Following this trend, the original grid consisted of three main morphosyntactic slots, corresponding to the *loci* identified in Wälchli (2001), i.e. verbal, adverbal and adnominal *locus*. The semantic information was restricted to Path and Manner, without any further specification. The resulting coding was very simple, and the categories proved very general and clear-cut.

As to be expected, this kind of grid, avoiding fine-grained distinctions, did not draw a faithful portrait of the language. In fact, gradually moving forward with the analysis, we

35 It is worth stressing that all the translations of the Ancient Greek examples discussed in the present work have been carefully revised and conveniently replaced when obsolete or deviating from the original sense.

encountered some syntactic patterns and semantic nuances which did not fit into the first broad coding.

In order to find a good balance between overgeneralisation and overspecification, both morphosyntactic and semantic categories have been implemented until the coding grid reached is final shape, which be discussed in details in the following sections.

It is worth stressing that the preliminary study of the different levels of coding carried a methodological caveat: while a coarse coding based on general categories is the most suitable option for wide crosslinguistic surveys, since it highlights the main similarities and differences between different languages, a fine-grained coding capturing the narrow details of motion expression revealed itself as being essential for a functional-typological description of an individual language with respect to such a complex and vivid semantic domain.[36]

In the following sections, we will first introduce the morphosyntactic categories that have resulted from the data collection and account for their internal structure, and then examine the semantic information they convey. It goes without saying that the development of the coding system has implied a back and forth process to and from the data (bottom-up & top-down), which characterized the whole process of data analysis.

2.4.1 Morphosyntactic devices

From the first exploration of motion event encoding in Ancient Greek five main morphosyntactic categories have resulted. They have been classified on the basis of their status: three categories, i.e. the verb, the noun and the modifier, are lexical, while two categories, i.e. the satellite and the adnominal, exhibit a more functional nature.[37]

Table 5 accounts (a) for the main slots dedicated to motion encoding, (b) for the maximum instances of each category within a single clause, and (c) for the internal organization of each category.

36 An analogous attempt to find a compromise between the two different level of coding is found in Fortis & Vittrant (2011).

37 The category of modifiers is more internally complex and retains some peculiar features which deserve a specific treatment.

Main Category	Maximum Number of Items per Clause	Number of Internal Morphosyntactic Specifications
Verb	2	2
Noun	2	3
Modifier	3	4
Satellite	3	3
Adnominal	4	2

Table 5: Main morphosyntactic categories involved in motion event encoding

As for the verbal category, which is, by virtue of its semantics, one of the most composite, the main internal distinction to be made is that between roots encoding spontaneous (voluntary) motion and roots encoding caused motion. Each of the two subcategories has further semantic specifications.

Far from constituting a clear-cut group, Ancient Greek causative motion verbs display an interesting pattern of alternation between mono- and bi-valency, which will be at issue in chapter 3. Idioms like *kineîn póda* or *tithénai póda* 'move the feet' have been included in the verb column for the sake of brevity, the motion meaning lying mainly in the verb.

The noun slot appears in complementary distribution with the verbal slot. In fact, not all scholars agree on the possibility for a noun to carry the displacement meaning (cf., *inter alia*, Fortis 2007). However, since motion nouns constitute a frequently exploited alternative to motion verbs (as they can also take satellites), the nominal locus has been included as an independent category. Three different kinds of forms have been labelled as Nouns, namely:

- nominalizations from motion verbs, either simple (e.g. *dío:xis* 'chase, pursuit' from *dió:ko:* 'pursue, chase') or preceded by nominal satellites (e.g. *aná-basis* 'mounting, ascension' from *ana-baíno:* 'go up, mount');

- nouns encoding motion, either simple (e.g. *hodós* 'journey, voyage') or preceded by nominal satellites (e.g. *éx-odos* 'going out');

- light verb constructions, i.e. analytic patterns replacing a motion verb, composed of a predicative noun (i.e. a *nomen actionis* expressing motion) (or adjective) and a

semantically bleached verb (cf. e.g. *poreían poieîsthai* 'make a journey', *éktopos ésto:* 'let him leave the place!').[38]

The third category my coding system embraces is that of modifiers, among which we have included four kinds of linguistic items:

- adverbs or adverbials adding a Path or Manner nuance to the verbal root, regardless to their etymology (e.g. the adverbial *pezêi* 'on foot, by land', etymologically the dative feminine of the adjective *pezós* 'on foot, walking', is coded as a Manner verb);

- adjectives usually referred to the moving Figure conveying either Path or Manner information (e.g. *enantíos* 'opposite', *sporás* 'scattered');

- prepositional phrases or noun phrases encoding Manner (e.g. *nausí* 'with ships');[39]

- complex adverbs encoding Path, derived from the suffixation of adverbs or satellites (e.g. *áno:-then* 'from above', *ekêi-se* 'thither').

Among the functional categories, satellites and adnominals contain the same kind of linguistic forms, and diverge only for the presence or absence of a noun introducing the Ground element in the motion event.[40]

The label of satellite applies to elements traditional grammars refer to as to *proper* and *improper prepositions* (cf., *inter alia*, Goodwin 1900: 254; Smyth 1920: 366), the former appearing in verbal compounds, the latter being «adverbs used as prepositions, but incapable of forming compounds» (cf. Smyth 1920: 366).

Among the eighteen proper prepositions described in the grammars, we found sixteen items showing a directional meaning in the corpus. Beside the standard preverbal behaviour, such items display the typical functioning of adpositions: the so-called *relational*

38 Despite their holistic character, light verb constructions have been incorporated in the nominal slot as a consequence of the poor semantics of the verb: in fact, the motion meaning is moslty carried by the noun (or the adjective).

39 This category differs from the adnominal locus in that it encodes different kinds of semantic roles, not Path.

40 The scope of this assumption requires to be mitigated: in fact, as it will be shown in chapter 3, not only prepositions are able to select a case marker.

preverbs (cf. Imbert & Grinevald 2008; Viti 2008a), though appearing attached to verbal roots, behave as adpositions in that they govern a noun and decide its case.

According to Imbert, Grinevald & Söres (2011: 10 ff.), the different syntactic behaviour of proper preverbs and relational preverbs could correspond to different stages of the same grammaticalisation process resulting in the final *satellisation* of adnominal sources. This process will be discussed in details in chapter 3.

The last morphosyntactic category identified in the text under analysis is that of adnominals. It includes two kinds of elements, namely prepositional phrases consisting of a preposition interacting with a case marker for the expression of the Ground element, and noun phrases. The items performing the prepositional use are the same found in satellite function plus some particles that cannot form verbal compounds. The Ancient Greek cases involved in the encoding of spatial relations are genitive (mainly for Source and Median), dative (mainly for Location), and accusative (mainly for Goal and Median).

2.4.2 Semantic components

The basic conceptual components of motion representing the focus of this work are Path and Manner. Similarly to the morphosyntactic categories, the semantic categories too show a certain degree of internal complexity.

As for the Path information, in our coding system we accounted for all the three segments of Path identified in the literature, i.e. Source, Median (or Medium, Medial, Path, Trajectory) and Goal.[41]

The Manner component has been subdivided in consonance with Slobin's classification of the Manner verb lexicon. According to the scholar's distinction (1997: 459) «languages seem to have a "two-tiered" lexicon of Manner verbs: the neutral, everyday verbs – like *walk* and *fly* and *climb*, and the more expressive or exceptional verbs – like *dash* and *swoop* and *scramble*». The first tier includes basic, classificatory roots encoding a kind of motion that is the default for a specific entity. The second tier embraces semantically richer verbs clustering around different Manner types. Any further specification has been avoided on

41 As for the terminology concerning the intermediate segment of Path, in the present dissertation we have opted for the label Median. In the coding system, however, the part in question as been indexed as T (=Trajectory), in order to avoid the ambiguity with M employed to identify the Manner component.

purpose, the main aim of the present study being examining the interaction between Path and Manner information in the linguistic form of verbs, satellites and adnominals.

The first step to identify the meaning of each morphosyntactic device involved in motion expression was the consultation of dictionaries, grammars and secondary literature on Ancient Greek, which have constituted a fundamental tool to get the meaning of linguistic items and have somehow replaced the speakers' judgements. Secondly, we have relied on the different contexts of occurrence in order to disambiguate the meaning of the fuzziest items. The resulting scenario is the one shown Table 6.

MORPHOSYNTACTIC CATEGORY	SEMANTIC INFORMATION	SEMANTIC SUBCATEGORIES
Verb	Path	Source-oriented Path verbs
		Median-oriented Path verbs
		Goal-oriented Path verbs
	Manner	Basic Manner verbs
		Expressive Manner verbs
		Path-plus-Manner verbs
Satellite	Path	Source satellites
		Median satellites
		Goal satellites
Adnominal	Path	Source adnominals
		Median adnominals
		Goal adnominals
Modifier	Path	Source modifiers
		Median modifiers
		Goal modifiers
	Manner	Manner modifiers

Table 6: Morphosyntactic categories and semantic specifications

In addition to the semantic subcategories related to Path or Manner information, further semantic specifications have been added for specific morphosyntactic categories:

- for verbs: verbs of basic motion (or generic motion verbs), encoding motion itself and proving semantically neutral to Path; verbs of caused motion employed both transitively and intransitively (i.e. *labile* verbs); stative verbs taking part in the *constructio praegnans* (cf. Chapter 4); "other verbs", i.e. verbs whose semantics does not directly imply displacement, which receive a motion reading in some constructions;

- for satellites, adnominals and modifiers: items expressing Location rather than Path, participating in the *constructio praegnans*.[42]

2.5 Data outline

Since the present study aims at providing a functional-typological description of the morphosyntactic means Ancient Greek resorts to for the expression of motion, data have been conformed to the typological standards, in order to go beyond the boundaries which have traditionally constrained the study of the Ancient Greek language.

Based on such a premise, all the examples will be presented as follows:

- first line → portion of text in the Greek alphabet;
- second line → transliteration in Latin characters;
- third line → glosses following the Leipzig Glossing Rules (cf. 2.5.1);
- fourth line → English translation and reference.

As for the transliteration of the Greek alphabet into Latin characters, we have resorted to the system used in Imbert (2008: 120). Table 7 shows the Ancient Greek letters with their traditional denomination, the suprasegmental elements (signalled by diacritics), and their transliteration throughout the present dissertation.

42 An appendix showing the coding system is provided on page 275.

Ancient Greek	Denomination	Transliteration	Ancient Greek	Denomination	Transliteration
α	*alpha*	a	π	*pi*	p
β	*beta*	b	ρ	*rho*	r
γ	*gamma*	g	σ/ς	*sigma*	s
δ	*delta*	d	τ	*tau*	t
ε	*epsilon*	e	υ	*upsilon*	u
ζ	*dzeta*	z	φ	*phi*	ph
η	*eta*	e:	χ	*khi*	kh
θ	*theta*	th	ψ	*psi*	ps
ι	*iota*	i	ω	*omega*	o:
κ	*kappa*	k	῾	*rough breathing*	h
λ	*lambda*	l	᾽	*smooth breathing*	not signalled
μ	*mu*	m	´	*acute accent*	´
ν	*nu*	n	`	*grave accent*	`
ξ	*xi*	x	~	*circumflex accent*	^
ο	*omicron*	o	¨	*dieresis*	¨

Table 7: Ancient Greek transliteration

As for the *dzeta*, we have opted for the simple Latin character z (instead of Imbert's more phonetic **zd**) for the sake of brevity and simplicity. Among the diacritics, the smooth breathing will not be signalled, since it did not imply any difference in the pronunciation. As for the vowels carrying the circumflex accent, since only long vowels can take it, their quantity will not be marked.

The example in (32) anticipates how data will be presented across this dissertation. Symbolically, it is the first motion event extracted.

(32) τούτους γὰρ ἀπὸ τῆς Ἐρυθρῆς θαλάσσης
toútous gàr apò tês Hruthrês thalásse:s
DEM.ACC.M.PL hence from ART.GEN.F.SG Red.GEN.F.SG sea(f).GEN.SG
ἀπικομένους ἐπὶ τήνδε τὴν
apikoménous epì té:nde tè:n
from-reach.PTCP.PRES.M/P.ACC.M.PL upon DEM.ACC.F.SG ART.ACC.F.SG
θάλασσαν
thálassan
sea(f).ACC.SG

'in fact arriving from the Red sea to this sea' (*Hdt.* 1.1.1a)

2.5.1 Glossing system

As far as the glosses are concerned, we have decided to conform the present thesis to the conventions established by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology and by the Department of Linguistics of the University of Leipzig, commonly known as the Leipzig Glossing Rules.[43] They consist of a set of rules of interlinear glosses providing morphological, syntactic and semantic information about words and morphemes, plus an appendix containing the abbreviated category labels. The use of these glosses is meant to help non-specialists of Ancient Greek understand the language in the framework of the functional-typological approach.

The first rule to which our glosses obey is that of word-by-word alignment, according to which each element of the glossing is left-aligned vertically, word-by-word, with the transliterated Ancient Greek text.

On the basis of the second glossing rule developed by the Leipzig group, segmentable morphemes are separated by means of hyphens; this rule proved particularly relevant for the preverbed forms, such as, for instance *aph-iknéomai*, whose semantics is glossed as 'from-reach', or *kata-baíno:*, 'downwards-go'.

The third glossing rule concerns grammatical categories, each of which is rendered through abbreviated labels typed in small capitals. Each discrete grammatical information is separated from the others by means of a dot. Inherent categories, such as gender for nouns, is glossed within round parenthesis.

As for one-to-many correspondences, for elements which are neither formally nor semantically segmentable in the Source language but lack a single-word equivalent in the metalanguage (i.e. English), we will resort to the underscore (cf. *ek*, glossed as 'out_of').

To conclude, some further remarks are required:

- as for the verbal morphology, active diathesis and indicative mood are not signalled;

43 The full document, updated in May 2015, is available online, on the following website: https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf.

- middle forms which can be used as either middle or passive are labelled as M/P following Luraghi (2003: 9);

- lexical meaning of pronouns and particles is not indicated;

- prepositions and preverbs are glossed with their primary meaning.

Chapter 3. Lexical and Grammatical Encoding of Path and Manner

In this chapter the morphosyntactic devices involved in motion expression in Ancient Greek will be presented.

As the corpus analysis has revealed, five slots participate in the encoding of the main conceptual components of motion, namely the verb, the noun, the satellite, the adnominal, and the modifier. Among these categories, three are autonomous and exhibit a lexical nature (i.e. the verb, the noun and the modifier), while two are functional and less syntactically independent (i.e. the satellite and the adnominal).

From an onomasiological perspective, while Path can be encoded by means of all of the five tools at issue, Manner appears to be "relegated" to the verbal slot (or to nominalizations of motion verbs), and to the modifier slot.

Verbs and nouns are mutually exclusive categories, since they both contain predicates. Satellites and adnominals, respectively corresponding to the adverbal locus and to the adnominal locus in Wälchli (2001: 301), mostly overlap as for the linguistic forms they include, that can perform both a preverbal and a prepositional function in Ancient Greek.

In the following sections the morphosyntactic tools in charge of motion event expression will be described in details, starting from the Path-encoding ones. For each device, we will first introduce the category, then present the inventory of items, analyse their morphosyntactic behaviour, and finally account for the semantic information they bear.

The purpose of this chapter is twofold. On the one hand, it aims at presenting the linguistic architecture of motion to those who are already familiar with the Ancient Greek language, exploring the gap between the resources available at the system level, and their actual use in the texts of the corpus. On the other hand, it proposes a general picture of the main typological features of Ancient Greek under the filter of the motion domain for the neophytes.

Generally speaking, this chapter will be preparatory for the analysis of the main motion constructions (cf. Chapter 4), for the investigation of the distribution of the spatial meaning across the clause (cf. Chapter 5), and for the study of the Source-Goal asymmetry (cf. Chapter 6).

3.1 Satellites: an introduction to the category

As previously stated, by virtue of its set of locative and directional particles to which the expression of Path is committed, Ancient Greek has been commonly classified as a Satellite-framed language in the relevant literature (cf., *inter alia*, Talmy 1991; Nikitina 2013).

To account for the complexity of the Ancient Greek system of directional particles a functional-typological approach to the notion of satellite has been adopted, following in particular the work by Imbert, Grinevald & Sörés (2011). Such an approach offers at least two advantages, namely the attention to the diachronic development and to the dynamic dimension of categories and constructions, and a gradient view of linguistic forms, which allows to account for fuzzy phenomena.

Based on such premises, satellites will be considered throughout the thesis as a functional category whose members result from various diachronic processes of grammaticalization exhibiting different patterns at the synchronic level, as a consequence of their various developments.

3.1.1 Inventory of Ancient Greek satellites

As previously stated, Ancient Greek has a fecund repertory of directional particles which are called *proper* and *improper prepositions* in traditional grammars (cf. Goodwin 1900: 254; Smyth 1920: 366), depending on their capability of forming verbal compounds and thus appearing as preverbs within the clause.

In particular, both grammars (Goodwin 1900; Smyth 1920; Schwyzer & Debrunner 1950) and etymological dictionaries (Pokorny 1959; Frisk 1960; Chantraine 1968) mention a closed class of proper prepositions, or *primary adpositions*, containing 18 items which can have both preverbal and prepositional uses, and an open (i.e. more variable) list of improper prepositions, or *secondary adpositions*, which «do not form compounds» (cf. Smyth 1920: 388). While the former can either occur attached to verbal roots or select nominal complements interacting with the meanings of case markers, the latter behave either as prepositions or as verb particles. In the case of Ancient Greek particles, the functional category of satellites proves particularly suitable to capture the differences in morphosyntactic status of such linguistic items, which will be analyzed in details in section 1.2.

Table 8 shows the sixteen so-called proper prepositions involved in motion expression in the data set. Since their meaning depends on the function they play within the clause, only their preverbal meaning will be considered in this section.[44]

Satellite	Preverbal meaning	Tokens[45]
aná	up, back	78 (4,8%)
antí	against	3 (0,2%)
apó	from, away, off	249 (15,3%)
diá	through, across, over	56 (3,4%)
eis	into, in, to	63 (3,9%)
ek	out, from, off, away	166 (10,2%)
en	in, at, on	10 (0,6%)
epí	upon, over, to	69 (4,2%)
katá	down from above, back	64 (3,9%)
metá	among, after	7 (0,4%)
pará	along, by, beside	54 (3,3%)
perí	around, about	13 (0,8%)
pró	before, forward, forth	19 (1,2%)
prós	to, toward, at	31 (1,9%)
hupér	over, above	3 (0,2%)
hupó	under	14 (0,9%)

Table 8: Ancient Greek preverbs expressing spatial meanings

As shown in the table, most of the particles found in the data have a clear directional meaning, except *en* 'in' and *perí* 'around', whose original meaning is locative, as well as *metá* 'among, after', which oscillates between locative and temporal values, and often encodes the passage of the Figure from one point to another in space. These three particles have been included in the category of Path satellites because they combine with dynamic verbs,

44 It is worth mentioning that, according to some scholars (cf., *inter alia*, Smyth 1920: 366), the original meaning of the so-called proper prepositions is better seen in verbal compounds. Such an assumption is not surprising, since, while within PPs, the semantics of the Ancient Greek particles under analysis results from the interaction with the case markers they select, in contexts of preverbation the particle is free from additional semantic nuances and retains its, so to say, "original" meaning, at least when combining with motion verbs.

45 The percentages are calculated out of the total number of motion events within the corpus (i.e. 1627), including the contexts in which no satellites appear.

sometimes stressing the result of the action.[46] As stated by Viti (2008b: 377), the use of such particles with motion verbs shows that they are not limited to a static meaning, and may also contribute to the expression of directionality in some contexts.

Two of the eighteen proper prepositions identified in the traditional grammars of Ancient Greek have been left out from the present study, one (*amphí* 'on both sides') simply not occurring in contexts of displacement in the data set, and the other (*sún* 'with') showing a comitative meaning which is not directly related to the motion domain.

As for the so-called improper prepositions or secondary adpositions, four of them occur in the corpus under study as verb particles (or satellites), as shown in Table 9 on page 68. In traditional grammars such items are described as the adverbial counterparts of proper prepositions. As shown by the low token frequency accounted, secondary adpositions are not often employed in Archaic and Classical Greek, while their increase in number and use is one of the main features of *koinè*.[47]

Satellite	Adverbal meaning	Tokens
áno: (cf. *aná*)	upwards	6 (0,4%)
eíso: (cf. *eis*)	to within	5 (0,3%)
éxo: (cf. *ek*)	out	3 (0,2%)
káto: (cf. *katá*)	downwards	4 (0,2%)

Table 9: Ancient Greek secondary adpositions

Though Talmy insists on keeping satellites distinguished from prepositions, considering the functions of both primary and secondary adpositions, it is evident that this morphosyntactic category represents a fuzzy area in Ancient Greek, as well as in other languages as, for instance, English, Russian and Latin (see Filipović 2007: 34).

Up to three satellites can appear in the same clause in the data gathered for this study. This kind of pattern however is extremely rare (it only occurs once), and involves both primary and secondary prepositions, as in (33):

46 For further details on the employment of *en* with motion verbs, see Luraghi (2013).

47 *Koinè Greek*, also known as common Attic, Hellenistic or Biblical Greek was the common supra-regional form of the Greek language spoken and written during the Hellenistic and Roman antiquity and the early Byzantine era, or Late Antiquity (IV century BC – IV century AD).

(33) ἄνω τε καὶ κάτω τὸ πέος
áno: te kaì káto: tò péos
upwards PTC and downwards ART.ACC.N.SG stick(N).ACC.SG
διέλκεις πυκνότερον Κορινθίων
diélkeis puknóteron Korinthío:n
through-pull.PRES.2SG more_often Corinthians.GEN.M.PL
'you keep pulling your stick upwards and downwards' (Aristoph. *Thes.* 647)[48]

The morphosyntactic behaviour of the Ancient Greek satellites presented so far will be discussed in details in the following section.

3.1.2 Morphosyntactic behaviour

As previously stated, that of satellites is among the most heterogeneous categories involved in motion expression in Ancient Greek. As a matter of fact, it includes linguistic items performing different morphosyntactic uses.

To begin with, one main distinction must be drawn between preverbs and verb particles (or adverbs), depending on the position the items in question occupy within the clause, in particular, with respect to the verb. According to Booij & Van Kemenade (2003: 1), preverbs are «morphemes that appear in front of a verb, and which form a close semantic unit with that verb». In some literature on the topic, the notion of preverb is used as a cover term for both preverbs and prefixes, despite the difference in morphosyntactic properties. In fact, while preverbs are autonomous morphemes which agglutinate to verbal roots to form compounds (but can also function outside the preverbal context), prefixes are bound morphemes participating in the morphological process of derivation.

As far as Ancient Greek preverbs are concerned, the analysis of the corpus has revealed at least four properties:

- Ancient Greek preverbs can attach to both verbs and nouns (as well as to adjectives and adverbs);

48 It is worth stressing that in (33) the two secondary prepositions, employed in their satellite function, can be conceived as a single unit encoding a multidirectional, confused displacement of the Figure.

- they can display different degrees of lexicalization;

- more than one preverb can agglutinate to a verbal root (cf. Imbert 2008 on multiple preverbation);

- the category of Ancient Greek preverbs exhibits strong internal variation.

As for the first feature, the same particle can occur in composition with a motion verb or with a motion noun (cf. Section 3.4). In some cases, the noun to which the satellite attaches is a nominalization from a motion verb, as in examples (34) and (35), where two Median markers (i.e. *diá* 'through, across', and *aná* 'up, back') combine respectively with a basic motion verb, and with a Path verb (cf. Section 3.3).

(34) ἢν ἡ διάβασις ἡ ἐπὶ
è:n he: diábasis he: epì
in ART.NOM.F.SG through-march(f).NOM.SG ART.NOM.F.SG upon
Μασσαγέτας μὴ ὀρθωθῇ
Massagétas mè: orthothêi
Massagetae.ACC.M.PL NEG succeed.SBJV.AOR.PASS.3SG
'if the crossing of the river against the Massagetae should not go well' (*Hdt.* 1.208.1d)

(35) ἥ τε γὰρ ἀναχώρησις τῶν Ἑλλήνων ἐξ
hé: te gàr anakhó:resis tôn Helléno:n ex
REL.NOM.F.SG PTC hence up-return(f).NOM.SG ART.GEN.PL Greeks.GEN.M.PL out_of
Ἰλίου χρονία γενομένη πολλὰ ἐνεόχμωσε
Ilíou khronía genoméne: pollà eneókhmo:se
Ilium(f).GEN.SG late.NOM.F.SG be.PTCP.NOM.F.SG many.N.PL innovate.AOR.3SG
'The late return of the Hellenes from Ilium caused many revolutions' (*Thuc.* 1.12.2)

In other cases, the noun preceded by the satellite is a bare noun expressing motion, as in example (36), where *hodós* 'way road', but also 'travelling, journeying' (cf. *Liddell Scott Jones Greek-English Lexicon*), takes the Source marker *ek* encoding the departure of the Figure from a place usually perceived as a Container. It is worth underlining that here the Source

information is redundant and appears distributed between the satellite and the preposition.[49]

(36) ἐπὶ μόνῃ τὴν δὲ ἐπὶ ἐξόδῳ ἐκ
epì móne:i tè:n dè epì exódo:i ek
upon only.DAT.F.SG ART.ACC.F.SG PTC upon out_of-journey(f).DAT.SG out_of
τῆς χώρης
tês khóre:s
ART.GEN.F.SG land(f).GEN.SG
'and only for the departure from the country' (*Hdt.* 1.94.5a)

Concerning the second property displayed by the preverbs, the particles found in the data differ in the extent to which they fuse together with the verb and, thus, become lexicalized. In fact, while some preverb-plus-verb combinations show a compositional semantics in which the directional meaning of the preverb is still transparent, some other compounds prove highly lexicalized. This is, for instance, the case of three compound verbs found in the corpus, all introduced by a Source preverb: *apallásso:* 'set free from, get off free', *aphiknéomai* 'arrive at, come to, reach', *ekde:méo:* 'to be abroad, to be on one's travel'. In all of the three combinations the satellite is both morphosyntactically and semantically tight to the verbal root. While the corresponding bare form of *ekde:méo:* is not attested in Ancient Greek, *hiknéomai* does not combine with *apó* in only 3 cases out of 100.[50] Another evidence in favor of a high degree of lexicalization of the compound *aphiknéomai* is provided by example (37).

(37) ἐσαπικνέσθαι καὶ δὴ καὶ ἐς Ἄργος
esapiknésthai kaì dè: kaì es Árgos
to-from-reach.INF.PRES.M/P and PTC and to Argos(N).ACC.SG
'and then they came also to Argos' (*Hdt.* 1.1.1b)

In this passage taken from Herodotus, two preverbs attach to the verbal root, namely the Goal satellite *eis* (in its Ionic form *es*) and the Source satellite (*apó*). Crucially, it is quite rare to find such combinations, since the semantics of the two preverbs is somehow

49 The contexts in which the Path information is distributed across the clause will be discussed in details in Chapter 5 of the present dissertation.

50 It is worth mentioning that in one out of the three previously mentioned cases, *hiknéomai* occurs again with a Source marker (i.e. *ek*).

incompatible.[51] Such an assumption would confirm the lexicalized nature of *aphiknéomai*, in which the original directional meaning of the satellite is opaque and no longer traceable. Such a situation would allow the combination with the Goal marker. As for the last lexicalized compound in question, i.e. *apallásso:*, the preverb *apó* provides *allásso:* with a motion nuance which is completely unknown to the bare root, whose original meaning is 'change, alter'.[52]

Concerning the internal variation within the category of preverbs in Ancient Greek, the data have revealed at least two different morphosyntactic behaviours being performed by the same particles:

- "proper" (i.e. pure) preverbs;

- relational preverbs, selecting a noun complement and selecting its case marker.

The proper preverbs display the core status of preverbs, in that they attach to verbal roots without selecting any nominal complement and, thus, appear in what Slobin (1996b: 201) calls *minus-Ground* clauses, i.e. clauses which include either bare motion verbs or directional satellites combining with motion verbs. Example (38), in which the Source preverb *ek* 'out' attaches to the basic motion verb *érkhomai* 'go, come', exemplifies this use.

(38) Ἀγάθων ἐξέρχεται
Hagátho:n *exérkhetai*
Agathon(M).NOM.SG out_of-go-pres.3SG
'Here comes Agathon' (Aristoph. *Thes.* 95)

Conversely, in example (39), taken from Euripides' *Bacchae*, the same satellite exhibits a morphosyntactic behaviour which could be interpreted either as preverbal or as prepositional. Here *ek* precedes a verbal root, namely the caused motion verb *bállo:* 'throw',

51 For similar results see Imbert (2008: 196), who provides an inventory of multipreverbed verbs in the Homeric poems. As the study clearly shows, the only verbal roots with which the Goal preverb *eis* combines with the Source preverb *apó* are *hiknéomai* and its defective counterpart *hikáno:* 'come'.

52 In addition to the three lexicalized compounds mentioned so far, two more appear in the corpus, both introduced by the Median satellite *katá*, which exhibits a transparent meaning compatible with that of both verbal roots, i.e. *hízo:* 'make to sit, sit' and *hêmai* 'be seated, sit'. Compounds of this type would support Mendez Dosuna's view, according to which «univerbation is not blind to semantics» (1997: 583).

and governs a nominal complement, namely the noun for 'father-land', which takes the genitive case marker :

(39) ποῖ γὰρ τράπωμαι πατρίδος
poî *gàr* *trápo:mai* *patrídos*
where hence turn-pres.1SG father_land(f).GEN.SG
ἐκβεβλημένη;
ekbeble:méne:
out_of-throw.PTCP.PF.PASS.NOM.F.SG
'For where can I turn, banished from my father-land?' (*Eur. Ba.* 1366)

As shown by the previous example, the so-called *relational preverbs* (cf. Imbert & Grinevald 2008; Viti 2008a), also referred to as prepositional preverbs (cf. Horrocks 1981), are case-modifying morphemes, usually derived from postpositions, syntactically linked to an argument of the verb. As a consequence of their ability to commanding case markers, they can be defined as being «morphologically prefixal and functionally adpositional» (cf. Imbert & Grinevald 2008: 99).

The two preverbal uses analysed so far correspond to the phases of the grammaticalization process leading from adnominal sources (e.g. adpositions) to satellites («*processus de satellisation*») identified by Imbert, Grinevald & Sörés (2011: 109). In particular, the relational preverb use seems to fit the first stage of the process which consists in the cliticization of an adpositional element in preverbal position. At this phase, from a syntactic point of view the preverb still functions as the head of the noun phrase encoding the Ground. The second step of the process, corresponding to the core preverbal use, implies the drop of the Ground element: the preverb no longer selects any nominal complement. Beside these two phases, the grammaticalization process in question includes a third, intermediate stage, during which the preverb causes valency changes in the argument structure of the verb to which it attaches. Such a pattern is clearly shown by example (40):

(40) ἐξέβημεν Ἀσωποῦ ῥοάς
exébe:men *Aso:poû* *rhoás*
out_of-go.AOR.1PL Asopus(M).GEN.SG stream(M).ACC.PL
'and we crossed the streams of Asopus' (*Eur. Ba.* 1044)

In the clause above, the Source preverb *ek* attaches to the basic motion root *baíno:* 'go, come', which is in principle intransitive. In such a syntactic context, neither the preverb (normally selecting the genitive case), nor the motion verb would allow the accusative case for the encoding of the Ground element. This is, however, the case in line with the syntacticization stage identified by Imbert, Grinevald & Sörés (2011: 111).

In addition to the preverbal uses analysed so far, some Ancient Greek satellites have an adverbial use which is similar to that of the verb particles found in English phrasal verbs (e.g. *to look after*, *to break down*), Italian *verbi sintagmatici* (cf. Simone 1996, e.g. *portare via* 'take away', *fare fuori* 'kill'), Dutch *samenkoppwlingen*, lit. 'combinations' (cf. Booij 2010, e.g *zoeken naar* 'search for', *berusten in* 'rest with, accept').

Finally, the last type of satellites identified in the corpus, i.e. that of improper prepositions (cf. Table 9 on page 68), performs such a morphosyntactic behaviour in the corpus. As previously stated, they are all classified as improper prepositions or adverbs in traditional grammars. From a syntactic point of view, they tend to occur in proximity with the motion verb they modify; from an etymological point of view, they are all related to proper prepositions. Examples from (41) to (44) show some of the contexts in which such particles appear in the data.

(41) ἐπεὶ δ’ ἐδόκει ἤδη πορεύεσθαι αὐτῷ ἄνω
epeì d' edókei é:de: poreúesthai autô:i áno:
when PTC seem.IMPF.3SG already march.INF.PRES.M/P 3SG.DAT upwards
'When he thought the time had come to march upwards' (Xen. *Anab.* 1.2.1a)

(42) τὸν δὲ Κῦρον ἦγον ἔσω οἱ
tòn dè Kûron êgon éso: hoi
ART.ACC.M.SG PTC Cyrus(M).ACC.SG lead.IMPF.3PL inside ART.NOM.M.PL
θεράποντες
therápontes
attendant(M).NOM.PL
'and the attendants led Cyrus inside' (*Hdt.* 1.116.3)

(43) πόθεν σὺ ἔξω περᾷς;
póthen sù éxo: perâis
whence 2SG.NOM outside traverse.PRES.2SG
'whence do you come outside' (*Eur. Ba.* 648a)

(44) ποῖ τὸ πέος ὠθεῖς κάτω
poî tò péos o:theîs káto:
where ART.ACC.N.SG stick(N).ACC.SG push.PRES.2SG downwards
'What do you keep pushing that thing down for?' (Aristoph. *Thes.* 643)

3.1.3 Diachrony of the Ancient Greek preverbs

It is worth mentioning that all of the Ancient Greek preverbal satellites were, originally and still in Homeric Greek, free adverbs, later to become preverbs and prepositions through a grammaticalization process, which is well attested cross-linguistically (see Heine *et al.* 1991; Hopper & Traugott 1993; Lehmann 1995).

Within the Homeric poems, as a consequence of the linguistic stratification they attest, both analytic and synthetic constructions, in which the same particle is involved, occur. Examples (45) to (47) show the three main morphosyntactic functions of one of the so-called proper prepositions, i.e. *ek* 'out', namely the adverbial use (45), the prepositional use (46) and the preverbal use (47).[53]

(45) Ποίει δὲ πρώτιστα σάκος μέγα τε στιβαρόν
Poíei dè pró:tista sákos méga te stibarón
do.PRES.3SG PTC first shield(N).ACC.SG big.ACC.N.SG PTC strong.ACC.N.SG
τε πάντοσε δαιδάλλων, περὶ δ' ἄντυγα
te pántose daidállo:n perì d' ántuga
PTC everywhere embellish.PTCP.PRES.NOM.M.SG around PTC edge(F).ACC.SG
βάλλε φαεινὴν τρίπλακα μαρμαρέην, ἐκ
bálle phaeinè:n tríplaka marmarée:n ek
throw.IMPF.3SG shining.ACC.F.SG triple.ACC.F.SG flashing.ACC.F.SG out_of
δ' ἀργύρεον τελαμῶνα
d' argúreon telamôna
PTC silver.ACC.M.SG strap(M).ACC.SG
'first he made a shield, great and sturdy, adorning it in every part, and round about it set a bright rim, threefold and glittering, and therefrom made fast a silver baldric' (*Il.* 18.478-4)

(46) Γουνεὺς δ' ἐκ Κύφου ἦγε δύω καὶ
Gouneùs d' ek Kúphou êge dúo: kaì
Gouneus(M).NOM.SG PTC out_of Cyphus(M).GEN.SG lead.IMPF.3SG two and

53 The following examples are taken from my Master's Thesis on *Meanings and Functions of the Ancient Greek particle ek in Homer's Iliad. Tmesis, grammaticalization, lexicalization (in Italian).*

εἴκοσι νῆας
eíkosi nêas
twenty ship(f).ACC.PL
'and Gouneus led from Cyphus two and twenty ships' (*Il.* 2.748)

(47) εἴ τινά που Δαναῶν ἔτι ἔλπεται
eí tiná pou Danaôn éti élpetai
if INDEF.ACC.M.SG perhaps Danaan.GEN.M.PL yet hope.PRES.3SG
ἐξαπατήσειν
exapaté:sein
out_of-cheat.INF.FUT
'if he hoped to deceive yet some of the Danaans' (*Il.* 9.371)

The multifunctional nature of the particle *ek* can be regarded as a direct effect of the morphosyntactic features of adverbs. An adverb is a free lexeme provided with a full lexical meaning, whose position within the clause can vary. By virtue of its tendency to float (i.e. to occur in various places within a clause), the Ancient Greek adverb, at least in an early phase of the Greek language, can occur close either to a noun or to a verb and is, quoting Lehmann (1995: 88), «lexically predestined» to become modifiers of the verb or of the noun. The regularity of such positions could have determined the progressive outbreak of new morphosyntactic behaviours. As stated by Lehmann (1995: 98), in fact: «(...) an adverb which mediates between a verb and an NP may find either its relationship to the NP or to the verb tightened. In the former case, it becomes an adposition, in the latter, a preverb».

On the basis of the crosslinguistic comparison between languages belonging to the Indoeuropean family, Pompei (2010: 412) hypothesizes the following stages in the grammaticalization process leading from free adverbs to preverbs:

1) PHASE I co-occurrence P [_____]

2) PHASE II complex verb P [___] V

3) PHASE III juxtaposition P + V

4) PHASE IV compounding [P + V] V

5) PHASE V derivation [P + [V] V] V

According to this path, during the first phase of the grammaticalization process, the particle has a purely adverbial value, in that it modifies the meaning of the verb, without however giving rise to a univerbated lexical unit. The second stage implies a progressive loss of the semantic and semantic autonomy of the particle, which starts approaching the closest constituent (usually a verb or a noun, to which it is linked by means of a certain degree of semantic compatibility). This is the stage during which the behaviour of the particle resembles that of verb particles the most: in principle, it can still function as the head of a PP, selecting a noun, or form a complex predicate together with a verb, from which it is however still separated. In order to account for the syntactic separation between the particle and the verb, the Ancient Greek grammarians used to invoke the concept of tmesis.

The term tmesis (from Ancient Greek *témno:* 'cut') indicates the physical separation of a preverb from its verbal root or, in Bertrand's words, «the non-agglutination of the verbal particle to the verb» (2014: 11). By means of such a definition, ancient grammarians tried to describe synchronically a diachronic process which was still ongoing. In other words, they described the heritage of a previous stage of the language, during which the particle and the verb were still separable, as an exception to the rule. The phenomenon of tmesis, also known as *discontinuous constituency* (cf. Cuzzolin 1995: 139), according to which the speaker reanalyses the verb particle as the discontinuous element of an single constituent, can be associated to English phrasal verbs or Dutch separable complex verbs. Booij (2010: 118-145) describes such patterns as «combinations of a verb and some other words that have both word-like properties and properties of word combinations».

In the third stage identified by Pompei, the distance between the particle and the verb decreases and gives rise to a preverbed form whose meaning is still compositional (P incorporation). In the forth phase of the process, the particle and the verb univerbate and create a verbal compound. During the last stage of the grammaticalization path, lexicalization takes place: the meaning of the particle becomes opaque and the two constituents, previously independent from one another, acquire the character and function of a single lexical and semantic unit, stored in the lexicon of the language.

It is worth stressing that, as stated by Bertrand (2014: 18), «the synchronic situation of

the HG (Homeric Greek) seems to be transitional: the older uses are becoming rarer, whereas the newer ones are not only becoming more frequent, but they are on their way to getting compulsory». In Classical Greek, some of the patterns mentioned so far are already lost, and the particles can perform basically two main satellite behaviours, i.e. preverbs (proper prepositions) and verb particles (improper prepositions).[54]

In parallel with the grammaticalization process discussed so far, while proper prepositions tend to develop more abstract meanings, as stated by Luraghi (2013), improper prepositions tend to replace them in their concrete meaning, in a sort of compensatory process.

3.1.4 Semantic information

From a semantic point of view, all the satellites in the corpus satisfy the criterion proposed by Imbert, Grinevald & Sörés (2011: 104), in that they convey Path-related information (cf. Chapter 1).[55]

Table 10 shows the main meanings conveyed by the satellites in my sample. When they occupy the preverbal position and, hence, function as satellites, these items convey information about the direction followed by the Figure during its displacement. When they occur as prepositions, their function is to describe the Ground though the combination with case markers, as we will see in the following section.

54 As stated by Viti (2008b: 116), «with time, Ancient Greek gets rid of the properly adverbial type, which is traditionally called tmesis, and extends the more recent solutions of prepositions and preverbs».

55 It is worth stressing that only the meanings directly associated to the motion domain have been taken into account, the other semantic nuances displayed by Ancient Greek preverbs being beyond the scope of the present dissertation.

Satellite	Gloss	Part of Path	Semantic specification	Morphosyntactic peculiarity
aná	up, back	Median	vertical or backward direction	X
antí	against	Goal	nuance of violence	always in contexts of multiple preverbation
anó:	upwards	Median	vertical direction	never agglutinated
apó	from, away, off	Source	ablative value	lexicalized in some compounds
diá	through, across, over	Median	area or boundary crossing	often as a relational preverb
eis	into, in, to	Goal	boundary crossing[56]	X
eíso:	to within	Goal	boundary crossing	never agglutinated
ek	out, from, off, away	Source	elative value	X
en	in, at, on	Location	resultative value	X
éxo:	out	Source	boundary crossing	never agglutinated
epí	upon, over, to	Goal	nuance of violence	often as a relational preverb
katá	down from above, back	Median	vertical or backward direction	sometimes lexicalized
káto:	downwards	Median	vertical direction	never agglutinated
metá	among, after	Median	passage, migration	X
pará	along, by, beside	Goal	Goal attainment	X
perí	around, about	Median	multidirectional path	X
pró	before, forward, forth	Goal	forward direction	X
prós	to, toward, at	Goal	Goal attainment	X
hupér	over, above	Median	boundary crossing	X
hupó	under, back	Median, Goal	vertical or backward direction	X

Table 10: Semantic information expressed by satellites

56 Especially when it is repeated twice (adverbal and adnominal locus), cf. the so-called *Parallel-Goal* construction analysed in Chapter 4.

3.2 Adnominals: an introduction to the category

The second category to which the expression of Path is committed in Ancient Greek is that of adnominals. Within this category both noun phrases and prepositional phrases encoding the three portions of Path were included.

As for the cases showing spatial values in Ancient Greek, they are three, namely the genitive, which prototypically expresses the Source of motion (ablative genitive), the dative, which prototypically expresses static locations (locative dative), and the accusative, which prototypically expresses Goal (allative accusative). However, the scenario is not as straightforward as it may look at first sight: as a matter of fact, the genitive can be employed, in combinations with the dedicated prepositions, for the expression of Median and even Goal (in particular, with some secondary prepositions exploiting its partitive value); the dative is sometimes found in Goal expressions, when the result of displacement is stressed; the accusative can be found in perlative expressions (exploiting its 'extent'-value, cf. Brucale 2014b) as well as in Source descriptions with transitive Source-oriented verbs, such as *leípo:* 'leave'. It is worth mentioning that the spatial semantics of cases results from their relationship with adpositions: as stated by Brucale (2014b: 311), «the result of this relation is a PP that encodes spatial functions with greater specificity». In Ancient Greek, the prepositions assigning nouns with case markers for the encoding of Path almost totally overlap with the particles employed as satellites.[57]

In the following section an inventory of the adnominals which occur in the texts I analysed will be presented. Lately in the present dissertation they will be grouped on the basis of their morphosyntactic properties they display and the semantic information they carry.

3.2.1 Inventory of Ancient Greek adnominals

The analysis of the corpus data has revealed three different kinds of adnominals co-opted for Path encoding, namely:

57 As will be shown in the section consecrated to the inventory of adnominals resulted from the corpus analysis, however, this one is richer than that of satellites, since a greater number of secondary adpositions is involved.

- plane cases (genitive, dative, accusative);
- combinations of primary prepositions + case markers;
- combinations of secondary prepositions + case markers.

First, regarding the bare case markers (NPs), they are rarely resorted to for the encoding of Grounds in Ancient Greek. Their use is even more sporadic after Homer and proves restricted to specific lexical domain (cf. Brucale 2014b).

Table 11 shows the primary prepositions combining with case markers for the expression of the different parts of Path found in the corpus.

Primary preposition + case	**Gloss**	**Tokens**[58]
amphí + accusative	about, around	2 (0,1%)
aná + accusative	up along, over, throughout	2 (0,1%)
apó + genitive	from, off, away from	47 (2,9%)
diá + genitive	through	43 (2,6%)
eis + accusative	into, to	345 (21,2%)
ek + genitive	out of, from, from within	104 (6,4%)
en + dative	in, into	4 (0,2%)
epí + genitive	upon	1 (0,1%)
epí + accusative	upon, to	156 (9,6%)
katá + genitive	down toward, under	1 (0,1%)
katá + accusative	down, through	26 (1,6%)
pará + genitive	from	3 (0,2%)
pará + accusative	to the side of, to	31 (2%)
perí + accusative	round about	2 (0,1%)
prós + dative	at	2 (0,1%)
prós + accusative	towards, to	34 (2,1%)
hupér + genitive	off	1 (0,1%)
hupó + genitive	from under	1 (0,1%)
hupó + accusative	towards and under	1 (0,1%)

Table 11: Combinations of primary prepositions and case markers expressing Path

58 The percentages are calculated out of the total number of motion events within the corpus (i.e. 1627), including the contexts in which no adnominals appear.

As for primary prepositions combining with case, it is worth stressing that the picture provided by the corpus analysis does not completely correspond to the general situation of the Ancient Greek language. In other words, there is a divergence between system and usage as for the combinations between primary prepositions and cases. In fact, compared to the eleven prepositions which can occur with more than one case in Ancient Greek at the system level, only *hupó* + accusative select two different case makers in the corpus (at least, as far as Path encoding is concerned). Furthermore, no case of prepositions capable of combining with three case markers is attested in the corpus under analysis, while such a phenomenon is quite common in the Ancient Greek language (8 prepositions out of 18 can select the genitive, the dative and the accusative).[59]

Comparing Table 10 with Table 11, that show respectively the preverbal and the prepositional occurrences of the Ancient Greek particles in the corpus, it turns out that they do not completely overlap: in fact, the prepositional use is restricted to 14 particles, compared to the 16 found in a preverbal function. Among those, *amphí* 'around' only occurs as a preposition, while *antí* 'against' and *pró* 'before, forward, forth' only perform a preverbal function within my corpus. The semantic nuances carried by each of the prepositions at issue will be described in further details in paragraph 3.2.3. Finally, Table 12 shows the secondary prepositions appearing in prepositional phrases expressing Path.

Secondary preposition + case	**Gloss**	**Tokens[60]**
eíso: + genitive	into	5 (0,3%)
éxo: + genitive	out of	3 (0,2%)
metaxú + genitive	between	1 (0,1%)
mékhri + genitive	as far as	3 (0,2%)
pároithe + genitive	before, in front	1 (0,1%)
páros + genitive	before	1 (0,1%)
húperthe + genitive	beyond[61]	1 (0,1%)
ho:s + accusative	to	5 (0,3%)

Table 12: Combination of secondary prepositions and case markers expressing Path

59 For an exhaustive account on the patterns of combination between prepositions and cases in Ancient Greek, see Luraghi 2003.

60 The percentages are calculated out of the total number of motion events within the corpus (i.e. 1627), including the contexts in which no adnominals appear.

61 According to Sinha & Kuteva (1995: 174-175) adpositions meaning 'beyond' encode subgoals that are part of a larger movement.

In overall, in the texts at issue in this study, all secondary prepositions exhibit relevantly lower frequencies compared to those of primary prepositions. Except *eíso:* 'into' and *éxo:* 'out of', no secondary prepositions appear also as verb particles within the texts I analysed. Most of the items in Table 12 are originally adverbs, but *ho:s* 'to' which is mostly used as a conjunction in Ancient Greek. As previously stated for primary prepositions, the spatial information encoded by the combinations of secondary prepositions and case markers will be discussed in section 3.2.3.

3.2.2 Morphosyntactic behaviour

So far, in order to identify the particles governing noun phrases for the expression of the different Ground elements in Ancient Greek, the term *prepositions* has been used. However, considering the high degree of freedom displayed by such particles as for the position they can occupy within the clause (cf. Luraghi 2003: 81), the label *adpositions* seems more appropriate.

Though the postpositional use of particles is a heritage of Homeric Greek, and is often perceived as irregular by ancient grammarians, who used to describe this phenomenon as an inversion of the normal word order (i.e. *anastrophe*), in Classical Greek the particle can still appear after the noun. This is often the case in poetry, where the postpositional use is employed as stylistic archaism, as in (48):

(48) Βρόμιος οὐκ ἀνέξεται κινοῦντα
Brómios ouk anéxetai kinoûnta
Bromius(M).NOM.SG NEG up-hold.FUT.M/P.3SG move.PTCP.PRES.ACC.M.SG
βάκχας σ᾽ εὐίων ὀρῶν ἄπο
bákkhas s' euío:n orôn ápo
Bacchae(F).ACC.PL 2SG.ACC bacchic.GEN.N.PL mountain(N).GEN.PL from
'Bromius will not allow you to remove the Bacchae from the joyful mountains'
(*Eur. Ba.* 790)

From a diachronic point of view, the postpositional use of particles could have risen a process of reanalysis later to lead to the grammaticalizations of postpositions into preverbs.

Among the main morphosyntactic patterns displayed by the Path adnominals, bare noun

phrases occur in about 6% of cases, mostly when a relational preverb is attached to the motion verb, while the prepositional phrases constitute the most pervasive strategy, covering about 46% of the total number of motion events in the texts under analysis.

3.2.3 Semantic information

Besides their morphosyntactic status, all the adnominals in the corpus share the core information they encode, i.e. Path. As already stated, Path can be considered the most important notion related to motion from both a cognitive and a linguistic point of view, since it defines the spatial relation linking all the different entities (Figure and Grounds) involved in a motion event (cf. chapter 1). While preverbs express the direction of the Figure's displacement or the configuration of the Ground without explicitly introducing it, adnominals exploit the interaction between prepositions, case markers, and the meaning of a noun, in order to convey fine-grained information related to the different parts of Path. Based on such a premise, it goes without saying that Path encoding is more explicit when adnominals are employed. In this section the set of adnominals found in the data set will be grouped on the basis of the Path segment they encode. First, Table 13 shows the Source adnominals found in the data.

Adnominal	Semantic specification	Morphosyntactic peculiarity
apó + genitive	ablative value	Primary preposition + case combination
ek + genitive	boundary crossing	Primary preposition + case combination
éxo: + genitive	boundary crossing	Secondary preposition + case combination
pará + genitive	departure from the vicinity of the Ground, only with human referents	Primary preposition + case combination
hupér + genitive	«of ships at sea,*off* a place» (cf. LSJ)	Primary preposition + case combination
hupó + genitive	the Ground is located below the Figure	Primary preposition + case combination

Table 13: Source adnominals

As the table clearly shows, in Ancient Greek the expression of the initial part of Path is closely connected to the genitive case, which is not surprising given the genitive-ablative syncretism in Proto-European. As a matter of fact, no other cases are employed for Source encoding in the texts, except the accusative with bivalent/transitive Source-oriented verbs, such as *leipo:* 'leave'.

Despite this clear preference, nevertheless, the use of the bare genitive case for the expression of Source is uncommon and requires the presence of a distance-denoting verb within the clause (cf. Brucale 2014b).

Among the prepositions combining with the genitive case marker for Source encoding, *apó* 'from' and *ek* 'out of' are the most frequently employed. While the former, as a consequence to his semantic generality, is employed in highly diversified contexts, i.e. it can occur with different types of Grounds, the latter is more semantically constrained, since it originally implied a relation of containment between the Figure and the Ground. In Classical Greek, however, the two prepositions, previously distinct on the basis of the boundary-crossing parameter, display a wide overlap and are on their way to merge. As a result of what Luraghi (2003: 315) calls the *weakening of the Container Metaphor*, after Homer *ek* can occur with nouns denoting entities which cannot be traversed, such as a mountain in (49), or the extremities of the land in (50):

(49) ὁρμώμενος δὲ οὗτος ἐκ τοῦ
hormó:menos dè hoûtos ek toû
move.PTCP.PRES.M/P.NOM.M.SG PTC DEM.NOM.M.SG out_of ART.GEN.SG
ὄρεος τούτου
óreos toútou
mountain(N).GEN.SG DEM.GEN.SG
'coming off this mountain' (*Hdt.* 1.36.1a)

(50) τόν τε γὰρ Μῆδον αὐτοὶ ἴσμεν ἐκ
tón te gàr Mêdon autoì ísmen ek
ART.ACC.M.SG PTC hence Mede.ACC.M.SG DEM.NOM.M.PL know.PF.1PL out_of
περάτων γῆς πρότερον ἐπὶ τὴν
peráto:n gês próteron epì tè:n
end(N).GEN.PL ground(F).GEN.SG before upon ART.ACC.F.SG
Πελοπόννησον ἐλθόντα
Pelopónne:son elthónta
Peloponnese(F).ACC.SG go.PTCP.AOR.ACC.M.SG

'The Mede, we ourselves know, had time to come from the ends of the earth to Peloponnese' (*Thuc.* 1.69.5)

Compared to *apó* and *ek*, the other Source adnominals in the corpus show very low frequencies, not going beyond the 0,2% of the total.[62] Furthermore, some of them are only attested once. This is, for instance, the case of *hupér* + genitive, which peculiarly appears as a Source marker only when the Figure is a ship (cf. LSJ «of ships at sea, *off* a place») in (51):

(51) καὶ πλεύσαντες ὑπὲρ Σαλαμῖνος
kaì pleúsantes hupèr Salamînos
and sail.PTCP.AOR.NOM.M.SG over Salamis(f).GEN.SG
'Sailing off Salamis' (*Thuc.* 1.112.4b)

As for the types of Ground that can appear within the different adnominals involved in Source encoding, while most of the prepositions select nouns with inanimate referents, such as toponyms (cities, islands, regions, countries), places, natural entities, objects, *pará* only combines with human Grounds both for Source and Goal expression. As shown by Luraghi (2009) with respect to the uses of the Italian preposition *da*, far from being a Greek peculiarity, the coexistence of the two meanings within the conceptual schema of the same particle finds its functional explanation in the idea of separation. The inherent semantics of *pará*, not triggering exact coincidence in space between Figure and Ground, allows to integrate the ablative and the allative functions, making the particle the best candidate to combine with human Grounds, as in (52):

(52) ἥκοντες αὐτόμολοι παρὰ μεγάλου
hé:kontes autómoloi parà megálou
have_come.PTCP.NOM.M.PL deserter.NOM.M.SG beside big.GEN.M.SG
βασιλέως
basiléo:s
king(M).GEN.SG
'there came deserters from the great King' (Xen. *Anab.* 1.7.2)

From a morphosyntactic point of view, all the Source prepositions are primary prepositions, except *éxo:*, which occurs only twice, possibly due to the high frequency of its

62 This point will be addressed in Chapter 6.

'proper' counterpart, *ek*, covering 6,4% of cases).

Table 14 summarizes the Median adnominals in the sample.

Adnominal	Semantic specification	Morphosyntactic peculiarity
aná + accusative	Upward direction or area (over)	Primary preposition + case marker combination
diá + genitive	Boundary crossing or area	Primary preposition + case marker combination
katá + genitive	Downward direction	Primary preposition + case marker combination
katá + accusative	Downward direction or area (throughout)	Primary preposition + case marker combination
metaxú + genitive	Whole Path (between Source and Goal)	Secondary preposition + case marker combination

Table 14: Median adnominals

As previously stated, the Median portion of Path is the most internally articulated. As a matter of fact, the label Median can indicate:

- the direction of the Figure's displacement, i.e. Path considered as a whole;
- the area within which the displacement takes place (perlative relation);
- an intermediate boundary the Figure has to cross during its displacement.

Among the adnominals expressing Median in the sample, *diá* + genitive 'through' is the most frequently attested. While in Homeric Greek the preposition could still select the accusative case to convey spatial meanings, in Classical Greek the combination *diá* + accusative is confined to more abstract values (and therefore does not appear in the corpus). With the genitive case, *diá* mainly encodes the extended portion of space through which the Figure moves, as in (53), where a river flows through a town, and (54), where the Ground is an entire nation.

(53) ῥεῖ δὲ καὶ οὗτος διὰ τῆς πόλεως
rheî dè kaì hoûtos dià tês póleo:s
flow.PRES.3SG PTC and DEM.NOM.M.SG through ART.GEN.F.SG city(F).GEN.SG
'the Marsyas also flows through the city' (Xen. *Anab.* 1.2.8a)

(54) καὶ ὀλίγοι ἀπὸ πολλῶν πορευόμενοι διὰ
kaì olígoi apò pollôn poreuómenoi dià
and little.NOM.M.PL from many.GEN.PL march.PTCP.PRES.M/P.NOM.M.PL through
τῆς Λιβύης ἐς Κυρήνην ἐσώθησαν
tês Libúe:s es Kuré:ne:n esó:the:san
ART.GEN.F.SG Libya to Cyrene(F).ACC.SG save.AOR.PASS.3PL
'Of all that large host a few travelling through Libya reached Cyrene in safety' (*Thuc.* 1.110.1)

In some contexts, *diá* + genitive expresses boundary crossing in the Median portion of Path, as in (55) when the physical obstacle is a door.

(55) σοὶ μελέτω τὸ ἐνθεῦτεν ὅκως μὴ σε
soì meléto: tò entheûten hóko:s mè: se
2SG.DAT take_care.IMP.PRES.3SG ART.ACC.N.SG hence how NEG 2SG.ACC
ὄψεται ἰόντα διὰ θυρέων
ópsetai iónta dià thuréo:n
see.FUT.M/P.3SG go.PTCP.PRES.ACC.M.SG through door(F).GEN.PL
'be careful she does not see you going out through the doorway' (*Hdt.* 1.9.3b)

Both *aná* + accusative 'up along, throughout' and its counterpart *katá* + accusative 'down, through' are used to describe either the vertical direction of motion already encountered in their preverbal use or a multi-directional Path through a surface as in (56) and (57), (cf. Luraghi 2003: 190ff.).

(56) οἳ δ' ἀνὰ πόλιν στείχοντες
hoì d' anà pólin steíkhontes
ART.NOM.M.PL PTC up city(F).ACC.SG walk.PTCP.PRES.NOM.M.PL
ἐξιχνεύσατε τὸν θηλύμορφον ξένον
exikhneúsate tòn the:lúmorphon xénon
out_of-track.AOR.2PL ART.ACC.M.SG effeminate.ACC.M.SG stranger(M).ACC.SG
'and some of you hunt throughout the city for this effeminate stranger' (*Eur. Ba.* 352)

(57) τὸν Σόλωνα θεράποντες περιῆγον
tòn Sólo:na therápontes periêgon
ART.ACC.M.SG Solon(M).ACC.SG attendant(M).NOM.PL around-take.IMPF.3PL
κατὰ τοὺς θησαυρούς
katà toùs the:sauroús
down ART.ACC.M.PL treasure(M).ACC.PL
'his attendants showed Solon around his treasures' (*Hdt.* 1.30.1c)

When occurring with a noun in the genitive case, *katá* expresses downward direction. Such a pattern, however, occurs just once in the texts analysed in this study.

(58) ὥσπερ ἄν δράμοι τις ἐπὶ νίκῃ καὶ μάλα
hó:sper àn drámoi tis epì níke:i kaì mála
as if run.OPT.AOR.3SG INDEF.NOM.M.SG upon victory(F).DAT.SG and very
κατὰ πρανοῦς γηλόφου
katà pranoûs ge:lóphou
down steep.GEN.M.SG hill(M).GEN.SG
'as a man would run for a victory, down a most exceedingly steep hill' (Xen. *Anab.* 1.5.8c)

The only secondary preposition encoding Median found in the corpus, i.e. *metaxú* 'between', occurs just once in the texts under analysis and describes the trajectory of a river, included between two points:

(59) ὃς ῥέων ἀπὸ μεσαμβρίης μεταξὺ
hòs rhéo:n apò mesambríe:s metaxù
REL.NOM.M.SG flow.PTCP.PRES.NOM.M.SG from midday(F).GEN.SG in_the_midst
Συρίων τε καὶ Παφλαγόνων
Surío:n te kaì Paphlagóno:n
Syrian.GEN.M.PL PTC and Paphlagonian.GEN.M.PL
' (the river Halys), which flows from the south between Syria and Paphlagonia' (*Hdt.* 1.6.1a)

The final portion of Path counts the biggest variety of adnominals, as well as the highest frequency of occurrence. Table 15 summarizes the Goal adnominals found in the data.

Adnominal	Semantic specification	Morphosyntactic peculiarity
amphí + accusative	vague Goal, extended area	Primary preposition + case combination
eis + accusative	core Goal marker	Primary preposition + case combination
eíso: + genitive	boundary crossing	Secondary preposition + case combination
en + dative	resultative value	Primary preposition + case combination
epí + genitive	vertical configuration	Primary preposition + case combination
epí + accusative	vertical configuration; nuance of violence	Primary preposition + case combination
mékhri + genitive	Goal attainment	Secondary preposition + case combination
pará + accusative	human Grounds (proximity, no exact coincidence)	Primary preposition + case combination
pároithe + genitive	frontal configuration	Secondary preposition + case combination
páros + genitive	frontal configuration	Secondary preposition + case combination
perí + accusative	vague Goal, circular Path	Primary preposition + case combination
prós + dative	resultative value	Primary preposition + case combination
prós + accusative	Implication of contact	Primary preposition + case combination
hupó + accusative	vertical configuration	Primary preposition + case combination
húperthe + genitive	boundary crossing; Goal attainment	Secondary preposition + case combination
ho:s + accusative	approach	Secondary preposition + case combination

Table 15: Goal adnominals

As Table 15 shows, the expression of Goal in Ancient Greek is considerably more differentiated than that of Source. Furthermore, not the same spatial configurations are pertinent for the two extremities of Path. While, for instance, the containment parameter is relevant for the Source markers (e.g. *apó* 'XX' vs. *ek* 'XX'), such a feature proves not salient when Goal is concerned. As a matter of fact, for the encoding of boundary crossing at the final portion of Path, Ancient Greek resorts either to a specific construction in which the core Goal marker *eis* 'towards, to' appears twice, i.e. both as a preverb and as a preposition

selecting the accusative case, or to a static adnominal composed of the locative preposition *en* 'in' and the dative case marker.[63] The latter pattern, which is attested only in 0,2% of cases in the corpus, could be described as an instantiation of the so-called *constructio praegnans*, recently analyzed in Nikitina & Maslov (2013) and Brucale (2014a). As stated by Nikitina & Maslov (2013: 3), this term refers to «constructions with two different types of mismatch between form and meaning (...). In one, a goal of motion is encoded by a prepositional phrase that normally describes static locations, and the idea of motion is inferred from the verb (...). In the other type of *constructio praegnans*, a prepositional phrase that is normally used to encode spatial goals appears, unexpectedly, with a verb that does not seem to describe any motion». The following example, which describe the entrance of a human Figure within the sea, shows the first option.

(60) τοὺς δὲ ἐν τῷ πελάγεϊ ἐπιβουλεύειν τὸν
toùs dè en tôi pelágei epibouleúein tòn
ART.ACC.M.PL PTC in ART.DAT.SG sea(N).DAT.SG upon-plot.INF.PRES ART.ACC.M.SG
Ἀρίονα ἐκβαλόντας
Aríona ekbalóntas
Arion(M).ACC.SG out_of-throw.PTCP.AOR.ACC.M.PL
'they plotted to cast Arion overboard' (*Hdt.* 1.24.2b)

More prominently than containment, other semantic nuances differentiate the prepositions which encode the final portion of Path in Ancient Greek. Compared to *eis* 'towards, to', which can be considered the basic Goal marker, since it merely expressed the direction towards a Ground, other prepositions are richer in meaning and can convey specific spatial configurations. This is the case of at least three prepositions, namely *epí* 'onto', *prós* 'to' and *hupó* 'towards and under'. The adnominal they form selecting different case markers express information about configuration, i.e. the location of the Figure with respect to the Ground, and the direction, i.e. the change of location of Figure. As for the distribution of these two types of spatial meanings between the preposition and the case marker, the adnominals in question seem to fulfill one of the strategy proposed by Lestrade *et al.* (2011: 266), in which the preposition describes the configuration, while the case marker is in charge of the direction encoding. Nevertheless, the possibility for two out of the three prepositions under analysis to combine with more than one case for the

63 In Chapter 4, a paragraph will be devoted to the double Goal marking expressing boundary crossing.

expression of Goal could represent an evidence in favour of a simultaneous encoding of both configuration and directionality by means of the preposition (cf. Lestrade *et al.* 2011: 266-267). Independently on the internal distribution of the spatial meaning, the Goal adnominals with *epí* 'upon, against' (plus genitive or accusative) express a vertical relation between the Figure and the Ground, the former occupying a higher position with respect to the latter at the end of displacement. As a consequence of this reference to verticality, *epí* 'upon, against' is particularly suitable when the Ground is a river or the sea, as in (61).

(61) ἐλθεῖν ἐπὶ τὴν θάλασσαν γυναῖκας ἄλλας
eltheîn epì tè:n thálassan gunaîkas állas
go.INF.AOR upon ART.ACC.F.SG sea(f).ACC.SG woman(f).ACC.PL other.ACC.F.PL
τε πολλάς
te pollás
PTC many.ACC.F.PL
'many other women came to the shore' (*Hdt.* 1.1.3)

In the adnominals in which *prós* 'at' selects either the accusative or the dative case to express Goal, the directional information combines with an implication of contact (cf. Luraghi 2003: 284). In (62), depicting the fall of a human Figure to the ground, the dative case stresses the result of motion.

(62) οὕτως ἐκπεπληγμέναι φόβῳ πρὸς
houto:s ekpeple:gménai phóbo:i pròs
so out_of-strike.PF.PASS.VOC.F.PL fear(M).DAT.SG towards
πέδῳ πεπτώκατ᾽;
pédo:i peptó:kat'
ground(M).DAT.SG fall.PF.M/P.2PL
'have you fallen on the ground so stricken with fear?' (*Eur. Ba.* 603)

Like *epí*, *hupó* 'under' too entails verticality but, unlike the former, it portrays the Figure in an inferior position with respect to the Ground. In line with the low frequency identified by Brucale (2014a: 307), the example in (63) is the only case of *hupó* + accusative encoding Goal in the whole corpus.

(63) ὑπ᾽ ἀγέλαν πεσόντι τὰν μαινάδων
hup' agélan pesónti tàn mainádo:n
under herd(f).ACC.SG fall.PTCP.AOR.DAT.M.SG ART.GEN.F.PL Maenad(f).GEN.PL
'as he fell beneath the flock of Maenads' (*Eur. Ba.* 1022)

Consistently with what has been claimed for the Source domain, when employed as a Goal marker assigning the noun expressing the Ground with the accusative case, *pará* 'to the side of, to' can only combine with human referents and encodes proximity to the Goal. In the corpus under analysis, the preposition selects names of people, nouns expressing social roles, proper names and personal pronouns, as in (64).

(64) ‘Θεμιστοκλῆς ἥκω παρὰ σέ
Themistoklês hé:ko: parà sé
Themistocles(M).NOM.SG have_come.PRES.1SG beside 2SG.ACC
'I, Themistocles, have come to you' (*Thuc.* 1.137.4a)

It is worth stressing that the case of *pará* 'to the side of, near', which can encode either Source or Goal based on the case marker it selects, could shed new light on the interplay between adpositions and cases in the expression of spatial information (cf., *inter alia*, Lestrade *et al.* 2011). In fact, while on the one hand the possibility to occur with both genitive and accusative could prove the fundamental weight of case in deciding the portion of Path, the semantic restriction according to which *pará* 'to the side of, near' appears only with human Grounds would support a prominent role of the adpositions in the encoding of Path information. The topic of the distribution of the spatial meaning across the clause will receive special attention in chapter 5 of the present study.

In addition to the primary prepositions expressing Goal analysed so far, there are six secondary prepositions in the corpus, all commanding the genitive case marker except *ho:s*, exploited for Goal encoding in Ancient Greek. Among them, *pároithe* and *páros* 'before' imply a frontal configuration of the Figure with respect to the Goal, *ho:s* 'to', similarly to *eis*, express generic direction towards the Goal, and *eíso:* 'into' describes the entrance of the Figure into a closed space and can occur as a postposition (65).

(65) ἐγὼ στελῶ σε δωμάτων ἔσω
egò: *stelô* *se* *do:máto:n* *éso:*
1SG.NOM make_ready.FUT.1SG 2SG.ACC house(N).GEN.PL inside
μολών
moló:n
go.PTCP.AOR.NOM.M.SG
'I will go inside and dress you' (*Eur. Ba.* 827)

3.3 (Motion) verbs: operational criteria to assess the verbal meaning

Considering its crucial role in determining how Path and Manner are encoded (cf. Beavers *et al.* 2010: 4, *inter alia*), as well as the variety of further semantic nuances it can carry, the verb represents the most important category involved in motion expression. In order to capture the semantics of the verbs assembled in the corpus, a set of operational criteria has been established, ranging from syntactic to semantic. The results have been later compared to the meaning provided by the *Liddell Scott Jones* dictionary of the Ancient Greek language.[64]

Only very general categories have been initially employed for the coding of the verbal roots found in the texts. In particular, the basic semantic core and syntactic behaviour of each verb has been taken as the starting point for the analysis. On this ground, the verbs have been categorized into four main types, i.e. (a) stative verbs, such as *gígnomai* 'to be born, to become' and *eimí* 'to exist, to be', (b) spontaneous motion verbs, such as *érkhomai* 'to come, to go', *hé:ko:* 'to reach', *pléo:* 'to sail', (c) caused motion verbs, such as *ágo:* 'to lead, to carry', *bállo:* 'to throw', *elaúno:* 'to drive', and (d) non-motion verbs such as *kaléo:* 'to call', *allásso:* 'to change, to alter'.[65] The diagnostics to analyse the verbal roots has been based on the following criteria:

1) token frequency of each root;

2) number and types of Figures with which each root can combine;

64 An electronic version of the dictionary is available online at the following website http://stephanus.tlg.uci.edu/lsj/#eid=1&context=lsj.

65 As for the last verb type, it includes roots which do not express motion itself but which can trigger some motion nuance depending on the constructions in which they occur.

3) number and types of syntactic templates in which each root appears;

4) semantic information expressed by means of satellites, adnominals and modifiers.[66]

As for the frequency parameter, since high frequency linguistic items tend to show more general meanings compared to low frequency items (cf., *inter alia*, Bybee 2008), the number and percentage of occurrences of each verbal root have been counted in order to evaluate the level of semantic detail of the verbal slot.

Concerning the syntactic templates in which the verbs appear, the possible combinations with satellites, adnominals (i.e. both prepositional phrases and plain cases) and modifiers have been checked, with the aim of capturing the similarities between different roots and, in so doing, assessing their membership to particular verb types.

From a semantic point of view, the classification of verbs relies on the type of Figures and on the semantic information conveyed by means of satellites, adnominals and modifiers, in order to examine the *semantic relevance* (cf. Bybee 1985: 13) between the verb and all the other devices involved in motion event encoding within the clause.

As for the kinds of Figures that can perform displacement in the motion events, an ontology consisting of seven types of entities has been used, namely humans, divinities, animals, natural entities, body parts, objects, abstract entities. Some of these Figures are culturally-dependent but, since there are clear restrictions as for the Manner of motion which can be performed by certain entities, independently from cultural and textual factors, the combinations between Figures and verbal roots can reveal something about the semantics of motion verbs. The same holds true for the Path and Manner information provided by the satellites, adnominals and modifiers that co-occur with a given verb: as a matter of fact, the encoding of a Path or Manner component can contribute to a better understanding of the verb meaning.

For the purpose of investigating the verb meaning, idioms such as 'to move the foot' have not been included in the analysis here. Hence, the sample comprises 118 verbs accounting for 1554 occurrences in total, which have been classified according to the four previously mentioned criteria.

66 For the sake of objectivity, each of the previously mentioned criteria has been exploited in order to grasp the semantic features of each verbal root, without relying only either on the translations provided by dictionaries or on some personal intuitions on the language under analysis.

In the following sections, the operational criteria for assessing the meaning of verbs will be discussed in detail for the ten most frequent verbal root found in the corpus. At the end of the section, the main verb types resulting from the analysis will be presented.

3.3.1 Frequency and Figures

On the basis of their frequency, the verbal roots found in the corpus can be arranged into four main groups:

- high frequency verbs (i.e. between 50 and 195 occurrences): 9 items;
- middle frequency verbs (i.e. between 10 and 39 occurrences): 24 items;
- low frequency verbs (i.e. between 2 and 9 occurrences): 34 items;
- *hapaxes* (i.e. roots appearing just once the texts constituting the corpus): 51 items.

Table 16 shows the ten most frequent verbal roots, their English translation provided by the *Liddell Scott Jones Greek-English lexicon*, and their number of occurrences in the corpus.

Verb	Gloss	Tokens
érkhomai	'come or go'	195
eîmi	'come or go'	130
hiknéomai	'reach'	100
baíno:	'step, walk'	91
elaúno:	'drive, set in motion'	80
pléo:	'sail'	78
ágo:	'lead, carry'	72
kho:réo:	'give way, withdraw'	59
pheúgo:	'flee, take flight'	50
bállo:	'throw'	39

Table 16: Ten most frequent verbs in the corpus

The most frequent verb is *érkhomai* 'come, go'. It appears in about 13% of cases and it is used by all the authors examined for the purpose of this study. In the texts under analysis, this verb co-occurs with five types of Figures, namely humans, divinities, objects, natural entities, abstract entities. Among those, humans are the most common, as in (66).

(66) καὶ παρελθὼν Περικλῆς ὁ
kaì parelthò:n Periklês ho
and beside-go.PTCP.AOR.NOM.M.SG Pericles(M).NOM.SG ART.NOM.M.SG
Ξανθίππου
Xanthíppou
Xanthippus(M).GEN.SG
'Among them came forward Pericles, son of Xanthippus' (*Thuc.* 1.139.4b)

Within the dramatic texts, the kind of motion expressed by *érkhomai* can also be performed by divine Figures, as in (67), where the verb is used to encode the penetration of a god into a human body.

(67) ὅταν γὰρ ὁ θεὸς ἐς τὸ σῶμ᾽
hótan gàr ho theòs es tò sôm'
whenever hence ART.NOM.M.SG god(M).NOM.SG to ART.ACC.N.SG body(N).ACC.SG

ἔλθῃ πολύς
élthe:i polús
go.SBJV.AOR.3SG much.NOM.M.SG
'for whenever the god enters a body in full force' (*Eur. Ba.* 299)

As for the nouns having natural entities as referents, *núx* 'night' appears twice with *érkhomai* in Herodotus, as in (68).

(68) νυκτὸς ἐπελθούσης
nuktòs epelthoúse:s
night(F).GEN.SG upon-go.PTCP.AOR.GEN.F.SG
'at nightfall' (*Hdt.* 1.76.4b)

The second verb by frequency in the sample is *eîmi* 'come, go', which appears in about 8% of cases, throughout the five authors.

As *érkhomai, eîmi* 'go, come' too associates with five types of Figures, i.e. humans, divinities, animals, natural entities and abstract entities. There is only one example where motion is performed by an animal, as shown in (69).

(69) ἴτε θοαὶ Λύσσας κύνες
íte thoaì Lússas kúnes
go.IMP.PRES.2PL quick.NOM.F.PL Madness(f).GEN.SG dog.NOM.F.PL
ἴτ᾽ εἰς ὄρος
ít' eis óros
go.IMP.PRES.2PL to mountain(N).ACC.SG
'Go to the mountain, go, fleet hounds of Madness' (*Eur. Ba.* 977)

Among the natural entities with which the root at issue can co-occur, rivers appear in two cases, both in Herodotus, as in 70.

(70) τῇ ἐξιεῖ ἐκ τῆς πόλιος
têi exieî ek tês pólios
ART.DAT.F.SG out_of-go.PRES.3SG out_of ART.GEN.F.SG city(f).GEN.SG
ὁ ποταμός
ho potamós
ART.NOM.M.SG river(M).NOM.SG
'where the river comes out of the city' (*Hdt.* 1.191.2b)

In (71) the noun for 'justice', having an abstract referent, is found with the imperative of *eîmi* 'go, come' in a formulaic invocation:

(71) ἴτω δίκα φανερός
íto: díka phanerós
go.IMP.PRES.3SG justice(f).NOM.SG visible.NOM.F.SG
'Let manifest justice go forth' (*Eur. Ba.* 992; 1011)

The third most frequent verb in the sample is *hiknéomai* 'reach' (about 6% of cases). It occurs in all the authors with a slight difference between the dramatic and the historical texts, the latter exhibiting a higher frequency compared to the former. The root can take five types of Figures, namely humans, divinities, natural entities, objects and abstract

entities. In (72) the entity undergoing motion is a krater. In (73) a news story is the subject of the verb 'to reach'.

(72) οὗτος ὁ κρητὴρ οὐκ ἀπίκετο ἐς
hoûtos ho kre:tè:r ouk apíketo es
DEM.NOM.M.SG ART.NOM.M.SG bowl(M).NOM.SG NEG from-reach.AOR.3SG to
Σάρδις
Sárdis
Sardis(F).ACC.PL
'this bowl never reached Sardis' (*Hdt.* 1.70.2a)

(73) αὐτίκα δὲ ἔς τε τοὺς δήμους φάτις
autíka dè és te toùs dé:mous phátis
immediately PTC to PTC ART.ACC.M.PL deme(M).ACC.PL rumour(F).NOM.SG
ἀπίκετο
apíketo
from-reach.AOR.3SG
'and immediately the report reached the demes' (*Hdt.* 1.60.5c)

The verb *baíno:* 'step, walk' occurs in almost 6% of cases within the corpus. All of the authors in the sample resort to this root, but quite a sensible difference is registered between the two playwrights, i.e. Aristophanes and Euripides (12 occurrences in total) and the three historians, i.e. Herodotus, Thucydides and Xenophon (79 occurrences in total). As for the Figures which can take part into the kind of motion encoded by *baíno:* 'go, come', the distribution of the roots is slightly reduced compared to that of the other roots analysed so far. As a matter of fact, the root combines with only three types of Figures, namely humans, divinities and animals.

In (74), a horse dashes into a river:

(74) ἐνθαῦτά οἱ τῶν τις ἱρῶν ἵππων
enthaûtá hoi tôn tis hirôn híppo:n
there ART.NOM.M.PL ART.GEN.PL INDEF.NOM.M.SG temple horses(M).GEN.PL
τῶν λευκῶν ὑπὸ ὕβριος ἐσβὰς
tôn leukôn hupò húbrios esbàs
ART.GEN.PL white.GEN.M.PL under violence(F).GEN.SG to-go.PTCP.AOR.NOM.M.SG
ἐς τὸν ποταμὸν

es tòn *potamòn*
to ART.ACC.M.SG river(M).ACC.SG
'one of his sacred white horses dashed recklessly into the river' (*Hdt.* 1.189.1g)

The information about the possible Figures combining with *baíno:* could prove misleading as for the kind of motion nuance that the verb can convey, since in fact only humans, divinities and animals can walk. In other words, combining the types of Figures with which the root can appear and the translation provided by the *Liddell Scott Jones Greek-English lexicon*, i.e. 'step, walk', one could tend to interpret *baíno:* as a basic Manner of motion verb encoding motion on foot, performed on a solid ground at a moderate speed. However, some occurrences of the verb seem to contradict this option.

In (75), motion is carried out by sea on ships (cf. *déka naûs* 'ten ships' in *Thuc.* 1.45.1), which makes the meaning 'to walk' unsuitable for *baíno:*; the preverb *apó* 'from' provides the root with the meaning of landing.

(75) καὶ μέλλωσιν ἀποβαίνειν ἢ ἐς τῶν ἐκείνων
kaì méllo:sin *apobaínein* *è: es tôn* *ekeíno:n*
and be_about.SBJV.PRES.3PL from-go.INF-PRES or to ART.GEN.PL DEM.GEN.PL
τι χωρίων
ti *kho:río:n*
INDEF.NOM.N.SG land(N).GEN.PL
'and they were about to land on one of those beaches' (*Thuc.* 1.45.3b)

Even more straightforward in this respect is the example in (76). Here, the presence of the modifier *ploío:i* 'by boat' forces a more generic interpretation of *baíno:*, encoding a simple displacement of the Figure and leaving the specification of the Manner of motion (i.e. the means of conveyance) outside the verb.

(76) χρῆν πλοίῳ διαβαίνειν
khrên *ploío:i* *diabaínein*
be_necessary.INF.PRES boat(N).DAT.SG through-go.INF.PRES
'one had to cross in a boat' (*Hdt.* 1.186.1b)

Further evidence supporting a generic interpretation of *baíno:* in terms of a basic motion verb encoding a simple displacement of the moving entity is conveyed by the examples in

which the root is accompanied by modifiers specifying the Manner of motion (i.e. motion on foot).

(77) πρόβαινε ποσὶ τὸν εὐλύραν
próbaine *posì* *tòn* *eulúran*
forth-go.IMP.PRES.2SG foot(M).DAT.PL ART.ACC.M.SG god_of_lyre(M).ACC.SG
Μέλπουσα
Mélpousa
sing.PTCP.PRES.NOM.F.SG
'move forward on foot while singing to the god of the lyre' (Aristoph. *Thes.* 969)

(78) καὶ διαβὰς εἶλε τὴν
kaì diabàs *heîle* *tè:n*
and through-go.PTCP.AOR.NOM.M.SG grasp.AOR.3SG ART.ACC.F.SG
νῆσον πεζῇ
nêson *pezêi*
island(F).ACC.SG on_foot
'and then, marching over on foot, he captured the island' (*Thuc.* 1.109.4c)

The verb *elaúno:* 'drive, set in motion' occurs in about 5% of cases. Only four authors out of five resort to this root in their texts. Herodotus and Xenophon exhibit the highest frequency, while both Thucydides and Euripides rarely employ the root (respectively 3 and 1 times). The verb occurs with three different types of Figures, namely humans, animals and objects. Due to the semantics of the root, as for the objects it likes to combine with the noun for 'wagon' (*zeûgos*), as in (79), while as for the the animals, it can take the noun for 'ass' (*ónos*) as its direct object, as in (80).

(79) ἤλασε ἐς τὴν ἀγορὴν τὸ
é:lase *es tè:n* *agorè:n* *tò*
drive.AOR.3SG to ART.ACC.F.SG marketplace(F).ACC.SG ART.ACC.N.SG
ζεῦγος
zeûgos
wagon(N).ACC.SG
'he drove his wagon into the marketplace' (*Hdt.* 1.59.4a)

(80) τοὺς ὄνους ἐλαύνοντες
toùs ónous elaúnontes
ART.ACC.M.PL donkey(M).ACC.PL drive.PTCP.PRES.NOM.M.PL
'driving their donkeys' (*Hdt.* 1.194.5b)

The sixth motion verb by frequency in the corpus is *pléo:* 'sail'. The root employed in about 5% of cases and appears in all the texts, with a great gap between the histories (76 occurrences) and the dramas (one single occurrence each), due to the text genre. The root in question can take two different types of Figures, namely humans and objects (usually ships) in line with the meaning of the verb provided by LSJ.

(81) πλεύσαντες οὖν Ἀθηναῖοι ἐς Σάμον
pleúsantes oûn Athe:naîoi es Sámon
sail.PTCP.AOR.NOM.M.SG in_fact Athenians.NOM.M.PL to Samos(F).ACC.SG
'Accordingly the Athenians sailed to Samos' (*Thuc.* 1.115.3a)

(82) καὶ πλοῖα πλεῖ ἐν αὐταῖς σιταγωγά
kaì ploîa pleî en autaîs sitago:gá
and boat(N).NOM.PL sail.PRES.3SG in DEM.DAT.F.PL conveying_corn.NOM.N.PL
'and grain-carrying ships sail in them' (Xen. *Anab.* 1.7.15b)

The verb *ágo:* 'lead, carry' occurs in about 4,5% of cases, across the five authors, and shows the highest degree of compatibility with the Figures, that is it can combine with all the seven types identified. In (83) the moving Figure is a river, whose flow can be redirected at the behest of an enlightened queen.

(83) τὸν Εὐφρήτην ποταμὸν ἐς τὰ
tòn Euphré:te:n potamòn es tà
ART.ACC.M.SG Euphrates(M).ACC.SG river(M).ACC.SG to ART.ACC.N.PL
ἀρχαῖα ῥέεθρα ἐκ τῆς λίμνης
arkhaîa rhéethra ek tês límne:s
old.ACC.N.PL stream(N).ACC.PL out_of ART.GEN.F.SG marsh(F).GEN.SG
ἐξήγαγε
exé:gage
out_of-lead.IMPF.3SG
'Nitocris brought the Euphrates back to its former channel out of the lake' (*Hdt.* 1.186.4)

Divine Figures too can perform the motion described by *ágo:*. In (84), Dionysus is taken around the streets of Hellas by the choir of Maenads.

(84) Βρόμιον παῖδα θεὸν θεοῦ
Brómion paîda theòn theoû
Bromius(M).ACC.SG child(M).ACC.SG god(M).ACC.SG god(M).GEN.SG
Διόνυσον κατάγουσαι Φρυγίων ἐξ
Diónuson katágousai Phrugío:n ex
Dionysus(M).ACC.SG down-lead.PTCP.PRES.NOM.F.PL Phrygian.GEN.N.PL out_of
ὀρέων Ἑλλάδος εἰς εὐρυχόρους ἀγυιάς
oréo:n Helládos eis eurukhórous aguiás
mountain(N).GEN.PL Hellas(F).GEN.SG to spacious.ACC.F.PL street(F).ACC.PL
'escorting the god Bromius, child of a god, from the Phrygian mountains to the broad streets of Hellas' (*Eur. Ba.* 84)

The verb *kho:réo:* 'give way, withdraw', exploited by all the five authors in 4% of cases, can bear four different types of Figures, namely humans, animals, natural entities and objects. In (85) a river withdraws from its former course.

(85) καὶ σαφῶς ὑποχωρῆσαι τὸν ποταμὸν Κύρῳ
kaì saphôs hupokhorêsai tòn potamòn Kúro:i
and clairly under-retire.INF.AOR ART.ACC.M.SG river(M).ACC.SG Cyrus
'that the river had plainly retired before Cyrus' (Xen. *Anab.* 1.4.18c)

In (86) the motion away from a Source which *kho:réo:* prototypically encodes is carried out by ships.

(86) καὶ αἱ νῆες τῶν Ἀθηναίων
kaì hai nêes tôn Athe:naío:n
and ART.NOM.F.PL ship(F).NOM.PL ART.GEN.PL Athenian.GEN.M.PL
ἀνεχώρησαν ἐξ αὐτῆς
anekhó:re:san ex autês
up-retire.AOR.3PL out_of DEM.GEN.F.SG
'and the Athenian vessels left the island' (*Thuc.* 1.55.2)

In line with its meaning, *pheúgo:* 'flee, escape', appearing almost 4% of cases, in all the texts under analysis, can only combine with animate figures, that is humans and animals. Its

semantics, in fact, is more specific compared with that of the other high frequency verbs in the sample and provides some directional information as well as a Manner nuance. In (87), a fawn (*nebrós*, cf. line 866) escapes its hunters.

(87) ἡνίκ᾽ ἂν φοβερὰν φύγῃ θήραν ἔξω
he:ník' àn phoberàn phúge:i thé:ran éxo:
when if fearful.ACC.F.SG escape.SBJV.AOR.3SG chase(f).ACC.SG outside
φυλακᾶς Εὐπλέκτων ὑπὲρ ἀρκύων
phulakâs Euplékto:n hupèr arkúo:n
sentinel(M).ACC.PL well_twisted.GEN.F.PL over net(f).GEN.PL
'when it has escaped a fearful chase beyond the watchers over the well-woven nets'
(*Eur. Ba.* 868)

The tenth verbal root by frequency in the data set is *bállo:* 'throw'. It covers about 2,5% of cases, it appears in all the authors and, as *ágo:*, it shows a high degree of compatibility with the types of Figures resulting from the data analysis: as a matter of fact, the root can combine with all the Figures except animals. In (88), the verb is employed in its transitive use and the moving entity is a body part, namely the arms.

(88) περίβαλε δὲ χέρας
perí̂bale dè khéras
around-throw.IMP.AOR.2SG PTC hand(f).ACC.PL
'throw your arms about me' (Aristoph. *Thes.* 913)

In its intransitive use *bállo:* can encode the motion of rivers emptying themselves into the sea or into other rivers, as in (89).[67]

(89) ἐσβάλλει δὲ οὗτος ἐς τὸν Εὐφρήτην
esbállei dè hoûtos es tòn Euphré:te:n
to-throw.PRES.3SG PTC DEM.NOM.M.SG to ART.ACC.M.SG Euphrates(M).ACC.SG

67 Such an employment is far from rare in all the three historical texts under analysis. In this respect, a frequently exploited alternative to *bállo:* is represented by the verb *dído:mi* (lit. 'give') which can take the elative preverb *ek* and express the flowing of a river into the sea, as in the following example taken from Herodotus: ἐς τὴν Ἐρυθρὴν θάλασσαν ἐκδιδοῖ 'and empties into the Red Sea' (*Hdt*. 1.189.1e).

ποταμὸν τὸ ῥέεθρον
potamòn tò rhéethron
river(M).ACC.SG ART.ACC.N.SG stream(N).ACC.SG
'it throws its stream into the Euphrates river' (*Hdt.* 1.179.4)

As for the other verbs in the corpus, the possible combinations with different kinds of Figures have shed new light about the semantics and syntactic behaviour of the roots at issue.

The Figures which can take the highest number of verbal roots are Humans. This group includes single individuals, encoded by means of personal pronouns, proper names or agent nouns, as well as groups, such as populations or armies (*stratós*). Human figures appear in about 86% of cases (i.e. 1333 occurrences out of 1554) and combine with 96 different verbal roots distributed equally enough across the four frequency groups, i.e. *hapaxes* (31 verbs), low frequency items (32 verbs), middle frequency items (24 verbs), high frequency items (9 verbs).

Objects are the second type of Figures by frequency. They can be weapons (especially within the historical texts), everyday objects (especially in Aristophanes' comedy), religious ornaments (especially in Euripides' tragedy), or vehicles. Objects occur in about 5% of cases (i.e. 74 occurrences out of 1554) with 32 different verbal roots exhibiting different relative frequencies. As expected, objects mostly combine with transitive verbs of motion (usually expressing caused motion) and with the so-called *labile verbs*, whose syntactic behaviour will be discussed in section 3.3.2, but they can also appear in spontaneous motion events, especially when they are means of conveyance.

Natural entities (mostly rivers) cover about 4% of motion events in the corpus, i.e. 59 occurrences out of 1554, and can perform the motion expressed by 19 different verbal roots which thicken around two main groups, i.e. high frequency items (6 verbs) vs. low frequency items and *hapaxes* (10 items). The high frequency of *hréo:* 'to flow' in combination with a natural entity is not surprising, since the verb encodes a Manner of motion which is the default option for rivers.

Divinities are the most culturally-driven Figures resulting from the corpus analysis. They appear in about 2% of cases, i.e. 34 occurrences out of 1554, mainly in Euripides' text, in combination with 16 different verbal roots ranging from *hapaxes* to high frequency.

Animals, namely birds, horses, fish and even a lion in Euripides, appear in only about 1% of cases (i.e. 22 occurrences out of 1554) and combine with 18 different motion verbs.

Body parts constitute the sixth category of Figure by frequency, occurring in only about 1% of cases (i.e. 18 out of 1554 occurrences) and combining with 13 verbal roots. They mostly appear in caused motion events.

As expected, the last type of Figure by frequency is that of abstract entities. They are mainly messages or news, they appear in less than 1% of cases (that is in 13 occurrences out of 1554) and combine with only 8 different verbal roots, all of which display very high frequencies in the corpus. This last finding is not surprising: as a matter of fact, the semantic specificity of nouns having abstract entities as referents forces such Figures to co-occur only with highly frequent verbal roots showing very general meanings (e.g. *ágo:* LSJ 'lead, carry', *bállo:* LSJ 'throw', *eîmi* LSJ 'come, go' *érkhomai* LSJ 'come, go'). According to Bybee's principle of lexical generality (1985: 13), «if a semantic element has high content, i.e. is very specific, it simply will not be applicable to a large number of stems»; in this specific case, in order for abstract entities to combine with motion verbs, the verbal roots in question must have a very generic meaning, since nouns referring to abstract entities and verbs encoding displacement are not semantically relevant to each other.

In one case only, two types of Figures, namely a human being and an animal, appear together within the same clause:

(90) ἀλλ᾽ ὑποχωρούντων φανερὰ ἦσαν καὶ
all' hupokho:roúnto:n phanerà êsan kaì
but under-retire.PTCP.PRES.GEN.M.PL visible.NOM.N.PL be.IMPF.3PL and
ἵππων καὶ ἀνθρώπων ἴχνη πολλά
híppo:n kaì anthró:po:n íkhne: pollá
horses(M).GEN.PL and man(M).GEN.PL footstep(N).NOM.PL many.N.PL
'but tracks of both horses and men in retreat were to be seen in great numbers'
(Xen. *Anab.* 1.7.17)

The qualitative and quantitative data provided so far, have revealed some interesting information about the 118 verbs found in the corpus:

- in line with what has been stated by Bybee (2008), the verbal roots showing higher frequencies are more general in meaning; they are both transitive and intransitive

verbs of motion which appear in all the texts taken into account;

- as far as the combination between motion verbs and moving Figures is concerned, the highest compatibility is exhibited by transitive roots mainly expressing caused motion (cf., inter alia, *ágo:* e *bállo:*), since they allow both animate and inanimate entities to take part in the displacement. Since proper restrictions exist as to the kind of motion that a specific entity can perform, this parameter has proved useful for assessing the verb meaning.

3.3.2 Morphosyntactic behaviour

From a morphosyntactic point of view, the main distinction the verbs display is between roots expressing spontaneous motion and roots expressing caused motion. As previously stated, such a differentiation is already found in Talmy (1985) and pertains to the role of the agent which takes part in displacement.

In spontaneous motion events (also referred to as self-agentive or voluntary in the literature), an animate Figure more or less spontaneously initiates its own movement later to result in a change of location, as in the sentence *Mary ran out of the room*. In Talmy's definition spontaneous motion is «(...) motion in which a figure moves and has control over its motion» (Talmy 2000: 28). Events of spontaneous motion constitute the base of Talmy's dichotomic distinction between Verb-framed and Satellite-framed languages.

Caused motion events imply a situation in which a typically animate Agent causes a typically inanimate entity to move from one point to another in space, as in the sentence *Mary threw the ball over the fence*, where the moving Figure is the ball.

As it will be shown in section 3.3, both verb types appear to belong to a wide range of semantic classes. While some roots are more general in the sense that they can be employed across a variety of situations, others (e.g. verbs encoding some kind of Manner component) are more specific in meaning and, thus, more limited in use.

The two English examples just mentioned clearly show the main difference between spontaneous and caused motion verbs, i.e. while the former appear within the Intransitive Motion Construction (cf. Goldberg 1995: 115ff.), in which the Figure is the syntactic subject

of the clause, the latter are employed transitively, the Figure being the direct object of the motion verb.[68]

Examples (91) and (92) illustrate the difference between spontaneous motion verbs and caused motion verbs in Ancient Greek.

(91) Ἀγάθωνα πεῖσαι τὸν τραγῳδοδιδάσκαλον ἐς
Agátho:na peîsai tòn trago:idodidáskalon es
Agathon(M).ACC.SG persuade.INF.AOR ART.ACC.M.SG tragic_poet(M).ACC.SG to
Θεσμοφόροιν ἐλθεῖν
Thesmophóroin eltheîn
Thesmophoria(f).DAT.DU go.INF.AOR
'I am going to beg Agathon, the tragic poet, to go to the Thesmophoria' (Aristoph. *Thes.* 88)

(92) εὐθὺς δ’ ἔλαβε τὰ παλτὰ εἰς τὰς
euthùs d' élabe tà paltà eis tàs
at_once PTC take.AOR.3SG ART.ACC.N.PL dart(N).ACC.PL to ART.ACC.F.PL
χεῖρας
kheîras
hand(f).ACC.PL
'and he immediately took his spears in his hand' (Xen. *Anab.* 1.5.15b)

In (91) the noun encoding the Figure, syntactically behaving as the subject of the clause, has a human referent and the motion verb, *érkhomai* 'go, come', expresses a generic displacement.[69] The adnominal *es Thesmofóroin* describes the Goal of the Figure's movement.

In (92) the moving Figure is an inanimate entity, namely a spear in the plural number, occurring as the direct object (in the accusative case) of the caused motion verb *lambáno:* 'take, hold'. The subject of the clause is the missing third person pronoun. Similarly to (91), the motion clause in (92) contains a Goal adnominal constructed with the preposition *eis* 'towards' and a Ground element taking the expected accusative case marker.

In the corpus under analysis, caused motion events cover about 16,3% of cases (i.e. they occur 266 times out of 1627). Table 17 accounts for the most frequent caused motion verbs.

68 The properties of two constructions at issue will be analysed in details in Chapter 4.
69 It is worth stressing that here the subjet occurs in the accusative case because the whole clause is an infinitive one governed by a *verbum dicendi*.

Caused motion verb	Gloss	Tokens[70]
ágo:	'lead, carry'	67 (4,1%)
phéro:	'bear, carry'	24 (1,5%)
bállo:	'throw, cast'	21 (1,3%)
pémpo:	'send'	16 (1%)
híste:mi	'make to stand, set up'	15 (0,9%)
hairéo:	'take with the hand, grasp, seize'	14 (0,9%)
elaúno:	'drive, set in motion'	13 (0,8%)
bibázo:	'cause to mount, cause to go'	12 (0,7%)
híe:mi	'release, let go'	10 (0,6%)
rípto:	'throw, cast'	7 (0,4%)
komízo:	'carry, bring'	7 (0,4%)

Table 17: Most frequent caused motion verbs

Consistently with the expectations about high frequency lexical items, the most frequent verbal roots expressing caused motion are quite generic in meaning. Only three out of the eleven verbs encode specific semantic components, such as directionality in the case of *bibázo:* 'cause to mount' (reference to verticality) and *híe:mi* 'release, let go' (ablative nuance), or an allusion to the body part with which the Figure's motion is provoked (cf. *hairéo:* 'take with the hand').

Independently on such differences in meaning, the caused motion verbs display the same syntactic behaviour: they are all employed transitively and they govern a direct object describing the Figure, which can be both an animate (often human) entity or an inanimate object. It goes without saying that, just like spontaneous motion verbs, caused motion verbs can be preverbed or not, and they can be preceded or followed by adnominals expressing the different parts of Path, as shown by examples from (93) to (95).

(93) τὰ ἑαυτῶν σώματα ἄγουσιν ἵπποις
tà heautôn só:mata ágousin híppois
ART.ACC.N.PL REFL.GEN.PL body(N).ACC.PL lead.PRES.2PL horse(M).DAT.PL
'to the horses that carried their own bodies' (Xen. *Anab.* 1.9.27)

70 The percentages are calculated out of the total number of motion events within the corpus (i.e. 1627), including the contexts in which no satellites appear.

(94) καὶ ἐκ τῆς Μέμφιδος ἐξήλασε
kaì ek tês Mémphidos exé:lase
and out_of ART.GEN.F.SG Memphis(f).GEN.SG out_of-drive.AOR.3SG
τοὺς Ἕλληνας
toùs Hélle:nas
ART.ACC.M.PL Greek.ACC.M.PL
'and drove the Hellenes out of Memphis' (*Thuc.* 1.109.4b)

(95) πολλοῖς δ' ἑτέροις ἀπὸ τῶν ὤμων ἐν
polloîs d' hetérois apò tôn ó:mo:n en
many.DAT.PL PTC other.DAT.PL from ART.GEN.PL shoulder(M).GEN.PL in
ταῖς στρατιαῖς ἔρριπται τὸ σκιάδειον
taîs stratiaîs érriptai tò skiádeion
ART.DAT.F.PL army(f).DAT.PL cast.PF.M/P.3SG ART.ACC.N.SG buckler(N).ACC.SG
'and many others have cast away from their arms the bucklers on the battlefield' (Aristoph. *Thes.* 829)

Despite the apparent clear-cut nature of the distinction between spontaneous motion verbs and caused motion verbs, some roots seem to form an intermediate category. This is the case of verbs which are originally transitive, but can be employed intransitively and, thus, encode spontaneous, rather than caused motion. By virtue of such an ambiguous syntactic behaviour, the verbs in question seem to belong to the class of labile verbs attested crosslinguistically (cf., *inter alia*, Creissels 2014, Dixon 2000, Letuchiy 2009). Such labile verbs typically participate in valency alternations without any formal morphological change. The term *lability* has been defined differently in the literature. Haspelmath (1993) adopts a restricted definition of lability, referring exclusively to causative-inchoative alternations (e.g. *He burned the house* and *The house burned*) in which the causative and inchoative pairs are identical in form and not derived from each other. According to Letuchiy (2009: 223) «a labile verb is a verb which can be used transitively or intransitively without any formal change». Based on such a premise, the verbs in clauses such as *She ate lunch* and *She ate*, or *She broke the stick* and *The stick broke* are examples of labile verbs. Similarly, Nichols (1986: 156) describes lability as «a valence pattern in which the verb can be transitive or intransitive without the application of formal transitivizing or detransitivizing derivations».

The labile verbs found in the dataset satisfy the two main criteria for assessing lability in Lethuchiy (2009):

- absence of formal derivation;
- relatively small number of labile verbs (lability does not usually spread to all prototypically transitive verbs, but rather "choses" a narrow group of verbs).

As for the first criterion, the following examples show the difference between contexts in which a transitive verb, namely *bállo:* 'throw, cast' is employed intransitively by means of the middle/passive voice morphology (96) and contexts in which the same verb becomes monovalent without any change in morphology (97). Example (98) accounts for the "regular" transitive use of *bállo:* for the encoding of caused motion.

(96) ἐσβαλομένους δὲ ἐς τὴν νέα
esbaloménous dè es tè:n néa
to-throw.PTCP.AOR.M/P.ACC.M.PL PTC to ART.ACC.F.SG ship(f).ACC.SG
'being thrown into the ship' (*Hdt.* 1.1.4c)

(97) ἐς Κλαζομενάς τε ἐσέβαλε
es Klazomenás te esébale
to Clazomenae(f).ACC.PL PTC to-throw.AOR.3SG
'and invaded the lands of Clazomenae' (*Hdt.* 1.16.2b)

(98) τηνικαῦτα ἐσέβαλλε τὴν στρατιήν
te:nikaûta eséballe tè:n stratié:n
then to-throw.IMPF.3SG ART.ACC.F.SG army(f).ACC.SG
'then he sent his army' (*Hdt.* 1.17.1)

In the dataset, in addition to *bállo:*, other verbal roots display such a pattern of lability. This is, for instance, the case of *elaúno:* 'drive, set in motion', which is often employed intransitively to express a military march of the Figure. Examples (99) and (100) illustrate the two behaviours of the root at issue.

(99) ἐξήλασε αὐτόν τε Σαρπηδόνα καὶ τοὺς
exé:lase autón te Sarpe:dóna kaì toùs
out_of-drive.AOR.3SG 3SG.ACC PTC Sarpedon(M).ACC.SG and ART.ACC.M.PL
στασιώτας αὐτοῦ
stasió:tas autoû
partisan(M).ACC.PL 3SG.GEN

'and he drove out Sarpedon and his partisans' (*Hdt.* 1.173.2a)

(100) ὡς δὲ ἀπήλασε ὁ Κῦρος ἐκ τῶν
ho:s dè apé:lase ho Kûros ek tôn
when PTC from-drive.AOR3SG ART.NOM.M.SG Cyrus(M).NOM out_of ART.GEN.PL
Σαρδίων
Sardío:n
Sardis(F).GEN.PL
'but no sooner had Cyrus marched away from Sardis' (*Hdt.* 1.154.1a)

The verb *hormáo:*, whose original causal meaning 'set in motion' is less frequent than the intransitive one 'start, move' within the analysed texts. The verb mostly appears in the middle/passive voice, but can also encode spontaneous motion despite keeping its active morphology, as in (101) and (102).

(101) οὐδ' ἄκρανθ' ὡρμήσαμεν
oud' ákranth' ho:rmé:samen
NEG unfulfilled.ACC.N.PL move.AOR.1PL
'nor we set out in vain' (*Eur. Ba.* 435)

(102) οἱ Κύρου ἑξακόσιοι εἰς τὸ διώκειν
hoi Kúrou hexakósioi eis tò dió:kein
ART.NOM.M.PL Cyrus(M).GEN.SG six hundred to ART.ACC.N.SG pursue.INF.PRES
ὁρμήσαντες
hormé:santes
move.PTCP.AOR.NOM.M.PL
'Cyrus' six hundred, setting out in pursuit' (Xen. *Anab.* 1.8.25c)

Besides the main morphosyntactic distinction between spontaneous motion verbs and caused motion verbs, the data have revealed other differences pertaining to the syntactic contexts in which verbal roots expressing displacement can occur. The constructions at issue range from simple patterns in which only one slot, i.e. the verbal slot, is involved, to complex patterns engaging four slots at once, i.e. the verb V (or the noun N), the satellite S, the adnominal A and the modifier M. Table 18 exemplifies the different constructions in which motion verbs can occur.

Construction	Slots	Example
1 slot (15%)	V	χώρει *khórei* 'Go away!' (Aristoph. *Thes.* 782)
2 slots (54%)	V + S	ἀποπλέειν κατὰ βίου τε καὶ γῆς ζήτησιν *apopléein katà bíou te kaì gês zé:te:sin* 'and sailed away to seek a livelihood and a country' (*Hdt.* 1.94.6d)
	V + A	ἴιε ἐς πόλιν ὁ βουκόλος *éie es pólin ho boukólos* 'the cowherd went to the city' (*Hdt.* 1.113.2b)
	V + M	ἐλθέτω πέλας *elthéto pélas* 'let him approach' (*Eur. Ba.* 1211)
3 slots (29%)	V + S + A	κατέπλεον ἐς τὸ στρατόπεδον *katépleon es tò stratópedon* 'they sailed up to the camp' (*Thuc.* 1.51.4)
	V + S + M	ἀνῆλθες ἤδη δεῦρο πρότερον; *anêlthes é:de: deûro próteron* 'have you ever been here before?' (Aristoph. *Thes.* 623)
	V + A + M	πρὸς τὸ ἱερὸν τῆς Χαλκιοίκου χωρῆσαι δρόμῳ *pròs tò hieròn tês Khalkioíkou khorêsai drómo:i* 'setting off with a run for the temple of the goddess of the Brazen House' (*Thuc.* 1.134.1c)
4 slots (2%)	V + S + A + M	ἐντεῦθεν ἐπειρῶντο εἰσβάλλειν εἰς τὴν Κιλικίαν *enteûthen epeirônto eisbállein eis tè:n Kilikían* 'from there they made ready to try to enter Cilicia' (Xen. *Anab.* 1.2.21a)

Table 18: Main types of constructions found in the corpus

Within this scenario, some categories can appear more than once in the same clause, such as in contexts of multiple preverbation (where two or more satellites attach to the same verbal root) or when two or three adnominals simultaneously express Path. Moreover, the previous patterns show some internal complexity, e.g. the construction in which a satellite, a verb and an adnominal occur can be instantiated at least by (a) a non-relational preverb + a motion verb + a prepositional phrase encoding one portion of Path (example 103), or (b) a relational preverb + a motion verb + a noun phrase in the case commanded by the relational preverb (example 104).

(103) Κῦρος δ’ οὖν ἀνέβη ἐπὶ τὰ ὄρη
Kûros d' oûn anébe: epì tà óre:
Cyrus(M).NOM PTC in_fact up-go.AOR.3SG upon ART.ACC.N.PL mountain(N).ACC.PL
'in fact Cyrus climbed the mountains' (Xen. *Anab.* 1.2.22a)

(104) οὐχ ὑπερβαίνουσι καὶ τείχη θεοί;
oukh huperbaínousi kaì teíkhe: theoí
NEG over-go.PRES.3PL and wall(N).ACC.PL god(M).NOM.PL
'do gods not pass over walls too?' (*Eur. Ba.* 654)

The constructions listed in Table 18 will be addressed in details in Chapter 4. In the following paragraph the semantics of the motion verbs will be discussed.

3.3.3 Semantic information and possible verb types

As previously stated, in order to backtrack to the semantic information encoded by the verbs, I resorted to an intersection of different parameters, i.e. the translation provided by the dictionaries of the Ancient Greek language, the Figures performing the movement encoded by the verb, the frequency of use of each verbal root in the corpus, the syntactic context in which it appears, and the combination with other elements encoding spatial information within the clause. From this joined investigation the following three major verb classes have resulted:

- basic motion verbs;
- Path verbs;
- Manner verbs.

The first category comprises four verbs which encode motion itself, without defining neither the trajectory followed by the Figure, nor the mode of motion it performs. Hence these verbs are semantically neutral to both Path and Manner information. Table 19 below

shows the four verbs at issue, i.e. *baíno:*, *bló:sko:*, *eîmi*, *érkhomai*, which can all be translated either as 'go, come' or as 'move', depending on the context.

Basic motion verb	Gloss	Tokens
érkhomai	'go or come'	195 (12%)
eími	'go or come'	130 (8%)
baíno:	'go or come'	91 (5,6%)
bló:sko:	'go or come'	9 (0,5%)

Table 19: Basic motion verbs

Given the lack of semantic specificity, all of these verbs need to be associated to other morphosyntactic tools in order to express a full motion event. Nevertheless they display an absolute usage too (cf. examples 105 and 106), mostly in the imperative form, which is rather frequent within the dramatic texts. This is possibly due to the deictic information some of these roots are likely to bear.[71]

(105) ἔλθετον
éltheton
go.IMP.AOR.2SG
'come here' (Aristoph. *Thes.* 1155b)

(106) ἴτε βάκχαι
íte bákkhai
go.IMP.PRES.2PL Maenad(f).VOC.PL
'go, Bacchae' (*Eur. Ba.* 83)

As previously stated, the basic motion verbs often co-occur with other morphosyntactic devices expressing either Path or Manner, since they seem to lack these two semantic information. Among them, *baíno:*, *eími* and *érkhomai*, often combine with prepositional phrases encoding Goal (cf. 107).

71 The topic of deixis, albeit fascinating, goes beyond the scope of the present dissertation. It will be investigated in a further study and on a larger dataset.

(107) ἐς τήνδε πρῶτον ἦλθον Ἑλλήνων πόλιν
es té:nde prôton êlthon Hellé:no:n pólin
to DEM.ACC.F.SG first go.AOR.1SG Greeks.GEN.M.PL city(F).ACC.SG
'and I have come to this Hellene city first' (*Eur. Ba.* 20)

When preverbed, the basic motion roots can select a wide range of satellites referring to all the different portions of Path. Such a high degree of combinability proves consistent with the semantic lightness of the verbs at issue.

(108) ἀναβὰς ἐπὶ τὸν ἵππον
anabàs epì tòn híppon
up-go.PTCP.AOR.NOM.M.SG upon ART.ACC.M.SG horses(M).GEN.PL
'mounting his horse' (Xen. *Anab.* 1.8.3b)

(109) ἀπιέναι ἕκαστον ἐπὶ τὰ ἑωυτοῦ
apiénai hékaston epì tà heo:utoû
from-go.INF.PRES each.ACC.M.SG upon ART.ACC.N.PL REFL.GEN.SG
'each to depart to his home' (*Hdt.* 1.63.2c)

(110) καὶ ἐς οἴκημα οὐ μέγα ὃ ἦν
kaì es oíke:ma ou méga hò ên
and to chamber(N).ACC.SG NEG big.ACC.N.SG REL.NOM.M.SG be.IMPF.3SG
τοῦ ἱεροῦ ἐσελθών
toû hieroû eselthó:n
ART.GEN.SG temple(N).GEN.SG to-go.PTCP.AOR.NOM.M.SG
'and entering into a small chamber, which formed part of the temple' (*Thuc.* 1.134.1d)

Compared to the three basic motion verbs analysed so far, *bló:sko:* displays a considerably lower frequency and is only attested in Aristophanes' *Thesmophoriazusae* and in Euripides' *Bacchae*.

The second group of verbs includes roots containing some kind of directional information. In the corpus 32 verbs display such features.

It is worth mentioning that, as previously stated, Ancient Greek is commonly classified as a SF language (cf. Talmy 1985; Filipović 2007; Imbert 2008; Nikitina 2013). As is well known, according to Talmy's two-way typology, languages belonging to this group should conflate the semantic components of Manner and Motion within the main verbal root, and express

Path through a satellite associated with the verb. However, though displaying the main features of SF languages, Ancient Greek shares traits of the VF type too, such as the presence of inherently directional verbs within the lexicon.

With the two exceptions of *aphiknéomai* 'arrive at, come to, reach' and *apallásso:* 'get off free, escape', which are, however, strongly lexicalized items, the Path verbs found in the corpus are likely to occur as bare forms, since they seem not need any satellite to further describe the trajectory followed by the moving entity. As to the prepositional phrases with which they tend to combine, they are likely to either confirm or further specify the directional component of the verbal root.

Among the 32 verbs containing Path information, 15 are *hapaxes*, i.e. they occur just once in the corpus, while 8 roots display low frequencies ranging from 2 to 8 occurrences. Table 20 accounts for the most frequent Path verbs in the data set.

Path verb	**Gloss**	**Tokens**
hiknéomai	'come, reach, attain to'	100 (6,1%)
kho:réo:	'give way withdraw'	59 (3,6%)
pheúgo:	'flee, escape'	50 (3,1%)
hé:ko:	'have come, have reached'	37 (2,3%)
pípto:	'fall'	31 (2%)
hépo:	'come after, follow'	27 (1,6%)
leípo:	'leave'	24 (1,5%)
dió:ko:	'pursue, chase'	17 (1%)
oíkhomai	'go away, go off, depart'	14 (0,9%)
nostéo:	'go or come home, return'	8 (0,5%)

Table 20: Most frequent Path verbs

Some of the Path verbs exhibit a natural inclination to combine with a specific portion of Path. This feature, crossed with the translations provided by the dictionaries, could constitute an evidence in favour of the existence of Source-oriented, Median-oriented and Goal-oriented verbs in Ancient Greek. Among the roots which seem proner to express the initial segment of Path, *kho:réo:* 'withdraw' often combines with Source satellites, as in (111), where *apó* is found both in the preverbal and in the adnominal slot.

(111) καὶ λιμοῦ γενομένου ἀπεχώρησαν ἀπὸ
kaì limoû genoménou apekhó:resan apò
and hunger(M).GEN.SG be.PTCP.AOR.M/P.GEN.M.SG from-retire.AOR.3PL from
Κιτίου
Kitíou
Citius(N).GEN.SG
'and they retired from Citius because of the famine' (*Thuc.* 1.112.4a)

Sometimes the root is employed as a *minus-ground verb*. As expected, this holds true especially in the dramatic texts, as a direct consequence of their dialogical trend.

(112) χώρει
khó:rei
retire.IMP.PRES.2SG
'go' (*Eur. Ba.* 509)

Leípo: 'leave' is mostly employed transitively within the corpus (its direct object expressing the Source of motion), and it often co-occurs with the Source preverb *ek* 'out of, from', as in (113).

(113) καὶ τὴν Βοιωτίαν ἐξέλιπον
kaì tè:n Boio:tían exélipon
and ART.ACC.F.SG Boeotia(F).ACC.SG out_of-leave.AOR.3PL
Ἀθηναῖοι πᾶσαν
Athe:naîoi pâsan
Athenians.NOM.M.PL whole.ACC.F.SG
'and the Athenians evacuated all Boeotia' (*Thuc.* 1.113.3)

Like *leípo:*, *apallásso:* 'get off free, escape' too tends to co-occur with Source expressions rather than with Goal expressions.

(114) ἀπαλλάσσετο ἐκ τῆς χώρης τὸ
apallásseto ek tês khó:re:s tò
go-change.IMPF.M/P.3SG out_of ART.GEN.F.SG land(F).GEN.SG ART.ACC.N.SG
παράπαν
parápan
altogether
' (Pisistratus) went alone away from the country altogether' (*Hdt.* 1.61.2a)

Some of the verbs showing directional information preferentially combine with Goal satellites and adnominals. This is the case of *aphinknéomai* 'come, reach, attain to' and *héko:* 'have come, have reached', which are often accompanied by a prepositional phrase encoding the final point of the Figure's trajectory. Both of the roots entail Goal attainment.

(115) ἐσαπικνέσθαι καὶ δὴ καὶ ἐς Ἄργος
esapiknésthai kaì dè: kaì es Árgos
to-from-reach.INF.PRES.M/P and PTC and to Argos(N).ACC.SG
'and then they came also to Argos' (*Hdt.* 1.1.1b)

(116) πολλῶν δ' ὅδ' ἀνὴρ θαυμάτων
pollôn d' hód' hanè:r thaumáto:n
many.GEN.PL PTC DEM.NOM.M.SG man(M).NOM.SG wonder(N).GEN.PL
ἥκει πλέως ἐς τάσδε Θήβας
hé:kei pléo:s es tásde Thé:bas
have_come.PRES.3SG full.NOM.M.SG to DEM.ACC.F.PL Thebes(F).ACC.PL
'this man has come to Thebes full of many wonders' (*Eur. Ba.* 449)

Among the Goal-oriented verbs, *hépo:* 'come after, follow' often requires a Ground element taking the dative case, which represents the moving Goal of motion and has, therefore, an animate referent, as in (117).

(117) ἀλλ' ἕπου μοι κισσίνου βάκτρου μέτα
all' hépou moi kissínou báktrou méta
but follow.IMP.PRES.2SG 1SG.DAT of_ivi.GEN.N.SG stick(N).GEN.SG with
'but follow me with the ivy-clad staff' (*Eur. Ba.* 363)

By virtue of its meaning, the verb *peraióo:* 'pass over, cross' (4 occurrences in the whole corpus), preferentially appear in contexts where the Median portion of Path is mentioned, as in (118), where it is expressed by means of a prepositional phrase introduced by *diá* 'through, across'.

(118) διὰ τοῦ Κρισαίου κόλπου εἰ βούλοιντο
dià toû Krisaíou kólpou ei boúlointo
through ART.GEN.SG of_Crisa.GEN.M.SG gulf(M).GEN.SG if want.OPT.PRES.3PL

περαιοῦσθαι
peraioûsthai
carry_over.INF.PRES.M/P
'if they wanted to pass across the Crissaean gulf' (*Thuc.* 1.107.3b)

In addition to Path and Manner verb, a further category can be identified. It comprises verbs that conflate both Path and Manner information. Two of the verbs classified as Path verbs, *pípto:* 'fall' and *pheúgo:* 'flee, escape', undeniably contain a Manner nuance, related respectively to the involuntary character and to the speed of the displacement. Such, so to say, "fuzzy" roots discredit a rigid separation between Path verbs, on one hand, and Manner verbs, on the other (cf. Levin & Rappaport Hovav 1992; 2006). When preverbed, *pípto:* 'fall' selects the directional satellite *katá* 'downwards', while *pheúgo:* 'flee, escape' shows a clear preference for the two preverbs encoding the Source of motion (and is often employed transitively).

(119) κατάπεσ᾽ ἀπὸ τῆς κλίμακος
katápes' *apò* *tês* *klímakos*
down-fall.AOR.3SG from ART.GEN.F.SG ladder(f).GEN.SG
'he fell down the ladder' (Aristoph. Birds 840b)

(120) οὐκ ἔστιν οὕτως ὠκὺς ὥστε μ᾽
ouk éstin *houto:s* *o:kùs* *hó:ste* *m'*
NEG be.PRES.3SG so quick.NOM.M.SG inasmuch_as 1SG.ACC
ἐκφυγεῖν
ekphugeîn
out_of-flee.INF.AOR
'he is not so swift as to escape me' (*Eur. Ba.* 452)

(121) οὔτε πολιὸν πέλαγος ἔστιν ὅ τι
oúte *poliòn* *pélagos* *éstin* *hó* *ti*
NEG grey.NOM.N.SG sea(N).NOM.SG be.PRES.3SG REL.NOM.M.SG INDEF.NOM.N.SG
δέξεται τώδ᾽ ἀποφυγόντε με
déxetai *tó:d'* *apophugónte* *me*
receive.FUT.3SG DEM.ACC.M.DU from-flee.PTCP.AOR.ACC.M.DU 1SG.ACC
'nor the foaming deep can save them, who are escaping' (Aristoph. Birds 351)

A third motion verb combining Path and Manner information is *didrásko:* 'run away' (3 occurrences in the corpus). By virtue of its Source-oriented semantics, the root is always preceded by a Source preverb in the corpus, as is the case in (122) where the preverb *ek* is used.

(122) ὁ μὲν οὖν Κύλων καὶ ὁ
ho mèn oûn Kúlo:n kaì ho
ART.NOM.M.SG PTC in_fact Cylon(M).NOM.SG and ART.NOM.M.SG
ἀδελφὸς αὐτοῦ ἐκδιδράσκουσιν
adelphòs autoû ekdidráskousin
brother(M).NOM.SG 3SG.GEN out_of-run.PRES.3PL
'Accordingly Cylon and his brother made their escape' (*Thuc.* 1.126.10)

The third and most composite verbal category identified within the corpus is that of Manner verbs. As previously stated, compared to Path, Manner has received much less attention in the literature.

In the corpus under analysis, 33 verbs refer to the mode of motion performed by the Figure. Table 21 accounts for the most frequent Manner verbs in the sample.

Manner verb	Gloss	Tokens
pléo:	'sail'	78 (4,8%)
pheúgo:	'flee, escape'	50 (3,8%)
strateúo:	'advance with an army or fleet'	32 (2%)
pípto:	'fall'	31 (1,9%)
réo:	'flow, run, stream'	27 (1,7%)
trékho:	'run, move quickly'	18 (1,1%)
phoitáo:	'go to and from, backwards and forwards, roam, wander'	12 (0,7%)
steíkho:	'walk, march'	9 (0,5%)
pe:dáo:	'leap, spring'	8 (0,5%)
badí:zo:	'walk, march, go by land'	6 (0,4%)

Table 21: Most frequent Manner verbs

Aside from the Path + Manner verbs, *pheúgo:, pípto:* and *didrásko:*, which represent an intermediate category, among the ten most frequent Manner roots in the data set, the

following seem to correspond to Slobin's first tier: *pléo:*; *réo:*; *trékho:*; *steíkho:*; *badí:zo:*.

Some of these verbs are barely classificatory, i.e. they encode a kind of motion that is the default for a specific entity. This is the case of *réo:*, which describes the typical motion of rivers. The verb is mostly employed in its bare form, and exploits the adnominal *locus* to describe Path. It is interesting to notice that *réo:* 'flow' typically occurs with two portions of Path or more, as shown in (123).

(123) ὁ Ἅλυς ποταμός ὃς ῥέει
ho Hálus potamós hòs rhéei
ART.NOM.M.SG Halys(M).NOM.SG river(M).NOM.SG REL.NOM.M.SG flow.PRES.3SG
ἐξ Ἀρμενίου ὄρεος διὰ Κιλίκων
ex Armeníou óreos dià Kilíko:n
out_of Armenian.GEN.N.SG mountain(N).GEN.SG through Cilician.GEN.M.PL
'the river Halys, which flows from the Armenian mountains through Cilicia'
(*Hdt.* 1.72.2a)

Pléo: 'sail', the high frequency of which is probably related to the plot of the historical texts, specifies the means of conveyance, which is considered to pertain to Manner only by some scholars (e.g. Levin 1993; Slobin 2004; 2006). It is usually preverbed and accompanied by prepositional phrases encoding different Ground elements.

(124) καταπλώσαντας γὰρ μακρῇ νηί ἐς
katapló:santas gàr makrêi ne:í es
down-sail.PTCP.AOR.ACC.M.PL hence big.DAT.F.SG ship(F).DAT.SG to
Αἶαν τε τὴν Κολχίδα καὶ ἐπὶ Φᾶσιν
Aîan te tè:n Kolkhída kaì epì Phâsin
Aea(F).ACC.SG PTC ART.ACC.F.SG Colchis(F).ACC.SG and upon Phasis(M).ACC.SG
ποταμόν
potamón
river(M).ACC.SG
'they sailed in a long ship to Aea, a city of the Colchians, and to the river Phasis'
(*Hdt.* 1.2.2)[72]

72 It is interesting to notice that the two Goals in (124) are expressed by means of two different prepositions, whose choice seem to be motivated both by the features of the Ground and by the position of the Figure at the end of its displacement (*eis* → approaching, *epí* → superior position).

In (125) the Manner information provided by *steíkho:* 'walk, march', encoding motion on foot at a normal speed, is strengthen and further specified by the prepositional phrase *bakkheío: podì* 'with Bacchic foot', behaving as a modifier of the motion verb (cf. 3.5).

(125) τὴν δ' εἶπέ τίς μοι δεῦρο βακχείῳ
tè:n d' eîpé tís moi deûro bakkheío:i
ART.ACC.F.SG PTC say.AOR.3SG INDEF.NOM.M.SG 1SG.DAT hither Bacchic.DAT.M.SG
ποδὶ στείχειν Ἀγαύην
podì steíkhein Agaúe:n
foot(M).DAT.SG walk.INF.PRES Agave
'But some one told me that Agave was coming here with Bacchic foot' (*Eur. Ba.* 1230)

Verbs corresponding to Slobin's second tier are fewer in the data than one would expect from a SF language. They only cover three out of the ten Manner type nuances identified by Slobin *et al. (*2014: 718), i.e. «relaxed walking, rapid movement, and punctuated, repeatable movement». Some of the expressive Manner verbs found in the corpus are: *phoitáo:* 'go forwards and backwards, roam', *pe:dáo:* 'leap, spring', *thoázo:* 'move quickly, rush, dart', *thró:isko:* 'leap, spring, rush, dart', *kulíndo:* 'roll'. These verbs can either be preverbed, like *pe:dáo:* in (126), where the high speed of motion is underlined by the adverbial accusative *tè:n takhíste:n* 'most quickly', or not, like *thoázo:* in (127).

(126) ἢ ἐκπηδᾶν ἐς τὴν θάλασσαν τὴν
è: ekpe:dân es tè:n thálassan tè:n
or out_of-leap.INF.PRES to ART.ACC.F.SG sea(f).ACC.SG ART.ACC.F.SG
ταχίστην
takhíste:n
swift.SUP.ACC.F.SG
'or else to jump into the sea at once' (*Hdt.* 1.24.3)

(127) Ἀσίας ἀπὸ γᾶς ἱερὸν Τμῶλον
Asías apò gâs hieròn Tmôlon
Asia(f).GEN.SG from land(f).GEN.SG sacred.ACC.M.SG Tmolus(M).ACC.SG
ἀμείψασα θοάζω
ameípsasa thoázo:
exchange.PTCP.AOR.NOM.F.SG rush.PRES.1SG
'from the land of Asia, having left sacred Tmolus, I am swift (move rapidly)' (*Eur. Ba.* 64)

When co-occurring with a satellite, verbs of the second tier select a preverb which is, by virtue of its core meaning, compatible with their semantics. This is what happens with *phoitáo:* in (128). This verbal root encodes a random movement of the Figure and is, therefore, unlikely to explicit neither the exact Source of motion, nor its Goal. Rather, the verb tends to combine with the satellite *diá* 'through, across', which is typically used for multi-directional paths inside continuous landmarks (cf. Luraghi 2003: 168ff.).

(128) καὶ τοῖσι θεοῖσιν ἀπειπεῖν διὰ τῆς
kaì toîsi theoîsin apeipeîn dià tês
and ART.DAT.M.PL god(M).DAT.PL from-say.INF.AOR through ART.GEN.F.SG
χώρας τῆς ὑμετέρας ἐστυκόσι μὴ
khó:ras tês humetéras estukósi mè:
land(F).GEN.SG ART.GEN.F.SG POSS.ACC.2PL make_stiff.PTCP.PF.DAT.M.PL NEG
διαφοιτᾶν
diaphoitân
through-roam.INF.PRES
'and forbid the gods henceforward to pass through your country with their tools up' (Aristoph. Birds 556)

It is worth mentioning that, generally speaking, the percentage of Manner verbs in the *corpus* is sensitively higher than those found by Slobin (2005: 124) and Hijazo-Gascón & Ibarretxe-Antuñano (2013: 477) in SF languages. Nevertheless, crosslinguistic comparison seems to confirm the low semantic granularity of Manner in Ancient Greek as opposed to other languages of the SF type.

3.4 Nouns

The nominal locus mainly comprises nouns encoding displacement. Such nouns should not be confused with nouns expressing the Ground, since the latter are in charge of Path encoding, by means of the prepositions they combine with and the case markers they take, and thus clearly belong to the category of adnominals (cf. Section 3.2).

Like verbs, nouns too can express both the Path and the Manner component. As previously stated, the verbal slot and the noun slot are mutually exclusive, since they both

are predicates. In other words, when the verbal slot is involved in the motion predication, the noun slot is empty and vice versa.

The data has revealed that, in overall, verbal predication constitutes the largely preferred option: as a matter of fact, the noun slot is resorted to in only 55 cases out of 1627 (about 3,4% of the total).

The noun category includes two main types of *nomina actionis*, namely:

- nouns denoting both concrete entities (i.e. places) and actions;
- deverbal nouns expressing motion (i.e. nominalizations of motion verbs).

It is worth stressing that both kinds of nouns can take directional satellites as prefixes. Furthermore, they can combine with a semantically general verb and, thus, give rise to the so-called light verb constructions (cf. Chapter 4).

Among the lexical items belonging to the first group, *hodós* 'of Place, way, road; as an Action, travelling, journeying' (cf. LSJ) often appears as a *nomen actionis* in the corpus. It can occur as a bare noun or prefixed, as in (129).

(129) καὶ πάντα σφι ἐξήρτυτο ἐς τὴν
kaì pánta sphi exé:rtuto es tè:n
and all.NOM.N.PL 3PL.DAT out_of-get_ready.PLPF.3SG to ART.ACC.F.SG
κάτοδον
kátodon
down-journey(f).ACC.SG
'everything was ready for their return' (*Hdt.* 1.61.4a)

Besides *katá* 'downwards, back', *hodós* can combine with other Path satellites, cf. e.g. *éxodos* 'going out', *eísodos* 'entering, entrance', *prósodos* 'going to, approach'.

In Thucydides, the noun combines with the negative prefix *dus-* to encode a difficult path followed by the Figure:

(130) δύσοδός τε γὰρ ἡ Γερανεία
dúsodós te gàr he: Geraneía
hard_to_pass.NOM.F.SG PTC hence ART.NOM.F.SG Geraneia(f).NOM.SG
'for the pass across Geraneia was a difficult one' (*Thuc.* 1.107.3d)

Similarly to *hodós, stólos* 'equipment, armament; journey, travel' (cf. LSJ) can encode both concrete entities related to the military domain, and the action of travelling. In the corpus under analysis, the noun is never preceded by a directional satellite.

Compared to the polysemous nouns mentioned so far, nominalizations of motion verbs are more frequently employed for motion event encoding. Like the former, they can occur bare or prefixed. Table 22 summarizes the non-prefixed deverbal nouns encoding motion in the sample.

Deverbal noun	**Related motion verb**	**Meaning (LSJ)**
básis	*baíno:* 'come, go'	'stepping, step; rhythmical or metrical movement'
nóstos	*nostéo:* 'go or come home, return'	'return home; travel, journey'
plóos (Att. contr. *ploûs*)	*pléo:* 'sail'	'sailing, voyage'
poreía	*poreúo:* 'go, walk, march'	'mode of walking or running, gait; journey; march'
strateía	*strateúo:* 'advance with an army or fleet, march'	'expedition, campaign'
phugé:	*pheúgo:* 'flee, escape'	'flight'

Table 22: Bare nouns derived from motion verbs

While the majority of the deverbal nouns under analysis stick to the meaning of the motion verb from which they derive, some others develop unexpected nuances which are, originally, lacking in the verbal root. This the case of *básis*, which exhibits additional semantic components with respect to the basic motion verb from which it derives, as in (131), where it is employed to encode a rhythmical movement:

(131) πρῶτον εὐκύκλου χορείας εὐφυᾶ
prôton eukúklou khoreías euphuâ
first well_rounded.GEN.F.SG dance(f).GEN.SG well_grown.ACC.F.SG
στῆσαι βάσιν
stêsai básin
make_stand.INF.AOR step(f).ACC.SG
'we are going through the rhythmic steps of the round dance for the first time' (Aristoph. *Thes.* 968)

When prefixed, the noun can combine with different nominal satellites displaying the same meanings mentioned for the preverbal use. In example (132), the satellite in question is the Median marker *diá* 'across'. Here the nominalization replaces the motion verb, takes the syntactic function of subject of a new verb and is followed by an adnominal expressing Goal:

(132) ἢν ἡ διάβασις ἡ ἐπὶ
è:n he: diábasis he: epì
in ART.NOM.F.SG through-march(f).NOM.SG ART.NOM.F.SG upon
Μασσαγέτας μὴ ὀρθωθῇ
Massagétas mè: ortho:thêi
Massagetae.ACC.M.PL NEG succeed.SBJV.AOR.PASS.3SG
'if the crossing of the river against the Massagetae should not go well' (*Hdt.* 1.208.1d)

Other nouns found in the corpus behave as the verb *básis*. Table 23 contains the most frequent combinations of satellites + deverbal nouns found in the data.

Prefixed deverbal noun	Related motion verb	Meaning (LSJ)
diábasis	*baíno:* 'come, go'	'crossing over, passage; act of crossing' (cf. LSJ)
diálusis	*lúo:* 'loosen'	'separating, parting' (cf. LSJ)
ékploos	*pléo:* 'sail'	'sailing out, leaving port' (cf. LSJ)
katadromé:	*trékho:* 'run'	'inroad, raid' (cf. LSJ)
kataphugé:	*pheúgo:* 'flee, escape'	'place of refuge; retreat' (cf. LSJ)

Table 23: Prefixed nouns derived from motion verbs

As the table shows, deverbal nouns expressing displacement derive from the different verb classes encoding the main conceptual components of motion:, i.e. basic motion verbs (e.g. *baíno:* 'go, come' → *básis* 'stepping, step'), caused motion verbs (e.g. *bállo:* 'throw, cast' → *metabolé:* 'change, transition, migration'), Manner verbs (e.g. *pléo:* 'sail' → *ékploos* 'sailing out, leaving port'), Path + Manner verbs (e.g. *feúgo:* 'flee, escape' → *katafugé:* 'place of refuge, retreat').

In addition to action nouns, the data contains some *nomina agentis* and some adjectives expressing displacement which have been included in the noun slot or category since they replace motion verbs in the predication. This is the case of the noun *ambáte:s* (poetic form for *anabáte:s*) 'one who mounts, one mounted', shown in example (133), which results from the combination of the directional prefix *aná* 'upwards' and the basic motion root *baíno:* 'go, come'. Here the noun seems to replace a relative clause.

(133) τὸν ἀμβάτην θῆρ᾽ ὡς ἕλωμεν
tòn ambáte:n thêr' ho:s hélo:men
ART.ACC.M.SG mounting.ACC.M.SG beast(M).ACC.SG when take.SBJV.AOR.1PL
'we may catch the beast who has climbed up' (*Eur. Ba.* 1107)

In (134), the adjective *khamairiphé:s* 'thrown to the ground', connected to the caused motion verb *ripto:* 'throw, cast, hurl', seem to incorporate the Goal of motion (cf. the locative adverb *khamaí* 'on the ground').

(134) ὑψοῦ δὲ θάσσων ὑψόθεν
hupsoû dè thásso:n hupsóthen
high PTC sit.PTCP.PRES.NOM.M.SG high-from
χαμαιριφὴς
khamairiphè:s
thrown_to_the_ground.NOM.M.SG
'who sits high falls from above' (*Eur. Ba.* 1111)

Analogously, two compounds etymologically related to the suppletive Manner verb *trékho:* 'run' (future and aorist root *dram-*), seem to constitute an instance of Ground incorporation. The two adjectives at issues are *oreídromos* 'running on the hills' (cf. *óros*

'mountain, hill'), which occurs in choral part of Euripides' *Bacchae* (135), and *hulodrómos* 'wood-ranging' (cf. *húle:* 'forest, woodland'), found in Aristophanes.

(135) Τίς ὅδ' ὀρειδρόμων
Tís hód' oreidrómo:n
INDEF.NOM.M.SG DEM.NOM.M.SG running_on_the_hills.GEN.M.PL
μαστὴρ Καδμείων ἐς ὄρος ἐς ὄρος
mastè:r Kadmeío:n es óros es óros
seeker(M).NOM.SG Cadmean to mountain(N).ACC.SG to mountain(N).ACC.SG
ἔμολ' ἔμολεν
émol' émolen
go.AOR.3SG go.AOR.3SG
'Who is this seeker of the mountain-going Kadmeans who has come to the mountain' (*Eur. Ba.* 985)

(136) θηρῶν τ' ἀγρίων πόδες ὑλοδρόμων
therôn t' agrío:n pódes hulodrómo:n
beast(M).GEN.PL PTC wild.GEN.M.PL foot.NOM.M.PL wood_ranging.NOM.GEN.PL
μὴ λυέσθων
mè: luéstho:n
NEG loosen.IMP.PRES.3PL
'and you, savage inhabitants of the woods, cease from your erratic wandering' (Aristoph. *Thes.* 47)

3.5 Modifiers

Besides the categories of verbs and nouns, a third category can express both the Path component and the Manner component of a motion event. In the present study I will use the label modifiers to refer to the items belonging to this category.

Both from a morphosyntactic and from a semantic point of view, the slot at issue appears as the most composite. As a matter of fact, it covers at least four different kinds of lexical strategies, namely:

- adverbs or adverbials;

- adjectives;

- prepositional phrases or noun phrases;

- complex modifiers (i.e. suffixed items).

Starting with Path, the kind of information modifiers can bear varies from a single portion of Path to the whole Figure's trajectory. In (137), the prepositional phrase *eis kúklo:sin* 'in circle' describes the shape of the Path traced by the moving entity.

(137) ἐπέκαμπτεν ὡς εἰς κύκλωσιν
epékampten ho:s eis kúklo:sin
upon-bend.IMPF.3SG when to circle(N).DAT.PL
'he wheeled round as in circles' (Xen. *Anab.* 1.8.23)

Example (138) shows how the encoding of Path information can be assigned to an adjective, i.e. *antíos*, meaning 'face to face, contrary, opposite':

(138) ἐλαύνει ἀντίος
elaúnei antíos
drive.PRES.3SG set_against.NOM.M.SG
'he marches agaist him' (Xen. *Anab.* 1.8.24b)

An interesting case of Path expression by means of modifiers is represented by what I have referred to as complex modifiers, that is suffixed items mainly expressing Source or Goal. As stated by Brucale (2014a: 310), the suffixes in question are «postpositive clitic elements of Indo-European origin whose application is, however, lexically constrained». There are two postpositives in the corpus, namely *-then* 'from' and *-de* 'towards'. The former is an innovative Hellenic elaboration of an original Indo-European locative particle **-dhe* (cf. Bubenik 2016: 36), which is employed for Source encoding. It mainly attaches to adverbial elements, as *ekeí* 'there, in that place' in (139), but it can also follow noun stems, as *hupso-* from *húpsos* 'height' in (140).

The other endings are added to the stem. -σε is usually added only to pronominal stems.

(139) ὥστε μήτε ἐκεῖθεν ναυτικὸν ἐᾶσαι
hó:ste mé:te ekeîthen nautikòn eâsai
inasmuch_as NEG thence naval_fee(N).NOM.SG permit.INF.AOR
Πελοποννησίοις ἐπελθεῖν
Peloponne:síois epeltheîn
Peloponnesian.DAT.M.PL upon-go.INF.AOR
'in order to forbid the passage of naval reinforcements from there to Peloponnese' (*Thuc.* 1.36.2)

(140) ὑψοῦ δὲ θάσσων ὑψόθεν
hupsoû dè thásso:n hupsóthen
high PTC sit.PTCP.PRES.NOM.M.SG high-from
χαμαιριφὴς
khamairiphè:s
thrown_to_the_ground.NOM.M.SG
'who sits high falls from above' (*Eur. Ba.* 1111)

Within the texts under analysis, the postpositive *-de* in charge of Goal expression often attaches to the accusative form of the noun for 'home', giving rise to the complex modifier *oikáde* meaning 'to one's house, home, or country, homewards'.

(141) τὰ δὲ ὀστᾶ φασὶ κομισθῆναι αὐτοῦ
tà dè ostâ phasì komisthênai autoû
ART.ACC.N.PL PTC bone(N).ACC.PL say.PRES.3SG attend.INF.AOR.PASS 3SG.GEN
οἱ προσήκοντες οἴκαδε
hoi prosé:kontes oíkade
ART.NOM.M.PL toward-have_come.PTCP.PRES.NOM.M.PL home
'His bones, it is said, were conveyed home by his relatives' (*Thuc.* 1.138.6)

Concerning the Manner component, the modifiers found in the corpus express various shades of meaning, ranging from speed to means of conveyance. The modifying expressions in the data set can co-occur with the different verb types presented in section 3.3. As claimed by Kopecka (2010: 238ff.), their functions are various:

- they can introduce some Manner information within the clause, when appearing with basic motion verbs which are underspecified as for the mode of motion

performed by the Figure;

- they can foreground the Manner information (especially when it is exceptional);

- when accompanying Manner verbs, they can further elaborate the information provided by the verbal root or «compensate (...) the absence of a fine-grained semantic component in the Manner verb itself» (Kopecka 2010: 240).

In (142) the instrumental dative *karpalímoin podôin* 'with swift feet' specifies the body part through with the generic motion expressed by *baíno:* 'go, come' is performed:

(142) βαῖνε καρπαλίμοιν ποδοῖν
baîne karpalímoin podoîn
go.IMP.PRES.2SG swift.DAT.M.DU foot(M).DAT.DU
'proceed with rapid feet' (Aristoph. *Thes.* 956)

Similarly, in (143) and (144) a noun phrase expresses the means of conveyance of the Figure's displacement.

(143) χρῆν πλοίῳ διαβαίνειν
khrên ploío:i diabaínein
be_necessary.INF.PRES boat(N).DAT.SG through-go.INF.PRES
'one had to cross in a boat' (*Hdt.* 1.186.1b)

(144) οἱ καταφυγόντες αὐτῶν ταῖς
hoi kataphugóntes autôn taîs
ART.NOM.M.PL down-flee.PTCP.AOR.NOM.M.PL 3PL.GEN ART.DAT.F.PL
ναυσὶν ἐς Μυκάλην διεφθάρησαν
nausìn es Mukále:n diephtháre:san
ship(F).DAT.PL to Mycale(F).ACC.SG through-destroy.AOR.PASS.3PL
'and after those of them who had fled with their ships to Mycale had been destroyed' (*Thuc.* 1.89.2b)

Example (145) shows how vehicles can be encoded by means of adpositional phrases. Here *epí* 'on, upon' exhibits a locative value and selects the genitive case:

(145) ἥ τε Κίλισσα ἔφυγεν ἐπὶ τῆς
hé: *te* *Kílissa* *éphugen* *epì* *tês*
REL.NOM.F.SG PTC Cilician.NOM.F.SG flee.AOR.3PL upon ART.GEN.F.SG
ἁρμαμάξης
harmamáxe:s
carriage(f).GEN.SG
'the Cilician queen took to flight in her carriage' (Xen. *Anab.* 1.2.18a)

In (146) the adjective *sporás* 'scattered, not collected, vagrant' seems to hesitate between Path and Manner encoding: in describing a multi-directional Path of the moving Figures, it simultaneously refers to a confused mode of motion.

(146) καταδιώξαντες σποράδας ἐς τὴν
katadió:xantes *sporádas* *es tè:n*
down-chase.PTCP.AOR.NOM.M.PL scattered.ACC.M.PL to ART.ACC.F.SG
ἤπειρον
é:peiron
continent(f).ACC.SG
'chasing them in disorder to the continent' (*Thuc.* 1.49.5a)

3.6 Summary and conclusions

This chapter has presented the inventory of lexical and grammatical tools in charge of Path and Manner expression in Ancient Greek, namely satellites, adnominals, verbs, nouns, and modifiers.

In particular, the corpus analysis has confirmed the existence of a rich repertory of directional particles behaving as both satellites and prepositions, already noticed in the literature. Furthermore, despite the preference towards Satellite-Framed strategies, the Ancient Greek data has revealed the presence of a number of Path verbs (rather typical of the Verb-Framed type) which are far from representing an exception within the data set.

As for the Manner component, the main results concern the category of modifiers, which includes heterogeneous elements belonging to different word classes. With respect to Ancient Greek Manner verbs, their type and token frequency has proven lower compared to other languages classified as Satellite-Framed.

As announced at the beginning of the chapter, the data presented so far aimed at introducing the main features of Ancient Greek in relation to the motion domain, as well as at preparing the ground for the investigation of three main topics, namely the difference between an overt and a covert encoding of spatial meaning (cf. Chapter 4), the distribution of Path and Manner information across the clause (cf. Chapter 5), and the Source-Goal asymmetry.

While in the present chapter each morphosyntactic has been considered in isolation, in Chapter 4 the analysis will concern the interaction between the different categories at issue, and the main constructional patterns in which they participate.

Chapter 4. Constructional Encoding of Path and Manner

In this chapter the morphosyntactic tools involved in motion expression will be investigated in their interaction with one another, i.e. within the syntactic templates they participate in. In particular, the main constructions encoding spontaneous motion will be presented with a special focus on the semantic compatibility between satellites, adnominals, and verbs, as well as some, so to speak, more "peripheral" patterns, which rely on constructional meaning to convey additional spatial information. As the Ancient Greek data will show, the different strategies exploited for the expression of motion events and, more specifically, of the Path component, constitute a cline proceeding from a more explicit (overt, compositional) towards a more implicit (covert, idiomatic) encoding.

As far as the semantic components are concerned, the attention will be on Path, both by virtue of its centrality within the conceptual architecture of motion events and due to the wide range of options available for its description. Manner will be recalled concerning the verbal semantics.

In the following sections the *Intransitive Motion Construction* as defined within the theoretical framework of Construction Grammar (cf. Goldberg 1995), as well as its extensions, will be analysed and compared to three constructions carrying some hidden (or covert) spatial meaning, namely the *Parallel-Goal* Construction, the *Constructio Praegnans* and two Idioms expressing displacement.

4.1 Overt encoding

The constructional patterns showing a more overt and compositional encoding of motion envisage each morphosyntactic slot to explicitly provide at least one piece of spatial information. The meaning of each device is quite transparent, even when it is the result of an interaction between different elements (see, for instance, the preposition + case marker

combinations forming the adnominals).[73]

As the analysis will show, this first type of motion encoding proves more "central" in the texts under analysis, both in terms of frequency and of contextual freedom. Thus, the compositional encoding of motion occurs in about 94% of cases (i.e. 1536 occurrences out of 1627). It has a wide applicability to a number of different situations, including:

- both spontaneous and caused motion;
- all the types of Figures (cf. Chapter 3);
- different types of Grounds;
- all the verb types (cf. Chapter 3);
- both the Path and the Manner component.

The main syntactic templates fulfilling these criteria are the *Caused-Motion Construction* and the *Intransitive Motion Construction* (cf., *inter alia*, Goldberg 1995). For the purpose of the present dissertation, only the latter will be analysed in details.

4.1.1 The *Intransitive Motion Construction* and its extensions

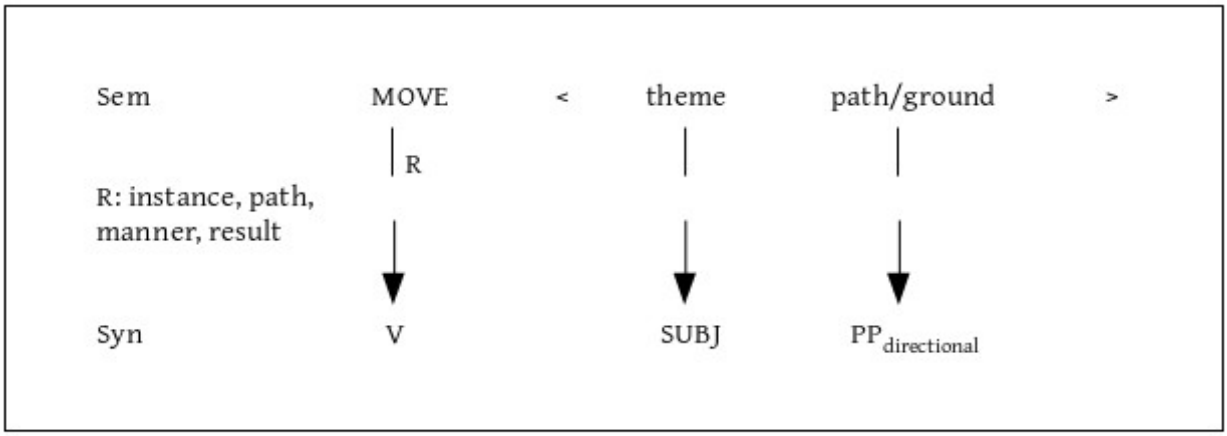
Within the framework of *Construction Grammar* in the version adopted here (cf., *inter alia*, Goldberg 1995; Rohde 2001; Stefanowitsch 2013), constructions are described as conventionalized form-meaning pairings that exist independently of individual linguistic items and correspond to abstract schemas. Each construction has its own central sense, which must be compatible with the semantics displayed by all the elements taking part in

73 It is worth stressing that, besides the information present at the lexical and grammatical level within the motion clause, inference also plays a role in motion expression. As a matter of fact, both motion event encoding and decoding result from «the interplay of inferential factors and linguistic means of different sorts distributed in the sentence which interact with the verb meaning» (cf. Iacobini & Vergaro 2014: 211). In other words, even in cases of overt motion encoding, some piece of motion-related meaning lies outside the clause, in the speakers' extralinguistic knowledge.

the pattern.

The core meaning of a given construction often designates what Goldberg (1995: 39) calls a *humanly relevant scene*. According to Langacker (1991: 294) «certain recurrent and sharply differentiated aspects of our experience emerge as archetypes, which we normally use to structure our conceptions insofar as possible. Since language is a means by which we describe our experience, it is natural that such archetypes should be seized upon as the prototypical values of basic linguistic constructs». By virtue of its prominence within human experience, motion belongs to this group of humanly relevant scenes to which abstract linguistic patterns correspond.

Following Rohde (2001: 242) and Stefanowitsch (2013: 227), Illustration 3 shows the core schema of the *Intransitive Motion Construction* (henceforth IMC) encoding spontaneous motion .



e.g. *run* (children out of (room))

Illustration 3: The *Intransitive Motion Construction*

In the full instantiation of the IMC, that is its most prototypical form, the verb has to lexicalize the Motion component, while the adnominal is in charge of Path expression. The semantic role of the subject is that of Figure, i.e. the entity which undergoes a change of location, or whose location is being specified. As for the semantic relations that may hold between the verb and the construction, they are mainly four:

- the *instance* relation, allowing basic motion verbs, such as *move* or *go*;

- the *path* relation (typical of the *Verb-framed* type), allowing directed motion verbs, such as *arrive* or *withdraw*;

- the *manner* relation (typical of the *Satellite-framed* type), allowing the composite group of verbs that specify some aspects of the mode of motion, such as *walk*, *leap* or *fly*;

- the *result* relation, allowing verbs which refer to «processes that are directly caused by the motion, such as emissions of light or sound» (Stefanowitsch 2013: 228).[74]

The use of the core schema exemplified in Illustration 3 can be extended according to the morphosyntactic tools available in a language for motion encoding. As shown in Chapter 3, in addition to verbs and adnominals, Ancient Greek can also resort to satellites and modifiers carrying some piece of motion-related information. The constructions expressing spontaneous motion in the corpus under analysis can be classified on the basis of the number of slots involved in Path and Manner encoding. Table 24 shows the resulting four patterns and their frequency of occurrence in the corpus. The occurrences of spontaneous motion expressed by means of an intransitive motion verb constitute about 68% of cases (i.e. 1108 occurrences out of the 1627 composing the data set).[75]

74 Only the verbs participating in the relations of *instance*, *path* and *manner* have been analysed for the purposes of the present chapter.

75 The cases in which spontaneous motion is encoded by means of labile verbs have been excluded from the count.

Construction	Syntactic Template	Example
1 slot 17,6% (195)	Verb 17,6% (195)	***hêke*** *ho Sardie:nòs kêrux* 'The Sardian herald came' (*Hdt.* 1.83.1a)
2 slots 53,3% (589)	Verb Sat 26,6% (294)	***prosérkhetai*** *gàr ho prútanis kho: toxóte:s* 'Here comes the Magistrate with his Scythian' (Aristoph. *Thes.* 923)
	Verb Adn1 21,5% (238)	***nosté:santa*** *dé min* ***es*** *toû Kambúseo:* ***tà oikía*** 'When he returned to Cambyses' house' (*Hdt.* 1.122.1)
	Verb Adn2 0,2% (2)	*tís agroió:tas* ***peláthei thrigkoîs****?* 'Who is the rustic that approaches this sacred enclosure?' (Aristoph. *Thes.* 58)
	Verb Mod 5% (55)	*ei mèn oûn* ***állosé*** *poi boúlesthe* ***pleîn****, ou ko:lúomen* 'So if you want to sail anywhere else' (*Thuc.* 1.53.4b)
3 slots 27,7% (308)	Verb Adn1 Mod 1,3% (15)	*é:n te* ***epì tè:n khó:ran*** *he:môn* ***pezêi ío:sin*** 'If they march against our country we will sail against theirs' (*Thuc.* 1.143.4)
	Verb Adn2 Mod 0,1% (1)	***leípousi*** *dè: kaì* ***tòn lóphon*** *hoi hippeîs: ou mè:n éti hathróoi all'* ***álloi állothen*** 'The horsemen at once proceeded to leave the hill; they did not keep together, however, as they went, but scattered in different directions' (Xen. *Anab.* 1.10.13b)
	Verb Sat Mod 3,7% (41)	*khrên* ***ploío:i diabaínein*** 'One had to cross in a boat' (*Hdt.* 1.186.1b)
	Verb Sat Adn1 22,1% (245)	***ambàs es eláte:n*** *hupsaúkhena* 'Ascending a lofty pine' (Eur. *Ba.* 1061)
	Verb Sat Adn2 0,5% (6)	*ho:s* ***ekpepheugò:s toùs ekhthroús*** 'That he had escaped from his enemies' (*Hdt.* 1.59.4b)
4 slots 1,4% (16)	Verb Sat Adn1 Mod 1,4% (16)	***apépleon opíso: es tè:n Pho:kaíe:n*** 'They sailed back to Phocaea' (*Hdt.* 1.165.3d)

Table 24: Overt encoding of spontaneous motion[76]

In the *1-slot* pattern, the verb carries all the motion information in the clause. Since it constitutes the centre of predication, it goes without saying that the verb is the only essential category involved in motion encoding. However, motion verbs can be replaced by nominalizations predicating displacement. This option is nevertheless very rare in the texts and has not been investigated in the present chapter.

The *2-slots* pattern represents the largely preferred type of construction (53% of cases).

76 The abbreviations in the table can be decoded as follows: Sat = Satellite; Adn1 = Prepositional Phrase; Adn2 = Noun Phrase; Mod= Modifier.

Among the four options the most frequent is Verb+Sat. The combinations between verbs and adnominals are very common when the adnominal is a prepositional phrase; this pattern corresponds to a fully instantiated IMC. Only two cases are attested in which a motion verb combines with a noun phrase (i.e. a bare case marker). In the Verb+Modifier pattern, occurring in about 5% of cases, the modifier can encode either Path, as in the example provided in the table above, or Manner information.

The *3-slots* template appears in about 28% of cases. Among the different subpatterns involved, the most recurrent one envisages the co-occurrence of a motion verb, a satellite and a prepositional phrase within the same clause. In the option Verb+Sat+Mod, the satellite and the modifier usually differ as for the kind of spatial information they encode: even when both refer to Path, the subcomponents they express are not exactly the same. The *3-slots* constructions in which bare case markers and relational preverbs appear (i.e. Verb+Sat+Adn2 or Verb+Adn2+Mod) prove quite rare.

The *4-slots* template which, by virtue of the high number of slots involved, requires a certain linguistic effort, is attested in only 1,4% of cases within the whole corpus.

In the next section, the patterns mentioned so far will be analysed from a semantic perspective, taking the category of satellites as the starting point. In particular, the following research questions will be addressed: how do satellites combine with motion verbs and adnominals? Do satellites encoding a specific Path segment prefer particular verb types? Are there actual restrictions as regards the combinations between satellites, verbs and adnominals? Which are the most, so to speak, "friendly" satellites and adnominals? Which are the most "solitary"?

4.1.2 Semantic relevance and preferred combinations

In this paragraph the combination between satellites and verbs, as well as the combination between adnominals and verbs will be analysed from a semantic point of view. The interplay between satellites and adnominals will be discussed in chapter 5 with respect to the distribution of Path information within the motion clause.

4.1.2.1 Co-occurrence of satellites and verbs

According to Bybee (1985: 13),

> «a meaning element is relevant to another meaning element if the semantic content of the first directly affects or modifies the semantic content of the second. If two meaning elements are, by their content, highly relevant to one another, then it is predicted that they may have lexical or inflectional expression, but if they are irrelevant to one another, then their combination will be restricted to syntactic expression.»

In the light of such premise, since satellites and motion verbs form a morphological unit, in order to combine together, they must share some piece of semantic information or, at least, show some semantic affinity.

Though no proper systemic restrictions seem to apply to the satellite-plus-verb combinations, a certain degree of *conceptual proximity* (cf. Mendez Dosuna 1997: 590) between directional particles and verbal roots is required in order for the composition to take place. On the basis of their intrinsic meaning, some verbs are, so to say, "lexically predestined" to be associated with one of the Path segments and, thus, to select a semantically appropriate preverb. Such a pattern is evident when a satellite expressing Median combines with a verb which is not insensitive to Path information, consistently stressing the direction of motion: see, for instance, *aná* 'upwards, from bottom to top' + *pétomai* 'fly'; *katá* 'downwards, from top to bottom' + *pípto:* 'fall'. As to be expected, the same holds true for those verbal roots whose meaning is highly compatible with a specific part of Path: *ek* 'out of'/*apó* 'from' + *pheúgo:* 'escape, flee'; *diá* 'through' + *phoitáo:* 'roam'. According to Méndez Dosuna (1997: 583) a possible explanation to such combinations lies in the fact that «univerbation is not blind to semantics», and this is why satellites and verbs displaying similar directional nuances tend to co-occur.

When looking at the whole inventory of satellites employed in motion clauses in the corpus, the scenario proves even more intriguing: as a matter of fact, each of the satellites has its own *combinatory potential* (cf. Filipović 2007: 74ff.), which can be defined on the basis of the number of verbs or adnominals with which a given satellite "accepts" to co-occur.

Table 25 show the most frequent combinations between satellite and verb types.

	Basic Motion Verbs	Goal-oriented Path verbs	Manner Verbs	Source-oriented Path verbs	Non-motion Verbs	Path-plus-Manner verbs	Median-oriented Path verbs	Total
Source Satellites	11,7% (70)	16,3% (98)	4,8% (29)	6,7% (40)	3,2% (19)	2% (12)	0,3% (2)	45% (270)
Goal Satellites	15,3% (92)	0,5% (3)	4,3% (26)	0,8% (5)	4,2% (25)	1,7% (10)	0,3% (2)	27,2% (163)
Median Satellites	14,3% (86)	1% (6)	4,2% (25)	5,3% (32)	0	2,2% (13)	0	27% (162)
Locative Satellites	0,3% (2)	0,3% (2)	0	0	0	0,2% (1)	0	0,8% (5)
Total	41,7% (250)	18,2% (109)	13,3% (80)	12,8% (77)	7,3% (44)	6% (36)	0,7% (4)	100% (600)

Table 25: Satellite-verb combinations (types)

Generally speaking, Source satellites exhibit the highest combinatory potential, in that they are prone to co-occur with all the verb types identified in the sample. The preferred combination for a Source satellite is with a Goal-oriented Path verb; this pattern occurs in about 16,3% of cases (i.e. 98 occurrences out of 600).[77] The second verb type by frequency is that of basic motion, which appears with a Source satellite in about 11,7% of cases. The high versatility of the roots which express a generic displacement of the Figure, without further specifying Path or Manner, relates to the principle of lexical generality described in Bybee (1985: 16): «if a semantic element has high content, i.e. is very specific, it simply will not be applicable to a large number of stems (...). In order for the form to occur commonly enough to be reduced and become bound, it must have a meaning that is widely applicable – that is, general enough to be appropriately combinable with every stem of the syntactic category». Consequently, considering the combinability of Source satellites, one could claim in favour of a more general semantics of the latter compared to Goal and Median satellites. This question will be addressed in Chapter 6.

Analogously to Source satellites, Goal satellites too combine with all the verb types identified in the corpus. However, as shown by the percentages in Table 25, the latter do not combine with Path verbs to the same extent as the former. In fact, the preferred option for Goal satellites is the combination with basic motion verbs (15,3% of cases), followed by Manner verbs (4,3% of cases). Among Path verbs, the least represented subgroup is that of Median-oriented roots, for both Goal and Source satellites.

77 600 is the total number of occurrences in which a satellite combines with a verb in the whole corpus.

Median satellites are not as flexible as Source and Goal satellites. As a matter of fact, they prove resistant to the co-occurrence with some specific verb types, namely non-motion verbs and Median-oriented Path verbs. Conversely, they do combine with Source-oriented Path verbs and Manner verbs, but the favoured group is that of basic motion.

As to be expected due to the dynamic character of motion events, satellites expressing Location are the least frequent category, as well as the least, so to speak, combinable. In contexts of spontaneous motion, they only appear in 5 cases out of 600, and they combine solely with basic motion verbs, Goal-oriented Path verbs and Path + Manner verbs. When co-occurring with directional verbs expressing both spontaneous and caused motion, Location satellites are used in a specific construction traditional grammars refer to as *Constructio Praegnans*. This peculiar template will be discussed separately in section 2.2 of the present chapter.

The analysis of the combinations between satellites and verbs has shed new light on the issue of semantic relevance. In order for two elements to combine together within the same clause, they do not necessarily have to express the same piece of semantic information. The case of Source and Median satellites is particularly illuminating in this respect: in contrast to the expected patterns (Source satellite + Source-oriented Path verb, Median satellite + Median-oriented Path verbs), they respectively prefer to combine with Goal-oriented verbs and Source-oriented verbs. Given such a premise, the concept of semantic relevance should be interpreted in terms of complementarity rather than similarity of semantic information. Crucially, in order to be relevant to one another, two meanings do not have to coincide, or to be redundant, but rather to reveal themselves as compatible.

Furthermore, in line with the lexical generality principle, Manner verbs do not manifest the same combinatory potential as basic motion verbs, even if they both are neutral to Path information. Such a scenario could be explained as the consequence of the lexical specificity of Manner verbs; in fact, as stated by Kopecka (2010: 240): «some verbs that have a very salient Manner meaning appear to be more constrained in their combinatorial possibilities than verbs in which Manner meaning is less specific».

What has been claimed so far finds further evidence when taking into account the combinations between the ten most frequent satellites and the most frequent verb encoding spontaneous motion for each type summarized in Table 26.

Satellite/Verb	*hiknéomai* 'reach'	*érkhomai* 'go'	*kho:réo:* 'withdraw'	*pléo:* 'sail'	*eimí* 'be'	*pheúgo:* 'flee'	*ameíbo:* 'pass'	Total
apó 'from'	31,8% (96)	5% (15)	4,6% (14)	3% (9)	-	1,3% (4)	-	45,7% (138)
pará 'near'	-	5% (15)	00,7% (2)	0,7% (2)	6% (18)	0	0,3% (1)	12% (36)
ek 'out of'	0,3% (1)	4,6% (14)	1,3% (4)	2% (6)	0,3% (1)	1% (3)	-	9,6% (29)
epí 'upon'	-	5,6% (17)	1,3% (4)	2,6% (8)	-	-	-	9,6% (29)
aná 'upwards'	-	1,6% (5)	5,3% (16)	0,7% (2)	-	-	-	7,6% (23)
katá 'downwards'	-	1,3% (4)	-	1,6% (5)	-	2% (6)	-	5% (15)
eis 'to'	0,3% (1)	2,6% (8)	-	0,3% (1)	-	-	-	3,3% (10)
prós 'at'	-	2% (6)	-	0,7% (2)	0,7% (2)	-	-	3,3% (10)
diá 'across'	-	0,7% (2)	-	0,7% (2)	-	1,3% (4)	-	2,6% (8)
pró 'forth'	-	1,3% (4)	-	-	-	-	-	1,3% (4)
Total	32,4% (98)	29,9% (90)	12,6% (38)	12,2% (37)	7% (21)	5,6% (17)	0,3% (1)	100% (302)

Table 26: Most frequent verbal compounds expressing spontaneous motion

In line with the results shown in Table 25, the most combinable satellite is the Source preverb *ek* 'out of', which combines with six out of the seven most frequent motion verbs occurring in compounds within the corpus. The six roots at issue belong to different verb types: basic motion verbs (*érkhomai* 'go'), Path verbs (*hiknéomai* 'reach', *kho:réo:* 'withdraw'), Manner verbs (*pléo:* 'sail'), Path-plus-Manner verbs (*pheúgo:* 'flee') and non-motion verbs (*eimí* 'be'). Despite showing a slight preference towards the basic motion verb *érkhomai* 'go, come', *ek* can also combine with the Source-oriented verb *kho:réo:* 'withdraw' or the Manner verb *pléo:* 'sail'.

The second satellite participating in the highest number of possible combinations is *apó* 'from'. This Source preverb finds its preferred root in the Goal-oriented Path verb *hiknéomai* 'reach, arrive', with which it forms a highly lexicalized compound. Similarly to its elative counterpart *ek*, *apó* also combines with the basic motion verb *érkhomai* 'go, come', with the

Source-oriented verb *kho:réo:* 'withdraw' and with the Manner verb *pléo:* 'sail'. However, in contrast to *ek*, it proves incompatible with respect to the stative verb *eimí* 'be'.

The Goal satellite *pará* 'near, by, to the side of' co-occurs with four out of the seven most frequent verbal roots encoding spontaneous motion. Besides the expected combination with *érkhomai* 'go, come', *pará* 'near' displays a peculiar behaviour in that it is the satellite which appears with the stative verb *eimí* 'be' the most.[78] Furthermore, it is the only preverb combining with the Median-oriented verb *ameíbo:* 'pass'. Clearly, the particular semantics of *pará* triggers the composition with specific verb types.

Most of the satellites in the sample, namely *aná* 'upwards', *diá* 'across, through', *eis* 'towards, to', *epí* 'upon', *katá* 'downwards', *prós* 'at', combine with only three out of the seven most representative verbs for each type. The Median preverb *pró* proves the most resistant to composition, in that it only appears with basic motion verbs.

Besides the most common combinations resulting from the intersection between the most frequent satellites and the most frequent motion verbs summarized in Table 26, each of the preverbs at issue has its own peculiar preferences that prove intimately connected to its semantics.

As for the Source satellites, *apó* 'from' forms a highly lexicalized compound with the non-motion verb *allásso:* 'change, alter', meaning 'depart from a place'. This pattern occurs in about 6,3% of cases (i.e. 12 out of the 190 occurrences in which *apó* appears in preverbal position) and it is employed by all the three authors considered in this study. As to be expected from its semantics, *ek* 'out of' is highly compatible with the Source-oriented Path verb *leípo:* 'leave', with which it appears in about 17,6% of cases (i.e. 13 out of the 74 occurrences in which *ek* is employed as a satellite). Furthermore, *ek* is the only preverb co-occurring with the non-motion verb *dído:mi* 'give', with which it expresses the flowing of a river into the sea. It is worth mentioning that *apó* and *ek* are the only satellites to attach to the verb *didrásko:* 'run away', which fuses together Path and Manner information, and to the denominal root *-de:méo:*, which is only attested in verbal compounds (e.g. *apode:méo:* 'go abroad, be away from home'; *ekde:méo:* 'travel through, be abroad').

Among the Goal satellites, besides the usual combination with basic motion verbs (*érkhomai* 'go, come' with all the four preverbs at issue, *baíno:* 'go, come' mostly with *eis* 'towards, to'), both *pará* 'near, by, to the side of' and *prós* 'to, at' exhibit a specific bias

78 The pattern in question belongs to the bigger category of the so-called *constructio praegnans*. It will be examined in further details in section 4.2.2 of the present chapter.

towards the stative verb *eimí* 'be'. Moreover, *pará* is the only preverb which is able to combine with the other stative root in the sample, i.e. *gígnomai* 'be, exist, happen' (about 8,7% of cases). The core satellite *eis* 'towards, to' peculiarly combines with *pípto:* 'fall' (about 12% of cases), while *epí* 'upon, against' displays a good compatibility with the Manner verb *pléo:* 'sail' (about 13% of cases).

All Median satellites except *pró* 'forth' show a strong preference for the basic motion verb *baíno:* 'go, come' (*aná* 'upwards' 28,5% of cases; *diá* 'across, through' 74,3% of cases; *katá* 'downwards' 27% of cases). Probably as a result of its meaning 'backwards' attested within verbal compounds, the directional preverb *aná* combines with the Source-oriented verb *kho:réo:* 'withdraw' in about 38% of cases (i.e. 16 occurrences out of 42); additionally, it is the only satellite agglutinating to the verb *strépho:* 'turn, twist'. Its counterpart *katá* 'downwards' likes to combine with the Path-plus-Manner verb *pheúgo:* 'flee, escape'.

As already shown in Table 26, *pró* is the most resistant to combination among the satellites in the data set under analysis: as a matter of fact, its range of possible combinations is sensitively smaller compared to that of the other preverbs. In order for *pró* to combine with a verbal root, the verb has to be general in meaning (e.g. *eîmi*, *érkhomai* 'go, come').

4.1.2.2 Co-occurrence of adnominals and verbs

Taking into account the co-occurrence of motion verbs and adnominals, the scenario is slightly different from the one drawn by the combinations between satellites and motion verbs. As a matter of fact, in the long run, adnominals seem to be more adaptable than satellites, probably as a result of the presence of the noun expressing the Ground element. No great gap subsists between the three main types of directional adnominals.

Table 27 accounts for the most frequent patterns of co-occurrence between the types of verbs encoding spontaneous motion and the types of adnominals describing the different Path segments, as well as Location, in the texts under analysis.

	Basic Motion Verbs	Manner Verbs	Goal-oriented Path verbs	Source-oriented Path verbs	Path-plus-Manner verbs	Non-motion Verbs	Median-oriented Path verbs	Total
Goal Adnominals	30,3% (156)	16,3% (84)	17,9% (92)	6% (31)	3,5% (18)	2,3% (12)	0,8% (4)	77,1% (397)
Source Adnominals	4,7% (24)	5,2% (27)	1% (5)	2% (10)	2% (10)	1,5% (8)	0	16,3% (84)
Median Adnominals	1,7% (9)	3% (15)	0,2% (1)	0,2% (1)	0,2% (1)	0,4% (2)	0,4% (2)	6% (31)
Locative Adnominals	0	0,4% (2)	0,2% (1)	0	0	0	0	0,6% (3)
Total	36,7% (189)	24,8% (128)	19,2% (99)	8,1% (42)	5,6% (29)	4,3% (22)	1,2% (6)	100% (515)

Table 27: Verb-adnominal combinations (types)

The most flexible category of adnominal is that of prepositional phrases expressing the Goal of motion. In fact, Goal adnominals, which are the most frequent in the corpus, can combine with all the verb types employed for the encoding of spontaneous motion. Despite preferring basic motion verbs, Goal-oriented Path verbs and Manner verbs, they often co-occur with Source-oriented and Path-plus-Manner verbs as well. Analogously, Median adnominals can co-occur with all the verb types at issue but, in contrast to Goal adnominals, they show a clear preference towards verbs of Manner. This is not surprising, given the atelic nature of some Manner verbs, based on which some scholars have formulated the principle of the *Manner-Result complementarity* (cf., *inter alia*, Levin & Rappaport Hovav 1991). By virtue of their intrinsic Manner feature, these verbs prove more compatible with the Median segment of Path, which is often conceptualized as an area rather than as a point in space. Source adnominals appear with all the verb types except Median-oriented Path verbs, and prefer roots encoding basic motion and Manner. As to be expected, locative adnominals are much less frequent than directional adnominals and, as far as spontaneous motion is concerned, they combine with Manner verbs (2 occurrences) and with a Goal-oriented Path verb (1 occurrence).

Going into the details of individual forms, the prepositional phrase *eis* 'towards, to' + accusative is the most frequent, occurring in about 47,4% of cases (i.e. 231 occurrences out of the 487 of the most frequent adnominal-plus-verb combinations). Although combining with all kinds of verbs, it shows a clear preference (about 26% of cases) towards the Goal-oriented Path verb *hiknéomai* 'reach, arrive' which, as previously stated, forms a lexicalized

compound with the Source preverb *apó* 'from'. Furthermore, *eis* + accusative is the only adnominal to occur with the non-motion verb *dído:mi* 'give', already mentioned with respect to the Goal satellite *eis* employed with the same root for the encoding of the typical motion of rivers.

The Goal adnominal *epí* 'upon, against' + accusative is the second by frequency (103 occurrences out of 487, i.e. 21,1% of cases) and often appears with the Manner verbs *pléo:* 'sail' and *strateúo:* 'march, advance with an army or fleet', probably due to their war-related meanings which proves highly compatible with *epí*'s violent nuance ('against'). Together with *eis* + accusative, the adnominal under analysis is the only prepositional phrase to combine with *strateúo:* in the whole corpus.

The third adnominal by frequency is *ek* 'out of' + genitive expressing the Source of motion. It occurs in about 11,5% of cases (i.e. 56 cases out of 487) and finds its semantic affinity with basic motion verbs (namely *érkhomai* and *eîmi* 'go, come'). It is worth mentioning that this is the only prepositional phrase co-occurring with the stative verb *gígnomai* 'be, exist, happen'.

In its prepositional use with the accusative case, the Goal marker *prós* 'to, at' preferentially combines with the basic motion verb *eîmi* 'go, come' (28% of cases, i.e. 7 occurrences out of 25).

The Source adnominal *apó* 'from' + genitive co-occurs in the same percentage of cases (about 16,6%, i.e. 4 occurrences out of 24) with three verbs belonging to different types, namely *eîmi* 'go, come' (basic motion), *pléo:* 'sail (Manner) and *kho:réo:* 'withdraw' (Path, Source-oriented). Furthermore, the prepositional phrase in question, together with *eis* + accusative, is the only one to combine with the Manner verb *pe:dáo:* 'leap, spring', encoding a sudden movement of the Figure. It is probably as a consequence of its intrinsic telicity that the verb prefers Sources and Goals rather than Medians.

Both the Goal adnominal *pará* 'near, by, to the side of' + accusative and the Median adnominal *katá* 'downwards' exhibit a bias towards basic motion verbs but, while the former prefers *érkhomai* 'go, come', the latter mostly appears with *baíno:* 'go, come'.

Lastly, the prepositional phrase *diá* 'across, through' + accusative expressing the Median part of Path is the only adnominal showing a clear preference towards the Manner verb *réo:* 'flow', employed to describe the motion of rivers.

The combinations analysed so far have revealed that motion verbs and satellites as well

as motion verbs and adnominals must share some semantic component in order to co-occur within the same clause. Considering now all the three morphosyntactic categories analysed in this section, some preliminary conclusions concerning the most frequent combinations can be drawn.

While Goals are preferentially expressed in the adnominal locus, no great gap subsists between the preverbal and prepositional occurrences of the Source particles *ek* 'out of' and *apó* 'from'.

Such a situation results in a slight prevalence within the corpus of the patterns as the one in (147), where a basic motion verb, free from any directional interpretation, is preceded by a Source preverb and followed by a Goal adnominal.

(147) ἀπῆλθε ἐς τὰς Σάρδις
apêlthe es tàs Sárdis
from-go.AOR.3SG to ART.ACC.F.PL Sardis(f).ACC.PL
'he returned to Sardis' (*Hdt.* 1.22.2)

4.1.3 An alternative to motion verbs: the *Light-Verb Construction*

In some particular contexts the motion verbs involved in the IMC can be replaced by a more analytic pattern commonly known as *Light-Verb Construction*.

Light-Verb Constructions (henceforth LVCs) are traditionally described as complex predicates composed of a semantically bleached - or light - verb and a predicative action-denoting noun (e.g. English *take a walk*; Italian *fare festa* 'celebrate, party'; Latin *mentionem facere* 'mention, commemorate'). From a lexical point of view, the predicative noun has some restriction with respect to the verb, as shown, for instance, by the Italian examples *fare una scelta* vs. **prendere una scelta, fare un viaggio* vs. **fare una partenza*. LVCs often have synthetic counterparts (e.g. Eng. *make a claim* > *claim*; It. *fare una telefonata* > *telefonare*; Fr. *faire un saut* > *sauter*) and, on the grounds of their syntax and semantics, they represent a challenge for linguistic studies, as shown by the increasing number of contributions on this topic (cf., *inter alia*, Butt 2010; Bratankova 2013; Ježek 2011).

Starting with some terminology, the English label *light verb* was first coined by Jespersen 1965, who stressed the semantic "emptiness" or underspecification of verbs like *make*, *do*,

take, *give*, *have*, *be* compared to "full" verbs such as *eat*, *sing*, *love*, *walk*. Despite the traditional view, however «the verbs are clearly not entirely devoid of semantic predicative content either: there is a clear difference between *take a bath* and *give a bath*. The verbs thus seem to neither retain their full semantic predicational content, nor are they semantically completely empty» (Butt 2010: 48). The French term *verbes supports* (cf. It. *verbi supporto* or *verbi operatore*, Sp. *verbos de apoyo*) coined by Harris (1964) refers to neutral verbs which serve as a grammatical support of the noun they co-occur with, providing it with TAM features, thus acting as verbalizers of the whole construction, and contributing to the joint predication. The German term *Funktionsverbgefüge* proposed by Hoffmann (1996) highlights the functional nature of such verbs, which require a nominal part in order to fulfil the predication.

From a formal point of view, LVCs can participate in different syntactic schemas. The most common is V + N, i.e. a transitive verb taking a nominal complement which can either be preceded by an article (e.g. Eng. *have a rest*; It. *fare una scelta*; Fr. *faire une promenade*; Sp. *dar una explicación*) or not (e.g. Eng. *have fun*; It. *prendere sonno*; Fr. *avoir peur*; Sp. *coger frío*). The presence or absence of the article mirrors different degrees of lexicalisation. In addition to the V + N template, LVCs can consist of the following patterns:

- V + PREP + N (e.g. Eng. *take into account*; It. *mettere in allarme*, *essere in ansia*);

- V + ADJ (e.g. Eng. *get cold*; Ancient Greek *éktopos eimí* 'leave a place', *lit.* 'to be away from a place', usually found in the imperative form);

- V + ADV (e.g. Eng. *get better/worse*).

As previously stated, the most common LVCs are verb-noun combinations in which a high frequency verb displaying generic meanings combines with an event denoting noun (cf. Butt 2010: 50). Light verbs are traditionally described as being semantically "empty"; however it seems worth stressing that the same verb can have both the light and the full (lexical) use, depending on the noun with which it combines. Let us consider the two Italian examples *fare una scelta* 'make a choice' vs. *fare una torta* 'bake a cake'. The first one shows a

light use of the verb *fare* 'do, make', which combines with the action-denoting noun for 'choice'; in the second example the same verb is employed in its "full" predicative meaning 'to make, to create' and selects the concrete noun *torta* 'cake'. Moreover, recent studies (cf., *inter alia*, Miguel 2008; Ježek 2011) have shown that:

- the light verb provides the construction with a meaning that cannot be derived from the noun;

- the same light verb can receive different interpretations according to the noun (e.g. It. *fare un sospiro* 'heave a sigh' < *fare* 'emanate' vs. *fare pressione* 'put pressure' < *fare* 'carry out').[79]

Generally speaking, it is possible to hypothesize that a semantically generic verb, by virtue of its high combinability, acquires different meanings depending on the contexts in which it occurs.

As far as the predicative nouns participating in LVCs are concerned, they mainly express actions, states or events. In Ježek (2011) the umbrella term employed to indicate nouns of this type is *nomina actionis*, i.e. nouns denoting temporal entities, independently on their aspectual (action, state or event) and morphological properties (deverbal or not deverbal). The *nomen actionis* applies lexical restrictions on the light verb in that not every root can appear within the construction (e.g. Eng. *I take a shower* vs. **I do a shower*). It goes without saying that, as for the combinations with light verbs allowed by the predicative noun, there are significant inter-linguistic differences (e.g. It. *fare un sonnellino*, Sp. *echar una siesta*; It. *fare un esempio*, Sp. *poner un ejemplo*; It. *fare una domanda*, Fr. *poser une question*...). As for the noun semantics, LVCs differ from idioms because in the former the noun keeps its original transparent meaning, while in the latter it develops opaque nuances derived from its literal meaning by means of metaphorical or metonymical shifts (cf. (*prendere una decisione*, *annullare una decisione* 'make a decision' vs. *prendere piede* 'become established, get a foothold'). The nouns involved in LVCs can display different degrees of referentiality. The lowest the referentiality of the noun, the highest the lexicalisation of the LVCs (cf. Heid

79 Concerning the influence on the noun semantics on the light verb, according to Ježek (2011: 29) «*(...) le sens d'un verbe général est modulé/spécifié par le sens du nom avec lequel il entre en contact sur le plan syntagmatique*».

1994). This is, for instance, the case of the Italian LVC *prendere sonno* 'get sleep', in which the lack of article between the verb and the noun is an evidence in favour of high level of lexicalisation of the construction.

The following sections investigate some LVCs employed for motion encoding in Ancient Greek. As for the data set, the five texts belonging to the corpus constitute the core of the sample. Once the most frequent verb-noun combinations had been identified, the lexical research tool on the TLG has been exploited in order to check the use of such constructions within other Ancient Greek texts dating back to the Classical period.

4.1.3.1 Main syntactic templates

The data analysis has revealed that Ancient Greek LVCs employed for motion encoding fit into two main syntactic templates. In the first one (V + N), a transitive light verb combines with a predicative noun in the accusative case. This pattern is exemplified by the example (148), in which the verb *poiéo:* 'do, make' governs the noun for 'acquisition, possession', preceded by the definite article. The literal translation of the LVC at issue would be 'making the acquisition of the wealth'.

(148) οἱ παρὰ θάλασσαν ἄνθρωποι μᾶλλον ἤδη τὴν
hoi parà thálassan ánthro:poi mâllon é:de: tèn
ART.NOM.M.PL beside sea(F).ACC.SG man(M).NOM.PL more already ART.ACC.F.SG
κτῆσιν τῶν χρημάτων ποιούμενοι
ktêsin tôn khre:máto:n poioúmenoi
acquisition(F).ACC.SG ART.GEN.PL good(N).GEN.PL do.PTCP.PRES.M/P.NOM.M.PL
βεβαιότερον ᾤκουν
bebaióteron ó:ikoun
more_firm.ACC.N.SG inhabit.IMPF.3PL
'The coast populations now began to apply themselves more closely to the acquisition of wealth, and their life became more settled' (*Thuc.* 1.8.3)

The second pattern (V + Adj) consists of a stative light verb combining with an adjective in the nominative case. This syntactic schema is shown in (149).

(149) ἔκτοπος ἔστω
éktopos *ésto:*
away_from_a_place.NOM.M.SG be.IMP.PRES.3SG
'let him get out of the way indoors' (*Eur. Ba.* 69)

4.1.3.2 Light verbs

As for the verbs that appear most frequently in LVCs encoding motion in Ancient Greek, the first by frequency is *poiéo:* 'make, do'. It is attested especially in prose (i.e. within the historical texts) and it proves versatile in that it can select the highest number of different predicative nouns expressing motion.

(150) ὁδὸν ἐποίεε
hodòn *epoíee*
journey(f).ACC.SG do.IMPF.3SG
'he made the journey' (*Hdt.* 1.211.1b)

The second light verb by frequency is *ékho:* 'have, hold'. In contrast to *poiéo:* 'make, do' it is more common in poetry than in prose and it displays limited combinability as for the nouns it can occur with.

(151) νόστον ἄθλιον πάλιν σχήσουσι
nóston *áthlion* *pálin* *skhé:sousi*
return(M).ACC.SG miserable.ACC.M.SG back have.FUT.3PL
'they will have a miserable return' (*Eur. Ba.* 1337)

Two more verbs behave as light verbs within LVCs, namely *híste:mi* 'make to stand, set up' and *títhe:mi* 'set, put, place'.[80] Both roots occur more frequently in the dramatic texts and combine with few *nomina actionis* compared with *poiéo:* 'make, do'. Examples (152) and (153) respectively show one context of use for each of the verbs at issue.

80 According to Cock (1981: 24), the employment of *títhe:mi* 'set, put, place' within the LVC is anterior to that of *poiéo:* 'make, do', which as a matter of fact is completely absent in Homer.

(152) οἵαν μ᾽ ἄρ᾽ ἔθου λώβαν
hoían m' ár' éthou ló:ban
such_as.ACC.F.SG 1SG.ACC PTC put.AOR.2SG outrage(f).ACC.SG
'What a ruin have you brought (=lit. put) upon me' (Soph. Trach. 996)

(153) πρῶτον εὐκύκλου χορείας εὐφυᾶ
prôton eukúklou khoreías euphuâ
first well_rounded.GEN.F.SG dance(f).GEN.SG well_grown.ACC.F.SG
στῆσαι βάσιν
stêsai básin
make_stand.INF.AOR step(f).ACC.SG
'we are going through the rhythmic steps of the round dance for the first time' (Aristoph. *Thes.* 968)

An important feature of Ancient Greek LVCs, already noticed in Ittzés' work on Sanskrit, Latin and Greek periphrastic constructions involving the verb 'to do' (2013), is the massive use of the middle voice.[81] According to some scholars (cf., *inter alia*, La Fauci 1979, 1988; Cock 1981), it could be used to mark the use of the verb as a support (or light) verb, as opposed to its causative employment. In the case of LVCs the middle voice would thus work as an antipassive in that it detransivizes the construction, emphasizes the Agent role of the subject (stressing its interest in the action) and relegates the predicative noun to the role of *chômeur* object exploiting its non-referentiality (cf. Marini 2010: 148, 177).

An effective example of the distribution of the two voices (active and middle) according to the different function covered by the verb is provided by the comparison between (154) and (155), where the verb *poiéo:* 'make, do' combines with the noun *odós* 'road, street, journey, travel'. In line with what previously stated, when the noun at issue is employed in its concrete meaning of 'road, street', the verb occurs in the active voice and performs its full lexical use ('make' = 'create') (154). Conversely, it takes the middle morphology when the noun has its action-denoting meaning of 'journey, travel' (155).

(154) πρῶτον μὲν τὴν ὁδὸν στενοτέραν
prôton mèn tè:n hodòn stenotéran
first PTC ART.ACC.F.SG journey(f).ACC.SG narrower.ACC.F.SG

81 According to Marini (2010: 158), the recourse to the middle voice as a morphosyntactic marker of the light use of a verb is an ancient phenomenon, dating back to the Mycenean phase of the Ancient Greek language.

ποιήσας
poié:sas
do.PTCP.AOR.NOM.M.SG
'first he made the road narrower' (Dem. 55 22)

(155) τὴν ὁδὸν ποιευμένους πρὸς
tè:n hodòn poieuménous pròs
ART.ACC.F.SG journey(f).ACC.SG do.PTCP.PRES.M/P.ACC.M.PL towards
ζέφυρον ἄνεμον
zéphuron ánemon
westerly_wind(M).ACC.SG wind(M).ACC.SG
'making the journey towards the west' (*Hdt.* 2.32.5)[82]

4.1.3.3 Predicative nouns

As for the nouns occurring in LVCs, two main types have been found in the corpus. The first group includes nouns denoting both concrete entities and actions, as the previously mentioned *hodós* 'of Place, way, road; as an Action, travelling, journeying' (cf. LSJ), or *stólos* 'equipment, armament; journey, travel', which in (156) occurs with *poiéo:* 'make, do' in the expected middle voice.

(156) ὥσπερ πάλιν τὸν στόλον Κύρου
hó:sper pálin tòn stólon Kúrou
as back ART.ACC.M.SG journey(M).ACC.SG Cyrus(M).GEN.SG
ποιουμένου
poiouménou
do.PTCP.PRES.M/P.GEN.M.SG
'just as if Cyrus were going home again' (Xen. *Anab.* 1.3.16)

A peculiar feature of the Ancient Greek language is that these nouns can take directional prefixes, exactly like motion verbs, see for instance from *hodós* > *éxodos* 'going out', *eísodos* 'entering, entrance', *prósodos* 'going to, approach', *káthodos* 'descent'.

The second group of *nomina actionis* consists of deverbal nouns derived from different types of motion verbs. Such nouns, analogously to those belonging to the first group, can

82 It is worth mentioning that in Ancient Greek winds were used to refer to directions.

occur either in their bare form or prefixed. Among the non-prefixed ones, the most frequent are *básis* 'stepping, step; rhythmical or metrical movement'; *nóstos* 'return home; travel, journey'; *plóos* (Att. contr. *Ploûs*) 'sailing, voyage'; *poreía* 'mode of walking or running, gait; journey; march'; *strateía* 'expedition, campaign'. In (157) *strateía* occurs in the plural number with the usual *poiéo:* in the middle voice. It seems worth stressing that the plural number is commonly interpreted as an evidence of low referentiality.

(157) οὐδ' αὖ αὐτοὶ ἀπὸ τῆς ἴσης κοινὰς
oud' aû autoì apò tês íse:s koinàs
NEG again DEM.NOM.M.PL from ART.GEN.F.SG equal.GEN.F.SG common.ACC.F.PL
στρατείας ἐποιοῦντο
strateías epoioûnto
expedition(F).ACC.PL do.IMPF.M/P.3PL
'they did not make common expeditions for combination of equals' (*Thuc.* 1.15.2)

The most frequent deverbal nouns taking directional satellites in the data set at issue are *diábasis* 'crossing over, passage; act of crossing'; *diálusis* 'separating, parting'; *ékploos* 'sailing out, leaving port'; *katadromé:* 'inroad, raid'; *katafugé:* 'place of refuge; retreat'. Examples from (158) to (160) show the employment of some of such prefixed nouns within the LVC.

(158) ἐπ' ὧν τὴν διάβασιν ἐποιεῦντο
ep' hôn tè:n diábasin epoieûnto
upon REL.GEN.PL ART.ACC.F.SG through_step(F).ACC.SG do.IMPF.M/P.3PL
οἱ Βαβυλώνιοι
hoi Babuló:nioi
ART.NOM.M.PL Babilonian.NOM.M.PL
'on which the Babylonians crossed' (*Hdt.* 1.186.3)

(159) ἐν τούτῳ δὲ οἱ Σάμιοι ἐξαπιναίως
en toúto:i dè hoi Sámioi exapinaío:s
in DEM.DAT.SG PTC ART.NOM.M.PL Samian.NOM.M.PL suddenly
ἔκπλουν ποιησάμενοι
ékploun poie:sámenoi
out_of-sailing_out(M).ACC.SG do.PTCP.AOR.M/P.NOM.M.PL
'but in the meantime the Samians made a sudden sally' (*Thuc.* 1.117.1a)

(160) πρός τε τὴν Δεκέλειαν καταδρομὰς
prós te tè:n Dekéleian katadromàs
towards PTC ART.ACC.F.SG Decelea(f).ACC.SG down-run(f).ACC.PL
ποιουμένων
poiouméno:n
do.PTCP.PRES.M/P.GEN.M.PL
'making excursions to Decelea' (*Thuc.* 7.27.5)

4.1.3.4 Functions and semantics

As the examples provided so far have shown, all Ancient Greek verbs expressing motion can be replaced by their analytic counterparts, i.e. by a LVC, independently on the motion component they express. Deverbal nouns involved in LVCs expressing motion derive, as a matter of fact, from different verb classes encoding the main conceptual components of motion, namely:

- basic motion verbs, like *baíno:* 'go, come' → *básis* 'stepping, step';

- caused motion verbs, like *bállo:* 'throw, cast' → *metabolé:* 'change, transition, migration';

- Path + Manner verbs, like *feúgo:* 'flee, escape' → *katafugé:* 'place of refuge, retreat;

- Manner verbs, like *pléo:* 'sail' → *ékploos* 'sailing out, leaving port'.

The comparison between the LVCs in the data set and their synthetic counterparts occurring in the same text have shed new light on the possible functions and meanings of LVCs.

To begin with, in some contexts, LVCs can be synonyms of the predicative verbs from which they derive, that is to say the author can resort to the LVCs for arbitrary stylistic

reasons, such as avoiding the repetition, as in examples (161) and (162), which are taken from the same passage of the same text.

(161) ξυνεβούλευε μὲν πλὴν πεντακοσίων ἄνεμον
xuneboúleue mèn plè:n pentakosío:n ánemon
with-advise.IMPF.3SG PTC except five_hundred wind(M).ACC.SG
τηρήσασι τοῖς ἄλλοις ἐκπλεῦσαι
te:ré:sasi toîs állois ekpleûsai
watch_over.PTCP.AOR.DAT.PL ART.DAT.PL other.DAT.PL out_of-sail.INF.AOR
'advised all except five hundred to watch for a wind, and sail out of the place' (*Thuc.* 1.65.1a)

(162) ἔκπλουν ποιεῖται λαθὼν
ékploun poieîtai lathò:n
out_of-sailing_out(M).ACC.SG do.PRES.M/P.3SG hide.PTCP.AOR.NOM.M.SG
τὴν φυλακὴν τῶν Ἀθηναίων
tè:n phulakè:n tôn Athe:naío:n
ART.ACC.F.SG guard(F).ACC.SG ART.GEN.PL Athenian.GEN.M.PL
'he eluded the guardships of the Athenians and sailed out' (*Thuc.* 1.65.1b)

Another possible function of LVCs is the encoding of an additional aspectual nuance stressing the occasional character of the action, as in (163), where the noun for 'expedition' is employed with reference to a specific march against a specific city, while in (164) the corresponding motion verb encodes the act of marching in general.

(163) ἀπεῖπον αὐτῷ πορεύεσθαι μετὰ δυνάμεως ἐντὸς
apeîpon autôi poreúesthai metà dunámeo:s entòs
from-say.AOR.3PL 3SG.DAT march.INF.PRES.M/P with army(F).GEN.SG within
Πυλῶν
Pulôn
Pylos(M).GEN.PL
'they forbade his marching south of Thermopylae with an army' (Plb. 2.52.8)

(164) ἐκ τῶν Συρακουσῶν ἐποιεῖτο τὴν
ek tôn Surakousôn epoieîto tè:n
out_of ART.GEN.PL Syracuse(do.IMPF.M/P.3SG ART.ACC.F.SG
πορείαν ἐπὶ τὴν προειρημένην
poreían epì tè:n proeire:méne:n
expedition(f).ACC.SG upon ART.ACC.F.SG before-say.PTCP.PF.PASS.ACC.F.SG
πόλιν
pólin
city(f).ACC.SG
'he made an expedition from Syracuse against that city' (Plb. 1.11.8)

In some contexts, the predicative noun involved in the LVC is semantically richer than the verb from which it derives. This is the case of *básis* 'stepping, step' in (166), which refers to a rhythmic movement (cf. LSJ), while the corresponding verb *baíno:* 'come, go' (which is preceded by the Median satellite *katá* 'downwards' in example 165) simply encodes a basic displacement of the Figure.

(165) εἶτα καταβαίνω λάθρᾳ
eîta katabaíno: láthrai
then down-go.PRES.1SG secretely
'and I was going down noiselessly' (Aristoph. *Thes.* 482)

(166) πρῶτον εὐκύκλου χορείας εὐφυᾶ
prôton eukúklou khoreías euphuâ
first well_rounded.GEN.F.SG dance(f).GEN.SG well_grown.ACC.F.SG
στῆσαι βάσιν
stêsai básin
make_stand.INF.AOR step(f).ACC.SG
'we are going through the rhythmic steps of the round dance for the first time' (Aristoph. *Thes.* 968)

The last couple of examples taken from the same author shows another function performed by the LVCs as opposed to their synthetic counterparts. While in (167) the syntactic templates forces the speaker to express the bare return of the Figure, without providing further details, the structure of (168), i.e. light verb + predicative noun, allows to specify the qualitative connotation of the action by means of an adjective. As stated by Cock

(1981: 27), in fact, «*la construction périphrastique offre du point de vue sémantique et syntaxique plus de possibilités d'emploi que le verbe simple: elle permet de distinguer le caractère défini et indéfini et le nombre; en outre, elle facilite l'emploi d'une subordonnée relative*».

(167) μόνος δὲ νοστῶ
mónos dè nostô
alone.NOM.M.SG PTC return.PRES.1SG
'I come back alone' (Eur. *Hel.* 428)

(168) νόστον ἄθλιον πάλιν σχήσουσι
nóston áthlion pálin skhé:sousi
return(M).ACC.SG miserable.ACC.M.SG back have.FUT.3PL
'they will have a miserable return' (*Eur. Ba.* 1337)

To sum up, the data concerning the employment of LVCs for motion encoding in the texts under analysis have shown that:

- the most common syntactic pattern envisages a transitive light verb selecting a predicative noun in the accusative case (superficially behaving as its direct object);

- the light verb showing the highest degree of combinability is *poiéo:* 'do';

- light verbs usually appear in the middle voice as an antipassive marker;

- as for the *nomina actionis* involved in LVCs, they may fall into two main types, i.e. non-deverbal nouns (both prefixed and non-prefixed) expressing either concrete entities or actions, and deverbal nouns (both prefixed and non-prefixed) denoting actions and events;

- Ancient Greek LVCs expressing motion exhibit a number of meanings and functions, ranging from stylistic variation, to qualitative connotation of the action encoded by the noun.

4.2 Covert encoding

«WHAT WE BUILD IS BIGGER THAN THE SUM OF TWO»

Kings of Convenience – *24, 25*

As previously stated, in the relevant literature it is unanimously recognized that Path plays a crucial role in motion encoding, since - as stated by Slobin (2004: 238) - «without a path verb or satellite or other path element, there is no motion event». However, besides the lexical and grammatical expression of this basic semantic component of motion, languages can resort to a more implicit pattern of spatial semantics in which the meaning related to the Figure's displacement cannot be fully derived from the sum of the meanings provided by each constituent, but rather relies on what could be referred to as the "power of the construction". The constructions in question carry one piece of, so to speak, *invisible* spatial meaning which is not predictable from the literal semantics of lexical and grammatical elements within the clause.

This second type of motion expression is rather "peripheral" in the data set, both with respect to the frequency of usage and to the dependence on the context. As for the frequency, the non-compositional pattern occurs in about 6% of cases (i.e. 91 occurrences out of 1627). Its employment is quite limited compared to the more overt encoding of motion, that is its use is restricted to:

- the Path component;
- human Figures or objects;
- specific types of Grounds;

- specific verb types.[83]

In the following subsections three Ancient Greek constructions showing such features will be presented, namely the *Parallel-Goal* construction, the *Constructio Praegnans* and two Idioms expressing motion. Despite their heterogeneity, the constructions at issue share at least two main semantic features: they provide some piece of hidden meaning related to the Path component, and they exhibit a partial compositionality (cf. Croft & Cruse 2004), in that they all contain some spatial information of various kind at the morphosyntactic level.

Table 28 shows the three constructions under analysis, as well as the Path information they provide explicitly by means of the lexical and grammatical tools they contain, the strategies through which they convey the hidden spatial component, and the additional semantic information they bear.

Construction	Explicit Spatial Info	Strategy	Constructional Spatial Info
Parallel-Goal Construction	Motion + Goal	Redundancy	Boundary crossing
Constructio Praegnans	Motion/Path	Coercion	Telicity
Idioms	Motion/Figure/Ground	Metaphor	Path + Pragmatic connotation

Table 28: Constructional encoding of Path in Ancient Greek

As shown by the table, the *Parallel-Goal* construction relies on the redundancy of the final segment of Path within the clause in order to encode boundary crossing. Similarly, the so-called *Constructio Praegnans* resorts to coercion (the process according to which specific contexts favor or enforce a particular reading of a word which lies outside its semantic range, cf. *inter alia* Goldberg 1995; Rohde 2001; Jackendoff 2013) for the expression of telicity. Finally the two idioms found in the corpus (i.e. 'to move the foot' and 'to strike the stern') make use of a spatial metaphor to encode Path and to add further pragmatic nuances to the utterance.

In the following paragraphs each construction will be analysed in details and empirical data will be provided exemplifying the patterns involved.

83 It is worth mentioning that each of the constructions displaying a more covert encoding of the spatial information shows its peculiarities: for instance, as for the Figures, the *Parallel-Goal* construction also occurs with rivers, while it requires bounded Grounds; idioms only appear with human Figures and prefer to combine with Goal adnominals and modifiers.

4.2.1 *Parallel-Goal* Construction

As the section of chapter 3 devoted to the inventories of satellites and adnominals involved in Path expression has revealed, Ancient Greek lacks dedicated morphosyntactic tools for the encoding of boundary crossing in the final part of Path, i.e. Goal. By contrast, both Source and Median rely on specialized particles for the description of this feature (cf. *ek* 'out of' and *diá* 'across, through').

Despite the richness and variety of Ancient Greek Goal markers, none of the morphemes in the data set under analysis proves sensitive to the boundary crossing parameter, rather they encode different kinds of spatial relations. As a matter of fact, among the most frequent Goal satellites and prepositions, *eis* 'towards, to' is the most generic (or basic) one; *epí* 'upon, against' refers to vertical configuration in that it describes a motion scene in which the Figure occupies a higher position with respect to the Ground once the displacement has taken place; *pará* 'near, by, to the side of' only selects nouns having human referents; *prós* 'to, at' implies Goal attainment or contact. Hence, it seems possible to assert the existence of a gap in the system of the Ancient Greek Goal markers. The *Parallel-Goal* Construction represents an attempt of the language to compensate this lack.

Due to the absence of references to such a pattern in the literature, the *Parallel-Goal* Construction has been named in the present dissertation after the *parallelism* pattern in Sinha & Kuteva (1995: 188), i.e. a subpattern of redundancy in which «the same schematization is actually expressed by the same morpheme in different positions in the syntagm».[84] By virtue of its properties, this pattern can be described as a simultaneous redundancy of forms and meanings.

The particular instantiation of the parallelism pattern at issue consists of a double marking of Goal realized by means of the core Goal marker *eis* 'towards, to', which appears in the clause both as a preverb attaching either to a basic motion or to a Manner verb, and as a preposition governing the accusative case.

As for the distribution of the *Parallel-Goal* construction within the texts belonging to the corpus, it occurs in about 2,6% of cases (i.e. 43 occurrences out of 1627), especially in prose; it can appear with both spontaneous and caused motion events and, interestingly, it only

84 The parallelism pattern, together with the other options of distributed spatial semantics identified in Sinha & Kuteva (1995), will constitute the core object of analysis in chapter 5 of the present dissertation. The original model will be applied to the Ancient Greek data in order to check the distribution of Path and Manner information over different constituents within the motion clause.

occurs with Grounds that can be conceived as Containers by virtue of their physical boundaries (e.g. closed spaces) or conceptual homogeneity (e.g. cities, regions).

As stated by Stefanowitsch (2013: 241) with reference to double Path encoding (i.e. Path expressed both inside and outside the verbal root), «since the path is encoded twice, it is assumed to be emphasized». The reason to exploit such an emphasis for the expression of boundary crossing could lie in the telic nature of this kind of Path (cf., *inter alia*, Aske 1989; Slobin & Hoiting 1994; Imbert 2012) as opposed to atelic Paths, i.e. non-boundary-crossing and boundary-reaching motion events (cf. Filipović 2007: 37ff.). Since a Goal implying boundary crossing is more marked already at the conceptual level, being it is conceived by the speaker as a change-of-state (*Ibid.*: 16), it requires a stronger morphosyntactic characterization.

Examples (169), (170) and (171) account for the *Parallel-Goal* Construction in contexts of spontaneous motion, respectively encoded by means of a basic motion verb (*eîmi* 'come, go' in 169), a labile Manner verb (*bállo:* 'throw' in 170) and a Manner verb (*pe:dáo:* 'leap, spring' in 171).

All the Grounds in the following examples, namely a hall in (169), a continent in (170) and a liquid Ground in (171), are entities that can be entered.

(169) ὡς ἐσήιε ἐς τὸ μέγαρον
ho:s esé:ie es tò mégaron
when to-go.IMPF.3SG to ART.ACC.N.SG hall(N).ACC.SG
'as soon as he entered the hall' (*Hdt.* 1.65.2b)

(170) οἳ ἐσέβαλον μὲν ἐς τὴν Ἀσίην
hoì esébalon mèn es tè:n Asíe:n
ART.NOM.M.PL to-throw.AOR.3PL PTC to ART.ACC.F.SG Asia(f).ACC.SG
'they had invaded Asia' (*Hdt.* 1.103.3b)

(171) εὐθὺς δὲ σὺν τούτοις εἰσπηδήσαντες εἰς τὸν
euthùs dè sùn toútois eispe:dé:santes eis tòn
at_once PTC with DEM.DAT.M.PL to-leap.PTCP.AOR.NOM.M.PL to ART.ACC.M.SG
πηλὸν
pe:lòn
mud(M).ACC.SG
'and leaping at once, with all this finery, into the mud' (Xen. *Anab.* 1.5.8d)

Examples (172) and (173) show the *Parallel-Goal* Construction with two verbs expressing caused motion, respectively *bállo:* 'throw' in (172) and *ágo:* 'lead, carry' in (173) and here in its original transitive use. Analogously to the spontaneous motion events in examples from (169) to (171), the Grounds appearing with caused motion are closed spaces (= Containers), namely a pit in (172) and a tent in (173).

(172) καὶ αὐτὸν ἐμέλλησαν μὲν ἐς τὸν Καιάδαν
kaì autòn emélle:san mèn es tòn Kaiádan
and 3SG.ACC be_destined.IMPF.3PL PTC to ART.ACC.M.SG Kaiadas(M).ACC.SG
οὗπερ τοὺς κακούργους ἐσβάλλειν
hoûper toùs kakoúrgous esbállein
REL.GEN.M.SG ART.ACC.M.PL villanous.ACC.M.PL to-throw.INF.PRES
'they were going to cast him into the Kaiadas[85], where they cast criminals'
(*Thuc.* 1.134.4)

(173) ἐπεὶ δὲ εἰς τὴν Ἀρταπάτου σκηνὴν
epeì dè eis tè:n Artapátou ske:nè:n
when PTC to ART.ACC.F.SG Artapates(M).GEN.SG tent(f).ACC.SG
εἰσήχθη
eisé:khthe:
to-lead.AOR.PASS.3SG
'after he had been conducted into the tent of Artapates' (Xen. *Anab.* 1.6.11)

To sum up, examples from (169) to (173) show different instantiation of the *Parallel-Goal* construction, in which a double occurrence of *eis* 'towards, to' (both as a preverb and as a preposition) within the same clause marks boundary crossing in the final segment of Path. As already affirmed, in order for this pattern to occur, the Ground needs to be conceived as a Container. When no boundary crossing takes place, the *Parallel-Goal* construction is not allowed and *eis* only occurs once in the clause, either as a preverb, as in (174), or as preposition, as in (175) and (176), where it selects respectively the noun for mountain and the noun for ground, i.e. entities that cannot be entered.

85 Kaiadas is the name of a pit or underground cavern in Sparta, into which state-prisoners or their corpses were thrown (cf. LSJ).

(174) λέγουσι δ' ὥς τις εἰσελήλυθε ξένος
légousi d' hó:s tis eiselé:luthe xénos
say.PRES.3PL PTC when INDEF.NOM.M.SG to-go.PF.3SG stranger(M).NOM.SG
'and they say that some stranger has come' (*Eur. Ba.* 233)

(175) ἱέμενος ἐς ὄρεα Φρύγια
hiémenos es órea Phrúgia
hasten.PTCP.PRES.NOM.M.SG to mountain(N).ACC.PL Phrygian.ACC.N.PL
'rushing to the Phrygian mountains' (*Eur. Ba.* 140)

(176) οὐδ' ἔπιπτεν ἐς μέλαν πέδον
oud' épipten es mélan pédon
NEG fall.IMPF.3SG to black.ACC.M.SG ground(M).ACC.SG
'and it did not fall to the black ground' (*Eur. Ba.* 756)

4.2.2 *Constructio Praegnans*

The second pattern of constructional encoding of spatial meaning which has resulted from the data analysis is the so-called *constructio praegnans* (*lit.* 'pregnant construction'). With this label traditional grammars of Ancient Greek (cf., *inter alia*, Smyth 1920) refer to an apparent syntactic anomaly whereby the idea of motion is missing from either the verb or the prepositional phrase. In a grammar of Hebrew such term is generally applied to «phrases which imply more than the words literally express, although there is no direct ellipsis» (Stuart 1828: 192). Nikitina & Maslov (2013: 105) define it as a particular group of «constructions with two different types of mismatch between form and meaning (...). In one, a goal of motion is encoded by a prepositional phrase that normally describes static locations, and the idea of motion is inferred from the verb (...). In the other type (...), a prepositional phrase that is normally used to encode spatial goals appears, unexpectedly, with a verb that does not seem to describe any motion».

The two English examples in (177) and (178) account for the two patterns of *constructio praegnans*:

(177) The ball fell in the water

(178) The table is standing to the left of the door

In (177) the motion verb *to fall*, encoding both Path and Manner, combines with the preposition *in*, commonly employed for the expression of locative spatial relations. In (178), the stative verb *to stand* occurs with the directional prepositional phrase *to the left*. Something analogous happens in the two types of Ancient Greek *constructio preagnans*, whose main features are:

- the lack of directional information in one of the two slots (i.e. the verb or the adnominal), which makes the pattern look like a non-fully instantiated IMC (cf. Rohde 2001);

- the presence of an additional, telic semantic nuance (the construction is said to be "pregnant" with a further meaning);

- the «impression of a static PP appearing "in place of" a directional one, or *vice versa*» (Nikitina & Maslov 2013: 138).

In the following subsections the two types of *constructio praegnans* will be analysed in details and some examples will be provided for each of the two patterns.

4.2.2.1 Type 1: motion verb + locative PP

The first type of *constructio praegnans* identified in Nikitina & Maslov (2013) consists of a motion verb selecting a locative adnominal as its complement. According to Smyth (1920: 1659a) it occurs when «a verb of motion is (...) used with a preposition with the dative to anticipate the rest that follows the action of the verb». Such a pattern is based on what Rohde (2001: 30) refers to as «the coercion of a non-dynamic prepositional phrase into a dynamic interpretation».

This type of *constructio praegnans*, also known as directive/locative alternation in the literature, is not a peculiarity of the Ancient Greek language, rather it is well-attested crosslinguistically. Nevertheless, it has proved very rare within the corpus under analysis (i.e. 5 cases in total). Such a result is not surprising, considering the progressive replacement of locative adnominals by means of specialized directional Goal markers in the passage from Archaic to Classical Greek.

As for the features displayed by this pattern in the data set, it is mostly found with events of caused motion; two prepositions take part in this construction, namely *en* 'in' which exclusively selects the dative case for the encoding of Location, and *prós* 'to, at', which can be either locative or directional depending on the case marker it governs.[86] Examples (179) and (180) respectively show the two prepositions in question recruited by the *constructio praegnans*. While (179) describes a caused motion scene in which a human Figure is thrown into the sea, (180) expresses spontaneous motion. In both cases the final phase of motion is stressed and the Figure is thought to occupy a portion of space as a result of displacement. Such an accent on the *telos* of the action is further supported by the verbal tenses, namely an aorist in (179) and a perfect in (180).

(179) τοὺς δὲ ἐν τῷ πελάγεϊ ἐπιβουλεύειν τὸν
toùs dè en tôi pelágei epibouleúein tòn
ART.ACC.M.PL PTC in ART.DAT.SG sea(N).DAT.SG upon-plot.INF.PRES ART.ACC.M.SG
Ἀρίονα ἐκβαλόντας
Aríona ekbalóntas
Arion(M).ACC.SG out_of-throw.PTCP.AOR.ACC.M.PL
'they plotted to cast Arion overboard' (*Hdt.* 1.24.2b)

(180) φόβῳ πρὸς πέδῳ πεπτώκατ᾽;
phóbo:i pròs pédo:i peptó:kat'
fear(M).DAT.SG towards ground(M).DAT.SG fall.PF.M/P.2SG
'have you fallen on the ground for the fear?' (*Eur. Ba.* 604)

86 As a preposition, *prós* can combine with all the three cases involved in the encoding of spatial relations. Prototypically, it expresses Source with the genitive case, Location with the dative, and Goal with the accusative. By contrast, within the *constructio praegnans*, the preposition encodes Goal with the dative case marker.

4.2.2.2 Type 2: non-motion verb + directional PP

The second type of *constructio praegnans* envisages a non-motion verb to occur with a directional prepositional phrase. In Smyth (1920: 1659b) it is defined as the pattern in which «a verb of rest is (...) followed by a preposition with the accusative to denote motion previous to or following upon the action of the verb: παρῆσαν εἰς Σάρδεις (they came to Sardis and were in the city) 'they arrived at Sardis' Xen. *Anab*. 1.2.2».

This second pattern displays a higher frequency in the corpus compared to the first one. The verbs which participate in the construction at issue are: verbs expressing static location, like *eimí* or *gígnomai* 'be, exist'; speech verbs (or *verba dicendi*), like *kaléo:* 'call', which appear in contexts of caused motion; mental state verbs, like *maínomai* 'rage, be furious', which appear in contexts of caused motion. The process of the accommodation of such verbs into a motion reading requires the activation of metaphorical extensions entailing a motion component, since all the verbs found in this pattern are somehow motion-related (e.g. whenever I call someone, the expected result of my action is that he/she will come to where I am; craziness can imply random motion...).

As for the adnominals found in this construction, they can express both Source and Goal. In (181) the stative verb *eimí* 'be, exist' occurs with the satellite preverb *pará* 'near, by, to the side of' and with the directional prepositional phrase *es koîton* 'to bed' expressing the Goal of motion. It is worth mentioning that the combination of a satellite meaning 'near' and the verb for 'be' developing the meaning of 'arrive' is not a prerogative of Ancient Greek: a similar pattern can be found in other languages, like Polish (cf. Voirin 2016).

(181) παρέσται καὶ ἡ γυνὴ ἡ
paréstai kaì he: gunè: he:
beside-be.FUT.3SG and ART.NOM.F.SG woman(f).NOM.SG ART.NOM.F.SG
ἐμὴ ἐς κοῖτον
emè: es koîton
POSS.1SG.NOM.F.SG to bed(M).ACC.SG
'my wife too will come to bed' (*Hdt.* 1.9.2c)

Examples (182) and (183) share the same syntactic template: in both occurrences, the Source satellite *ek* 'out of, from' attaches to a non-motion verb and governs a noun in the

genitive case, thus behaving as a relational preverb. The whole construction can impose a motion interpretation onto the non-motion verb (cf. Stefanowitsch 2013: 228).

(182) Κάδμον ἐκκάλει δόμων
Kádmon ekkálei dómo:n
Kadmos(M).NOM.SG out_of.CALL.IMP.PRES.2SG house(M).GEN.PL
'call Kadmos out of the house' (*Eur. Ba.* 170)

(183) ὅσαι γυναῖκες ἦσαν,
hósai gunaîkes ês̃an
as_great_as.NOM.F.PL woman(f).NOM.PL be.IMPF.3PL
ἐξέμηνα δωμάτων
exéme:na do:máto:n
out_of.DRIVE_CRAZY.AOR.3SG house(N).GEN.PL
'as many as are women, I have driven maddened from the house' (*Eur. Ba.* 35)

4.2.3 Idioms

The third and last pattern exhibiting a constructional encoding of spatial information in the corpus consists of two idioms expressing motion.

An idiom is a conventional expression whose meaning or use cannot be entirely predicted on the basis of its constituents (cf. Croft & Cruse 2004). In the relevant literature, idioms have been classified according to their syntactic, semantic and pragmatic properties. In particular Fillmore *et al.* 1988 distinguish between:

- decoding idioms (i.e. idioms whose meaning cannot be figured out by knowing the words and grammar of the language, e.g. *kick the bucket*) vs. encoding idioms (i.e. expressions whose semantics is predictable from their constituent parts, but which a speaker would not know without a previous exposure, e.g. *answer the door*);

- substantive idioms (i.e. lexically filled idioms, in which all elements are fixed and cannot undergo any grammatical change, e.g. *it takes one to know one*, **it took one to know one*) vs. formal (or schematic) idioms (i.e. idioms which are only partially filled

by concrete lexical expressions and/or grammatically variable, e.g. *the... the... > the sooner the better*, *the faster the worse*...);

- regular idioms (i.e. idioms which are licensed by the grammar of the language, but semantically irregular, e.g. *spill the beans*) vs. extragrammatical idioms (i.e. idioms that are both syntactically and semantically irregular, e.g. *by and large*);

- idioms with pragmatic point (i.e. idioms which are tight to a specific pragmatic context, e.g. *once upon a time*) vs. idioms without a pragmatic point (i.e. idioms which are pragmatically flexible; e.g. *all of a sudden*).

Idioms have been analysed within the theoretical framework of *Construction Grammar* (cf., *inter alia*, Goldberg 1995; Booij 2005), whose main assumption is that all constructions are in fact schematic idioms (i.e. conventional abstract schemas) which carry their own meaning independently on the verb semantics, and need to be lexically instantiated.

From a semantic and pragmatic point of view, idioms are characterized by specific properties, such as conventionality (i.e. their meaning cannot be fully predicted from the knowledge of the independent conventions that determine the use of their constituents in isolation), figuration (i.e. they involve the activation of metaphorical and metonymical processes, based on which abstract concepts are expressed by means of concrete concepts), affect (i.e. idioms usually imply an evaluative or affective description of the things they denote), informality (i.e. they are often associated with informal or colloquial registers)[87].

As already claimed for the *constructio praegnans* (cf. Section 4.2.2), idioms too can show a partial compositionality, in that they can be motivated or non-arbitrary. This is the case when the literal meaning of a constituent directly contributes to the idiomatic meaning or when the constituents build a meaningful literal scene together (and this is what happens in the two Ancient Greek idioms under analysis).

The two Ancient Greek idioms that have resulted from the corpus analysis share two main features: they both contain some spatial information at the morphosyntactic level and thus show partial compositionality, and they both display the same syntactic template, i.e. a

87 Concerning informality, it seems worth mentioning that the high majority of idioms expressing motion is found in the dramatic texts, which are known to reproduce the features of daily conversations and are thus close to oral production.

transitive verb combining with its direct object, which is not preceded by any determiner. In both cases, the lack of the article is a clue in favour of a high semantic tightness of the construction.

The first idiom at issue literally means 'move (the) foot'. In this pattern two different verbs expressing caused motion, namely *híste:mi* 'make to stand, set' and *kinéo:* 'move', combine with the accusative singular of the noun for 'foot', i.e. *póda* < *poús*. What could be interpreted as a self-contained caused motion event, in which a human Figure provokes the motion of one of its body parts, in fact develops an additional semantic nuance related to translational motion and ends up to encode spontaneous motion ('move the foot' = 'move, pass').

In (184) the verb *híste:mi* 'make to stand, set' takes the satellite *metá* 'among, between', which in composition oscillates between a spatial and a temporal value, and encodes the passage of the moving entity from a point in space to another.[88] The example at issue belongs to a solemn passage in the tragedy, where Dionysus, the god of wine, fertility and ritual madness, describes his mission in Thebes (i.e. showing the Thebans and their king, Penteus, his divine origins), as well as his future plan to move 'to a new land', *es d' álle:n khthóna*. The personal engagement of Dionysus in the facts he tells proves in line with the pragmatic connotation displayed by idioms in general (i.e. affect).

(184) ἐς δ’ ἄλλην χθόνα τἀνθένδε θέμενος
es d' álle:n khthóna tanthénde thémenos
to PTC other.ACC.F.SG land(f).ACC.SG hence put.PTCP.AOR.M/P.NOM.M.SG
εὖ μεταστήσω πόδα
eû metasté:so: póda
well between-set.FUT.1SG foot(M).ACC.SG
'I will move the foot to another land' (*Eur. Ba.* 47)

While in (184) the idiom occurs with an adnominal expressing the Goal of the Figure's displacement, in (185) it is accompanied by the Source modifier *hóthen* 'whence'. Here the verb recruited for the idiom is *kinéo:* 'move'.

88 On the meaning of *metá* in verbal compounds, cf. LSJ: «most freq. of *change* of place, condition, plan, etc., as in *metabaíno:, metabállo:, metabouleúo:, metagignó:sko:*».

(185) ὅθεν ἐκίνησαν πόδα
hóthen ekíne:san póda
whence move.AOR.3PL foot(M).ACC.SG
'where they had come from' (*Eur. Ba.* 765b)

The second idiom carrying an additional semantic nuance related to displacement has the literal meaning of 'strike (the) stern'. It consists of the verb *kroúo:* 'strike, smite', which can be itself considered as expressing caused motion, and of the meronym *prúmna* 'stern, poop', which seems to provide the directional information. The constructional meaning of the idiom in question is 'backwater, draw back in water'. Example (186) shows an instantiation of this pattern.

(186) καὶ οἱ Κορίνθιοι ἐξαπίνης πρύμναν
kaì hoi Korínthioi exapíne:s prúmnan
and ART.NOM.M.PL Corinthian(M).NOM.PL suddenly stern(F).ACC.SG
ἐκροúοντο
ekroúonto
strike.IMPF.M/P.3PL
'when the Corinthians suddenly began to back water' (*Thuc.* 1.50.5a)

This construction occurs only three times in the corpus (all in the first book of Thucydides' *History of the Peloponnesian war*), but is attested elsewhere in Ancient Greek texts belonging to the Classical and to the Hellenistic period, mostly with the verb in the middle voice.[89] The same idiom with the preverbed form *anakroúo:* 'push back' (cf. the meaning of *aná* 'backwards' in composition) is found in Herodotus' *Histories* (8.84), as well as in later texts.

In Modern Greek the idiom is preserved with the preverbed form *anakroúo:*. It proves fossilised in that the verb alone is no longer productive. From a semantic point of view, the concrete meaning of 'stern' is completely lost and the idiom is no longer transparent. Its meaning is 'retire' and it can occur in contexts in which no ships or boats appear, such as to withdraw an opinion.

89 Cf. Thucydides' *History of the Peloponnesian war* (3.78); Arrian's *Anabasis* (5.17.7); Polibius' *Histories* (16.3.8).

In this section three constructions carrying some *invisible* spatial information have been investigated, namely the *Parallel-Goal* construction, the *constructio praegnans* and two idioms.

The patterns in question share two main properties: they exploit the constructional semantics for the encoding of Path information and they exhibit a meaning that is compositional only to a certain extent. Concerning this second point, all the constructions at issue contain at least one morphosyntactic item carrying some piece of spatial information, namely the Goal marker *eis* 'towards, to' in the *Parallel-Goal* construction, a motion verb or a directional PP in the *constructio praegnans*, and a caused motion verb combining with either a body part or a meronym in the idioms.

As for the additional semantic nuances *hidden* at the constructional level, they cover different functions, such as:

- compensating for the lack of dedicated tools in charge of Path encoding (e.g. boundary crossing in the final segment of Path in the *Parallel-Goal* construction);

- providing further semantic components (e.g. a telic meaning in the *constructio praegnans*);

- adapting the utterance to a specific register or revealing the speaker's attitude (e.g. informality and affect in the idioms).

The three cases analysed so far display a more implicit pattern of spatial semantics, which relies on the construction as a whole, rather than on the single slots involved in motion encoding.

4.3 Summary and conclusions

The data presented in this chapter has revealed the existence of different strategies available for motion encoding in Ancient Greek. Such strategies form a cline proceeding from more overt (i.e. explicit, transparent, compositional and context-independent) to more covert (i.e. implicit, opaque, idiomatic and context-dependent) patterns of motion

description. While the former exploit the lexical and grammatical tools in the clause, the latter rely on the holistic meaning of the construction for the expression of the spatial information and, in particular, of the Path component.

The cline at issue can be represented as follows:

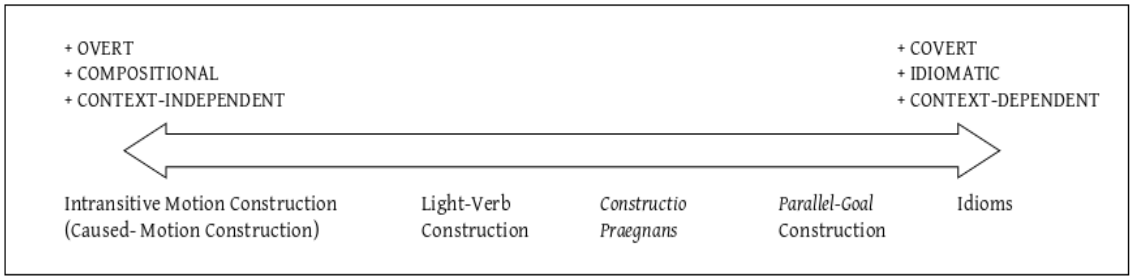


Illustration 4: The cline of motion constructions in Ancient Greek

As shown in Illustration 4, the constructions tending towards the most overt extremity of the cline are the IMC and the CMC (*Caused-Motion Construction*, not being analysed in this chapter), in which each element in the clause provides one piece of the motion meaning. Regardless of the different degrees of complexity displayed by the syntactic templates merging into the IMC, the compositionality of the spatial information remains rather constant.

The LVC represents a more analytic alternative to the synthetic motion verbs appearing within the IMC. Compared to the IMC, it displays the same degree of semantic explicitness, but it proves less independent from the context, since it performs special functions, such as providing the motion action with a qualitative connotation. Furthermore, as already shown, the interaction between the light verb and the predicative noun can give rise to specific semantic nuances.

Among the patterns carrying some piece of invisible spatial meaning beyond the overt morphosyntactic level, the *Constructio praegnans* is the most explicit. In fact, it envisages one piece of spatial information (i.e. the Path meaning conveyed either by the motion verb or by the adnominal) to be extended to the other non-directional element in the clause, i.e. a stative verb or a locative prepositional phrase.

The *Parallel-Goal* construction consists of an emphasized encoding of Path realized through the repetition of the same morpheme, i.e. the directional particle *eis* 'towards, to',

within the same clause. This double Goal marking is employed for the expression of boundary crossing, which is lacking at the morphosyntactic level. As a consequence of this feature, the semantics of the construction at issue is neither fully transparent, nor completely idiomatic, since some kind of motion-related information is nevertheless lexicalized within the clause. On the other hand, its employment is highly context-dependent, since it proves limited to motion descriptions in which the Ground is conceived as a Container and boundary crossing takes place.

The pole of covert motion encoding is embodied by the two spatial idioms analysed in section 4.2.3, as a consequence of their structural cohesion and crystallized semantics. Despite containing some motion indication at the lexical and grammatical level (i.e. a motion verb, a body part, a meronym), they develop additional meanings, such as displacement and direction. Moreover, they are context-dependent in that they only appear with human Figures, they are exclusively used when spontaneous motion is concerned, and they carry some peculiar pragmatic values, such as association with the colloquial register and affective evaluation of the action.

Chapter 5. Patterns of Path and Manner Distribution

In this chapter we will address the topic of the distribution of Path and Manner information by applying the *Distributed Spatial Semantics* approach elaborated by Sinha and Kuteva (1995) to the Ancient Greek data, in order to determine to which extent each of the morphosyntactic elements in the motion clause described in Chapter 3 participate in the building of the motion meaning.

After an introduction to Sinha and Kuteva's paper (section 5.1), a readaptation of the original model will be applied to the Ancient Greek language (section 5.2), and the patterns of Path and Manner distribution will be discussed (sections 5.3 and 5.4). Finally, we will draw a comparison between the two semantic components (section 5.5), in order to capture the differences and similarities in their linguistic treatment.

Same as in the chapter devoted to the constructions expressing motion in Ancient Greek, since self-agentive motion constitutes the empirical core of the present dissertation, the analysis of Path and Manner distribution has been restricted to the 1055 cases in which a spontaneous motion event is encoded by means of an intransitive motion verb. Specifically, from the total of 1627 motion clauses, the occurrences containing the following elements have been excluded:

- transitive verbs encoding caused motion (e.g. *ágo:* 'lead, carry'; *bállo:* 'throw, carry');

- labile verbs expressing both caused and spontaneous motion (e.g. *elaúno:* trans. 'drive, set in motion', intrans. 'march');

- instantiations of the so-called *constructio praegnans*, i.e. a pattern in which a stative verb combines with a directional complement or, vice versa, a directional verb co-occurs with a static complement (cf. Chapter 4, pp. 166ff.);

- idiomatic expressions (e.g. *to move the foot*, cf. Chapter 4, pp. 170ff.);

- nominalizations from motion verbs (cf. Chapter 3, pp. 124ff.).

5.1 *Distributed spatial semantics*

In their paper from 1995, Sinha and Kuteva discuss the encoding of spatial meaning and, in particular, the patterns of distribution of Path information over the utterance. Providing examples from different languages, the authors argue that the building of spatial meaning is not committed to (or segregated in) a single slot within the clause, but that, conversely, various linguistic items, together with discourse contextual and referential contextual factors, interact to convey information about spatial scenes (p. 189).

Sinha & Kuteva's main aim is to challenge some assumptions derived from the localist approach (cf., *inter alia*, Svorou 1994), according to which:

- the spatial meaning is carried by a set of linguistic items belonging to clearly-identifiable closed grammatical classes (i.e. the so-called *spatial grams*) (p. 192);

- the full range of uses of spatial prepositions can be accounted for by relying exclusively on intra-linguistic lexical restrictions (p. 179);

- being linguistic items meaningful entities independently on the context in which they occur, any semantic variations can be explained in terms of polysemy (p. 170).

In clear contrast to such assumptions, Sinha & Kuteva observe that:

- all languages exhibit a distributed spatial semantics, which can be either overt or covert (pp. 181ff.);

- the weighting of different linguistic forms varies across languages (p. 173).

Concerning the first point, a language can display an overt or covert distributed spatial semantics depending on the extent to which the spatial information receives explicit

expression in the clause.

(187) *Il* *ragazzo* *entrò* *nella* *stanza*
ART.M.SG boy(M).SG enter.PST.3SG in-art.F.SG room(f).SG
'The boy entered the room' (Italian)

(188) The boy entered the room

The Italian example in (187) and its English counterpart in (188) show the difference between the two types of distributed spatial semantics at issue: in (187) the boundary crossing information is distributed across three slots, namely the inherently directional verb *entrare*, the preposition *in* (*nella* < *in* + *la*, feminine definite article), and the noun for 'room' (*stanza*) encoding the Ground, which is, by virtue of its physical properties, a three-dimensional entity that can be penetrated. While, in the Italian example, the same Path information is explicitly repeated in two different places within the clause, in the English translation redundancy is not allowed (**The boy entered into the room*) and the motion verb is followed by a bare noun phrase expressing the Goal.[90] Such a restriction is due to the so-called *Direct Path Constraint*, according to which «no two English morphemes will directly (overtly) express within the same syntagmatic sequence exactly the same profiled schematization of a particular Directed Path» (Sinha & Kuteva 1995: 183).

As for the second claim, the different charge of linguistic items for the encoding of spatial information could be responsible for the distinction between Verb-Framed and Satellite-Framed languages, the former assigning a primary role to the verb, the latter relying more on directional satellites for the expression of Path.

The following sections of this chapter address the topic of distributed spatial semantics in Ancient Greek, and propose a readaptation of the original model to better capture the types of distributions found in the corpus.

5.2 Distributed spatial semantics meets Ancient Greek

90 It is worth mentioning that English examples in which the same spatial information is repeated across the verb and the preposition are admitted only when conveying metaphorical meanings.

From Sinha & Kuteva's approach, it seems clear that no pure types exist: that is, no language exhibits a completely overt or covert distributed spatial semantics. The explicit or implicit distribution of the spatial information over the utterance must rather be interpreted in terms of a cline proceeding from maximally overt to maximally covert strategies of encoding. Furthermore, it is worth stressing that one and the same language can show both patterns according to the event type to lexicalize (cf. John **entered** the room *vs.* John **inserted** the plug **into** the socket).

The patterns of distribution identified by Sinha & Kuteva (1995: 187-189) are three, namely:

1. the ***parallelism*** pattern, in which one and the same piece of spatial information is expressed by means of the same morpheme which occurs twice in the clause, as *do* 'on' in the following example from Bulgarian:

(189) *Tja* ***do****pàlzja* ***do*** *vratata*
she ADJACENT+CONTACT-crept ADJACENT+CONTACT door-the
'She crept up to the door' (Bulgarian)

2. the ***redundancy*** pattern, in which the same type of spatial information (e.g. one segment of Path) is repeated in the clause by means of different morphemes, as shown by the following example from Latin, in which the Source meaning is simultaneously expressed by the preverb *ex* 'out of' and by the preposition *ab* 'from, off' selecting the ablative case:

(190) ***Ex****ire* ***ab*** *hoc* *corpore*
out_of-go.INF.PRES out_of DEM.ABL.N.SG body(N).ABL.SG
'exit (from) that body' (Latin)[91]

3. the ***differentiation*** pattern, in which different pieces of spatial information (e.g. more than one Path segment) appear within the clause, as in the following example from Italian, in which both the Source and the Goal of motion are expressed:

91 The sentence under analysis is a formula employed for exorcism in late Latin.

(191) *Il* *bambino* *ha* *gattonato* ***dalla***
ART.M.SG child.M.SG AUX.PRES.3SG crawl.PART.PST.M.SG from-ART.F.SG
poltrona ***fino*** ***alla*** *porta*
armchair(f).SG up_to to-ART.F.SG door(f).SG
'The child crawled from the armchair to the door' (Italian)

In the light of such premises, the three main patterns distinguished in Sinha & Kuteva can be conceptually located at different points of the continuum from overt to covert distribution, as shown by Illustration 5.

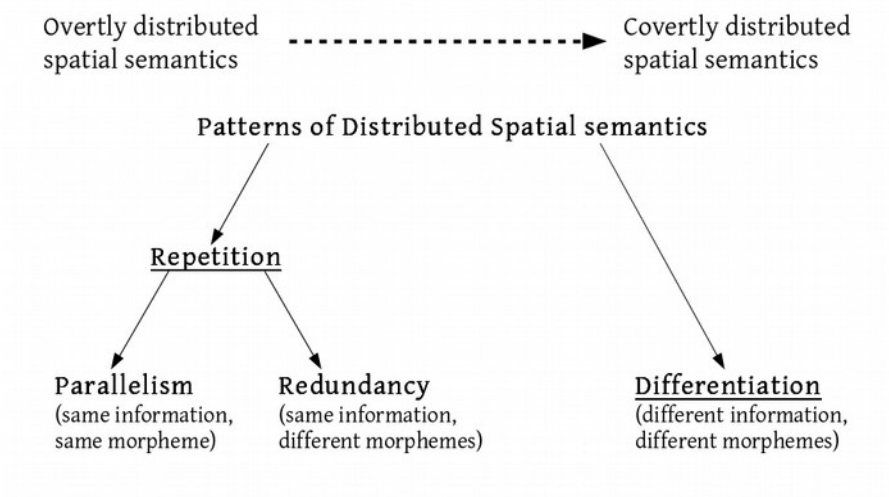


Illustration 5: Distributed Spatial Semantics in Ancient Greek

According to this schema, the parallelism pattern corresponds to the highest degree of overt distributed spatial semantics, while the differentiation pattern fits the opposite end of the gradient. At last, the redundancy pattern ideally occupies a space in between the two extremities.

To this picture a fourth pattern has to be added, in which one piece of spatial information appears in isolation (i.e. is not distributed) within the clause. The pattern in question is the ***locatedness*** pattern, which can be interpreted either in terms of fully covert distribution or as an instantiation of isolation. By virtue of its semantic lightness, this pattern assigns inference with a crucial role for the decoding of the motion event.

Concerning the reinterpretation of the original prototype of distributed spatial

semantics, the model employed for the analysis of the Ancient Greek data differs from the original version in the following respects:

- the label of *repetition* (cf. Illustration 5) has been added as a cover term accounting for both the parallelism pattern and the redundancy pattern;

- among the spatial meanings mentioned in Sinha & Kuteva's paper, the Path and its parts will receive a specific focus in this chapter;

- the Manner component, which is not taken into account in the original model, will also be explored;

- only contexts of translational motion will be analysed, whereas in Sinha & Kuteva's article static locations are examined as well;

- while in the original model only the interaction between the categories of verbs and *locative particles* are debated, for the Ancient Greek data four slots will be checked, namely verbs, satellites, adnominals, and modifiers;

- the patterns of parallelism and redundancy will be distinguished into inter-category and intra-category, the former occurring across different morphosyntactic categories, the latter being attested within one and the same category.

In the following sections the way verbs, modifiers, satellites and adnominals share the task of encoding Path and Manner will be analysed. For Path, all the morphosyntactic tools involved in motion expression will be investigated; for Manner the analysis will be restricted to verbs and modifiers. As previously stated, in both cases the action nouns replacing motion verbs in some contexts (cf. section 3.4) will not be considered for the purposes of the present analysis.

5.3 Patterns of distribution in the expression of Path

Being Path a complex notion (cf., *inter alia*, Grinevald 2011), in order to investigate the patterns of distribution exhibited by this semantic component, each segment, i.e. Source, Median and Goal, has been analysed on its own. The only pattern for which Path has been considered as a whole is differentiation, as a consequence of its conceptual structure.

In the following sections, the different patterns at issue will be presented following the cline discussed on page 181, ranging from a maximally overt distribution (i.e. parallelism and redundancy) to a maximally covert distribution (i.e. locatedness and differentiation) of the Path information.

Table 29 shows the number of clauses displaying each pattern of distribution for a given part of Path. As a methodological caveat, it is worth stressing that the percentages have been calculated out of the total number of clauses in which each segment is mentioned, in order to guarantee the comparability of the results.

Pattern/Segment	Source	Median	Goal
Parallelism	1,8% (8)	1,1% (3)	4,4% (28)
Redundancy	17,8% (79)	6,5% (17)	19,5% (123)
Locatedness	80,4% (358)	92,4% (241)	76,1% (480)
Total number of clauses containing S/M/G info	100% (445)	100% (261)	100% (631)

Table 29: Patterns of distribution in the expression of the different Path segments

5.3.1 Parallelism

Parallelism is a subpattern of repetition in which «the same schematization is actually expressed by the same morpheme in different positions in the syntagm» (Sinha & Kuteva 1995: 188). Therefore, as previously stated, this pattern represents the most overt instantiation of distributed spatial semantics, since the spatial information is redundant from both a semantic and a formal point of view. In other words the parallelism pattern implies a perfect coincidence of the redundant pieces of spatial information within the clause.

In a language like Ancient Greek, in which the same particles can behave both as

satellites of the verb and as adpositions interacting with case markers, such a pattern of distribution, despite rare, is attested. As a consequence of the nature of the linguistic system, for Ancient Greek it is possible to identify three features of the parallelism pattern for the Path component:

- it is mainly inter-category (i.e. the morphemes involved in the parallelism pattern must occupy two different slots in the motion clause), but one case of intra-category parallelism is attested for adnominals;

- from a morphosyntactic point of view, it can only pertain to satellites and adnominals, since these forms can be homophones.

SOURCE

The parallelism pattern occurs with Sources in only 1,8% of cases (i.e. 8 occurrences out of 445 in which this Path segment appears). In one case it is realized within one single morphosyntactic category, i.e. that of adnominals. No cases of intra-category redundancy are attested for satellites. In (192) the Source information is repeated by means of two adnominals in which the preposition *ek* 'out of, from' selects the genitive case to encode two different Grounds.

(192) καὶ αὐτοῖς ἔκ τε γῆς ἐπιπεσόντες πεζοὶ
kaì autoîs ék te gês epipesóntes pezoì
and 3PL.DAT out_of PTC ground(f).GEN.SG upon-fall.PTCP.AOR.NOM.M.PL on_foot
καὶ ἐκ θαλάσσης Φοινίκων ναυτικὸν
kaì ek thalásse:s Phoiníko:n nautikòn
and out_of sea(f).GEN.SG Phoenician.GEN.M.PL naval_fee(N).NOM.SG
'attacked on the land side by the troops, and from the sea by the Phoenician navy'
(*Thuc.* 1.110.4b)

The remaining 7 cases of Source parallelism are all inter-category and, as previously stated, get involved the satellite slot and the adnominal slot. In only one case the redundant Source marker is *apó* 'from, off'. In the example at issue the verb *thrôisko:* 'leap, spring' encodes the Manner component and Source is the only part of Path explicitly mentioned in the clause.

(193) ἀποθορόντες ἀπὸ τῶν ἵππων
apothoróntes apò tôn híppo:n
from-leap.PTCP.AOR.NOM.M.PL from ART.GEN.PL horses(M).GEN.PL
'they leaped from their horses' (*Hdt.* 1.80.6a)

In the other instances of inter-category parallelism, the Source marker *ek* 'out of, from' occurs both in preverbal position, combining with basic motion and Manner verbs, and as a preposition selecting three different types of Grounds, i.e. cities, regions and a ship in (194). Here a physical boundary is crossed as expected according to the original semantics of the preposition.

(194) τὴν δὲ ἀσφάλειαν εἶναι μηδένα
tè:n dè aspháleian eînai me:déna
ART.ACC.F.SG PTC safety(f).ACC.SG be.INF.PRES nobody.ACC.M.SG
ἐκβῆναι ἐκ τῆς νεὼς μέχρι
ekbênai ek tês neò:s mékhri
out_of-go.INF.AOR out_of ART.GEN.F.SG ship(f).GEN.SG as_far_as
πλοῦς γένηται
ploûs géne:tai
sailing(M).ACC.SG be.SBJV.AOR.3SG
'meanwhile their safety consisted in letting no one leave the ship until a favorable time for sailing should arise' (*Thuc.* 1.137.2e)

MEDIAN

In Ancient Greek, the Median part of Path proves highly resistant to the parallelism pattern, with only 3 occurrences in total (i.e. 1,1% of the total number of clauses in which Median appears).

In (195) the Median information referring to a circular Path is distributed across the preverb and the preposition governing the accusative case. In the example at issue, the Source-oriented meaning of the verb *nostéo:* 'go or come home, return' is, so to speak, "neutralized" by the Median information conveyed by the satellite.

(195) περὶ τὰς κλίνας περινοστῶν
perì tàs klínas perinostôn
around ART.ACC.F.PL bed(f).ACC.PL around-return.PTCP.PRES.NOM.M.SG
'each of you comes prowling round the bed' (Aristoph. *Thes.* 796)

In the second instance of parallel Median distribution, the particle *katá* 'downwards' responsible for the description of a vertical displacement of the Figure proceeding from a higher to a lower position, is employed as a preverb attaching to the basic motion root *baíno:* 'come, go', and as a preposition governing the neuter accusative of the demonstrative pronoun *toûto* 'this' which refers to a part of the acropolis.

(196) τῶν τινα Λυδῶν κατὰ τοῦτο τῆς
tôn tina Ludôn katà toûto tês
ART.GEN.PL INDEF.ACC.M.SF Lydian.GEN.M.PL down DEM.ACC.N.SG ART.GEN.F.SG
ἀκροπόλιος καταβάντα ἐπὶ κυνέην
akropólios katabánta epì kunée:n
acropolis(f).GEN.SG down-go.PTCP.PRES.ACC.M.SG upon helmet(f).ACC.SG
'one of the Lydians came down by this part of the acropolis' (*Hdt.* 1.84.4a)

The last example of parallelism attested for Median shows the usual double marking in the preverbal and in the prepositional slot plus a case of multiple preverbation: in fact, not only the Median satellite *diá* 'across, through' agglutinates to the basic motion verb *eîmi* 'come, go', but also the Source preverb *ek* 'out of, from', appearing in second position. The combination of the two satellites within one single compound verb is allowed by boundary crossing: as a matter of fact both preverbs are sensitive to this parameter, which makes their semantic compatible.

(197) δι᾽ ὧν οἱ ξεῖνοι
di' hôn hoi xeînoi
through REL.GEN.PL ART.NOM.M.PL stranger(M).NOM.PL
διεξιόντες
diexióntes
through-out_of-go.PTCP.PRES.NOM.M.PL
'by which the men pass' (*Hdt.* 1.199.2c)

With 28 occurrences out of the 631 in which some kind of Goal information is present (about 4,4% of cases), Goal is the part of Path for which the parallelism pattern is most frequently attested. Similarly to Source, in principle such a pattern could be realized only across categories or within the adnominal category, since no preverb can attach twice to the same verbal root. In fact, what is interesting to point out as far as the adnominal slot is concerned, is that no contexts in which the same Goal preposition is repeated within the same clause are attested in the corpus under analysis. Therefore the parallelism pattern is only inter-category and occurs between the satellite and the adnominal slot, as shown by example (198). This case represents a perfect instantiation of construction analysed in Chapter 4, in which a double Goal marking is employed to encode boundary crossing. Here the Manner verb *pedáo:* 'leap, spring', describing a fast movement of the Figure, takes the Goal preveb *eis* 'to, towards, into' and the prepositional phrase *eis tòn pe:lòn* 'into the mud', encoding the Ground which is entered during the displacement.

(198) εὐθὺς δὲ σὺν τούτοις εἰσπηδήσαντες εἰς τὸν
euthùs dè sùn toútois eispe:dé:santes eis tòn
at_once PTC with DEM.DAT.M.PL to-leap.PTCP.AOR.NOM.M.PL to ART.ACC.M.SG
πηλὸν
pe:lòn
mud(M).ACC.SG
'and leaping at once, with all this finery, into the mud' (Xen. *Anab.* 1.5.8d)

Despite representing the most frequent option (20 occurrences out of 28), the double occurrence of the most basic Goal marker within the same clause does not constitute the only possibility through which the parallelism pattern is realized for the final part of Path. In fact, three more Goal markers can exhibit the same behaviour, namely *epí* 'upon, over, to', *pará* 'along, by, beside' and *prós* 'to, towards, at'.

In (199) the satellite *pará* combines with the basic motion verb *érkhomai* 'come, go' and encodes proximity to the Ground, which is further stressed in the adnominal slot. The conjunctive participle in the middle passive voice *ballómenos* (from *bállo:* 'thorow') and the adverb *khalepôs* 'hardly, with difficulty' provide information about the Manner component.

(199) καὶ παρῆλθε παρὰ τὴν χηλὴν διὰ
kaì parêlthe parà tè:n khe:lè:n dià
and beside-go.AOR.3SG beside ART.ACC.F.SG breakwater(f).ACC.SG through
τῆς θαλάσσης βαλλόμενός τε καὶ χαλεπῶς
tês thalásse:s ballómenós te kaì khalepôs
ART.GEN.F.SG sea(f).GEN.SG throw.PTCP.PRES.M/P.NOM.M.PL PTC and hardly
'and not without difficulty he passed along by the breakwater through the sea'
(*Thuc.* 1.63.1c)

In (200) *prós* 'to, towards, at' appears both in the preverbal and in the adnominal slot, where it governs a human Ground, for which usually *pará* 'along, by, beside' represents the preferred option.

(200) προσιόντες ὧν πρὸς τὸν
prosióntes ôn pròs tòn
towards-go.PTCP.PRES.NOM.M.PL in_fact towards ART.ACC.M.SG
κάμνοντα
kámnonta
be_sick.PTCP.PRES.ACC.M.SG
'come near the sick' (*Hdt.* 1.197.1b)

5.3.2 Redundancy

Similarly to parallelism, the redundancy pattern envisages the same semantic information to occur distributed over different elements in the clause. The difference between the two patterns lies in the forms by which the spatial meaning is conveyed: while they coincide in the parallelism pattern, they differ in the redundancy pattern.

All the three segments of Path display redundancy, but Source and Goal prove more tolerant towards this pattern of repetition compared to Median.

SOURCE

The redundancy pattern is attested for Source in about 17,8% of cases (i.e. 79 clauses out of 445). This occurrences can be subgrouped as follows:

- cases of inter-category redundancy (or redundancy across category);

- cases of intra-category redundancy (or redundancy within one and the same category);

- cases of inter- and intra-category redundancy.

Among these options, the most frequent one is the first. According to this pattern, the Source information simultaneously appears in two or even three different morphosyntactic slots within the same clause. In the texts under analysis no cases in which four slots (namely the verb, the satellite, the adnominal and the modifier) participate in Source encoding are attested.

Example (201) shows a case of redundancy across the satellite and the modifier. Here both the preverb *apó* 'from, off' and the adverb *ekpodó:n* lit. 'away from the feet' contribute to the building of the Source information.

(201) σὺ δ’ ἄπιθ’ ὦ Θρᾷττ’
sù d' ápith' ô Thrâitt'
2SG.NOM PTC from-go.IMP.PRES.2SG ART.VOC.M.SG Thratta(M).VOC.SG
ἐκποδών
ekpodó:n
away_from_the_feet
'be off, Thratta, be off' (Aristoph. *Thes.* 293)

In (202) the Source information is shared between the verb and the adnominal: by virtue of its Source-oriented meaning the verb *khoréo:* 'give way, withdraw' does not dislike to combine with Source adnominals, as *ek tês Euró:pe:s* 'from Europe'. Here the verb takes the Median satellite *aná* showing its directional meaning 'backwards', common in compounds.

(202) ἐπειδὴ Μῆδοι ἀνεχώρησαν ἐκ τῆς
epeidè: Mêdoi anekhó:re:san ek tês
when Mede.NOM.M.PL up-retire.AOR.3PL out_of ART.GEN.F.SG
Εὐρώπης
Euró:pe:s
Europe(F).GEN.SG

'after the Medes had returned from Europe' (*Thuc.* 1.89.2a)

In (203) the satellite and the adnominal are in charge of Source encoding. Differently from the parallelism pattern, in which the same morphemes encode the same spatial information, here the preverb (*apó* 'from, off') and the preposition (*ek* 'out of, from') do not formally coincide, albeit both referring to the initial part of Path.

(203) ἄπιθι ἐκ τῆσδε τῆς χώρης
ápithi ek têsde tês khó:re:s
from-go.IMP.PRES.2SG out_of DEM.GEN.F.SG ART.GEN.F.SG land(f).GEN.SG
ἀζήμιος
azé:mios
unpunished.NOM.M.SG
'and leave this country unpunished' (*Hdt.* 1.212.3)

The last example of inter-category redundancy shows a pattern in which three categories, namely the verb, the satellite and the adnominal, take part in Source encoding. This pattern of what one may call “triple” redundancy is attested four times in the corpus, in all the authors except Euripides. In (204) the Source-oriented verb *khoréo:* 'give way, withdraw' combines with the Source preverb *apó* 'from, off' and with the Source adnominal *ek tês Helládos* 'from Greece'.

(204) ὅτε ἐκ τῆς Ἑλλάδος
hóte ek tês Helládos
when out_of ART.GEN.F.SG Hellas(f).GEN.SG
ἡττηθεὶς τῇ μάχῃ
he:tte:theìs têi mákhe:i
be_defeated.PTCP.AOR.M/P.NOM.M.SG ART.DAT.F.SG battle(f).DAT.SG
ἀπεχώρει
apekhó:rei
from-retire.IMPF.3SG
'when he was on his retreat from Greece after losing the famous battle'
(Xen. *Anab.* 1.2.9a)

In the corpus under analysis the pattern of intra-category redundancy is attested in only

one case for Source and it affects the verbal slot. In (205) two verbs appear in the same clause: the first one is the conjunctive participle of *pheúgo:* 'flee, escape' (aorist tense), the second is the present subjunctive of *oíkhomai* 'go away, go off', governed by the final conjunction *hópo:s* 'in such a manner that, in order that'. Both verbal roots convey a directional, Source-oriented meaning, which makes the Source information redundant.[92]

(205) τουτονὶ φυλάττετε ὅπως μὴ
toutonì phuláttete hópo:s mè:
DEM.ACC.M.SG guard.IMP.PRES.2PL in_such_manner_as NEG
διαφυγὼν οἰχήσεται
diaphugò:n oikhé:setai
through-flee.PTCP.NOM.M.SG go_away.FUT.3SG
'watch him closely, so that he will not escape' (Aristoph. *Thes.* 653)

Similarly to intra-category redundancy, another pattern of Source distribution has proven extremely rare in the corpus, with only one occurrence in total. This is the case of simultaneous intra- and inter-category redundancy, shown in example (206). Here, the Source information is distributed across three slots within the same clause, namely the verb *pheúgo:* 'flee, escape', whose high frequency in contexts of Source description constitutes an evidence supporting its Source-oriented semantics, the noun *kheîma* 'winter weather, storm' in the accusative case governed by the motion verb, and the adnominal *ek thalássas* 'from the sea'. Though not formally overlapping (one exploits the case marker only, the other is a prepositional phrase), the two adnominals to which the Source expression is assigned display the same semantic function, which makes the Source information redundant both within the adnominal category and across the verb and the adnominals.

(206) εὐδαίμων μὲν ὃς ἐκ θαλάσσας ἔφυγε
eudaímo:n mèn hòs ek thalássas éphuge
happy.NOM.M.SG PTC REL.NOM.M.SG out_of sea(F).GEN.SG flee.AOR.3SG
χεῖμα
kheîma
storm(N).ACC.SG
'happy is he who has fled a storm on the sea' (*Eur. Ba.* 902)

92 It is worth stressing that the two verbs in (205) refer to the same motion event. For this reason they have been considered as one single clause.

The Median segment of Path dislikes repetition. In fact, the information about the intermediate segment of Path is distributed in only about 6,5% of cases (17 occurrences out of 261). No instances of intra-category redundancy are attested.

Among the different options of inter-category redundancy, the preferred one is the pattern in which the satellite and the modifier interact for the expression of Median. In (207) the preverb *aná*, often displaying the directional meaning of 'backwards' when occurring in verbal compounds, finds a good ally in the adverb *opíso:* 'backwards' for the encoding of the direction followed by the Figure.

(207) πρὶν γὰρ ἢ ὀπίσω σφέας ἀναπλῶσαι ἐς τὰς
prìn gàr è: opíso: sphéas anaplôsai es tàs
before hence or backwards 3PL.ACC up-sail.INF.AOR to ART.ACC.F.PL
Σάρδις
Sárdis
Sardis(f).ACC.PL
'before they could sail back to Sardis' (*Hdt.* 1.78.2)

A similar pattern is shown by example (208), where both the satellite *diá* 'across, through' and the adverb *péran* 'across' are in charge of boundary crossing expression.

(208) καὶ διαπλεύσαντες πέραν
kaì diapleúsantes péran
and through-sail.PTCP.AOR.NOM.M.PL across
'and sailing across' (*Thuc.* 1.111.3a)

The verbal slot rarely participates in the redundancy pattern for the Median, probably as a consequence of the low type and token frequency of Median-oriented verbs in the corpus. Median verbs can interact with all the three categories involved in Path expression, namely satellites (3 cases), adnominals (2 cases) and modifiers (1 case).

In (209), the verb *peraióo:* 'ACT. carry over or across; PASS. pass over, cross', co-occurs with an adnominal introduced by the preposition *diá* 'across, through'. This case of redundancy proves particularly interesting since the verb under analysis can be constructed

transitively, the noun in the accusative case expressing the segment of Path which is crossed (cf. *Hdt.* 1.209, ἐπεραιώθη τὸν Ἀράξεα 'He crossed the river Araxes'). Despite the availability of a non-redundant option for Median encoding, the redundancy pattern is still preferred.

(209) διὰ τοῦ Κρισαίου κόλπου εἰ βούλοιντο
dià toû Krisaíou kólpou ei boúlointo
through ART.GEN.SG of_Crisa.GEN.M.SG gulf(M).GEN.SG if want.OPT.PRES.3PL
περαιοῦσθαι
peraioûsthai
carry_over.INF.PRES.M/P
'if they wanted to pass across the Crissaean gulf' (*Thuc.* 1.107.3b)

GOAL

The final segment of Path shows the greatest variety of repetition patterns within the texts of the corpus. The 123 occurrences of Goal redundancy, covering the 19,5% of cases, can be grouped as follows:

- 108 cases of redundancy across categories;
- 10 cases of redundancy within categories;
- 5 cases of redundancy across and within categories.

As already seen for Source and Median, for Goal too the inter-category redundancy represents the most frequent option. Such a pattern involves all the morphosyntactic slots by which Path information can be carried in Ancient Greek. All the possible intersections are attested in the corpus.

Among the most interesting cases of redundancy across categories, there is one example in which the Goal information is repeated in three different *loci* within the same clause, namely the verb, the satellite and the modifier. Besides this triple redundancy, what makes example (210) intriguing is the simultaneous occurrence of the redundancy pattern (taking into account the Goal-oriented verb *hiknéomai* 'reach', as well as the Goal satellite *eis* 'to, towards, into' and the Goal adnominal *eis* + accusative) and the parallelism pattern (realized

in the exact coincidence between the preverb and the preposition).

(210) ἐσαπικνέσθαι καὶ δὴ καὶ ἐς Ἄργος
esapiknésthai kaì dè: kaì es Árgos
to-from-reach.INF.PRES.M/P and PTC and to Argos(N).ACC.SG
'and then they came also to Argos' (*Hdt.* 1.1.1b)

Redundancy within categories is quite rare in the data set. When attested, it concerns the categories of satellites, adnominals and modifiers. It is worth stressing that, while such a pattern does not occur within the satellite slot for Source, Goal information can be distributed across two different satellites in contexts of multiple preverbation, as the one in (211). Here the two Goal preverbs attach to the basic motion verb *érkhomai* 'come, go'.

The two satellites only share the information concerning the Path segment, but while the semantics of *epí* 'upon, on' is more related to the configuration of the Figure with respect to the Ground, *eis* 'to, towards, into' is more directional. Such a scenario would correspond to what stated by Lestrade *et al.* (2011) regarding the distribution of labor between adpositions and cases. In this respect the behaviour of the first preverb would be closer to that of adpositions, while the second one could be assimilated to case markers.

(211) ἐπεσέρχεται ὁ τοῦ Κροίσου
epesérkhetai ho toû Kroísou
upon-to-go-pres.3SG ART.NOM.M.SG ART.GEN.SG Croesus(M).GEN.SG
παῖς
paîs
son(M).NOM.SG
'the son of Croesus now entered' (*Hdt.* 1.37.1)

When concerning the adnominal slot, the intra-category redundancy pattern gives rise to interesting combinations revealing how some prepositions are, so to speak, "predestined" to select specific types of Grounds. Such a situation is exemplified by (212), in which two Goals (respectively a city and a river) are encoded by means of two different prepositional phrases, namely *eis* plus accusative and *epí* plus accusative. While the city can be described resorting to the generic Goal marker *eis* 'to, towards, into', the position that a moving Figure

usually occupies with respect to a river requires the more specific semantics of *epí* 'upon, on', accounting for such a specific spatial configuration.

(212) καταπλώσαντας γὰρ μακρῇ νηί ἐς
katapló:santas gàr makrêi ne:í es
down-sail.PTCP.AOR.ACC.M.PL hence big.DAT.F.SG ship(F).DAT.SG to
Αἶαν τε τὴν Κολχίδα καὶ ἐπὶ Φᾶσιν
Aîan te tè:n Kolkhída kaì epì Phâsin
Aea(F).ACC.SG PTC ART.ACC.F.SG Colchis(F).ACC.SG and upon Phasis(M).ACC.SG
ποταμόν
potamón
river(M).ACC.SG
'they sailed in a long ship to Aea, a city of the Colchians, and to the river Phasis' (*Hdt.* 1.2.2)

The same kind of pattern is displayed by example (213). Here, the distinction between the two Grounds is based on the feature +/- human: while *eis* 'to, towards, into' selects a -human Goal, i.e. a city, *prós* 'to, towards, at' combines with a +human Goal, i.e. 'the father'.

(213) κατελθὼν δὲ ἐς πόλιν πρὸς τὸν
katelthò:n dè es pólin pròs tòn
down-go.PTCP.AOR.NOM.M.SG PTC to city(F).ACC.SG towards ART.ACC.M.SG
πατέρα
patéra
father(M).ACC.SG
'he went down to his father in the city' (*Hdt.* 1.114.4)

The distinction human vs. non-human also plays a role in some examples of inter- and intra- category redundancy. In (214) the Goal information is distributed across the categories of verb and adnominal and within the category of adnominal. The example under analysis differs from the previous one in that the motion verb here contains a directional information related to the final segment of Path, while the motion verb in (213) is neutral to Path information, which is thus added by the Median preverb *katá* 'downwards'.

(214) ἀπίκετο ἐς τοὺς Τερμίλας παρὰ
apíketo *es toùs* *Termílas* *parà*
from-reach.AOR.3SG to ART.ACC.M.PL Termilae(M).ACC.PL beside
Σαρπηδόνα
Sarpe:dóna
Sarpedon(M).ACC.SG
'to join Sarpedon in the land of the Termilae' (*Hdt.* 1.173.3b)

5.3.3 Locatedness

The "most covert" pattern of distribution, i.e. the locatedness pattern, represents the largely preferred strategy for all the parts of Path, with a token frequency that overcomes the 75% of cases for each segment.

SOURCE

In the corpus under study, Source exhibits the locatedness pattern, i.e. it is not distributed over the clause, but rather located in one slot at a time, in about 80,4% of cases (i.e. 358 occurrences out of 445).

As for all the parts of Path, the initial segment of the Figure's trajectory can be encoded by means of verbs, satellites, adnominals and modifiers. Examples (215 to 218) show the four possibilities of Source locatedness: (215) Source in the verb (104 cases in the corpus); (216) Source in the satellite (192 cases in the corpus); (217) Source in the adnominal (49 cases in the corpus); (218) Source in the modifier (13 cases in the corpus).

(215) χώρει χώρει
khó:rei *khó:rei*
retire.IMP.PRES.2SG retire.IMP.PRES.2SG
'Go away!' (Aristoph. *Thes.* 782)

(216) ἀποπλέειν κατὰ βίου τε καὶ γῆς
apopléein *katà* *bíou* *te* *kaì* *gês*
from-sail.INF.PRES down life(M).GEN.SG PTC and ground(F).GEN.SG
ζήτησιν
zé:te:sin
search(F).ACC.SG

'and sailed away to seek a livelihood and a country' (*Hdt.* 1.94.6d)

(217) ὁ δὲ Ἀράξης ποταμὸς ῥέει μὲν ἐκ
ho dè Aráxe:s potamòs rhéei mèn ek
ART.NOM.M.SG PTC Araxes(M).NOM.SG river(M).NOM.SG flow.PRES.3SG PTC out_of
Ματιηνῶν
Matie:nôn
Matieni.GEN.M.PL
'the Araxes flows from the country of the Matieni' (*Hdt.* 1.202.3a)

(218) ἐντεῦθεν δὲ κατέβαινεν εἰς πεδίον μέγα καὶ
enteûthen dè katébainen eis pedíon méga kaì
thence PTC down-go.IMPF.3SG to plain(N).ACC.SG big.ACC.N.SG and
καλόν
kalón
beautiful.ACC.N.SG
'thence he descended to a large and beautiful plain' (Xen. *Anab.* 1.2.22b)

As shown by the last example, locatedness can overlap with differentiation (cf. pp. 201ff.). Since the former concerns one part of Path at a time, while the latter regards Path as a whole, it may happen that the two patterns appear together in the clause. This is the case of (218), where Source is located in the modifier, while Path is differentiated, since all its segments are expressed, namely Source in the adverb *enteûthen* 'thence', Median in the preverb *katá* 'downwards' and Goal in the adnominal *eis pedíon* 'to the plain'. This observation holds true for all Path segments displaying locatedness.

MEDIAN

The Median part of Path is located in one single slot in the great majority of cases, i.e. the 94,3% of cases (241 motion clauses out of 261). Analogously to Source, it can be expressed by means of verbs, satellites, adnominals and modifiers, but it exhibits a strong preference for satellites compared to the other categories (151 occurrences out of 241). Sometimes this option derives from discourse factors: in order to avoid the repetition of the Ground element, mentioned earlier in the text, the author resorts to the Median satellite and omits the noun.

In (219) the preverb *diá* 'across, through', in combination with the basic motion verb

baíno: 'go, come', refers to the act of crossing a liquid Ground. This information can be inferred from the noun phrase *ploío:i* 'on boat' to which the expression of Manner is assigned.

(219) χρῆν πλοίῳ διαβαίνειν
khrên ploío:i diabaínein
be_necessary.INF.PRES boat(N).DAT.SG through-go.INF.PRES
'one had to cross in a boat' (*Hdt.* 1.186.1b)

Example (220) shows the same particle in its prepositional function, selecting the noun for city, which is, as a consequence of the extension of its referent, among the most frequent Grounds appearing as the Median part of Path.

(220) ῥεῖ δὲ καὶ οὗτος διὰ τῆς πόλεως
rheî dè kaì hoûtos dià tês póleo:s
flow.PRES.3SG PTC and DEM.NOM.M.SG through ART.GEN.F.SG city(F).GEN.SG
'the Marsyas also flows through the city' (Xen. *Anab.* 1.2.8a)

In (221) the verb *peráo:* 'pass across or through, traverse' is in charge of Median expression. The boundary-crossing nuance is further reinforced by the Source satellite *éxo:* 'out'. In this case, as in (X) Path is differentiated since two segments are mentioned within the same clause.

(221) πόθεν σὺ ἔξω περᾷς;
póthen sù éxo: perâis
whence 2SG.NOM outside traverse.PRES.2SG
'whence do you come outside' (*Eur. Ba.* 648a)

Example (222) exemplifies the most rare option of Median locatedness within the data set, i.e. Median encoding in the modifier, which occurs in 19 cases only. This option often entails the direction of motion to be described by means of an adverb, such as *opíso:* 'backwards' in the example under analysis.

(222) ἀπίκοντο ὀπίσω
apíkonto *opíso:*
from-reach.AOR.3PL backwards
'and returned home' (*Hdt.* 1.62.1b)

GOAL

The final segment of Path is located within one single slot in the clause in the high majority of cases (480 occurrences out of 631, i.e. about 76,1% of total). The data has shown that its preferred *locus* is the adnominal (265 cases out of 480). As previously stated, the prepositions involved in Goal encoding are numerous, and their employment may vary according to the spatial configuration of the Ground. In (223) the core Goal marker *eis* 'to, towards, into' selects a toponym and co-occurs with the basic motion verb *érkhomai* 'come, go'. Non other Path segments are expressed in the clause.

(223) Ἀγάθωνα πεῖσαι τὸν τραγῳδοδιδάσκαλον ἐς
Agátho:na *peîsai* *tòn* *trago:idodidáskalon* *es*
Agathon(M).ACC.SG persuade.INF.AOR ART.ACC.M.SG tragic_poet(M).ACC.SG to
Θεσμοφόροιν ἐλθεῖν
Thesmophóroin *eltheîn*
Thesmophoria(F).DAT.DU go.INF.AOR
'I am going to beg Agathon, the tragic poet, to go to the Thesmophoria'
(Aristoph. *Thes.* 88)

In (224) the Goal preposition *epí* 'upon, on' appears in a clause where the basic motion verb *baíno:* 'come, go' takes the Median preverb *aná* 'upwards'. The example shows how the semantics of the satellite and that of the preposition are, in Bybee's terms (1985: 13), relevant to one another, *aná* encoding vertical direction, *epí* implying a superior position of the Figure with respect to the Ground at the end of displacement. Such a semantic affinity makes the two particles good candidates to co-occur within the same clause.

(224) αὐτοὶ ἐπὶ τὰς αἱμασιὰς ἀναβάντες
autoì *epì* *tàs* *haimasiàs* *anabántes*
DEM.NOM.M.PL upon ART.ACC.F.PL wall(F).ACC.PL up-go.PTCP.AOR.NOM.M.PL
'they mounted the walls' (*Hdt.* 1.191.5b)

The second option of Goal locatedness by frequency (96 occurrences out of 480) gets involved the satellite slot. Example (225) seems to contradict the principle of iconicity discussed in Haiman (1980), according to which, as a consequence of the linearity of the linguistic sign, Sources should precede Goals in the clause (just as they do in the natural order of events). Here, however, the Goal satellite *eis* 'to, towards, into', attaches to the basic motion verb *eîmi* 'come, go', which is followed by the prepositional phrase *apò tôn ikrío:n* 'lit. from the benches (of a theatre)', encoding the Source of motion. Besides contradicting the linear order of events in the extra-linguistic reality, the example under analysis also opposes to the most frequent pattern in the data set, according to which Source of motion prefer the preverbal slot, while Goals tend to be expressed by means of adnominals.

(225) ὥστ᾽ εὐθὺς εἰσιόντες ἀπὸ τῶν
hó:st' *euthùs* *eisióntes* *apò* *tôn*
inasmuch_as at_once to-go.PTCP.PRES.NOM.M.PL from ART.GEN.PL
ἰκρίων
ikrío:n
halfdeck(N).GEN.PL
'so that they come back from the theater' (Aristoph. *Thes.* 395)

Compared to the other parts of Path, as far as Goal is concerned, the pattern of locatedness in the verbal slot is more frequent (92 occurrences out of 480). This result is in line with the relatively high type and token frequency of Goal-oriented verbs in the sample. Verbal roots referring to the final segment of Path are distributed across the five authors; the most frequent are *hiknéomai* 'reach' and *héko:* 'have come, have reached'. In (226) the latter is the only Path element in the clause.

(226) ἦκε ὁ Σαρδιηνὸς κῆρυξ
hêke *ho* *Sardie:nòs* *kêrux*
have_come.IMPF.3SG ART.NOM.M.SG Sardian.NOM.M.SG herald(M).NOM.SG
'the Sardian herald came' (*Hdt.* 1.83.1a)

The last pattern of Goal locatedness by frequency shows the modifier as the only category participating in Goal expression. In (227) the adverb *ekeî* 'there, in that place'

follows the basic motion verb *érkhomai* 'go, come'.[93]

(227) ἐλθὼν δὲ ἐκεῖ
elthò:n dè ekeî
go.PTCP.AOR.NOM.M.SG PTC there
'when you get there' (*Hdt.* 1.121.1b)

5.3.4 Differentiation

According to Sinha & Kuteva (1995: 187), differentiation is a pattern in which each slot in the clause «contributes a different part of the spatial relational meaning». As previously stated, for the investigation of this pattern, the Path component has been considered holistically.

As far as Path information is concerned, the differentiation pattern can be linked to the concept of Path complexity or elaboration. According to Slobin (1996b: 202), speakers are not obliged to mention one single Path segment per each motion event they describe; rather, they «may present a series of linked paths or a path with way-stations». This is what he calls a complex path or journey, i.e. an extended path that includes milestones or subgoals situated in a medium.

In the light of such premises, since the differentiation pattern envisages more than one part of Path to appear within one and the same clause, it can be interpreted in terms of Path complexity. This notion relates to the number of different Path segments per clause. It covers a range going from 0 up to 3 different parts of Path (i.e. Source, Median and Goal) explicitly mentioned in the clause. The 0-segment option corresponds to the absence of Path information; the 1-segment option matches Slobin's simple Paths (1996b: 202); the 2-segments and the 3-segments options can be considered as instantiations of Sinha & Kuteva's differentiation pattern.

The four possibilities are attested in the data set. Table 30 shows the combinations between the different options of Path complexity and the verb types.

93 It seems the case that Goal modifiers, like the one at issue here, trigger some kind of deictic information. The topic of deixis has not been investigated for the purposes of the present study, but it could represent a stimulating challenge for future research.

	NUMBER OF DIFFERENT PATH SEGMENTS PER CLAUSE				
MAIN VERB TYPES	1 SEGMENT	2 SEGMENTS	0 SEGMENTS	3 SEGMENTS	TOTAL
Basic motion	273	75	69	8	40,3% (425)
Path	125	183	0	13	30,4% (321)
Manner	157	25	36	6	21,2% (224)
Path + Manner	46	31	0	8	8,1% (85)
TOTAL	57% (601)	29,8% (314)	9,9% (105)	3,3% (35)	100% (1055)

Table 30: Different segments of Path per clause[94]

The horizontal axis accounts for the number of different Path segments per clause, while the vertical axis shows the verb types. All the quantitative data in the table is ordered by frequency.

Generally speaking the two patterns involving differentiation, namely the 2-segments and the 3-segments options, are less frequent than the clauses in which only one part of Path is encoded. The most frequent option for all the main verb types involves simple Path encoding. There is a great gap between the 1-segment pattern and the 2-segments pattern occurring with basic motion verbs. The same observation can be drawn for Manner verbs. As far as Path verbs are concerned, the situation changes and the 2-segments option prevails over the simple Path option. Since no great variance exist between the two patterns, with Path verbs the scenario proves more balanced.

Table 31 summarizes the quantitative data related to the patterns of locatedness (i.e. 1 segment of Path per clause, simple Path) and differentiation (i.e. 2/3 segments of Path per clause, complex Path). The percentages are calculated out of the total number of clauses containing some piece of Path information (i.e 950 out of 1055).

Pattern	Frequency
Locatedness	63,3% (601)
Differentiation	36,7% (349)
Total number of clauses containing Path info	100% (950)

Table 31: Location and differentiation in the expression of Path

The following examples account for the contexts in which the Path information is

94 The 0-segments pattern refers to the clauses in which no Path information is explicitly encoded.

differentiated, i.e. more than one Path segment occurs within the same clause. It is worth stressing that these are not all the possible patterns, but only a few instances.

Examples from (228) to (231) show the two-parts option realized by means of different combinations among the slots involved in Path expression.

Sat_{SOURCE} + $Verb_{BASIC}$ + Adn_{GOAL}

(228) καὶ ἐς τὴν γῆν ἀπέβησαν
kaì es tè:n gên apébe:san
and to ART.ACC.F.SG land(f).ACC.SG from-go.AOR.3PL
'and they arrived on the island' (*Thuc.* 1.100.2b)

Sat_{TRAJ} + $Verb_{MANNER}$ + Adn_{SOURCE}

(229) καταπηδήσας ἀπὸ τοῦ ἵππου
katape:dé:sas apò toû híppou
down-leap.PTCP.AOR.NOM.M.SG from ART.GEN.SG horse(M).GEN.SG
'he leaped down from his horse' (Xen. *Anab.* 1.8.28b)

Sat_{GOAL} + Sat_{SOURCE} + $Verb_{BASIC}$

(230) ἐπεξελθόντες ἀπέθανον πάντες
epexelthóntes apéthanon pántes
upon-out_of-go.PTCP.AOR.NOM.M.PL from-die.AOR.3PL all.NOM.M.PL
Ξάνθιοι μαχόμενοι
Xánthioi makhómenoi
of_Xanthus.NOM.M.PL fight.PTCP.PRES.NOM.M.PL
'and sallying out fell fighting, all the men of Xanthus' (*Hdt.* 1.176.2)

$Verb_{BASIC}$ + Adn_{SOURCE} + Adn_{GOAL}

(231) ἐκ τῆς Δρυοπίδος οὕτω ἐς Πελοπόννησον
ek tês Druopídos houto: es Pelopónne:son
out_of ART.GEN.F.SG Dryopia(f).GEN.SG so to Peloponnese(f).ACC.SG
ἐλθὸν
elthòn
go.AOR.3PL

'and at last they came from Dryopia to the Peloponnese' (*Hdt.* 1.56.3c)

In examples (232) and (233) a full Path (segmented into its three parts) is described within the same motion clause.

Sat_{SOURCE} + $Verb_{BASIC}$ + Adn_{GOAL} + Adn_{TRAJ}

(232) καὶ δενδροτομήσαντες πάλιν ἀπῆλθον ἐπ'
kaì dendrotomé:santes pálin apêlthon ep'
and cut_down_trees.PTCP.AOR.NOM.M.PL back from-go.AOR.3PL upon
οἴκου διὰ Γερανείας καὶ Ἰσθμοῦ
oíkou dià Geraneías kaì Isthmoû
home(M).GEN.SG through Geraneia(f).GEN.SG and isthmus(M).GEN.SG
'and cutting down the fruit trees, the Lacedaemonians returned home across Geraneia and the isthmus' (*Thuc.* 1.108.2b)

Sat_{TRAJ} + $Verb_{SOURCE}$ + Adn_{SOURCE} + Adn_{GOAL}

(233) ἀναχωρῆσαι ἐκ τῆς πρύμνης ἐς μέσην
anakho:rêsai ek tês prúmne:s es mése:n
up-retire.INF.AOR out_of ART.GEN.F.SG stern(f).GEN.SG to middle.ACC.F.SG
νέα
néa
ship(f).ACC.SG
'he drew away toward the waist of the vessel from the stern' (*Hdt.* 1.24.5a)

5.4 Patterns of distribution in the expression of Manner

As well known, compared to Path, whose conceptual subcomponents have been investigated in detail by a number of scholars working on motion event encoding crosslinguistically (cf., *inter alia*, Ibarretxe-Antuñano 2009; Imbert 2012), Manner has received little attention in the relevant literature and a unanimous description of the dimensions pertaining to this semantic component of motion is still lacking. Such an unequal treatment has to do with the internal complexity of the Manner concept.

As stated by Kopecka (2010: 230), Manner can be defined as «the feature characterizing how the Figure moves as opposed to where the Figure moves to or from. This interpretation

of Manner encompasses not only the different ways of moving the body, but also other semantic dimensions related to movement. More specifically, it includes various physical (e.g. effort, posture, velocity) and psychological (e.g. attitude or emotional state) features, as well as some more internal aspects such as the conveyance and the noise associated with the movement».

Given the conceptual architecture of Manner, as well as the lack of a unanimous identification of its semantic subcomponents, the criteria employed for assessing the distribution of Path information do not totally fit the analysis of Manner distribution. However, as the following sections of the present chapter will show, Sinha & Kuteva's model has proven fruitful for an investigation of this semantic component too.

Table 32 shows the number of clauses showing each pattern of distribution for the Manner component. As already stated with respect to Path distribution (cf. Table 29 on page 183), the percentages have been calculated out of the total number of clauses containing some piece of Manner information, in order to guarantee the comparability of the quantitative results.

Pattern	Frequency
Parallelism	0
Redundancy	2,7% (9)
Differentiation	2,1% (7)
Locatedness	95,2% (319)
Total number of clauses containing Manner info	100% (335)

Table 32: Patterns of distribution in the expression of Manner

5.4.1 Parallelism

Both the semantic and the lexical heaviness of Manner compared to Path information make the parallelism pattern highly unlikely to occur. As a matter of fact, a clause in which the Manner component is expressed redundantly by means of the same morphemes (namely the verb and the modifier), such as English *He walked walking* or *He ran at a run*, albeit possible, would be too dense to be easily processed by the speakers of a language. That is probably why the parallelism pattern is not attested for the Manner component in

the texts under analysis.

5.4.2 Redundancy

The redundancy pattern is attested for the Manner component in 9 cases (i.e. about 2,7% of the total number of clauses in which Manner appears). The occurrences at issue show different types of Manner elaboration:

- SUBPATTERN I: the verb and the modifier express the same semantic information related to the Manner component, e.g. velocity or conveyance;

- SUBPATTERN II: the modifier further specifies one of the Manner ingredients already provided by the verb;

- SUBPATTERN III: the overlap of Manner information between the verb and the modifier is only partial, being the verb semantically richer than the modifier.

Among the examples in which the verb and the modifier provide ancillary information about the Manner of motion (cf. Özçalışkan & Slobin 2003: 268) (SUBPATTERN I), two display redundancy of the velocity component, i.e. (234) and (235). In (234) the fast character of the action expressed by the verb *speúdo:* 'hasten' is further stressed by the adverb *takhéo:s* 'quickly' etymologically derived from the adjective *takhús* 'swift, fleet'.

(234) ἔκσπευδε ταχέως
ékspeude takhéo:s
out_of-hasten.IMP.PRES.2SG fast
'hurry up!' (Aristoph. *Thes.* 277)

In (235) the redundancy pattern is realized by means of a noun, i.e. *o:kúte:s* 'swiftness, fleetness', found in the accusative of limitation, and a verb, i.e. *aísso:* 'to move with a quick shooting motion, to shoot, dart, glance', both describing the instantaneous character of the

motion performed by the Maenads.

(235) ἦξαν πελείας ὠκύτητ᾽ οὐχ ἥσσονες
êixan peleías o:kúte:t' oukh hé:ssones
dart.AOR.3PL dove(f).GEN.SG swiftness(f).ACC.SG NEG inferior.NOM.M.PL
'they rushed forth, swift as a dove' (*Eur. Ba.* 1090)

In one case of redundancy, the Manner subcomponent which appears to be distributed between the verbal slot and the modifier slot is the conveyance, that is to say both the verb *pléo:* 'sail' and the noun phrase *nausí* 'by ship' refer to the vehicle exploited by the Figure for its displacement.

(236) καὶ κατὰ θάλασσαν μὲν αὐτούς Ἀθηναῖοι ναυσὶ
kaì katà thálassan mèn autoús Athe:naîoi nausì
and down sea(f).ACC.SG PTC 3PL.ACC Athenians.NOM.M.PL ships(f).DAT.PL
περιπλεύσαντες ἔμελλον κωλύσειν
peripleúsantes émellon ko:lúsein
around-sail.PTCP.AOR.NOM.M.PL be_destined.IMPF.3PL prevent.INF.FUT
'the route by sea exposed them to the risk of being stopped by the Athenian fleet' (*Thuc.* 1.107.3a)

In two examples taken from Xenophon, the redundant information is related to the mode subcomponent of Manner, which involves «translational motion brought about by specific types of movements of the Figural entity» (cf. Narasimhan 1998: 211). In particular, in the two examples at issue the verb *théo:* 'run' and the noun *drómos* 'course, race', found in the Manner dative, encode a quick movement of a human Figure performed by moving the legs more rapidly than at a walk, corresponding to the English verb run.

(237) τὸ ὑπολειπόμενον ἤρξατο
tò hupoleipómenon é:rxato
ART.ACC.N.SG under-leave.PTCP.PRES.M/P.NOM.N.SG begin.AOR.M/P.3SG
δρόμῳ θεῖν
drómo:i theîn
course(M).DAT.SG run.INF.PRES
'those who were thus left behind began to run' (Xen. *Anab.* 1.8.18c)

(238) ἐβόων δὲ ἀλλήλοις μὴ θεῖν δρόμῳ
ebóo:n dè allé:lois mè: theîn drómo:i
shout.IMPF.3PL PTC RECP.DAT.PL NEG run.INF.PRES course(M).DAT.SG
'but shouted meanwhile to one another not to run at a headlong pace'
(Xen. *Anab.* 1.8.19e)

The second subcategory belonging to the redundancy pattern includes two cases in which the modifier designates the Manner information conveyed by the verb in further details (SUBPATTERN II). In both the examples under analysis the modifier is a noun phrase in which a noun in the dative case (expressing respectively the Instrument and the Manner of motion) combines with an adjective providing more specific semantic features. It is precisely the presence of the adjective which makes the overlap between the information encoded by the verb and that encoded by the modifier only partial.

(239) ποδῶν τρέχουσαι συντόνοις δραμήμασι
podôn trékhousai suntónois dramé:masi
foot(M).GEN.PL run.PTCP.PRES.NOM.F.PL intense.DAT.N.PL course(N).DAT.PL
'running with eager speed of feet' (*Eur. Ba.* 1091)[95]

(240) τὴν δ' εἶπέ τίς μοι δεῦρο βακχείῳ
tè:n d' eîpé tís moi deûro bakkheío:i
ART.ACC.F.SG PTC say.AOR.3SG INDEF.NOM.M.SG 1SG.DAT hither Bacchic.DAT.M.SG
ποδὶ στείχειν Ἀγαύην
podì steíkhein Agaúe:n
foot(M).DAT.SG walk.INF.PRES Agave
'But some one told me that Agave was coming here with Bacchic foot' (*Eur. Ba.* 1230)

The last subgroup ascribable to the Manner redundancy pattern comprises two cases in which the verb is semantically richer than the modifier (SUBPATTERN III). In both examples the modifier expresses the fast nature of the action encoded by the verb (cf. the adverb *tákhista* 'most quickly, most speedily' and the adverbial accusative *tèn takhíste:n* 'by the quickest way, most quickly', both in the superlative grade), while the verb combines the

95 In order to grasp the difference between the two subcategories of Manner redundancy, it is worth comparing the two examples in (239) and (240). While in the former the verb and the noun phrase express the same type of Manner information, i.e. the mode of motion, in the latter the adjective combining with the noun *drómos* 'course, race' adds another piece of information associated to the temporal character of the action.

information related to velocity and some other kind of Manner information. The verb *pheúgo:* 'flee, escape' in (241) contains a directional component referring to a Source-oriented movement of the Figure, while *pe:dáo:* 'leap, spring' in (242) mentions the mode of motion.

(241) ὅταν λυθῇς τάχιστα φεύξει
hótan luthêis tákhista pheúxei
whenever loosen.SBJV.AOR.PASS.2SG most_quickly flee.FUT.2SG
'as soon as you have been released, escape most quickly' (Aristoph. *Thes.* 1205a)

(242) ἢ ἐκπηδᾶν ἐς τὴν θάλασσαν τὴν
è: ekpe:dân es tè:n thálassan tè:n
or out_of-leap.INF.PRES to ART.ACC.F.SG sea(f).ACC.SG ART.ACC.F.SG
ταχίστην
takhíste:n
swift.SUP.ACC.F.SG
'or else to jump into the sea at once' (*Hdt.* 1.24.3)

Table 33 summarizes the options of Manner redundancy revealed by the data. As shown by the final rows in the table, SUBPATTERN II and SUBPATTERN III look specular to one another, the former entailing a stronger elaboration of the Manner component within the modifier, the latter assigning denser semantic information to the verb.

SUBPATTERN	EXAMPLE	MANNER INFORMATION ON THE VERB	MANNER INFORMATION ON THE MODIFIER
I	Aristoph. *Thes.* 277 (234)	VELOCITY (*speúdo:* 'hasten')	VELOCITY (*takhéo:s* 'quickly')
I	Eur. *Ba.* 1090 (235)	VELOCITY (*aísso:* 'to move with a shooting motion')	VELOCITY (*o:kúteta* 'as for the swiftness')
I	*Thuc.* 1.107.3a (236)	CONVEYANCE (*pléo:* 'sail')	CONVEYANCE (*nausí* 'by ship')
I	Xen. *Anab.* 1.8.18c (237)	MODE (*théo:* 'run')	MODE (*drómo:i* 'at a run')
I	Xen. *Anab.* 1.8.19e (238)	MODE (*théo:* 'run')	MODE (*drómo:i* 'at a run')
II	Eur. *Ba.* 1091 (239)	MODE (*trékho:* 'run')	MODE + FORCE (*suntónois dramé:masi* 'with intense runs')
II	Eur. *Ba.* 1230 (240)	MODE (*steíkho:* 'walk')	MODE + QUALITY (*bakkheío:i podí* 'with Bacchic foot')
III	Aristoph. *Thes.* 1205a (241)	VELOCITY + DIRECTION (*pheúgo:* 'flee, escape')	VELOCITY (*tákhista* 'most quickly)
III	*Hdt.* 1.24.3 (242)	VELOCITY + MODE (*pe:dáo:* 'leap, spring')	VELOCITY (*tèn takhíste:n* 'most quickly')

Table 33: Subpatterns of Manner redundancy

5.4.3 Locatedness

Analogously to all the three segments of Path, Manner too prefers to be isolated in one slot within the motion clause. As a matter of fact, the locatedness pattern occurs in the 95,2% of cases (i.e. 319 clauses out of 335). In the high majority of contexts (i.e. 294 out of 319), the category in charge of Manner encoding is the verb, as in example (243). Here the Satellite-Framed strategy is perfectly instantiated: Path expression is committed to the Median satellite *perí* 'round about, around', as well as to the Source and Goal adnominals *ap'Io:nías* 'from Ionia' and *eis Kilikían* 'to Cilicia', while the main verb *pléo:* 'sail' describes the conveyance of motion. It is worth mentioning that, since all the three Path segments are explicitly mentioned in the clause, the example at issue exhibits the differentiation pattern for the whole Path component.

(243) περιπλεούσας ἀπ᾽ Ἰωνίας εἰς Κιλικίαν
peripleoúsas ap' Io:nías eis Kilikían
around-sail.PTCP.AOR.NOM.M.SG from Ionia(f).GEN.SG to Cilicia(f).ACC.SG
'sailing around from Ionia to Cilicia' (Xen. *Anab.* 1.2.21e)

Example (244) shows an instance of the locatedness pattern within the modifier slot. Here the dative feminine of the adjective *pezós* 'on foot, walking' is the only element providing some Manner information and, more specifically, a reference to the vehicle employed by the Figure for its displacement.

(244) ἤν τε ἐπὶ τὴν χώραν ἡμῶν πεζῇ ἴωσιν
é:n te epì tè:n khó:ran he:môn pezêi ío:sin
if PTC upon ART.ACC.F.SG land(f).ACC.SG 1PL.GEN on_foot go.SBJV.PRES.3PL
'if they come against our country on foot' (*Thuc.* 1.143.4)

5.4.4 Differentiation

In about 2% of cases (7 occurrences out of 335) the Manner distribution is fulfilled through the differentiation pattern. In the examples at issue, the verb and the modifier encode two different subcomponents of Manner. Such cases would correspond to the instances of complex Path. Being Manner more difficult to grasp as a consequence of its fuzzy conceptual nature, it is maybe preferable to speak about density of Manner information.

The examples exhibiting the differentiation pattern can be further classified according to the type of Manner information encoded by the modifier:

- conveyance (4 x);
- mode (1 x);
- other types of Manner information (2 x).

When the conveyance of motion is mentioned, it is usually found in a noun phrase taking the instrumental dative case marker. The vehicle is often a ship (cf. *taîs nausí* 'with the ships' in (245)), except in example (246), where the prepositional phrase *epì tê:s armáxe:s* 'on the carriage' oscillates between a locative and an instrumental meaning. In both the examples under analysis the verb (i.e. *pheúgo:* 'flee, escape') associates a directional nuance and a Manner information both related to the velocity of motion and to the attitude of the Figure.

(245) οἱ καταφυγόντες αὐτῶν ταῖς
hoi kataphugóntes autôn taîs
ART.NOM.M.PL down-flee.PTCP.AOR.NOM.M.PL 3PL.GEN ART.DAT.F.PL
ναυσὶν ἐς Μυκάλην διεφθάρησαν
nausìn es Mukále:n diephtháre:san
ship(f).DAT.PL to Mycale(f).ACC.SG through-destroy.AOR.PASS.3PL
'and after those of them who had fled with their ships to Mycale had been destroyed' (*Thuc.* 1.89.2b)

(246) ἥ τε Κίλισσα ἔφυγεν ἐπὶ τῆς
hé: te Kílissa éphugen epì tês
REL.NOM.F.SG PTC Cilician.NOM.F.SG flee.AOR.3PL upon ART.GEN.F.SG
ἁρμαμάξης
harmamáxe:s
carriage(f).GEN.SG
'the Cilician queen took to flight in her carriage' (Xen. *Anab.* 1.2.18a)

Two further examples in which the Manner information conveyed by the verb and that provided by the modifier differ are both taken from Xenophon's *Anabasis*. In (247) the verb *pétomai* 'fly' mainly refers to the medium through which the Figure moves, i.e. the air, while the adverbial accusative of the adjective *brakhús* 'short' alludes to the temporal dimension (i.e. the short duration) of the displacement. The final comparison with the partridges represents an instance of what Özçalışkan & Slobin (2003: 267) call indirect evocation of Manner.

(247) πέτονται γὰρ βραχὺ ὥσπερ πέρδικες
pétontai gàr brakhù hó:sper pérdikes
fly.PRES.3PL hence shortly as partridge(f).NOM.PL
'for they fly only a short distance, like partridges' (Xen. *Anab.* 1.5.3d)

In (248) the prepositional phrase *anà krátos* 'by storm' seem to express the impetuous character of the Figure's escape.

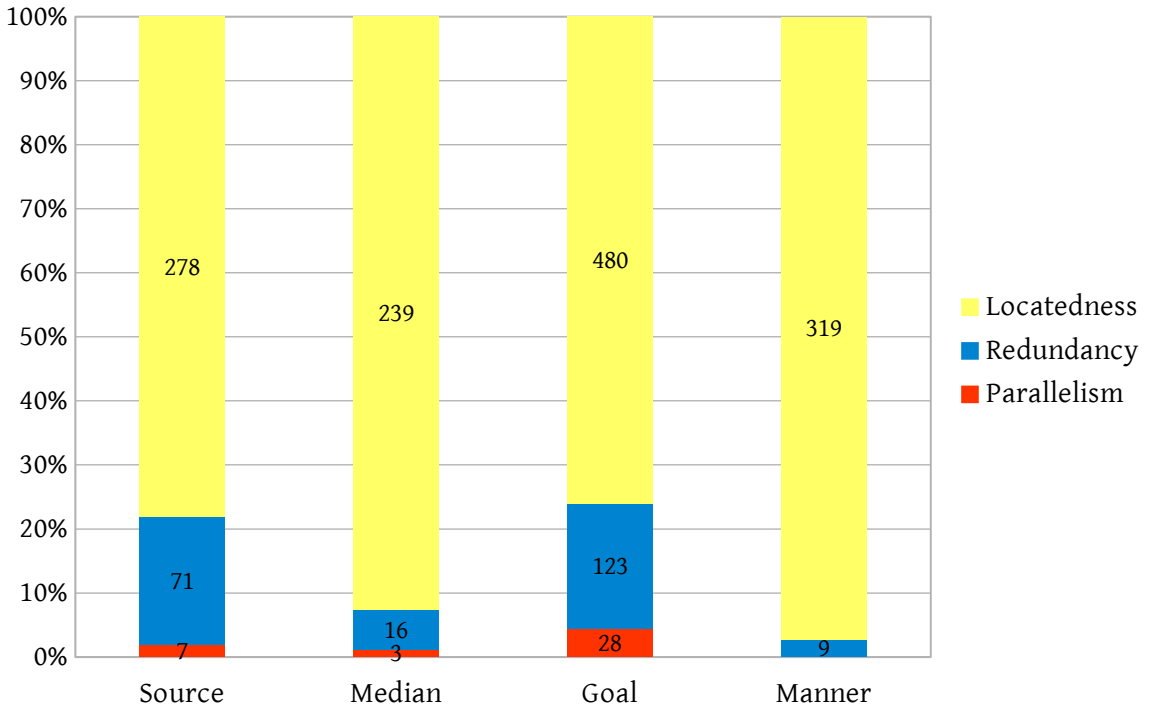
(248) ὅτι φεύγουσιν ἀνὰ κράτος
hóti pheúgousin anà krátos
that flee.PRES.3PL up strength(f).GEN.SG
'that they were in headlong flight' (Xen. *Anab.* 1.10.15)

5.5 Path vs. Manner

The analysis of the ways Path and Manner information is distributed over the motion clause has revealed some important results.

To begin with, as previously stated, in Ancient Greek various elements in the clause "conspire" (cf. Ameka 1995) to provide information about spatial scenes. In particular, four categories interact for Path expression (namely verbs, satellites, adnominals and modifiers) and two for Manner expression (namely verbs and modifiers). In addition to these linguistic tools, contextual inference also plays a role in the building of spatial information, e.g. as for the physical features of the Ground.

Although not exactly the same parameters can be exploited to investigate Path and Manner with respect to the topic of distribution, in that the former must be decomposed in order to assess the frequency of most patterns, the data has shown that there is ground for a comparison between the two components to a certain extent. Graph 1 summarizes the results about the patterns of Path and Manner distribution.



Graph 1: Patterns of Path and Manner distribution

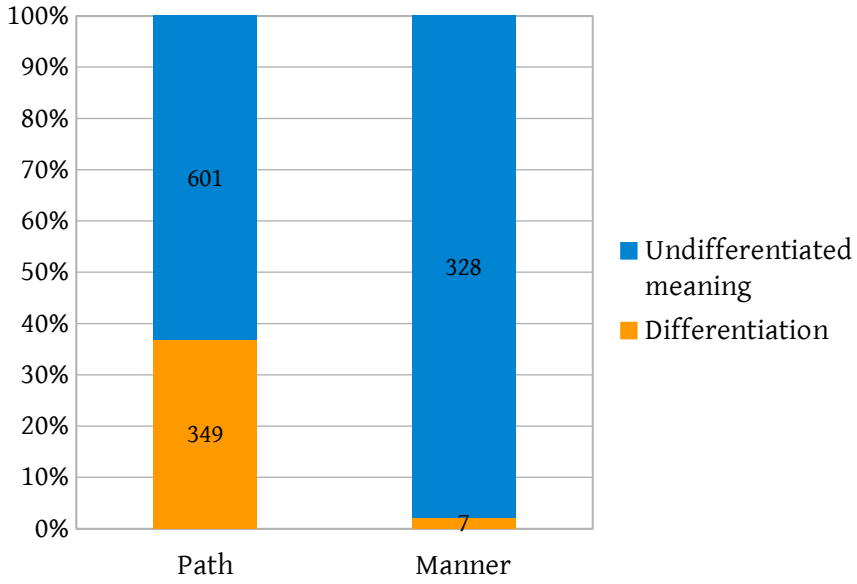
The preferred pattern for both Path (and its parts) and Manner is locatedness. The two main semantic components of motion prove quite resistant to redundancy. In this light, Ancient Greek shows a bias towards a covert distributed spatial semantics.

Despite its preference for a pattern in which one piece of spatial information is encoded by means of one single slot at a time, Ancient Greek does not seem to respond to the so-called *Directed Path Constraint* identified for languages like English, as shown by the occurrence of parallelism within the data. This pattern, which in Ancient Greek involves the repetition of the same directional particle both in the preverbal and in the prepositional slot, is only applicable to the Path component. Among the three Path segments, Goal is the one which exploits parallelism the most. This could be due to the constructional character of boundary crossing in the final part of Path (cf. pp. 163ff.).

As for the redundancy pattern, it is attested for all the segments of Path, as well as for the Manner component. Generally speaking, redundancy tends to occur more frequently across different morphosyntactic categories than within one and the same category (i.e. inter-category redundancy is preferred to intra-category redundancy). The three parts of Path show the following hierarchy as far as the redundancy pattern is concerned: Source is

more redundant than Goal; Goal is more redundant than Median (Source > Goal > Median). Furthermore, Goal shows the greatest variety of redundancy patterns (inter- and intra-category, and both). Manner is less distributed than Path and no great gap subsists between redundancy and differentiation.

With respect to differentiation, although both Path and Manner prefer to appear within the clause in the form of one single type of information (i.e. one segment for Path, and one dimension for Manner), the former proves less reluctant to the pattern at issue, as shown by Graph 2.



Graph 2: Path and Manner differentiation

Crucially, the pattern of differentiation can be interpreted in terms of complexity of a given semantic component of motion. In this light, it is possible to affirm that in Ancient Greek Path shows a higher degree of granularity compared to Manner. In other words, the description of the trajectory followed by the Figure tends to be more detailed than the description of the mode of motion. Such a claim contrasts the common assumption according to which in Satellite-Framed languages the Manner component would be finer-grained than the Path component.

Chapter 6. Asymmetries in Path Encoding. a Case Study of Motion Expression in Ancient Greek

> «After all, there are no events in the 'real world'. Events are the result of a cognitive segmenting of the continuous process that constitutes our reality. There is nothing to stop us from construing a motion event as having only a source, only a trajectory, or only a goal.»
>
> Stefanowitsch & Rohde (2004: 264)

The present chapter aims at identifying and analysing the differences in the encoding of the initial and final section of Path. In particular, the main purpose is to address hypothesis of the Source-Goal asymmetry, and to explore the following research questions: do different Path segments receive equal linguistic treatment? Which part of Path receives more elaborate and fine-grained linguistic encoding in the Ancient Greek data under analysis? In what ways? Is it possible to claim in favour of the existence of a Goal bias in the texts at issue?

The topic of the asymmetries in Path encoding will be presented as a case study of motion expression in Ancient Greek. In this respect, this chapter is intended to retrace all the steps of the dissertation, as well as to investigate the different phenomena through the lens of the biases registered in the expression of Source and Goal. In this respect, this case study on Path expression represents an example of how a detailed analysis of motion event encoding as the one presented in this work may be exploited for the investigation of further linguistic phenomena, among which we have selected the Source-Goal asymmetry by virtue of its typological and cognitive relevance.

Despite the hypothesized existence of the following hierarchy involving the three parts of Path, Goal > Source > Median (cf., *inter alia*, Radden *et al.* 1999: 98), only the asymmetry between the initial and the final segment will be investigated. For this purpose, we will investigate the strategies exploited for their encoding, in the light of different morphosyntactic and semantic parameters. Following the structure of the whole thesis, the analysis will concern three levels, namely the level of the lexical and grammatical tools available for Path encoding (cf. Chapter 3), that of the constructions ranging from a more overt to a more covert encoding of the spatial information (cf. Chapter 4), and that of the distribution of the semantic components across the motion clause (cf. Chapter 5).

Similarly to Chapter 5, the analysis will find its focus in spontaneous motion events, which represent the core of Talmy's original formulation.

The present chapter will be structured as follows: in Section 6.1 the hypothesis of Source-Goal asymmetry will be presented from both an extralinguistic and a linguistic point of view. In Section 6.2 the criteria to assess the existence as well as the direction of such asymmetry will be introduced and explained. Sections from 6.3 to 6.5 will be devoted to the core qualitative analysis of the phenomenon in question, while section 6.6 will be consecrated to the quantitative. Finally, conclusions will be drawn in section 6.7.

6.1 The Source-Goal asymmetry

The rising of the hypothesis on the existence of an asymmetry between the initial and the final part of Path in the literature on motion event expression can be linked to the works by Jones (1983) and Ikegami (1987), respectively on French and on Japanese. These two papers represent the starting point of a number of studies which analyse the topic of Source-Goal asymmetry from a cognitive, psychological and perceptual perspective, as well as from a strictly linguistic point of view.

According to this branch of studies, «not all motion PATHs are born equal» (Papafragou 2010: 1065). More specifically, languages would privilege the Goal of motion by:

- expressing it more systematically than Source;

- making finer-grained distinctions at motion event endpoints than at motion event beginnings.

As a consequence or as a cause of this linguistic constraint on spatial meaning (cf. Lakusta & Landau 2005; Regier & Zheng 2007), from a cognitive point of view, Goals would be more promptly perceived, better discriminated and given preferential attention compared to Sources. Furthermore, empirical data shows that, from an acquisitional point of view, Goals would be identified more easily than Sources (cf. Freeman, Sinha & Stedmon 1981), and that, even when acquired simultaneously to Source terms (cf. Clark & Carpenter 1994),

Goal terms would prove more specific in meaning (cf. Bowerman 1996).

According to Ikegami (1987: 135), this general psychological tendency could be explained as the effect of the speakers' anticipations about events in general: «if we hear that something has started, we are still left with an expectation to be told that it has arrived at a certain point. Otherwise, it will be felt incomplete as a description of motion. On the other hand, if we hear that something has arrived at some place and ended its motion there, we feel quite satisfied with the description in spite of the fact that we are not told about the start of motion». Such an orientation towards endpoints would constitute the basis for a cognitive Goal bias.

In order to explore the non-linguistic representation of Path, Lakusta & Landau (2005) show the results of three experiments in which normally developing children between the ages of 3 and 6 years, children with Williams syndrome and normal adults, all English speaking, were asked to employ prepositional phrases referring to Path segments in order to describe different kinds of motion-related events, i.e. Manner of motion events, Change of Possession, Change of State, Attachment/Detachment events. The results unanimously reveal that even with events that prove neutral to the Path component, both children and adults tend to adopt a Goal-biased perspective leading them to omit the Source of motion. In this light, the heavier cognitive and linguistic weight of Goals compared to Sources may find its origins in the speakers' perceptual and attentional systems.

In Stefanowitsch & Rohde (2004), two possible explanations to the Source-Goal asymmetry are put forth, namely the *(psychological) salience hypothesis* and the *complete-conceptualization hypothesis*. According to the former, the Goal bias would be «an inherent part of the make up of the human conceptual system» (p. 251), which is naturally oriented towards the goals and purposes of human actions. By contrast, the complete-conceptualization hypothesis stresses the higher information value of Goal markers: «if we know the goal of a motion, we can infer enough about its trajectory (which must lead to the goal), and perhaps even its source, to arrive at a complete conceptualization of the motion event» (p. 252). The same does not hold true for Source.

Aiming at investigating the psychological and linguistic weight of Sources and Goals, Regier & Zheng (2007) reach analogous conclusions through an empirical analysis. The results of their experiments based on video stimuli involving visual discrimination tasks and showing joining and separating events, reveal that «people attend more to endpoints of

spatial motion events than to their beginnings, and that languages accordingly may make finer semantic distinctions at event endpoints than at beginnings» (Regier & Zheng 2007: 706). The origin of such a bias could be related to the memory recency of Goals or to the attention towards purposes of human actions in general.

Kopecka & Ishibashi (2011) too resort to video stimuli as a methodological tool to test the hypothesis of Source-Goal asymmetry.[96] Their typological analysis is concerned with the lexical and grammatical resources involved in Source and Goal expression, the distribution of Source and Goal information within the clause, the semantic distinctions available at starting points and endpoints of motion, and the number of Path segments per clause (i.e. the difference between simple and complex Paths). The results of their study show the existence of a higher degree of crosslinguistic variation than previously claimed in cognitive studies.

In the following section the criteria to evaluate the actual existence of an asymmetry between the initial and the final part of Path will be described in details.

6.2 Criteria for assessing the Source-Goal asymmetry in Ancient Greek

On the basis of the existing literature on the topic, a set of twelve morphosyntactic and syntactic parameters has been elaborated in order to analyse the possible ways in which the Source-Goal asymmetry surfaces in the Ancient Greek. Such parameters will be grouped, following the structure of the dissertation, according to the level of analysis they refer to.

To begin with, keeping the corpus-based approach that has characterized the whole thesis, in section 4 the spatial system of Ancient Greek will be subject to a deep investigation. Specifically, the morphosyntactic tools the language resorts to for Source and Goal encoding will be analysed on the account of:

- the number of markers for each part of Path;

- the number and types of distinctions encoded, with a special reference to the

96 The video stimuli in question have been elaborated by Ishibashi, Kopecka & Vuillermet (2006) within the framework of the project *Trajectoire*, aiming at building a typology of Path expression. The elicitation tool elaborated for this purpose consists in a set of 76 videoclips showing different kinds of motion events.

concepts of *semantic granularity* (cf. Kopecka & Ishibashi 2011: 140ff.), or *semantic breadth* (cf. Regier & Zheng 2007: 711ff.), as well as to the modal and configurational features of Source and Goal markers identified in Bourdin (1997: 190ff.);

- the possible pragmatic extensions of Source and Goal markers (cf. Regier & Zheng 2007: 712; Papafragou 2010: 1066);

- the morphological complexity of Source and Goal terms (cf. Kopecka & Ishibashi 2011: 143ff.), with a focus on the so-called complex modifiers (cf. Chapter 3).

Concerning the dimension of the interaction between the different lexical and grammatical resources involved in Source and Goal expression, which will be examined in section 5, the following research questions will be addressed:

- which part of Path allows a more constructional (i.e. covert, idiomatic) encoding?

- which extremity is less marked (cf., *inter alia*, Nam 2004)?

- which part of Path shows the highest combinatory potential (cf. Chapter 4), i.e. is more open to the co-occurrence with the other Path components in the clause?

In section 6.5, the topic of distribution, already discussed in chapter 5, will be declined in the light of the phenomenon of Path asymmetries. Going back to a purely onomasiological perspective, the patterns of distribution of Source and Goal information across the motion clause will be investigated in details, aiming at finding out which part of Path is more *located*, *redundant* or *parallel*, as well as the possible functional explanation to the different behaviours displayed.

Some quantitative results of the corpus analysis on Ancient Greek regarding the relative token frequencies of Source and Goal markers will follow the qualitative data and prepare the ground for some conclusions on the topic of Source-Goal asymmetry (cf. Section 6.7).

Table 34 summarizes the criteria presented in the present paragraph. For each parameter

an acronym has been created aiming at simplifying the reading of the following sections.[97] Each criterion will be tested for both Source and Goal.

Reference	Criterion	Dimension
INV1	Number of markers	Morphosyntactic tools
INV2	Semantic granularity (or breadth, or delicacy)	Morphosyntactic tools
INV3	Pragmatic extension	Morphosyntactic tools
INV4	Morphological complexity	Morphosyntactic tools
CONSTR1	Overt vs. covert encoding	Constructions
CONSTR2	Cooptation of Location markers	Constructions
CONSTR3	Semantic combinability	Constructions
DISTR1	Patterns of distribution	Distribution
FREQ1	Token frequency	Frequency
FREQ2	Morphosyntactic distribution	Frequency
FREQ3	Interaction with Path complexity	Frequency

Table 34: Criteria for assessing the Source-Goal asymmetry

Each criterion has been investigated with a special focus on the categories of satellites and adnominals, which are the most relevant with respect to Path encoding. Verbs and modifiers, however, will be occasionally mentioned with regard to some specific parameters.

6.3 Asymmetries in the inventory of morphosyntactic tools

INV1. Concerning the inventory of morphosyntactic tools in charge of Path expression, a first parameter to check concerns the number of markers available for the encoding of each part of Path (i.e. the respective type frequency of Source and Goal). Table 35 summarizes the number of dedicated markers for each section.

97 INV holds for 'inventory' and refers to the morphosyntactic tools (namely verbs, satellites, adnominals and modifiers) found in the corpus under analysis for the encoding of Source and Goal.

Category/Path extremity	N. of Source markers	N. of Goal markers
Satellites	3	7
Adnominals	6	15
Verbs	12	13
Modifiers	15	17

Table 35: Type frequency of Source and Goal markers

Starting from the category of satellites, the data analysis in chapter 3 of the present dissertation has shown the presence of three dedicated Source markers, i.e. two preverbs, namely *apó* 'from, off' and *ek* 'out of', and one verbal particle, namely *éxo:* 'out'. As for Goal, the corpus analysis has revealed the existence of seven dedicated satellites, i.e. six preverbs, namely *antí* 'against', *eis* 'towards, to', *epí* 'upon, against', *pará* 'along, by', *pró* 'before, forward, forth', and *prós* 'to, towards, at', and one verbal particle, namely *eíso:* 'to within'. Parallelly, six dedicated Source adnominals contrast with fifteen Goal adnominals.[98]

The comparison between the type frequencies of Source and Goal satellites and adnominals reveals a strong asymmetry: as a matter of fact, the high number of specialized tools for Goal expression compared to Source expression represents a clue in favour of a higher level of semantic detail for the final part of Path. Conversely, however, as for both the verbs and the modifiers encoding Path in the texts under analysis, no great gap is attested between Sources and Goals.

INV2. Among Path verbs (cf. Chapter 3), eleven roots display a Source-oriented meaning, while thirteen display a Goal-oriented meaning. Table 36 shows the inventory of the Path verbs in question, as well as the meaning and frequency of each root.

98 The occurrences of the locative particle *en* 'in' as a satellite or as a preposition governing the dative case for Goal expression could be added to the total of specialized Goal markers.

Source-oriented verbs			Goal-oriented verbs		
Verb	**Meaning**	**Tokens**	**Verb**	**Meaning**	**Tokens**
-de:méo:	'be away from home'	2	*akolouthéo:*	'follow'	1
leípo:	'leave'	24	*dió:ko:*	'pursue'	17
nostéo:	'return, come home'	8	*hézomai*	'sit'	1
oíkhomai	'go away, go off'	14	*hépo:*	'follow'	27
ptó:sso:	'shrink from'	1	*hé:ko:*	'have reached'	37
strépho:	'turn round, from'	6	*hêmai*	'sit'	2
trépo:	'turn'	1	*hízo:*	'sit'	1
khoréo:	'withdraw, retire'	59	*hiknéomai*	'reach'	100
didrásko:	'run away'	3	*kikháno:*	'reach'	1
tréo:	'flee away'	1	*pelázo:*	'approach'	1
pheúgo:	'flee, escape'	50	*peláthо:*	'approach'	1
			teíno:	'stretch out'	1
			husteréo:	'come late'	1

Table 36: Source-oriented vs. Goal-oriented verbs

As shown by the table, the main differences between the two types of Path roots at issue concern:

- the number of *hapaxes* attested for each of the two extremities, which is sensitively higher for Goal than for Source;

- the semantic clumps around which the Source and Goal meanings conveyed by each root gather, which are more numerous for the former than for the latter;

- the interaction with the Manner component, which concerns at least three Source-oriented verbs (namely *didrásko:* 'run away', *tréo:* 'flee away' and *pheúgo:* 'flee, escape') vs. one Goal-oriented verb (*dió:ko:* 'pursue').

As for the category of modifiers, no great gap is attested between the type frequency displayed by Source markers (15 types) and the one displayed by Goal markers (17 types). Among the meanings encoded for each part, deixis seems to be one of the most relevant. Furthermore, while most of the modifiers in the texts under analysis are quite generic in

meaning (e.g. *deûro* 'hither', *ekeîse* 'thither', *hóthen* 'whence'), both parts of Path have some dedicated items in which a directional particle is recognisable (e.g. the adjectives *hupobrúkhios* 'under water', *ekpodó:n* 'away from the feet').

As far as the category of adnominals is concerned, consistently with the results shown in a number of typological studies on the *semantic granularity* of Path (cf. Kopecka & Ishibashi 2011: 140), also referred to as *semantic breadth* (cf. Regier & Zheng 2007: 711), or *delicacy* (cf. Bourdin 1997: 190), Ancient Greek seems to make finer distinctions within Goal rather than Source spatial semantic fields. In other words, the corpus analysis demonstrates that configurations at endpoints of motion are better differentiated (through a higher number of available linguistic elements) compared to configurations at starting points.

Recalling the considerations in Chapter 3, it turns out that the asymmetry between Source and Goal in this respect does not only concern the number of distinctions encoded for each part, but also the semantic nature of the distinctions in question.

As for the Goal domain, the following main features appear to be pertinent: Approximation, Attainment, Extent[99] (described as modal features in Bourdin 1997: 190ff.), Vertical Configuration, Frontal Configuration, Non-Spatial Configuration (e.g. Human Grounds). As for Sources of motion, only the following traits are expressed by means of preposition-plus-case combinations: Separation, Boundary-Crossing.

Table 37 shows in details the semantic granularity of Source and Goal expressed in the adnominal slot in the texts under analysis.

Feature	Part of Path	
	Source	Goal
Approximation/Separation	X	X
Attainment		X
Extent		X
Vertical Configuration		X
Frontal Configuration		X
Boundary Crossing	X	
Non-spatial Configuration		X

Table 37: Semantic granularity of Source and Goal adnominals

99 The feature of Extent refers to Path expressions such as *all the way to*, *up to*, *all the way from*, which hightlight the length of the trajectory followed by the Figure.

Besides the paucity of semantic distinctions registered in the Source domain, the most interesting result regards the types of traits encoded for each part of Path. As shown in the table, on the one hand, the boundary-crossing parameter is pertinent for Source but not for Goal, on the other, the features of Attainment, Extent, Vertical Configuration and Non-Spatial Configuration exclusively affect Goal.[100]

Among the distinctions that prove peculiar to Goal, Attainment is encoded by *prós* plus accusative 'to, at', as in example (249), where the Figure reaches the ground after falling from its throne.

(249) πίπτει πρὸς οὖδας μυρίοις οἰμώγμασιν
píptei pròs oûdas muríois oimó:gmasin
fall.PRES.3SG towards ground(N).ACC.SG infinite.DAT.N.PL cry(N).DAT.PL
Πενθεύς
Pentheús
Pentheus(M).NOM.SG
'Pentheus fell to the ground with great wails' (*Eur. Ba.* 1112)

Goal-Extent is expressed by the combination of *mékhri* 'as far as, up to' plus the genitive case, which occurs in the corpus with different types of Grounds. The feature of Extent is fine-grained and very specific, since it combines the Goal meaning and an implicit reference to the length of the whole Path.

(250) καὶ μέχρι τοῦ στρατοπέδου πλεύσαντες αὐτῶν
kaì mékhri toû stratopédou pleúsantes autôn
and as_far_as ART.GEN.SG camp(N).GEN.SG sail.PTCP.AOR.NOM.M.SG 3PL.GEN
'and they sailed up to their camp' (*Thuc.* 1.49.5b)

As far as vertical configuration is concerned, the dedicated Goal adnominals are two, namely *epí* plus genitive/accusative 'upon, onto', and *hupó* plus accusative 'towards and under'. While the former envisages the Figure to occupy a superior position compared to

100 It is worth stressing here that the relevance of a given parameter for one extremity of Path is related to its grammatical encoding. Considering boundary crossing, since in the Source domain it can be described by means of a dedicated preposition, namely *ek* 'out of', this trait is considered as relevant for this part of Path, while it is not relevant for Goal, since it requires a constructional, i.e. syntactic, encoding (cf. the *Parallel-Goal* construction, section 4.).

the Ground once the dislocation has been accomplished, the latter pictures the opposite scenario, with the Figure being located at an inferior position relative to the Ground. Examples (251) and (252) show the two possibilities.

(251) Ἀρίονα τὸν Μηθυμναῖον ἐπὶ δελφῖνος
Aríona tòn Me:thumnaîon epì delphînos
Arion(M).ACC.SG ART.ACC.M.SG of_Methymna.ACC.M.SG upon dolphin(M).GEN.SG
ἐξενειχθέντα ἐπὶ Ταίναρον
exeneikhthénta epì Taínaron
out_of-bring.PTCP.AOR.PASS.ACC.M.SG upon Taenarus(M).ACC.SG
'Arion of Methymna had been brought to Taenarus by a dolphin' (*Hdt.* 1.23.1)[101]

(252) ὑπ' ἀγέλαν πεσόντι τὰν μαινάδων
hup' agélan pesónti tàn mainádo:n
under herd(F).ACC.SG fall.PTCP.AOR.DAT.M.SG ART.GEN.F.PL Maenad(F).GEN.PL
'as he fell beneath the flock of Maenads' (*Eur. Ba.* 1022)

Frontal configuration occurs more rarely than vertical configuration in the texts. It is expressed by means of two etymologically related secondary prepositions selecting the genitive case, i.e. *páros* and *pároithe* both meaning 'before, in front'.

(253) ἕπεσθε, πρόσπολοι, δόμων πάρος
hépesthe próspoloi dómo:n páros
follow.IMP.PRES.2PL slave.VOC.M.PL house(M).GEN.PL in_front
'follow me, slaves, before the house' (*Eur. Ba.* 1217)

Among the features classified under the label of non-spatial configuration in Bourdin (1997: 201ff.), the human nature of the Ground prompts the selection of the Goal preposition *pará* 'to the side of'. Although also *epí* 'upon, onto' and *prós* 'to, at' can perform the same function, *pará* plus accusative is the only dedicated adnominal for the expression of the allative relation with human Grounds. Example (254) shows the difference between *eis* plus

101 As already underlined in Chapter 3, by virtue of its semantics, *epí* 'upon, onto' is often employed for scenes in which the sea or a river constitute the Ground. Even if none of the two is explicitly mentioned, example (251) is no exception to the rule, since it refers to the motion by sea of Arion, who is taken to cape Taenarus by a dolphin.

accusative 'towards, to', employed with two toponyms for the encoding of Approximation, and *pará* governing two proper nouns with human referents.

(254) ἐς Αἴγυπτον ἀπίκετο παρὰ Ἄμασιν καὶ δὴ καὶ
es Aígupton apíketo parà Ámasin kaì dè: kaì
to Egypt(M).ACC.SG from-reach.AOR.3SG beside Amasis(M).ACC.SG and PTC and
ἐς Σάρδις παρὰ Κροῖσον
es Sárdis parà Kroîson
to Sardis(F).ACC.PL beside Croesus(M).ACC.SG
'he went to Amasis in Egypt and then to Croesus in Sardis' (*Hdt.* 1.30.1b)

The only semantic feature that is restricted to Source is boundary crossing, in that only in the initial segment of Path it is encoded through grammatical means, namely the elative preposition *ek* 'out of' as opposed to the ablative *apó* 'from, off'. Conversely, the grammatical system of Ancient Greek does not appear to afford any grammatical device for the encoding of boundary crossing in the final part of Path.

As previously stated, the complementary distribution of the two Source prepositions in question on the basis of the conceptualization of the Ground element (container vs. line/point/surface), is more stable in Archaic Greek than in Classical Greek, as shown by the following examples in which the noun for 'ship' appears, both taken from Luraghi (2003: 96 & 120). While in (255) *ek* is employed to encode the exit of the Figure from a closed space (i.e. the interior of the ship), in (256) the author opts for *apó,* which is more suitable to express motion away from a Ground that does not have well-defined physical boundaries (i.e. the stern).

(255) ἠὲ πεσὼν ἐκ νηὸς
e:è pesò:n ek ne:òs
or fall.PTCP.AOR.NOM.M.SG out_of ship(F).GEN.SG
ἀποφθίμην ἐνὶ πόντῳ
apophthíme:n enì pónto:i
from-perish.OPT.M/P.AOR.1SG in sea(M).DAT.SG
'whether I should fling myself from the ship and perish in the sea' (Od. 10.51)

(256) νηὸς ἄπο πρυμνῆς χαμάδις πέσε
ne:òs ápo prumnês khamádis pése
ship(f).GEN.SG from stern(f).GEN.SG on_the_ground fall.AOR.3SG
'he fell to the ground from off the stern of the ship' (Il. 15.435)

INV3. Such a clear-cut functional distinction between *ek* and *apó* becomes nevertheless fuzzier in Classical Greek, when the two prepositions begin to converge, thus producing a further reduction of the semantic breadth of Source. Conversely, no analogous process of overlapping is attested for Goal markers. As a consequence of the already mentioned *weakening of the Container Metaphor*, the two Source prepositions undergo semantic bleaching and consequent context generalization, i.e. the contexts in which each of the two preposition can occur become more numerous and overlap. Such a process corresponds to the criterion related to the possible contextual extensions of Path terms.[102]

Some studies in language acquisition (cf., *inter alia*, Bowerman 1996; Bowerman *et al.* 1995) focusing on the errors in the use of spatial language have shown that children tend to overgeneralise Source terms, while making fine-grained distinctions at endpoints, that is they differentiate less at starting points than at endpoints of motion. This pattern is not surprising if one considers the loss of semantic specificity observed for Source markers in the passage from Homeric to Classical Greek. Comparing the diachrony of Ancient Greek to the scenario pictured in the works on L1 acquisition, it is possible to conclude that both phenomena suggest that:

1) Source terms are generally broader than Goal terms;

2) the domain of Source tends to be less specified than that of Goal.

INV4. When dealing with the criterion concerning the morphological complexity of Source and Goal markers, no actual asymmetry is registered in the corpus under analysis for either satellites or adnominals. As a matter of fact, both categories contain monomorphemic items in charge of Path encoding.

A slightly different frame is, however, portrayed by the modifiers. As already shown in

102 In his article on grammaticalization, Heine (2008: 580) defines the process of extension as follows: «extension obtains when a linguistic item can be used in new contexts where it could not be used previously».

Chapter 3, this composite category includes elements of different nature, among which the so-called complex modifiers prove particularly relevant for the present discussion.

In Ancient Greek, each Path section can be encoded, in certain contexts, by means of a dedicated suffix, namely *-then* 'whence' (Source) and *-de/-se* 'whither' for (Goal), which can attach to adverbs, noun stems or pronoun stems. Concerning the employment of the two postpositives in question, at least two remarks deserve to be made. First, as for the fusion with different lexical or morphological items, the Source suffix seems more flexible than the Goal suffix, which occurs only in a few crystallized forms, such as *pedóse* (= *pédonde*, from the accusative of *pédon* 'ground' + the Goal postpositive *-de/-se* 'towards') 'to the ground', or *oíkade* 'to one's house, home'). Conversely, the Source postpositive appears less lexically constrained, since it can attach to a number of different stems, some of which are themselves spatial in nature, e.g. *áno:then* 'from above' (from the directional preposition/verbal particle *áno:* 'upwards'), *énthen* 'thence' (from the locative preposition/satellite *en* 'in), *hupsóthen* 'from on high' (from the noun *húpsos* 'height'), while some are pronominal, e.g. *autóthen* 'from the very spot' (from the personal/reflexive pronoun *autós* 'self, him/her/it'), *hóthen* 'whence' (from the relative pronoun *hó* 'who'). The higher combinability of the Source suffix compared to the Goal suffix for the formation of complex modifiers is in line with the results revealed by the analysis of the criterion **CONSTR3** discussed in section 5 of the present chapter.[103]

From a quantitative point of view, the token frequency of each of the two types of complex modifiers proves unbalanced in favour of the Source suffix *-then* (38 tokens for the Source type vs. 15 tokens for the Goal type).

From the considerations claimed so far about the category of modifiers, as expected, Sources seem to prefer a morphologically more complex encoding compared to Goals. This is in line with the findings about the tendency of Sources to be syntactically more elaborated and more often organised around two different clauses compared to Goals (cf.

103 Among the so-called complex modifiers, an interesting case is represented by *ópisthen* ' (from) behind', which occurs in the text under analysis four times in total: once with a clearly locative value (Xen. *Anab.* 1.8.24a), once with a clearly directional Source-oriented value (Xen. *Anab.* 1.10.6a), and twice with a meaning that oscillates between Location and Source. Nikitina & Spano (2014) identify a cycle of ablative-to-locative transfers in the development of this modifier, which is an etymological ablative later to perform a locative function requiring the presence of a new ablative form to express Source. Such a pattern, quite common among ancient Indoeuropean languages, is discussed in Papahagi (2011) with respect to French. Future research could be devoted to the cycles as the one in question across the diachrony of the (Ancient) Greek language.

Bourdin 1997: 188; Kopecka & Ishibashi 2011: 145ff. on the biclausal encoding of Source).

To sum up, in this section the differences between Source and Goal have been analysed according to four criteria related to the inventory of forms employed for their expression. The results of the corpus analysis have shown that:

- the number of Goal markers is higher than that of Source markers for the categories of satellites and adnominals, while no great gap subsists between the type frequencies of Source-oriented and Goal-oriented verbs, as well as for Source and Goal modifiers;

- as predicted in most of the literature on Source-Goal asymmetry, the semantic breadth of Goal proves wider than that of Source, in that Goal adnominals express finer-grained semantic distinctions compared to Source adnominals. An interesting result, however, shows that the features encoded for each of the Path extremities do not coincide in most cases, being Approximation/Separation the only shared trait;

- in line with the results shown in the field of language acquisition, looking at the diachronic dimension of the Ancient Greek language, Source markers tend to be overgeneralised more than Goal markers do;

- Source and Goal do not differ as for the morphological complexity of satellites and adnominals, since they both rely on monomorphemic particles performing the two morphosyntactic functions. Nevertheless, a slight asymmetry is attested within the category of modifiers as for the employment of Source and Goal suffixes.

In the following paragraph the Source-Goal asymmetry will be investigated from a syntactic point of view in order to evaluate:

1. which one between the two Path extremities is, so to speak, more “constructional”;

2. which part allows for alternative encodings (e.g. by means of locative markers);

3. which extremity combines more often with other pieces of spatial information within the motion clause.

6.4 Asymmetries in constructions

The importance of going beyond the single slots in charge of Path expression within the motion clause for the investigation of Source-Goal asymmetry has been emphasized by Kopecka & Ishibashi (2011: 147):

> *«si on veut rendre pleinement compte du phénomène d'(a-)symétrie dans l'expression de la Source et du But, il convient de ne pas limiter l'analyse à un seul élément de l'expression (un adnominal ou un verbe), mais qu'il est nécessaire de faire place aux unités plus grandes telles que les constructions».*

For this purpose, a set of three syntactic and semantic criteria has been elaborated.

CONSTR1. The first constructional parameter is concerned with the difference, already discussed in chapter 4, between an overt and a covert encoding of spatial meaning. As previously stated, Ancient Greek can resort to two main strategies for motion expression: an explicit, compositional encoding exploiting the literal value of each morphosyntactic tool in the clause as opposed to a more implicit, idiomatic description of motion, which relies on the holistic meaning of the construction. Source and Goal display different behaviours with respect to this parameter.

Among the templates in which the spatial meaning is encoded in a covert fashion, the three constructions analysed in Chapter 4 contrast as for the interaction with the two extremities of Path. Leaving out the *Parallel-Goal* construction, which will be treated in details in the next paragraph, the motion idioms and the so-called *constructio praegnans* are not consistent with respect to the hypothesis of Source-Goal asymmetry.

Regarding motion idioms of the type 'move the foot' or 'strike the stern' (cf. Chapter 4), from a semantic point of view they both seem, so to speak, Median-oriented, in that they respectively stress the displacement of the Figure ('move the foot' > 'move, migrate'), and the direction of motion ('strike the stern' > 'backwater, withdraw'). However, while the first idiom occurs both with Source markers (as the satellite *ek* 'out of' in example 257) and with

Goal markers (as the modifier *poî* 'whither' in example 258), the second one does not take any further Path specification in the texts under analysis 259).

(257) εἶα δὴ πρώτιστα μὲν χρὴ κοῦφον
eîa dè: pró:tista mèn khrè: koûphon
up PTC first PTC be_necessary.PRES.3SG light.ACC.M.SG
ἐξορμᾶν πόδα
exormân póda
out_of-move.INF.PRES foot(M).ACC.SG
'come, quick, we have to move (with) a light foot' (Aristoph. *Thes.* 659)

(258) ποῖ καθιστάναι πόδα
poî kathistánai póda
where down-set.INF.PRES foot(M).ACC.SG
'where must I set my feet' (*Eur. Ba.* 184)

(259) καὶ ἐθαύμαζον τοὺς Κορινθίους πρύμναν
kaì ethaúmazon toùs Korinthíous prúmnan
and wonder.IMPF.3PL ART.ACC.M.PL Corinthian.ACC.M.PL stern(F).ACC.SG
κρουομένους
krouoménous
strike.PTCP.PRES.M/P.ACC.M.PL
'and they were wondering why the Corinthians were backing water' (*Thuc.* 1.51.2b)

From the examples at issue, it seems possible to conclude that no relevant asymmetry is registered between Source and Goal concerning the motion idioms in the sample.

Analogously, with respect to the second type of *constructio praegnans* identified in Chapter 4, consisting in the co-occurrence of a non-motion verb with a directional prepositional phrase, Source and Goal appear quite balanced. In fact, such a pattern indifferently occurs with both the initial and the final part of Path, as shown respectively by examples (260) and (261). In the former, the stative verb *gígnomai* 'be, exist' combines with the Source adnominal *ek toû adútou* 'from the temple; in the latter, the same verb takes the Goal complement *eíso: tês táphrou* 'into the trench'.

(260) ἐκ τοῦ ἀδύτου γενέσθαι
ek toû adútou genésthai
out_of ART.GEN.SG temple(N).GEN.SG be.INF.AOR
'he came out of the inner shrine' (*Hdt.* 1.159.3)

(261) ἐγένοντο εἴσω τῆς τάφρου
egénonto eíso: tês táphrou
be.AOR.3SG inside ART.GEN.F.SG trench(F).GEN.SG
'they found themselves on the inner side of the trench' (Xen. *Anab.* 1.7.16c)

It is, however, in the other type of *constructio praegnans* (cf. Type 1 in Chapter 4) that Source and Goal display an asymmetrical behaviour. As a matter of fact, the contexts in which a motion verb combines with a locative adnominal exhibit a clear Goal bias, in that it is only the final part of Path that can be replaced by a locative expression, as shown by example (262). Here the satellite *en* 'in' is used as a relational preverb selecting the dative case of the noun for 'son', which encodes the Ground of motion.

(262) μή τί οἱ κρεμάμενον τῷ
mé: tí hoi kremámenon tôi
NEG INDEF.ACC.N.SG 3SG.DAT hang_up.PTCP.PRES.M/P.ACC.N.SG ART.DAT.SG
παιδὶ ἐμπέσῃ
paidì empése:i
child(M).DAT.SG in-fall.SBJV.AOR.3SG
'so that nothing would fall hanging on his son' (*Hdt.* 1.34.3)

In this respect, the criterion related to the overt *vs.* covert encoding of the spatial information within the clause, overlaps with the second constructional criterion for the assessing of Source-Goal asymmetry, namely the possible cooptation of locative markers for the expression of the two extreme segments of Path.

CONSTR2. Languages differ regarding the way they encode the distinction between the notions of Source, Goal and Location, by means of adpositions and/or case markers. Besides a clear linguistic repartition among the three functions, involving at least one dedicated marker for each, the following patterns of syncretism exist (cf., *inter alia*, Shay & Seibert

2003; Creissels 2006; Nikitina 2009):[104]

- **PATTERN 1: Goal-Location vs. Source** → the distinction between Goals and Locations is neutralized, while Sources are encoded by means of specialized markers (cf. French *Je vais au stade/Je suis au stade* vs. *Je viens du stade*);

- **PATTERN 2: Source-Location vs. Goal** → no formal distinction is made between Sources and Locations, while Goals are encoded separately;

- **PATTERN 3: Source-Goal vs. Location** → Sources and Goals of motion are conflated, while Locations receive a dedicated expression;

- **PATTERN 4: Source – Goal – Location** → no distinction is encoded between any pair of spatial meanings, thus Sources, Goals and Locations are lexicalized through one and the same marker.[105]

Among the four syncretic patterns in question, the first one is the most common crosslinguistically (cf., *inter alia*, Ikegami 1987; Nam 2004; Levinson 2006; Papafragou 2010), probably as a result of the conceptual proximity between Goals and Locations later to be mirrored at the linguistic level (cf. Nikitina 2009). As stated by Creissels (2006: 22), «if adpositions or case affixes conflate two of the meanings essive/allative/ablative and provide a distinct expression for the third one, the meanings that conflate are almost always essive and allative: the pattern 'allative vs essive-ablative' (...) seems to be extremely rare».

Consistently with the general typological tendency, Ancient Greek can opt for a neutralization between Goal and Location in some contexts. In fact, despite the gradual change in the dominant strategy for the encoding of motion, leading to the employment of

104 As stated by Creissels (2006: 22), there is considerable variation even within the limits of each individual language regarding the sensitivity of linguistic markers to the distinction between Source, Goal and Location. Italian, for instance, exploits different patterns according to the features of the Ground or to the type of motion event. In the following examples, the relevant feature is the human nature of the Ground element. While Goal and Location are opposed to Source with toponyms, cf. *vado a Roma/sono a Roma* (Goal-Location) vs. *torno da Roma* (Source), with humans one and the same preposition, *da* 'from', is employed for the expression of the three spatial roles, cf. *vado da mia nonna* (Goal), *sto da mia nonna* (Location), *torno da (casa di) mia nonna* (Source).

105 Pattern 4 is exceptional in languages belonging to the Indoeuropean family, but common in other areas, such as Subsaharan Africa, as shown by Creissels (2006) on Tswana and Nikitina (2009) on Wan.

motion verbs together with specialized directional preposition-plus-case combinations in Classical Greek (cf. Nikitina 2013: 188ff.), some traces of the Homeric pattern involving final locative datives are still present in the corpus under analysis. By contrast, the opposite pattern picturing an ambiguity between Source and Location is not attested in the texts under analysis. According to a number of studies (cf., *inter alia*, Jackendoff 1983; Bourdin 1997; Papafragou 2010), such an asymmetry could signal a more basic or 'natural' status of Goals compared to Sources of motion.

CONSTR3. The third constructional criterion for the evaluation of Source-Goal asymmetry deals with the semantic combinability of Path satellites and adnominals with other morphosyntactic tools activated for motion expression.

The data analysis has shown that, among the satellites, the most versatile as for the combination with the different verb types in the corpus are Source preverbs. As a matter of fact, they attach not only to verbal roots that are mostly neutral to Path information, such as basic motion verbs or Manner verbs, but also to roots of directed motion, both Source-oriented and Goal-oriented. This result goes in the direction of the criterion discussed in section 3. concerning the semantic breadth of Source and Goal markers (**INV3**). By virtue of their *lexical generality* (cf. Bybee 1985: 16), Sources would be proner to the combination with different verb types compared to Goals, which conversely entail more fine-grained semantic descriptions.

The patterns of combination displayed by motion verbs and adnominals expressing Source and Goal require different considerations. As already shown in Chapter 4, in fact, among the prepositional phrases assigned to Path encoding the most versatile are those expressing Goal. Such a scenario, which is opposite to the one exhibited by satellites, could be explained as a consequence of the semantic power of the noun describing the Ground: while the relation between satellites and verbs, which is of morphological nature, is driven by the internal semantics of the two elements forming a verbal compound, in the combinations between verbs and adnominals, which are syntactic, three categories plays a role, namely the verb, the preposition and the noun. The latter, being in a closer syntactic relation with the preposition compared to the verb, can strongly influence the co-occurrence of the adnominal with the other tools in the clause.

As for the modifiers, probably as a consequence of their greatest syntactic and semantic

autonomy, for both Source and Goal they show a fair level of combinability with the other tools in the clause.

In conclusion, the analysis of the constructional behaviour of Source and Goal in the texts constituting the corpus has revealed that:

- the initial and the final segment of Path equally participate in motion idioms, as well as in one of the two options of *constructio praegnans*, thus behaving symmetrically in this respect;

- conversely, only Goal is indulgent towards the possible substitution of directional adnominals by means of locative adnominals (cf. Type 1 of *constructio praegnans*);

- as for the semantic combinability with verb types, while Source preverbs are the most flexible among Path satellites, on the adnominal side Goal PPs take part in the greatest number of combinations.

The last step of the qualitative analysis of Source-Goal asymmetry is devoted to the topic of distribution.

6.5 Asymmetries in distribution

As already shown in chapter 5, the three parts of Path differ as for the patterns of distributed spatial semantics in which they preferentially participate. Table 38 accounts for the two main templates respectively exhibited by Source and Goal. As in the chapter devoted to the topic of distribution, the present analysis has been restricted to events of spontaneous motion encoded by means of intransitive motion verbs (i.e. 1055 occurrences in total).

Part of Path	Locatedness	Repetition[106]	Total
Source	80,4% (358)	19,6% (87)	100% (445)
Goal	76,1% (480)	23,9% (151)	100% (631)

Table 38: Main patterns of distribution for Source and Goal

106 The label repetition stands for both parallelism and redundancy (cf. Illustration 5 on page 181).

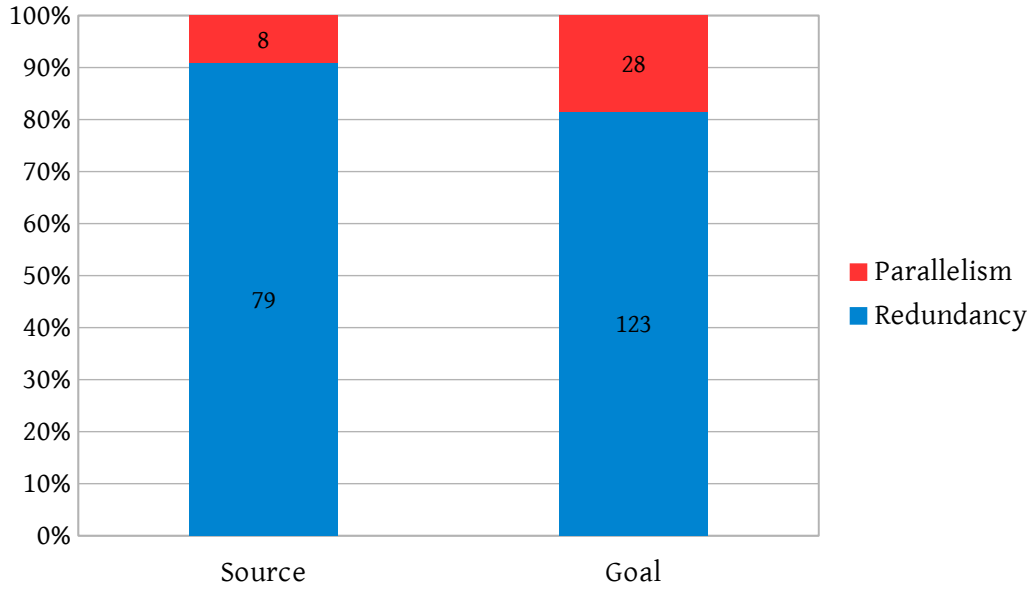
The general tendency envisages one single segment of Path (i.e. a simple Path) to be expressed in one single locus within the motion clause, cf. the locatedness pattern introduced in Chapter 5. Both Source and Goal are consistent with this general preference towards isolation, that is to say both the starting point and the endpoint of motion prove reluctant to the redundancy pattern, which in fact occurs in about 20% of cases only, for both parts. The data analysis has not revealed any great deviation between Source and Goal with respect to the locatedness pattern. Examples (263) and (264) show the option at issue respectively for Source and Goal in the adnominal locus.

(263) ὡς αὐτοῖς ἐκ τῆς Ἐπιδάμνου ἦλθον
ho:s autoîs ek tês Hpidámnou êlthon
when 3PL.DAT out_of ART.GEN.F.SG Epidamnus(M).GEN.SG go.AOR.1SG
ἄγγελοι ὅτι πολιορκοῦνται
ággeloi hóti poliorkoûntai
messenger(M).NOM.PL that be_besieged.PRES.3PL
'when the messengers that were besieged left Epidamnus' (*Thuc.* 1.27.1a)

(264) πλῶσαι ἐς Ἰταλίην τε καὶ Σικελίην
plôsai es Italíe:n te kaì Sikelíe:n
sail.INF.AOR to Italy(f).ACC.SG PTC and Sicily(f).ACC.F
'to sail to Italy and Sicily' (*Hdt.* 1.24.1a)

On the basis of the considerations stated so far, the scenario looks rather balanced between the initial and the final segments of Path, and no conspicuous asymmetry is attested between Source and Goal as for the patterns of distribution within the motion clause.

It is, however, in the details of the repetition patterns that Source and Goal diverge. As a matter of fact, among the contexts of distribution, i.e. the clauses in which the information about one part of Path is repeated, it is possible to identify two further options, namely proper redundancy and parallelism. Graph 3 shows the behaviour of Source and Goal with respect to the two subpatterns at issue. The percentages are calculated out of the total number of contexts of repetition, i.e. clauses in which the Path information is distributed.



Graph 3: Patterns of Source and Goal distribution

As shown by the percentages in Graph 3, there is an important difference between Source and Goal as for the pattern of parallelism, which envisages one and the same piece of spatial meaning to be expressed by means of the same morpheme appearing redundantly in the clause (cf. Chapter 5).

Such a distributional asymmetry between the initial and the final part of Path appears to be functionally motivated. In fact, as already shown, the parallelism pattern for Goal is far from exceptional, and gives rise to the so-called *Parallel Goal* construction, in which the Goal marker *eis* 'towards, to' is found in both preverbal and prepositional function within the same clause. As previously stated, the construction at issue serves to fill a gap in the inventory of Goal markers for the expression of boundary crossing. This functional motivation behind Goal parallelism provides a possible explanation to the high frequency of the pattern. As far as Source is concerned, the parallelism option proves very rare in the texts under analysis, and mostly involves the Source marker *ek* 'out of', except for one single case with *apó* 'from, off' attested in Herodotus.

Examples (265) and (266) respectively show the parallelism pattern for Source and Goal.

(265)	ἀλλὰ	σκευάς	τε	Μηδικὰς	ἐνδυόμενος	ἐκ
	allà	*skeuás*	*te*	*Me:dikàs*	*enduómenos*	*ek*
	but	dress(f).ACC.PL PTC		Median.ACC.F.PL	in-wear.PTCP.PRES.NOM.M.SG	out_of

τοῦ Βυζαντίου ἐξῄει
toû Buzantíou exé:iei
ART.GEN.SG Byzantium(M).GEN.SG out_of-go.IMPF.3SG
'but he went out of Byzantium in a Median dress' (*Thuc.* 1.130.1a)

(266) καὶ ἐς μὲν τὴν εἱρκτὴν ἐσπίπτει τὸ
kaì es mèn tè:n heirktè:n espíptei tò
and to PTC ART.ACC.F.SG prison(f).ACC.SG to-fall.PRES.3SG ART.ACC.N.SG
πρῶτον ὑπὸ τῶν ἐφόρων
prôton hupò tôn ephóro:n
first under ART.GEN.PL guardian(M).GEN.PL
'and at first he fell into prison due to the guardians' (*Thuc.* 1.131.2b)

Although the repetition of the same morpheme expressing one single part of Path within the same clause could be interpreted as an idiosyncrasy of the Ancient Greek language, the asymmetry registered between Source and Goal in this respect stresses the functional motivation beneath such a redundant and, so to speak, "expensive", in terms of linguistic effort, lexicalization pattern.

In this section, the patterns of distribution displayed by the initial and the final part of Path have been interpreted under the lens of Source-Goal asymmetry. The data analysis has demonstrated that no relevant differences occur limited to locatedness and redudancy. On the contrary, the pattern of parallelism represents a systematic strategy for the encoding of boundary crossing at Goals, while is rarely attested (and less functionally specified) for Sources.

6.6 Asymmetry in frequency

In this section three quantitative parameters concerning the frequency and categorial repartition of Sources and Goals will be discussed.

FREQ1. The most straightforward manifestation of Source-Goal asymmetry concerns the relative token frequency of each of the two Path extremities. The coding system presented in Chapter 2 has been exploited in order to obtain precise quantitative results, which are summarized in Table 39. The percentages are calculated out of the total number of Path

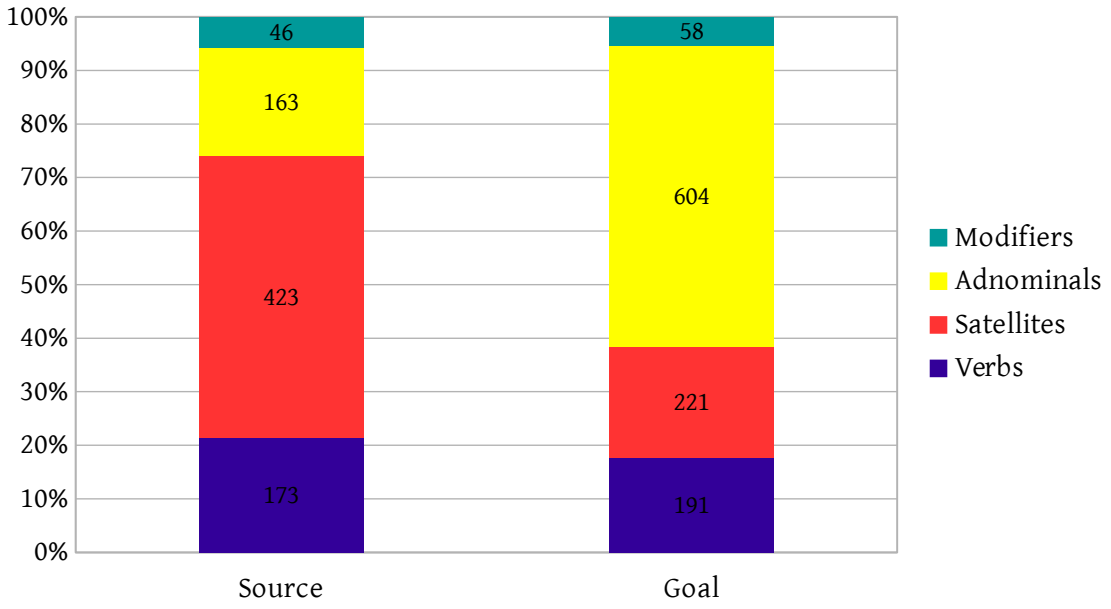
expressions appearing in the corpus, i.e. 2335 tokens, distributed over 1421 motion clauses out of 1627.[107]

Path extremity	Token frequency
Source	34,5% (805)
Goal	46% (1074)

Table 39: Token frequency of Source and Goal

With a gap of 11,5%, i.e. 269 occurrences out of 2335, Goal confirms itself as the most frequently encoded extremity of Path.

FREQ2. The total number of Source and Goal expressions in the sample can be subdivided according to their morphosyntactic status. Graph 4 shows how the information about the starting point and the endpoint of motion is distributed across the four categories available for their encoding in Ancient Greek, namely verbs, satellites, adnominals and modifiers.



Graph 4: Morphosyntactic distribution of Source and Goal

As shown by the graph, Source and Goal significantly differ with respect to their preferred locus of encoding. While satellites constitute the highly favourite slot for the

107 It seems plausible to hypothesize that the lack of an explicit reference to Path registered in 206 clauses out of 1627 (about 12,7%) is due to discourse effects or to the presence of some deictic information.

expression of the initial segment of Path (52,5% of cases, i.e. 423 occurrences out of 805), Goal selects the adnominal locus as its first choice, exploiting it in more than half of the total number of Goal tokens (56% of cases, i.e. 604 occurrences out of 1074).

This results are not surprising, and seem to confirm the existence of a linguistic asymmetry between Sources and Goals which mirrors a conceptual disparity. Since leaving endpoints unspecified would make the motion description feel incomplete, Goals tend to occupy the most foregrounded and semantically detailed slot in the clause, i.e. the adnominal, whose meaning results from the interaction between the preposition, the case marker and the noun expressing the Ground. By contrast, given their lighter weight within the conceptual architecture of displacement events (cf., *inter alia*, Ikegami 1987; Stefanowitsch & Rohde 2004), Sources better fit into a backgrounded and less fine-grained slot, i.e. the preverbal position, since they can more easily tolerate semantic underspecification compared to Goals. Furthermore, the preference displayed by Source for the preverbal locus could find a plausible explanation in the iconicity principle (cf. Haiman 1980).

FREQ3. Besides the morphosyntactic distribution, the occurrences of Source and Goal expressions can be grouped on the basis of their interaction with the degree of Path complexity of the motion description.

As previously stated, the concept of *Path complexity* (cf. Slobin 1996b) concerns the number of different segments of Path per clause: while a simple Path consists of one single Ground, a complex Path, also referred to as *journey* in Slobin (1996b: 202), is composed of more than one Ground. The option envisaging all the three parts to be encoded within the same clause will be defined as *complete Path*.

Examples from (267) to (269) show the three options for a simple Path encoding, while examples from (270) to (273) show the possible realizations of a complex Path.

Simple Path (Source-oriented)

(267) ἐκ Φοινίκης ἐλαύνων
ek *Phoiníke:s* *elaúno:n*
out_of Phoenicia(f).GEN.SG march.PTCP.PRES.NOM.M.SG
'marching from Phoenicia' (Xen. *Anab.* 1.7.12b)

Simple Path (Median-oriented)

(268) οἳ δ’ ἀνὰ πόλιν στείχοντες
hoì d' anà pólin steíkhontes
ART.NOM.M.PL PTC up city(F).ACC.SG walk.PTCP.PRES.NOM.M.PL
ἐξιχνεύσατε τὸν θηλύμορφον ξένον
exikhneúsate tòn the:lúmorphon xénon
out_of-track.AOR.2PL ART.ACC.M.SG effeminate.ACC.M.SG stranger(M).ACC.SG
'and some of you hunt throughout the city for this effeminate stranger' (*Eur. Ba.* 352)

Simple Path (Goal-oriented)

(269) προσέρχεται γὰρ ὁ πρύτανις
prosérkhetai gàr ho prútanis
towards-go.PRES.3SG hence ART.NOM.M.SG magistrate(M).NOM.SG
χὠ τοξότης
kho: toxóte:s
and-art.NOM.M.SG bowman(M).NOM.SG
'here is the magistrate with his bowman' (Aristoph. *Thes.* 923)

Complete Path (Source-Median-Goal)

(270) ἤδη κατ’ ἄστυ τειχέων ἔσω βεβὼς σὺν τῷ
é:de: kat' ástu teikhéo:n éso: bebò:s sùn tôi
already down city wall(N).GEN.PL inside go.PTCP.PF.NOM.M.SG with ART.DAT.SG
γέροντι Τειρεσίᾳ Βακχῶν πάρα
géronti Teiresíai Bakkhôn pára
old.DAT.M.SG Teiresias(M).DAT.SG Maenad(F).GEN.PL beside
'when I had already come within the walls of the city on my return from the Bacchae with old Teiresias' (*Eur. Ba.* 1223)

Complex Path (Source-Median)

(271) ὁ Ἅλυς ποταμός ὃς ῥέει
ho Hálus potamós hòs rhéei
ART.NOM.M.SG Halys(M).NOM.SG river(M).NOM.SG REL.NOM.M.SG flow.PRES.3SG
ἐξ Ἀρμενίου ὄρεος διὰ Κιλίκων
ex Armeníou óreos dià Kilíko:n
out_of Armenian.GEN.N.SG mountain(N).GEN.SG through Cilician.GEN.M.PL
'the river Halys, which flows from the Armenian mountains through Cilicia' (*Hdt.* 1.72.2a)

Complex Path (Source-Goal)

(272) ἐκ δὲ τῶν Ἀθηνῶν καὶ τῆς ἄλλης
ek dè tôn Athe:nôn kaì tês álle:s
out_of PTC ART.GEN.PL Athens(f).GEN.PL and ART.GEN.F.SG other.GEN.F.SG
ξυμμαχίδος πεντήκοντα τριήρεις διάδοχοι
xummakhídos penté:konta trié:reis diádokhoi
alliance(f).GEN.SG fifty trireme(f).NOM.PL successor(M).NOM.PL
πλέουσαι ἐς Αἴγυπτον
pléousai es Aígupton
part.PRES.NOM.F.PL to Egypt(M).ACC.SG
'a squadron of fifty vessels sailing from Athens and the rest of the confederacy for Egypt' (*Thuc.* 1.110.4a)

Complex Path (Median-Goal)

(273) τὰ πλοῖα αὐτοῖσι ἐστὶ τὰ κατὰ
tà ploîa autoîsi estì tà katà
ART.ACC.N.PL boat(N).NOM.PL 3PL.DAT be.PRES.3SG ART.ACC.N.PL down
τὸν ποταμὸν πορευόμενα ἐς τὴν
tòn potamòn poreuómena es tè:n
ART.ACC.M.SG river(M).ACC.SG go.PTCP.PRES.M/P.NOM.N.PL to ART.ACC.F.SG
Βαβυλῶνα
Babulôna
Babylon(f).ACC.SG
'they have boats which go down the river to Babylon' (*Hdt.* 1.194.1)

Table 40 summarizes the quantitative results about the different patterns of Path complexity. The percentages are calculated out of the total amount of motion clauses in the corpus (i.e. 1627), and the contexts in which one part of Path is redundant count as one single token, being redundancy beyond the scope of this specific analysis.

Simple Path		Complex Path		No Path information
Goal	30% (489)	Source-Goal	14,1% (229)	12,7% (206)
		Median-Goal	6,5% (105)	
Source	18,1% (294)			
		Source-Median	5,3% (87)	
Median	10% (163)			
		Source-Median-Goal	3,3% (54)	
Total 58,1% (946)		Total 29,2% (475)		Total 12,7% (206)

Table 40: Path complexity

The results of the analysis of Path complexity highlight two main findings:

- the prevalence of simple Paths over complex Paths, already stressed in Chapter 5;

- the prevalence of all the options containing an explicit mention of Goal over the options in which Goal is absent.

As for the first claim, the fact that Ancient Greek seems to dislike complex Paths could represent another piece of evidence against a rigid repartition between Verb-Framed languages and Satellite-Framed languages. As a matter of fact, despite displaying several features of the latter type, Ancient Greek does not show the expected accumulation of different Grounds onto one single motion verb, which - according to some scholars - represents one of the most representative characteristics of the group at issue.

Concerning the second claim, it is important to stress that, except for the *complete-Path* pattern (entailing the encoding of Source, Median and Goal within the same clause), which requires a strong linguistic effort and is thus anti-economical, all the options in which Goal appears prevail in the text under analysis. The Goal-oriented pattern is the largely preferred choice among the contexts of simple Path (30% of cases) and, in parallel, the Source-plus-Goal and the Median-plus-Goal patterns predominate among the complex Path options.

6.7 Summary and conclusions

This case-study on the encoding of Source and Goal in Ancient Greek has confirmed the existence of an actual asymmetry between the two extremities of Path, whose nature has been investigated by resorting to a set of twelve morphosyntactic and semantic parameters.

The picture depicted by the data is, nevertheless, more complex than the one expected on the basis of the existing literature on the topic. As a matter of fact, both the entity and the direction of the phenomenon in question are strongly related to two main factors, namely the lexical and grammatical categories activated for Path encoding, and the parameters at issue.

From a merely quantitative point of view, Goals appear more frequently than Sources in the texts under analysis. Furthermore, when only one segment of Path is expressed in the motion clause (simple Path), this is Goal in the high majority of cases. When two different segments are mentioned (complex Path), the contexts in which Goal is present prevail over the contexts in which Goal is absent. These findings could represent another piece of evidence confirming the existence of a Goal-over-Source principle, based on which «we tend to be far more interested in the goal of the action than in the source of the action. Therefore, when human action is involved, goal is far more salient than source» (cf. Radden *et al.* 1999: 88).

When looking at the qualitative dimension of the Source-Goal asymmetry, however, the scenario becomes more complex, since each of the morphosyntactic categories involved in Path encoding is sensitive to this phenomenon to a different extent. For instance, while the categories of verbs and modifiers prove balanced with respect to the criteria of type frequency and semantic breadth for the two Path extremities, it is among satellites and adnominals that Source and Goal diverge the most. In particular, while the final part of Path owns the highest number of markers and pertinent features, the initial segment affords a grammatical encoding for boundary crossing (which conversely requires a constructional strategy for Goal).

The case of boundary crossing is particularly illustrative of the ambivalent nature of the Source-Goal asymmetry: in fact, with respect to this specific trait, Source seems prominent compared to Goal, thus contradicting the expected direction of the bias.

Considering the morphological complexity of Path expressions, while satellites and

adnominals do not exhibit significant variation between the two segments of Path, Source modifiers tend to be more complex than Goal modifiers.

Going beyond the limits of each morphosyntactic slot taken in isolation, the constructional level confirms the complexity of the Source-Goal asymmetry. While the two extremities behave similarly with regard to some patterns of covert encoding of spatial meaning, they deviate from each other as far as their semantic combinability is concerned. Specifically, Source is more open than Goal towards morphological combinations such as verbal compounds, probably due to its semantic generality.

Lastly, as for the patterns of distribution, the starting point and the endpoint of motion are almost equivalent, except for the parallelism option, which for Goal is functionally motivated, and thus more common.

The reflections presented so far show that the biases in the encoding of Source and Goal are not a straightforward phenomenon. In fact, based on the interaction between the morphosyntactic status of the markers and the qualitative/quantitative parameters investigated, the initial and the final segment of Path can reveal themselves as either symmetrical or asymmetrical. Therefore, the topic of the Source-Goal asymmetry requires a deep, fine-grained study embracing different levels of analysis, ranging from the inventories of forms to discourse effects.

Conclusions

This dissertation represents an attempt to explore the linguistic strategies deployed by Ancient Greek for the lexicalization of the main conceptual components of motion, namely Path and Manner.

The present work can be considered as a "grammar" of displacement, whose main peculiarity lies in the fact that the analysis is not limited to the single morphosyntactic tools considered in isolation, but rather it is extended beyond the limits of each locus, up to the constructional and idiomatic dimension, past the topic of the semantic distribution of each piece of spatial information.

The second specificity of this thesis concerns the inclusion of new categories into the analysis. In contrast with most of the research on motion event encoding which typically focuses on verbs and satellites, here the categories of adnominals, nouns and modifiers have been considered as well, in order to reach an exhaustive picture of motion expression in Ancient Greek. From a semantic point of view, the mistreated component of Manner has been examined in the light of checking its interaction with other types of semantic information, as well as its patterns of distribution within the clause.

The structure of the present dissertation can be represented as a funnel in which the analysis proceeds from smaller linguistic units (i.e. satellites, verbs, nouns, adnominals, modifiers) to constructional blocks expressing different kinds of motion events.

After presenting the state of the art (Chapter 1), and discussing the methodological claims, as well as the issues related to the data collection (Chapter 2), the data analysis has occupied the chapters from 3 to 6.

As a first step of the analysis, the inventory of the lexical and grammatical devices in charge of Path and Manner expression has been introduced combining qualitative and quantitative results. Furthermore, for the category of verbs, a set of operational criteria (related to the properties of the moving Figure, the token frequency of each root, the syntactic templates in which the verb participates, and the complementary semantic information in the clause) has been established, with the aim of identifying the verb semantics. This introduction on the most frequent verbs, satellites, adnominals, nouns and modifiers involved in motion description had the twofold purpose of (a) providing the

neophytes with a presentation of Ancient Greek under the lens of the spatial domain, and (b) provide the readers who are already familiar with the language with a background for the subsequent analyses.

The starting point of this dissertation was the idea of studying the topic of motion event expression resorting to different theoretical, conceptual and methodological tools. This premise has determined the adoption of an organic point of view based on a constant exchange between the onomasiological perspective, and the semasiological perspective. Such an approach, combined with the laborious work on the data, has produced a number of interesting results, mostly related to the main constructions deployed for motion descriptions, and to the distribution of Path and Manner within one and the same clause. Such results converge to show two main aspects of motion expression in Ancient Greek which are deeply inter-connected, namely the complexity of the linguistic system related to this conceptual domain, and the cooperation between the different tools involved at different levels (syntactic, semantic, pragmatic).

With respect to the topic of complexity, this study has clearly shown that, regardless of the traditional attribution of Ancient Greek to the Satellite-Framed type, several lexicalization patterns coexist, and the choice among all the different options available for motion encoding is influenced by a number of different parameters, among which the type of event, the features of the Figure, the physical (and conceptual) characteristics of the Ground, the syntactic properties of the motion verb, and the attitude of the speaker towards the utterance play a crucial role.

Secondly, the fine-grained investigation of the syntactic and semantic behaviour of each slot has revealed the existence of a gap between system and use: despite the availability of a given linguistic item at the system level, its concrete employment in the utterance does not always fit the expectations based on the descriptions provided by traditional grammars and dictionaries. In this respect, an interesting case is represented by the use of the Source prepositions *apó* 'from' and *ek* 'out of'. While from a prescriptive point of view they should appear in complementary distribution, the former displaying a pure ablative value, the latter adding a reference to boundary crossing, the usage-based perspective adopted in this work has disclosed a functional overlap between the two prepositions, due to the

progressive semantic bleaching of the elative marker *ek* (cf. Chapter 3).

Thirdly, the analysis of the data from Ancient Greek has contributed to confirm the controversial nature of satellites. The rich repertory of directional particles ranging from preverbs to verb particles, and exhibiting a twofold status between satellites and adpositions, proves consistent with the claims in Imbert, Grinevald & Sőrés (2011) on the functional character of the notion of satellite. According to the scholars, that of satellite is a super-category resulting from various diachronic processes of grammaticalization, whose members display different behaviours at the synchronic level.

As a direct consequence of the system complexity, the results of our corpus-based study have revealed the multidimensional character of Path and Manner expression in Ancient Greek. Crucially, the information related to the main conceptual components of motion is not isolated in the utterance, but must rather be conceived as the result of a complex interaction between different factors, both linguistic and extra-linguistic.

In this respect, the analysis of the main motion constructions, with a focus on the Path component (cf. Chapter 4) has shown the presence of a cline proceeding from a more overt and explicit to a more covert and implicit encoding of the trajectory followed by the Figure during its displacement. In particular, the data has revealed a strong preference towards an overt encoding of the spatial information and, in particular, towards the *Intransitive Motion Construction*, which occurs in about 68% of cases. Among its possible realizations, the template in which a spontaneous motion verb combines with a directional satellite [2 slots: Verb + Sat] is the preferred one, appearing in about 26% of cases. Conversely, the covert encoding of motion (6% of the total number of occurrences) has proven peripheral, but not irrelevant. Among the different patterns analysed, the *Parallel-Goal* construction (attested in about 3% of cases) represents a systematic strategy to compensate the lack of a dedicated Goal marker for the expression of boundary crossing.

The findings on the "interactional" character of motion encoding have been corroborated by the analysis of the semantic distribution of Path and Manner information across the clause based on Sinha & Kuteva's model from 1995 (cf. Chapter 5). Specifically, the data from Ancient Greek has pointed out a different status of the two components with respect to semantic granularity and redundancy. Both share a tendency towards the locatedness pattern (i.e. one piece of Path or Manner information appears alone within the

clause), which is attested in more than 75% of cases for all the three segments of Path, and for Manner. Nevertheless, the redundancy pattern (i.e. the repetition of the same kind of spatial information within the clause) is attested for both components, although to different extents (Manner is less redundant than Path). Both Path and Manner dislike differentiation (i.e. each slot provides a different part of the spatial meaning), but a sensible difference occurs between the two components as for the pattern at issue, which is attested in about 36,7% of cases for Path vs. 2,1% for Manner.

In order to reach the outcomes mentioned so far, the methodological choices on which this dissertation is based have been decisive. Concerning this point, two main claims have originated from the present work, i.e. the importance of corpus-based analyses to grasp the difference between system and use, and the necessity to develop a coding grid accounting for both morphosyntactic and semantic properties of linguistic forms. A piece of evidence in favour of the validity of a corpus-based approach for the study of motion expression is constituted by the *Parallel-Goa*l construction. In fact, without a deep interrogation of the texts, the double marking of Goal employed to describe the entrance of the Figure into a bounded Ground, would never be seized. In addition to what stated so far, a corpus-based analysis is central to address quantitative questions related to the type and token frequencies of each linguistic item.

As far as the coding grid for the data analysis is concerned, the great effort of the present work has consisted in finding a balance between broad and narrow categories, the former allowing for crosslinguistic comparison, the latter revealing the most fine-grained phenomena within individual languages. In this respect, the system developed for the investigation of the data from Ancient Greek, which has slightly evolved in parallel with the analysis, has proven effective, consenting as well to access the constructional dimension of motion encoding.

An example aiming at showing how a wide corpus-based analysis allows for the study of detailed linguistic (and cognitive) phenomena, is represented by the case-study on the Source-Goal asymmetry (cf. Chapter 6), which seals both the data section and the whole thesis. The results of this investigation, besides confirming the existence of an actual Goal bias in Ancient Greek in line with the crosslinguistic tendency, have stressed the complexity of the phenomenon in question, as well as the consequent need for a multidimensional

analysis.

It is worth mentioning that several aspects observed in the data could not be explored in this dissertation. Such aspects open some interesting perspectives for future research.

As for the methodology, the coding system created for this study will be exported to other languages, both ancient and modern, in order to grasp the similarities and differences in Path and Manner encoding, from both a qualitative and a quantitative point of view. As a further methodological caveat, the correlation between the strategies of motion event encoding and the different literary genres represented in the corpus will be investigated in order to discover the possible idiosyncrasies.

Furthermore, in addition to the synchronic dimension of Classical Greek, the diachronic evolution of the patterns involved will be examined, with the purpose of retracing the history of motion expression from Homeric Greek to Modern Greek. Such a research could also reveal the possible typological shifts as the one identified by Iacobini & Fagard (2011) in the passage from Latin to Romance languages.

Eventually, among the individual phenomena that have been left out of the analysis for time reasons, the following seem particularly stimulating: the topic of deixis, with a special reference to the employment of basic motion verbs in the dramatic texts; the status of the Median segment of Path in terms of frequency and strategies of encoding (e.g. morphological vs. syntactic), as opposed to Source and Goal of motion; the features of caused motion events compared to spontaneous motion, with a specific focus on Path and Manner granularity; the behaviour, distribution and syntactic patterns exhibited by non-motion verbs found in motion expressions; the existence of more idioms related to displacement.

To conclude, the main merit of the present study resides in the meticulous work of data extraction, coding and analysis, aiming at integrating a text language like Ancient Greek within the framework of semantic typology. Moreover, this study has shown that, besides Talmy's original typology of motion event encoding, other approaches related to the spatial domain, such has *Distributed Spatial Semantics* (Sinha & Kuteva 1995) or *Construction Grammar* (cf., *inter alia*, Goldberg 1995), can be fruitfully applied to ancient languages.


View from my room in Lyon (spring 2016)

«(...) personne, jamais, ne peut donner l'exacte mesure de ses besoins, ni de ses conceptions, ni de ses douleurs, et (...) la parole humaine est comme un chaudron fêlé où nous battons des mélodies à faire danser les ours, quand on voudrait attendrir les étoiles.»

Gustave Flaubert
Madame Bovary, 1856

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Appendix A

This appendix contains a sample of the data gathered for this dissertation. It consists of 500 motion events (about 1/3 of the whole corpus, i.e. 100 tokens per author) plus a short coding manual on page 307. For each motion clause, the following elements are provided, namely:

- the reference;
- the portion of text in Ancient Greek characters;
- the transliteration in the Latin alphabet;
- the English translation;
- the coding for the relevant morphosyntactic and semantic information.

Reference	Token	Transliteration	Translation	Coding
Aristoph. Thes. 4	παρὰ σοῦ πυφέσθαι ποῖ μ᾽ ἄγεις ωὖριπίδη;	*parà soû puphésthai poî m' ágeis o:ûripíde:?*	Euripides, can you at least tell me where you are leading me?	VCt Mod1G
Aristoph. Thes. 24	πρὸς τοῖς ἀγαθοῖς τούτοισιν ἐξεύροιμ᾽ ὅπως ἔτι προσμάθοιμι χωλὸς εἶναι τὼ σκέλει	*pròs toîs agathoîs toútoisin exeúroim' hópo:s éti prosmáthoimi kho:lòs eînai tò: skélei*	but first of all I should like to find out how to grow lame, so that I need not have to follow you all about	N3 Mod3M
Aristoph. Thes. 25	βάδιζε δευρὶ καὶ πρόσεχε τὸν νοῦν	*bádize deurì kaì prósekhe tòn noûn*	come here and give heed!	VM Mod1G
Aristoph. Thes. 36a	ἀλλ᾽ ἐκποδὼν πτήξωμεν	*all' ekpodò:n pté:xo:men*	ah! let us step aside	VM Mod2S
Aristoph. Thes. 36b	ὡς ἐξέρχεται θεράπων τις αὐτοῦ πῦρ ἔχων καὶ μυρρίνας	*ho:s exérkhetai therápo:n tis autoû pûr ékho:n kaì murrínas*	here is one of his slaves bringing a brazier and some myrtle branches	VB S1S
Aristoph. Thes. 47	θηρῶν τ᾽ ἀγρίων πόδες ὑλοδρόμων μὴ λυέσθων	*the:rôn t' agrío:n pódes hulodrómo:n mè: luéstho:n*	and you, ye savage inhabitants of the woods, cease from your erratic wandering	N1
Aristoph. Thes. 58	τίς ἀγροιώτας πελάθει θριγκοῖς;	*tís agroió:tas peláthei thrigkoîs?*	who is the rustic that approaches this sacred enclosure?	VPG A2G
Aristoph. Thes. 59	κατὰ τοῦ θριγκοῦ συγγογγύλας καὶ συστρέψας τουτὶ τὸ πέος χοανεῦσαι	*katà toû thrigkoû suggoggúlas kaì sustrépsas toutì tò péos khoaneûsai*	I have a strong tool here both well rounded and well polished, which will pierce your enclosure and penetrate you	VCt A1T
Aristoph. Thes. 65	Ἀγάθωνά μοι δεῦρ᾽ ἐκκάλεσον	*Agátho:ná moi deûr' ekkáleson*	quick, go and call Agathon to me	VO S1S Mod1G

Aristoph. Thes. 66	μηδὲν ἱκέτευ’: αὐτὸς γὰρ ἔξεισιν τάχα	*me:dèn hikéteu': autòs gàr éxeisin tákha*	it's not worth the trouble, for he will soon be here himself	Vst S1S Mod1M
Aristoph. Thes. 69	ἢν μὴ προίῃ θύρασι πρὸς τὸν ἥλιον	*è:n mè: proíe:i thúrasi pròs tòn hé:lion*	without coming to the sun to excite the imagination	VB S1T A1G
Aristoph. Thes. 70	περίμεν’, ὡς ἐξερχεται	*perímen', ho:s exerkhetai*	wait till he gets here	VB S1S
Aristoph. Thes. 88	Ἀγάθωνα πεῖσαι τὸν τραγῳδοδιδάσκαλον ἐς Θεσμοφόροιν ἐλθεῖν	*Agátho:na peîsai tòn trago:idodidáskalon es Thesmophóroin eltheîn*	I am going to beg Agathon, the tragic poet, to go to the Thesmophoria	VB A1G
Aristoph. Thes. 95	Ἀγάθων ἐξέρχεται	*Hagátho:n exérkhetai*	here comes Agathon	VB S1S
Aristoph. Thes. 109	ὃς ἱδρύσατο χώρας γύαλα Σιμουντίδι γᾷ	*hòs hidrúsato khó:ras gúala Simountídi gâi*	who erected the walls of the city of the Simois	VCt
Aristoph. Thes. 116	ἕπομαι κλῄζουσα σεμνὸν γόνον ὀλβίζουσα Λατοῦς Ἄρτεμιν ἀπειρολεχῆ	*hépomai klé:izousa semnòn gónon olbízousa Latoûs Ártemin apeirolekhê*	I, in my turn, celebrate the everlasting happiness of the chaste Artemis, the mighty daughter of Leto!	VPG
Aristoph. Thes. 136	ποδαπὸς ὁ γύννις;	*podapòs ho gúnnis?*	whence comes this androgyne?	Mod2S
Aristoph. Thes. 184	ἡ πᾶσ’: ἐὰν γὰρ ἐγκαθεζόμενος λάθρᾳ ἐν ταῖς γυναιξίν	*he: pâs': eàn gàr egkathezómenos láthrai en taîs gunaixín*	everything: mingle secretly with the women by making yourself pass as one of themselves	VPG S1L S1T A1L
Aristoph. Thes. 202	τί δ’ ἔστιν ὅτι δέδοικας ἐλθεῖν αὐτόσε;	*tí d' éstin hóti dédoikas eltheîn autóse?*	but what prevents your going there?	VB Mod4G
Aristoph. Thes. 222	ἐμβαλῶ σοι πάτταλον, ἢν μὴ σιωπᾷς	*embalô soi páttalon, è:n mè: sio:pâis*	I'll cram a spit down your gullet, if you're not quiet	VCt S1L
Aristoph. Thes. 224	οὗτος σὺ ποῖ θεῖς; ἐς τὸ τῶν σεμνῶν θεῶν	*hoûtos sù poî theîs? es tò tôn semnôn theôn*	where are you running to now?	VM A1G Mod1G
Aristoph. Thes. 229	χώρει δεῦρο	*khó:rei deûro*	come here	VPS Mod1G
Aristoph. Thes. 236	ἀνίστασ’, ἵν’ ἀφεύσω σε, κἀγκύψας ἔχε	*anístas', hín' apheúso: se, kagkúpsas ékhe*	stand up; I am now going to remove your hair. Bend down	VCi S1T
Aristoph. Thes. 238	ἐνεγκάτω τις ἔνδοθεν δᾷδ’ ἢ λύχνον	*enegkáto: tis éndothen dâid' è: lúkhnon*	come now, a torch or a lamp!	VCt Mod4S
Aristoph. Thes. 261	τουτὶ λάβ’ ἀπὸ τῆς κλινίδος	*toutì láb' apò tês klinídos*	there's one on the couch; take it	VCt A1S
Aristoph. Thes. 265	εἴσω τις ὡς τάχιστά μ’ ἐσκυκλησάτω	*eíso: tis ho:s tákhistá m' eskukle:sáto:*	let me be taken inside	VCt S1G S3G

Aristoph. Thes. 269	βάδιζε τοίνυν	*bádize toínun*	come, get yourself to the temple	VM
Aristoph. Thes. 277	ἔκσπευδε ταχέως	*ékspeude takhéo:s*	hurry up!	VM S1S Mod1M
Aristoph. Thes. 279a	ἐγὼ δ᾽ ἄπειμι	*egò: d' ápeimi*	farewell	VB S1S
Aristoph. Thes. 279b	δεῦρό νυν ὦ Θρᾷτθ᾽ ἕπου	*deûró nun ô Thrâitth' hépou*	here, Thratta, follow me	VPS Mod1G
Aristoph. Thes. 280	ὦ Θρᾷττα θέασαι, καομένων τῶν λαμπάδων ὅσον τὸ χρῆμ᾽ ἀνέρχεθ᾽ ὑπὸ τῆς λιγνύος	*ô Thrâitta théasai, kaoméno:n tôn lampádo:n hóson tò khrêm' anérkheth' hupò tês lignúos*	look, Thratta, at the cloud of smoke that arises from all these lighted torches	VB S1T A1S
Aristoph. Thes. 283	καὶ δεῦρο καὶ πάλιν οἴκαδε	*kaì deûro kaì pálin oíkade*	both within the temple and on my way back	Mod1G Mod1T Mod4G
Aristoph. Thes. 284a	ὦ Θρᾷττα τὴν κίστην κάθελε	*ô Thrâitta tè:n kíste:n káthele*	come, Thratta, put down the basket	VCt S1T
Aristoph. Thes. 284b	κᾆτ᾽ ἔξελε τὸ πόπανον	*kâit' éxele tò pópanon*	and take out the cake	VCt S1S
Aristoph. Thes. 293	σὺ δ᾽ ἄπιθ᾽ ὦ Θρᾷττ᾽ ἐκποδών	*sù d' ápith' ô Thrâitt' ekpodó:n*	be off, Thratta, be off	VB S1S Mod2S
Aristoph. Thes. 317	καὶ σὺ παγκρατὲς κόρα γλαυκῶπι χρυσόλογχε πόλιν οἰκοῦσα περιμάχητον, ἐλθὲ δεῦρο	*kaì sù pagkratès kóra glaukôpi khrusólogkhe pólin oikoûsa perimákhe:ton, elthè deûro*	and thou, oh, invincible virgin, Pallas, with the eyes of azure and the spear of gold, who protectest our illustrious city, come hither	VB Mod1G
Aristoph. Thes. 322	σύ τε πόντιε σεμνὲ Πόσειδον ἁλιμέδον προλιπὼν μυχὸν ἰχθυόεντ᾽ οἰστροδόνητον	*sú te póntie semnè Póseidon halimédon prolipò:n mukhòn ikhthuóent' oistrodóne:ton*	come, thou mighty Poseidon, king of the Ocean, leave thy stormy whirlpools	VPS S1T A2S
Aristoph. Thes. 383	φιλοτιμίᾳ μὲν οὐδεμιᾷ μὰ τὼ θεὼ λέξουσ᾽ ἀνέστην ὦ γυναῖκες	*philotimíai mèn oudemiâi mà tò: theò: léxous' anéste:n ô gunaîkes*	if I have asked to speak, may the goddesses bear me witness, it was not for sake of ostentation	VCi S1T
Aristoph. Thes. 395	ὥστ᾽ εὐθὺς εἰσιόντες ἀπὸ τῶν ἰκρίων	*hó:st' euthùs eisiónte:s apò tôn ikrío:n*	so that, directly they come back from the theater	VB S1G A1S
Aristoph. Thes. 401	κἂν ἐκβάλῃ σκεῦός τι	*kàn ekbále:i skeûós ti*	does she let some vase drop?	VCt S1S
Aristoph. Thes. 402	κατὰ τὴν οἰκίαν πλανωμένη	*katà tè:n oikían plano:méne:*	while going or returning to the house	VCi A1T

Aristoph. Thes. 421	οἱ γὰρ ἄνδρες ἤδη κλῄδια αὐτοὶ φοροῦσι κρυπτὰ κακοηθέστατα Λακωνίκ᾽ ἄττα	*hoi gàr ándres é:de: klé:idia* *autoì phoroûsi kruptà kakoe:théstata* *Lako:ník' átta*	our husbands now carry little Spartan keys on their persons, made with three notches and full of malice and spite	VCt
Aristoph. Thes. 457	ἀλλ᾽ εἰς ἀγορὰν ἄπειμι	*all' eis agoràn ápeimi*	but I must back to the market	VB S1S A1G
Aristoph. Thes. 481	οὗτος πόθῳ μου 'κνυεν ἐλθὼν τὴν θύραν	*oûtos pótho:i mou 'knuen elthò:n tè:n thúran*	impelled by his passion, he came scratching at the door	VB A2G
Aristoph. Thes. 482	εἶτα καταβαίνω λάθρᾳ	*eîta katabaíno: láthrai*	and I was going down noiselessly	VB S1T Mod1M
Aristoph. Thes. 483	ὁ δ᾽ ἀνὴρ ἐρωτᾷ ‘ποῖ σὺ καταβαίνεις᾽	*ho d' anè:r ero:tâi 'poî sù katabaíneis'*	“where are you going?” asked my husband	VB S1T
Aristoph. Thes. 485a	ἐς τὸν κοπρῶν᾽ οὖν ἔρχομαι	*es tòn koprôn' oûn érkhomai*	“and I am going to the can”	VB A1G
Aristoph. Thes. 485b	βάδιζέ νυν	*bádizé nun*	“go ahead”	VM
Aristoph. Thes. 487	ἐγὼ δὲ καταχέασα τοῦ στροφέως ὕδωρ	*egò: dè katakhéasa toû strophéo:s húdo:r*	as for myself, I moistened the door-hinge	VCt S2T A2T
Aristoph. Thes. 488	ἐξῆλθον ὡς τὸν μοιχόν	*exêlthon ho:s tòn moikhón*	and I went to find my lover	VB S1S A1G
Aristoph. Thes. 500	ἐγκεκαλυμμένον τὸν μοιχὸν ἐξέπεμψεν	*egkekalumménon tòn moikhòn exépempsen*	to conceal her lover by so doing and afford him the means of making his escape	VCt S1S
Aristoph. Thes. 504	ὁ δ᾽ ἀνὴρ περιέτρεχ᾽ ὠκυτόκι᾽ ὠνούμενος	*ho d' anè:r periétrekh' o:kutóki' o:noúmenos*	the husband hurried in all directions to buy drugs to hasten her deliverance	VM S1T
Aristoph. Thes. 505	τὸ δ᾽ εἰσέφερε γραῦς ἐν χύτρᾳ τὸ παιδίον	*tò d' eiséphere graûs en khútrai tò paidíon*	and meanwhile an old woman brought the infant in a stew-pot	VCt S1G
Aristoph. Thes. 508	‘ἄπελθ᾽ ἄπελθ᾽, ἤδη γὰρ ὦνέρ μοι δοκῶ Τέξειν᾽	*'ápelth' ápelth', é:de: gàr ônér moi dokô Téxein'*	“go away, friend, go away, I think I am going to be delivered”	VB S1S
Aristoph. Thes. 510	χὠ μὲν γεγηθὼς ἔτρεχεν	*kho: mèn gege:thò:s étrekhen*	the husband goes off full of joy	VM
Aristoph. Thes. 513	θεῖ μειδιῶσα πρὸς τὸν ἄνδρα	*theî meidiôsa pròs tòn ándra*	runs to the father with a smile on her face	VM A1G
Aristoph. Thes. 571	καὶ γὰρ γυνή τις ἡμῖν ἐσπουδακυῖα προστρέχει	*kaì gàr guné: tis he:mîn espoudakuîa prostrékhei*	I see a woman running here in hot haste	VM S1G
Aristoph. Thes. 579	ἥκω φράσων τοῦτ᾽ ἀγγελῶν θ᾽ ὑμῖν	*hé:ko: phráso:n toût' aggelôn th' humîn*	I come to tell it to you, to let you know it	VPG

Aristoph. Thes. 584	Εὐριπίδην φάσ᾽ ἄνδρα κηδεστήν τινα αὑτοῦ γέροντα δεῦρ᾽ ἀναπέμψαι τήμερον	*Euripíde:n phás' ándra ke:desté:n tina hautoû géronta deûr' anapémpsai té:meron*	they say that Euripides has sent an old man here to-day, one of his relations	VCt S1T
Aristoph. Thes. 595	ληρεῖς: ἐγὼ γὰρ οὐκ ἂν ἦλθον ἀγγελῶν	*le:reîs: egò: gàr ouk àn êlthon aggelôn*	nonsense! I should not have come here to tell you	VB
Aristoph. Thes. 600	καὶ ζητεῖν ὅπου λέληθεν ἡμᾶς κρυπτὸς ἐγκαθήμενος	*kaì ze:teîn hópou léle:then he:mâs kruptòs egkathé:menos*	let us search and rummage everywhere	VPG S1L S1T*
Aristoph. Thes. 603	ποῖ τις τρέψεται;	*poî tis trépsetai?*	wherever am I to stow myself?	VPS Mod1G
Aristoph. Thes. 610	αὕτη σὺ ποῖ στρέφει; μέν᾽ αὐτοῦ. τί τὸ κακόν;	*haúte: sù poî stréphei? mén' autoû. tí tò kakón?*	what are you running away for?	VPS Mod1G
Aristoph. Thes. 617	τί καρδαμίζεις; οὐ βαδιεῖ δεῦρ᾽ ὡς ἐμέ;	*tí kardamízeis? ou badieî deûr' ho:s emé?*	what are you chattering about cress? Come here and be quick	VM A1G Mod1G
Aristoph. Thes. 618	τί δῆτά μ᾽ ἕλκεις ἀσθενοῦσαν;	*tí dêtá m' hélkeis asthenoûsan?*	oh! don't pull a poor sick woman about like that	VCt
Aristoph. Thes. 623	ἀνῆλθες ἤδη δεῦρο πρότερον;	*anêlthes é:de: deûro próteron?*	let's see, have you ever been here before?	VB S1T Mod1G
Aristoph. Thes. 626	ἄπελθ᾽	*ápelth'*	withdraw, all of you	VB S1S
Aristoph. Thes. 634	δεῦρ᾽ ἐλθὲ δεῦρ᾽ ὦ Κλείσθενες	*deûr' elthè deûr' ô Kleísthenes*	here, Cleisthenes, here!	VB Mod1G
Aristoph. Thes. 643	ποῖ τὸ πέος ὠθεῖς κάτω	*poî tò péos o:theîs káto:*	what do you keep pushing that thing down for?	VCt S3T
Aristoph. Thes. 644	αὖθις ἐς τὸ πρόσθεν οἴχεται	*aûthis es tò prósthen oíkhetai*	to the front	VPS A1G
Aristoph. Thes. 645	μἀλλὰ δεῦρ᾽ ἥκει πάλιν	*mallà deûr' hé:kei pálin*	ah! it's behind now	VPG Mod1G Mod1T
Aristoph. Thes. 647	ἄνω τε καὶ κάτω τὸ πέος διέλκεις πυκνότερον Κορινθίων	*áno: te kaì káto: tò péos diélkeis puknóteron Korinthío:n*	you keep pulling your stick backwards and forwards more often than the Corinthians do their ships	VCt S1T S3T S3T Mod1M
Aristoph. Thes. 653	τουτονὶ φυλάττετε Ὅπως μὴ διαφυγὼν οἰχήσεται	*toutonì phuláttete Hópo:s mè: diaphugò:n oikhé:setai*	watch him closely, so that he does not escape	VPS+M VPS S1T
Aristoph. Thes. 657a	εἴ που κἄλλος τις ἀνὴρ ἀνελήλυθε	*eí pou kállos tis anè:r anelé:luthe*	whether some other man has not come here too	VB S1T
Aristoph. Thes. 657b	καὶ περιθρέξαι τὴν πύκνα πᾶσαν	*kaì perithréxai tè:n púkna pâsan*	let us pass round the whole Pnyx	VM S2T A2T

Aristoph. Thes. 659	εἶα δὴ πρώτιστα μὲν χρὴ κοῦφον ἐξορμᾶν πόδα	*eîa dè: pró:tista mèn khrè: koûphon exormân póda*	come, be quick, let us start off on a light toe	IDIOM
Aristoph. Thes. 662	ἀλλὰ τὴν πρώτην τρέχειν χρῆν ὡς τάχιστ᾽ ἤδη κύκλῳ	*allà tè:n pró:te:n trékhein khrên ho:s tákhist' é:de: kúklo:i*	let us hasten, let us finish our round as soon as possible	VM Mod3T
Aristoph. Thes. 689	ἆ ποῖ σὺ φεύγεις;	*â poî sù pheúgeis?*	where are you flying to?	VPS+M Mod1G
Aristoph. Thes. 690	καὶ τὸ παιδίον ἐξαρπάσας μοι φροῦδος ἀπὸ τοῦ τιτθίου	*kaì tò paidíon exarpásas moi phroûdos apò toû titthíou*	he has torn my child from my breast and has disappeared with it	VCt S1S A1S Mod2S
Aristoph. Thes. 692	τοῦτο δ᾽ οὐδέποτε σὺ ψωμιεῖς, ἢν μή μ᾽ ἀφῇτ᾽	*toûto d' oudépote sù pso:mieîs, è:n mé: m' aphêt'*	but you'll never feed him again. If you do not let me go this very instant	VCt S1S
Aristoph. Thes. 706	δεινὰ δῆθ᾽, ὅστις γ᾽ ἔχει μου 'ξαρπάσας τὸ παιδίον	*deinà dêth', hóstis g' ékhei mou 'xarpásas tò paidíon*	aye, it's shameful that he should have robbed me of my child	VCt S1S
Aristoph. Thes. 710	ἀλλ᾽ οὖν ἥκεις γ᾽ ὅθεν	*all' oûn hé:keis g' hóthen*	little I care whence you come	VPG Mod4S
Aristoph. Thes. 711	οὐ φαύλως γ᾽ ἀποδρὰς λέξεις οἷον δράσας διέδυς ἔργον	*ou phaúlo:s g' apodràs léxeis hoîon drásas diédus érgon*	you shall not return to boast of having acted so odiously with impunity	VPS+M S1S
Aristoph. Thes. 717	μάτην λαλεῖτε: τὴν δ᾽ ἐγὼ οὐκ ἀφήσω	*máte:n laleîte: tè:n d' egò: ouk aphé:so:*	you talk in vain! I shall not let go the child	VCt S1S
Aristoph. Thes. 726	ἀλλὰ τάσδε μὲν λαβεῖν χρῆν σ᾽ ἐκφέρειν τε τῶν ξύλων	*allà tásde mèn labeîn khrên s' ekphérein te tôn xúlo:n*	come there, bring some firewood	VCt S1S
Aristoph. Thes. 728	ἴωμεν ἐπὶ τὰς κληματίδας ὦ Μανία	*ío:men epì tàs kle:matídas ô Manía*	bring faggots, Mania!	VB A1G
Aristoph. Thes. 739	παράβαλλε πολλὰς κληματίδας ὦ Μανία	*paráballe pollàs kle:matídas ô Manía*	faggots, Mania, plenty of them	VCt S1G
Aristoph. Thes. 760	τίς τὴν ἀγαπητὴν παῖδά σοὐξῃρήσατο;	*tís tè:n agape:tè:n paîdá souxe:iré:sato?*	who has robbed you of your daughter, your beloved child?	VCt S1S
Aristoph. Thes. 773	τί δ᾽ ἂν εἰ ταδὶ τἀγάλματ᾽ ἀντὶ τῶν πλατῶν γράφων διαρρίπτοιμι	*tí d' àn ei tadì tagálmat' antì tôn platôn grápho:n diarríptoimi*	what if I took these statues instead of oars, wrote upon them and then threw them towards this side and that	VCt S1T
Aristoph. Thes. 782	χώρει χώρει	*khó:rei khó:rei*	go away!	VPS
Aristoph. Thes. 783	ἐπείγετε πάσας καθ᾽ ὁδοὺς κείνᾳ ταύτᾳ	*epeígete pásas kath' hodoùs keínai taútai*	come, off with you in all directions, to the right and to the left; and hurry yourselves	VM A1T

Aristoph. Thes. 790	κἀπαγορεύετε μήτ᾽ ἐξελθεῖν μήτ᾽ ἐκκύψασαν ἁλῶναι	*kapagoreúete mé:t' exeltheîn mé:t' ekkúpsasan halônai*	why forbid us to go out or show ourselves at the window?	VB S1S
Aristoph. Thes. 792	κᾆν ἐξέλθῃ τὸ γύναιόν ποι	*kàn exélthe:i tò gúnaión poi*	if your wife goes out	VB S1S Mod1G
Aristoph. Thes. 796	περὶ τὰς κλίνας περινοστῶν	*perì tàs klínas perinostôn*	each of you comes prowling round the bed	VPS S1T A1T
Aristoph. Thes. 798	κᾆν αἰσχυνθεῖσ᾽ ἀναχωρήσῃ	*kàn aiskhuntheîs' anakho:ré:se:i*	and if we withdraw through modesty	VPS S1T
Aristoph. Thes. 829	πολλοῖς δ᾽ ἑτέροις ἀπὸ τῶν ὤμων ἐν ταῖς στρατιαῖς ἔρριπται τὸ σκιάδειον	*polloîs d' hetérois apò tôn ó:mo:n en taîs stratiaîs érriptai tò skiádeion*	and many others have cast away their bucklers on the battlefield	VCt A1S A1L
Aristoph. Thes. 844	ἀλλ᾽ ἀφαιρεῖσθαι βίᾳ τὰ χρήματ᾽ εἰπόντας τοδί	*all' aphaireîsthai bíai tà khré:mat' eipóntas todí*	should not even repay the capital, saying	VCt S1S
Aristoph. Thes. 877	ποίαν δὲ χώραν εἰσεκέλσαμεν σκάφει;	*poían dè khó:ran eisekélsamen skáphei?*	what is this shore whither the wind has driven our boat?	VCi S2G A2G Mod3M
Aristoph. Thes. 878	ὦ δύστηνος οἷ πεπλώκαμεν	*ô dúste:nos hoî pepló:kamen*	alas! how far we are from own country!	VM Mod1G
Eur. Ba. 1	ἥκω Διὸς παῖς τήνδε Θηβαίων χθόνα Διόνυσος	*hé:ko: Diòs paîs té:nde The:baío:n khthóna Diónusos*	I, the son of Zeus, have come to this land of the Thebans—Dionysus	VPG
Eur. Ba. 13	λιπὼν δὲ Λυδῶν τοὺς πολυχρύσους γύας Φρυγῶν τε	*lipò:n dè Ludôn toùs polukhrúsous gúas Phrugôn te*	I have left the wealthy lands of the Lydians and Phrygians	VPS
Eur. Ba. 14	Περσῶν θ᾽ ἡλιοβλήτους πλάκας Βάκτριά τε τείχη τήν τε δύσχιμον χθόνα Μήδων ἐπελθὼν Ἀραβίαν τ᾽ εὐδαίμονα Ἀσίαν τε πᾶσαν	*Persôn th' he:lioblé:tous plákas Báktriá te teíkhe: té:n te dúskhimon khthóna Mé:do:n epelthò:n Arabían t' eudaímona Asían te pâsan*	and have passed over the wintry land of the Medes, and blessed Arabia, and all of Asia	VB S2G
Eur. Ba. 20	ἐς τήνδε πρῶτον ἦλθον Ἑλλήνων πόλιν	*es té:nde prôton êlthon Hellé:no:n pólin*	and I have come to this Hellene city first	VB A1G
Eur. Ba. 35	ὅσαι γυναῖκες ἦσαν, ἐξέμηνα δωμάτων	*hósai gunaîkes êsan, exéme:na do:máto:n*	as many as are women, I have driven maddened from the house	VO S2S
Eur. Ba. 47	ἐς δ᾽ ἄλλην χθόνα, τἀνθένδε θέμενος εὖ, μεταστήσω πόδα	*es d' álle:n khthóna, tanthénde thémenos eû, metasté:so: póda*	I will move on to another land	IDIOM A1G

Eur. Ba. 50	ἢν δὲ Θηβαίων πόλις ὀργῇ σὺν ὅπλοις ἐξ ὄρους βάκχας ἄγειν ζητῇ	*è:n dè The:baío:n pólis orgêi sùn hóplois ex órous bákkhas ágein ze:têi*	but if ever the city of Thebes should in anger seek to drive the Bacchae down from the mountains with arms	VCt A1S
Eur. Ba. 55	ἀλλ', ὦ λιποῦσαι Τμῶλον ἔρυμα Λυδίας	*all', ô lipoûsai Tmôlon éruma Ludías*	but, you women who have left Tmolus, the bulwark of Lydia	VPS
Eur. Ba. 60	βασίλειά τ' ἀμφὶ δώματ' ἐλθοῦσαι τάδε	*basíleiá t' amphì dó:mat' elthoûsai táde*	and going about this palace	VB A1G
Eur. Ba. 62	ἐς Κιθαιρῶνος πτυχὰς Ἐλθὼν	*es Kithairônos ptukhàs Hlthò:n*	I myself will go to the folds of Kithairon	VB A1G
Eur. Ba. 64	Ἀσίας ἀπὸ γᾶς (ἱερὸν Τμῶλον ἀμείψασα) θοάζω	*Asías apò gâs (hieròn Tmôlon ameípsasa) thoázo:*	from the land of Asia, having left sacred Tmolus, I am swift (move rapidly)	VM A1S
Eur. Ba. 69	ἔκτοπος ἔστω	*éktopos ésto:*	let him get out of the way indoors	N3 S1S
Eur. Ba. 83	ἴτε βάκχαι	*íte bákkhai*	go, Bacchae	VB
Eur. Ba. 84	Βρόμιον παῖδα θεὸν θεοῦ Διόνυσον κατάγουσαι Φρυγίων ἐξ ὀρέων Ἑλλάδος εἰς εὐρυχόρους ἀγυιάς	*Brómion paîda theòn theoû Diónuson katágousai Phrugío:n ex oréo:n Helládos eis eurukhórous aguiás*	escorting the god Bromius, child of a god, from the Phrygian mountains to the broad streets of Hellas	VCt S1T A1S A1G
Eur. Ba. 115	Βρόμιος ὅστις ἄγῃ θιάσους εἰς ὄρος	*Brómios hóstis áge:i thiásous eis óros*	whoever leads the sacred band is Bromius—to the mountain, to the mountain	VCt A1G
Eur. Ba. 135	ἡδὺς ἐν ὄρεσιν, ὅταν ἐκ θιάσων δρομαίων πέσῃ πεδόσε	*he:dùs en óresin, hótan ek thiáso:n dromaío:n pése:i pedóse*	he is sweet in the mountains, whenever after the running dance he falls on the ground	VPT+M A1S Mod4G
Eur. Ba. 140	ἱέμενος ἐς ὄρεα Φρύγια	*hiémenos es órea Phrúgia*	rushing to the Phrygian mountains	VCi A1G
Eur. Ba. 147	ἐκ νάρθηκος ἀίσσει δρόμῳ καὶ χοροῖσιν πλανάτας ἐρεθίζων	*ek nárthe:kos aíssei drómo:i kaì khoroîsin planátas erethízo:n*	(the Bacchic one) [...] darts about, arousing the wanderers with his racing and dancing	VM A1S
Eur. Ba. 150	τρυφερόν τε πλόκαμον εἰς αἰθέρα ῥίπτων	*trupherón te plókamon eis aithéra rhípto:n*	casting his rich locks into the air	VCt A1G
Eur. Ba. 152	ἴτε βάκχαι	*íte bákkhai*	go, Bacchae	VB

Eur. Ba. 160	λωτὸς ὅταν εὐκέλαδος ἱερὸς ἱερὰ παίγματα βρέμῃ, σύνοχα φοιτάσιν εἰς ὄρος	*lo:tòs hótan eukélados hieròs hierà paígmata bréme:i, súnokha phoitásin eis óros*	when the sweet-sounding sacred pipe sounds a sacred playful tune suited to the wanderers, to the mountain	VM A1G
Eur. Ba. 166	κῶλον ἄγει ταχύπουν σκιρτήμασι βάκχα	*kôlon ágei takhúpoun skirté:masi bákkha*	and the Bacchante rouses her swift foot in a gamboling dance	IDIOM Mod3M
Eur. Ba. 170	Κάδμον ἐκκάλει δόμων	*Kádmon ekkálei dómo:n*	call from the house Kadmos	VO
Eur. Ba. 172	ὃς πόλιν Σιδωνίαν λιπὼν	*hòs pólin Sido:nían lipò:n*	who leaving the city of Sidon	VPS
Eur. Ba. 173	ἴτω τις	*íto: tis*	let someone go	VB
Eur. Ba. 174	οἶδε δ' αὐτὸς ὧν ἥκω πέρι	*oîde d' autòs hôn hé:ko: péri*	he knows why I have come	VPG
Eur. Ba. 184	ποῖ καθιστάναι πόδα	*poî kathistánai póda*	where must I set my feet	IDIOM Mod1G
Eur. Ba. 191	οὐκοῦν ὄχοισιν εἰς ὄρος περάσομεν	*oukoûn ókhoisin eis óros perásomen*	then will we go to the mountain in a chariot?	VPT A1G
Eur. Ba. 212	Πενθεὺς πρὸς οἴκους ὅδε διὰ σπουδῆς περᾷ	*Pentheùs pròs oíkous hóde dià spoudês perâi*	Pentheus is coming here to the house now in haste	VPT A1G
Eur. Ba. 217	γυναῖκας ἡμῖν δώματ' ἐκλελοιπέναι	*gunaîkas he:mîn dó:mat' ekleloipénai*	that the women have left our homes	VPS S1S
Eur. Ba. 218	ἐν δὲ δασκίοις ὄρεσι θοάζειν	*en dè daskíois óresi thoázein*	and rush about in the shadowy mountains	VM A1L
Eur. Ba. 222	ἄλλην δ' ἄλλοσ' εἰς ἐρημίαν πτώσσουσαν	*álle:n d' állos' eis ere:mían ptó:ssousan*	and that they each creep off different ways into secrecy	VPS A1G
Eur. Ba. 233	λέγουσι δ' ὥς τις εἰσελήλυθε ξένος	*légousi d' hó:s tis eiselé:luthe xénos*	and they say that some stranger has come	VB S1G
Eur. Ba. 253	οὐκ ἀποτινάξεις κισσόν	*ouk apotináxeis kissón*	won't you cast away the ivy?	VCt S1S
Eur. Ba. 278	ὃς δ' ἦλθ' ἔπειτ'	*hòs d' êlth' épeit'*	but he who came afterwards	VB
Eur. Ba. 289	ἐς δ' Ὄλυμπον βρέφος ἀνήγαγεν θεόν	*es d' Ólumpon bréphos ané:gagen theón*	and led the child as a god to Olympus	VCt S1T A1G
Eur. Ba. 290	Ἥρα νιν ἤθελ' ἐκβαλεῖν ἀπ' οὐρανοῦ	*Hé:ra nin é:thel' ekbaleîn ap' ouranoû*	Hera wished to banish him from the sky	VCt S1S A1S
Eur. Ba. 299	ὅταν γὰρ ὁ θεὸς ἐς τὸ σῶμ' ἔλθῃ πολύς	*hótan gàr ho theòs es tò sôm' élthe:i polús*	for whenever the god enters a body in full force	VB A1G
Eur. Ba. 346	στειχέτω τις ὡς τάχος ἐλθὼν δὲ θάκους τοῦδ' ἵν' οἰωνοσκοπεῖ	*steikhéto: tis ho:s tákhos elthò:n dè thákous toûd' hín' oio:noskopeî*	let someone go quickly to the seat where he watches the flights of birds	VM VB

Eur. Ba. 352	οἳ δ' ἀνὰ πόλιν στείχοντες ἐξιχνεύσατε τὸν θηλύμορφον ξένον	*hoì d' anà pólin steíkhontes exikhneúsate tòn the:lúmorphon xénon*	and some of you hunt throughout the city for this effeminate stranger	VM A1T
Eur. Ba. 355	δέσμιον πορεύσατε δεῦρ' αὐτόν	*désmion poreúsate deûr' autón*	bring him here bound	VCt Mod1G
Eur. Ba. 360	στείχωμεν ἡμεῖς, Κάδμε	*steíkho:men he:meîs, Kádme*	let us go, Kadmos	VM
Eur. Ba. 363	ἀλλ' ἕπου μοι κισσίνου βάκτρου μέτα	*all' hépou moi kissínou báktrou méta*	but follow me with the ivy-clad staff	VPG
Eur. Ba. 365	γέροντε δ' αἰσχρὸν δύο πεσεῖν	*géronte d' aiskhròn dúo peseîn*	it would be shameful for two old men to fall down	VPT+M
Eur. Ba. 371	Ὅσία δ' ἃ κατὰ γᾶν χρυσέαν πτέρυγα φέρεις	*Hosía d' hà katà gân khruséan ptéruga phéreis*	Holiness, who bear your golden wings along the earth	VCt A1T
Eur. Ba. 402	ἱκοίμαν ποτὶ Κύπρον	*hikoíman potì Kúpron*	would that I could go to Cyprus	VPG A1G
Eur. Ba. 412	ἐκεῖσ' ἄγε με, Βρόμιε Βρόμιε	*ekeîs' áge me, Brómie Brómie*	lead me there, Bromius	VCt Mod4G
Eur. Ba. 435	οὐδ' ἄκρανθ' ὡρμήσαμεν	*oud' ákranth' ho:rmé:samen*	nor have we set out in vain	VCi
Eur. Ba. 445	φροῦδαί γ' ἐκεῖναι λελυμέναι πρὸς ὀργάδας Σκιρτῶσι	*phroûdaí g' ekeînai leluménai pròs orgádas Skirtôsi*	the Bacchae are set loose and gone, and are gamboling in the meadows	VM A1G Mod2S
Eur. Ba. 449	πολλῶν δ' ὅδ' ἀνὴρ θαυμάτων ἥκει πλέως ἐς τάσδε Θήβας	*pollôn d' hód' hanè:r thauváto:n hé:kei pléo:s es tásde Thé:bas*	this man has come to Thebes full of many wonders	VPG A1G
Eur. Ba. 452	οὐκ ἔστιν οὕτως ὠκὺς ὥστε μ' ἐκφυγεῖν	*ouk éstin houto:s o:kùs hó:ste m' ekphugeîn*	he is not so swift as to escape me	VPS+M S1S
Eur. Ba. 454	ἐφ' ὅπερ ἐς Θήβας πάρει	*eph' hóper es Thé:bas párei*	for which reason you have come to Thebes	Vst S1G A1G
Eur. Ba. 465	πόθεν δὲ τελετὰς τάσδ' ἄγεις ἐς Ἑλλάδα	*póthen dè teletàs tásd' ágeis es Helláda*	where do you bring these rites to Hellas from?	VCt A1G Mod4S
Eur. Ba. 481	ἦλθες δὲ πρῶτα δεῦρ' ἄγων τὸν δαίμονα;	*êlthes dè prôta deûr' ágo:n tòn daímona?*	did you come here first, bringing the god?	VB Mod1G
Eur. Ba. 509	χώρει	*khó:rei*	go	VPS
Eur. Ba. 515	στείχοιμ' ἄν	*steíkhoim' án*	I will go	VM
Eur. Ba. 526	Ἴθι, Διθύραμβ'	*Íthi, Dithúramb'*	go, Dithyrambus	VB
Eur. Ba. 527	ἐμὰν ἄρ- σενα τάνδε βᾶθι νηδύν	*emàn ár- sena tánde bâthi ne:dún*	enter this my male womb	VB

Eur. Ba. 530	σὺ δέ μ', ὦ μάκαιρα Δίρκα, στεφανηφόρους ἀπωθῇ θιάσους ἔχουσαν ἐν σοί	*sù dé m', ô mákaira Dírka, stephane:phórous apo:thêi thiásous ékhousan en soí*	but you, blessed Dirce, reject me with my garland-bearing company about you	VCt S1S
Eur. Ba. 533	τί με φεύγεις;	*tí me pheúgeis?*	why do you flee me?	VPS+M
Eur. Ba. 553	μόλε, χρυσῶπα τινάσσων, ἄνα, θύρσον κατ' Ὄλυμπον	*móle, khrusôpa tinásso:n, ána, thúrson kat' Ólumpon*	come, lord, down from Olympus, brandishing your golden thyrsos	VB A1T
Eur. Ba. 568	διαβὰς Ἀξιὸν	*diabàs Axiòn*	having crossed the Axius	VB S2T
Eur. Ba. 583	μόλε νυν ἡμέτερον ἐς θίασον, ὦ Βρόμιε Βρόμιε	*móle nun he:méteron es thíason, ô Brómie Brómie*	come now to our company, Bromius	VB A1G
Eur. Ba. 600	δίκετε πεδόσε τρομερὰ σώματα	*díkete pedóse tromerà só:mata*	cast on the ground your trembling bodies	VCt Mod4G
Eur. Ba. 603	οὕτως ἐκπεπληγμέναι φόβῳ πρὸς πέδῳ πεπτώκατ';	*houto:s ekpeple:gménai phóbo:i pròs pédo:i peptó:kat'?*	have you fallen on the ground so stricken with fear?	VPT+M A1G
Eur. Ba. 610	εἰς ἀθυμίαν ἀφίκεσθ	*eis athumían aphíkesth*	did you despair?	VPG S1S* A1G
Eur. Ba. 611	Πενθέως ὡς ἐς σκοτεινὰς ὁρκάνας πεσούμενος;	*Penthéo:s ho:s es skoteinàs horkánas pesoúmenos?*	to fall into Pentheus' dark dungeon	VPT+M A1G
Eur. Ba. 623	ἐλθὼν ὁ Βάκχος	*elthò:n ho Bákkhos*	Bacchus came	VB
Eur. Ba. 625	ᾖσσ' ἐκεῖσε κᾖτ' ἐκεῖσε	*êiss' ekeîse kâit' ekeîse*	he ran here and there	VM Mod4G Mod4G
Eur. Ba. 629	ὃ δ' ἐπὶ τοῦθ' ὡρμημένος ᾖσσε	*hò d' epì toûth' ho:rme:ménos êisse*	Pentheus rushed at it headlong	VCi VM A1G
Eur. Ba. 635	πρὸς θεὸν γὰρ ὢν ἀνὴρ ἐς μάχην ἐλθεῖν ἐτόλμησε	*pròs theòn gàr ò:n anè:r es mákhe:n eltheîn etólme:se*	for he, a man, dared to join battle with a god	VB A1G
Eur. Ba. 639	ἐς προνώπι' αὐτίχ' ἥξει	*es pronó:pi' autíkh' hé:xei*	he will soon come to the front of the house	VPG A1G
Eur. Ba. 640	κἂν πνέων ἔλθῃ μέγα	*kàn pnéo:n élthe:i méga*	even if he comes boasting greatly	VB
Eur. Ba. 642	διαπέφευγέ μ' ὁ ξένος	*diapépheugé m' ho xénos*	the stranger has escaped me	VPS+M S1T
Eur. Ba. 648a	πόθεν σὺ (...) ἔξω περᾷς;	*póthen sù (...) éxo: perâis?*	how have you come outside?	VPT S3S
Eur. Ba. 649b	δεσμὰ διαφυγὼν	*desmà diaphugò:n*	escaping your chains	VPS+M S1T
Eur. Ba. 654	οὐχ ὑπερβαίνουσι καὶ τείχη θεοί;	*oukh huperbaínousi kaì teíkhe: theoí?*	do gods not pass over walls too?	VB S2T

Eur. Ba. 658	ὃς ἐξ ὄρους πάρεστιν ἀγγελῶν τί σοι	*hòs ex órous párestin aggelôn tí soi*	who has come from the mountain	Vst S1G A1S
Eur. Ba. 661a	ἥκω	*hé:ko:*	I have come	VPG
Eur. Ba. 661b	Κιθαιρῶν' ἐκλιπών	*Kithairôn' eklipó:n*	having left the Kithairon	VPS S1S
Eur. Ba. 664	βάκχας ποτνιάδας εἰσιδών, αἳ τῆσδε γῆς οἴστροισι λευκὸν κῶλον ἐξηκόντισαν	*bákkhas potniádas eisidó:n, haì têsde gês oístroisi leukòn kôlon exe:kóntisan*	having seen the holy Bacchae, who goaded to madness have darted from this land with their fair feet	VCt S2S
Eur. Ba. 685	αἳ δ' ἐν δρυὸς φύλλοισι πρὸς πέδῳ κάρα εἰκῇ βαλοῦσαι σωφρόνως	*haì d' en druòs phúlloisi pròs pédo:i kára eikêi baloûsai so:phróno:s*	others laying their heads at random on the oak leaves	VCt A1G
Eur. Ba. 693	αἳ δ' ἀποβαλοῦσαι θαλερὸν ὀμμάτων ὕπνον ἀνῆξαν ὀρθαί	*haì d' apobaloûsai thaleròn ommáto:n húpnon anêixan orthaí*	and they, casting off refreshing sleep from their eyes, sprang upright	VM S1T
Eur. Ba. 704	θύρσον δέ τις λαβοῦσ' ἔπαισεν ἐς πέτραν	*thúrson dé tis laboûs' épaisen es pétran*	one took her thyrsos and struck it against a rock	VCt A1G
Eur. Ba. 705	ὅθεν δροσώδης ὕδατος ἐκπηδᾷ νοτίς	*hóthen drosó:de:s húdatos ekpe:dâi notís*	from which a dewy stream of water sprang forth	VM S1S Mod4S
Eur. Ba. 706	ἄλλη δὲ νάρθηκ' ἐς πέδον καθῆκε γῆς	*álle: dè nárthe:k' es pédon kathêke gês*	another let her thyrsos strike the ground	VCt S1T A1G
Eur. Ba. 707	καὶ τῇδε κρήνην ἐξανῆκ' οἴνου θεός	*kaì têide kré:ne:n exanêk' oínou theós*	and there the god sent forth a fountain of wine	VCt S1S S1T Mod1G
Eur. Ba. 710	ἐκ δὲ κισσίνων θύρσων γλυκεῖαι μέλιτος ἔσταζον ῥοαί	*ek dè kissíno:n thúrso:n glukeîai mélitos éstazon rhoaí*	and a sweet flow of honey dripped from their ivy thyrsoi	VM A1S
Eur. Ba. 728	κἀγὼ 'ξεπήδησ' ὡς συναρπάσαι θέλων	*kagò: 'xepé:de:s' ho:s sunarpásai thélo:n*	and I sprang forth, wanting to snatch her	VM S1S
Eur. Ba. 733	ἀλλ' ἕπεσθέ μοι	*all' hépesthé moi*	but follow me!	VPG
Eur. Ba. 734	ἡμεῖς μὲν οὖν φεύγοντες	*he:meîs mèn oûn pheúgontes*	we fled	VPS+M
Eur. Ba. 735	αἳ δὲ νεμομέναις χλόην μόσχοις ἐπῆλθον χειρὸς ἀσιδήρου μέτα	*haì dè nemoménais khlóe:n móskhois epêlthon kheiròs asidé:rou méta*	but they, with unarmed hands, sprang on the heifers browsing the grass	VB S2G
Eur. Ba. 741	εἶδες δ' ἂν ἢ πλεύρ' ἢ δίχηλον ἔμβασιν ῥιπτόμεν' ἄνω τε καὶ κάτω	*eîdes d' àn è: pleúr' è: díkhe:lon émbasin rhiptómen' áno: te kaì káto:*	you might see ribs or cloven hooves tossed here and there	VCt S3T S3T

Eur. Ba. 744	ταῦροι δ᾽ ὑβρισταὶ κἀς κέρας θυμούμενοι τὸ πρόσθεν ἐσφάλλοντο πρὸς γαῖαν δέμας	*taûroi d' hubristaì kas kéras thumoúmenoi tò prósthen esphállonto pròs gaîan démas*	bulls who before were fierce, and showed their fury with their horns, stumbled to the ground	VCt A1G
Eur. Ba. 748	ὥστ᾽ ὄρνιθες ἀρθεῖσαι δρόμῳ	*hó:st' órnithes artheîsai drómo:i*	and like birds raised in their course	VPT Mod3M
Eur. Ba. 752	Ὑσιάς τ᾽ Ἐρυθράς θ᾽, αἳ Κιθαιρῶνος λέπας νέρθεν κατῳκήκασιν, ὥστε πολέμιοι, Ἐπεσπεσοῦσαι	*Hysiás t' Hruthrás th', haì Kithairônos lépas nérthen kato:iké:kasin, hó:ste polémioi, Hpespesoûsai*	and falling like soldiers upon Hysiae and Erythrae, towns situated below the rock of Kithairon	VPT+M S2G S1G
Eur. Ba. 753	πάντ᾽ ἄνω τε καὶ κάτω Διέφερον	*pánt' áno: te kaì káto: Diépheron*	they turned everything upside down	VCt S3T S3T
Eur. Ba. 756	οὐδ᾽ ἔπιπτεν ἐς μέλαν πέδον	*oud' épipten es mélan pédon*	nor did it fall to the ground	VPT+M A1G
Eur. Ba. 758	οἳ δ᾽ ὀργῆς ὕπο ἐς ὅπλ᾽ ἐχώρουν φερόμενοι βακχῶν ὕπο	*hoì d' orgês húpo es hópl' ekhó:roun pherómenoi bakkhôn húpo*	some people in rage took up arms, being plundered by the Bacchae	VPS A1G
Eur. Ba. 762	θύρσους ἐξανιεῖσαι χερῶν	*thúrsous exanieîsai kherôn*	hurling the thyrsoi from their hands	VCt S2S S1T
Hdt. 1.1.1a	τούτους γὰρ ἀπὸ τῆς Ἐρυθρῆς (...) θαλάσσης ἀπικομένους ἐπὶ τήνδε τὴν θάλασσαν	*toútous gàr apò tês Hruthrês (...) thalásse:s apikoménous epì té:nde tè:n thálassan*	these came to our seas from the Red sea	VPG S1S* A1S A1G
Hdt. 1.1.1b	ἐσαπικνέσθαι καὶ δὴ καὶ ἐς Ἄργος	*esapiknésthai kaì dè: kaì es Árgos*	they came to Argos	VPG S1G S1S* A1G
Hdt. 1.1.2	ἀπικομένους δὲ τούς Φοίνικας ἐς δὴ τὸ Ἄργος	*apikoménous dè toús Phoínikas es dè: tò Árgos*	the Phoenicians came to Argos	VPG S1S* A1G
Hdt. 1.1.3	ἐλθεῖν ἐπὶ τὴν θάλασσαν γυναῖκας ἄλλας τε πολλάς	*eltheîn epì tè:n thálassan gunaîkas állas te pollás*	many other women came to the shore	VB A1G
Hdt. 1.1.4a	καὶ τοὺς Φοίνικας διακελευσαμένους ὁρμῆσαι ἐπ᾽ αὐτάς	*kaì toùs Phoínikas diakeleusaménous hormêsai ep' autás*	the Phoenicians incited one another to set upon them	VCi A1G
Hdt. 1.1.4b	τὰς μὲν δὴ πλεῦνας τῶν γυναικῶν ἀποφυγεῖν	*tàs mèn dè: pleûnas tôn gunaikôn apophugeîn*	most of the women escaped	VPS+M S1S
Hdt. 1.1.4c	ἐσβαλομένους δὲ ἐς τὴν νέα	*esbaloménous dè es tè:n néa*	being thrown into the ship	VCt S1G A1G
Hdt. 1.1.4d	ἀποπλέοντας ἐπ᾽ Αἰγύπτου	*apopléontas ep' Aigúptou*	then sailed away for Egypt	VM S1S A1G
Hdt. 1.2.1	οὕτω μὲν Ἰοῦν ἐς Αἴγυπτον ἀπικέσθαι	*houto: mèn Ioûn es Aígupton apikésthai*	in this way Io came to Egypt	VPG S1S* A1G
Hdt. 1.2.2	καταπλώσαντας γὰρ μακρῇ νηί ἐς Αἶαν τε τὴν Κολχίδα καὶ ἐπὶ Φᾶσιν ποταμόν	*katapló:santas gàr makrêi ne:í es Aîan te tè:n Kolkhída kaì epì Phâsin potamón*	they sailed in a long ship to Aea, a city of the Colchians, and to the river Phasis	VM S1T A1G A1G

Hdt. 1.4.3	ἐλθόντας ἐς τὴν Ἀσίην	*elthóntas es tè:n Asíe:n*	they came to Asia	VB A1G
Hdt. 1.5.2	οὕτω δὴ ἐθελοντήν αὐτήν τοῖσι Φοίνιξι συνεκπλῶσαι	*hoúto: dè: ethelonté:n auté:n toîsi Phoínixi sunekplôsai*	she sailed away with the Phoenicians of her own accord	VM S1S
Hdt. 1.5.3	προβήσομαι ἐς τὸ πρόσω τοῦ λόγου	*probé:somai es tò próso: toû lógou*	and thus proceed with my history	VB S1T A1G
Hdt. 1.6.1a	ὃς ῥέων ἀπὸ μεσαμβρίης μεταξὺ Συρίων τε καὶ Παφλαγόνων	*hòs rhéo:n apò mesambríe:s metaxù Surío:n te kaì Paphlagóno:n*	(the river Halys), which flows from the south between Syria and Paphlagonia	VM A1S A1T
Hdt. 1.6.1b	ἐξιεῖ πρὸς βορέην ἄνεμον ἐς τὸν Εὔξεινον καλεόμενον πόντον	*exieî pròs borée:n ánemon es tòn Eúxeinon kaleómenon pónton*	and empties into the sea called Euxine	VCi S1S A1G A1G
Hdt. 1.6.3	τὸ γὰρ Κιμμερίων στράτευμα τὸ ἐπὶ τὴν Ἰωνίην ἀπικόμενον	*tò gàr Kimmerío:n stráteuma tò epì tè:n Io:níe:n apikómenon*	the Cimmerian host which invaded Ionia	VPG S1S* A1G
Hdt. 1.9.2a	ἐγὼ γάρ σε ἐς τὸ οἴκημα ἐν τῷ κοιμώμεθα ὄπισθε τῆς ἀνοιγομένης θύρης στήσω	*egò: gár se es tò oíke:ma en tôi koimó:metha ópisthe tês anoigoméne:s thúre:s sté:so:*	I will bring you into the chamber where she and I lie and conceal you behind the open door	VCt A1G
Hdt. 1.9.2b	μετὰ δ' ἐμὲ ἐσελθόντα	*metà d' emè eselthónta*	and after I have entered	VB S1G
Hdt. 1.9.2c	παρέσται καὶ ἡ γυνὴ ἡ ἐμὴ ἐς κοῖτον	*paréstai kaì he: gunè: he: emè: es koîton*	my wife too will come to bed	Vst S1G A1G
Hdt. 1.9.3a	ἐπεὰν δέ ἀπὸ τοῦ θρόνου στείχῃ ἐπὶ τὴν εὐνήν	*epeàn dé apò toû thrónou steíkhe:i epì tè:n euné:n*	then, when she moves from the chair to the bed	VM A1S A1G
Hdt. 1.9.3b	σοὶ μελέτω τὸ ἐνθεῦτεν ὅκως μὴ σε ὄψεται ἰόντα διὰ θυρέων	*soì meléto: tò entheûten hóko:s mè: se ópsetai iónta dià thuréo:n*	be careful she does not see you going out through the doorway	VB A1T
Hdt. 1.10.1	ἤγαγε τὸν Γύγεα ἐς τὸ οἴκημα	*é:gage tòn Gúgea es tò oíke:ma*	he brought Gyges into the chamber	VCt A1G
Hdt. 1.10.2a	ὡς δὲ κατὰ νώτου ἐγένετο ἰούσης τῆς γυναικός ἐς τὴν κοίτην	*ho:s dè katà nó:tou egéneto ioúse:s tês gunaikós es tè:n koíte:n*	when she turned her back upon him to go to bed	VB A1G
Hdt. 1.10.2b	ἐχώρεε ἔξω	*ekhó:ree éxo:*	he slipped from the room	VPS S3G
Hdt. 1.10.2c	καὶ ἡ γυνὴ ἐπορᾷ μιν ἐξιόντα	*kaì he: gunè: eporâi min exiónta*	the woman glimpsed him as he went out	VB S1S
Hdt. 1.11.2	ὡς δὲ ὁ Γύγης ἀπίκετο	*ho:s dè ho Gúge:s apíketo*	when Gyges came	VPG S1S*
Hdt. 1.12.1	εἵπετο ἐς τὸν θάλαμον τῇ γυναικί	*heípeto es tòn thálamon têi gunaikí*	Gyges followed the woman into the chamber	VPG A1G
Hdt. 1.15.1a	ἐς Μίλητόν τε ἐσέβαλε	*es Míle:tón te esébale*	and invaded the country of Miletus	VCi S1G A1G

Hdt. 1.15.1b	ἀπίκοντο ἐς τὴν Ἀσίην	*apíkonto es tè:n Asíe:n*	came into Asia	VPG S1S* A1G
Hdt. 1.16.2a	Κιμμερίους τε ἐκ τῆς Ἀσίης ἐξήλασε	*Kimmeríous te ek tês Asíe:s exé:lase*	drove the Cimmerians out of Asia	VCt S1S A1S
Hdt. 1.16.2b	ἐς Κλαζομενάς τε ἐσέβαλε	*es Klazomenás te esébale*	and invaded the lands of Clazomenae	VCi S1G A1G
Hdt. 1.16.2c	ἀπὸ μέν νυν τούτων οὐκ ὡς ἤθελε ἀπήλλαξε	*apò mén nun toúto:n ouk ho:s é:thele apé:llaxe*	but he did not return from these as he wished	VO S1S* A1S
Hdt. 1.17.1	τηνικαῦτα ἐσέβαλλε τὴν στρατιήν	*te:nikaûta eséballe tè:n stratié:n*	he sent his army	VCt S1G
Hdt. 1.17.2	ὡς δὲ ἐς τὴν Μιλησίην ἀπίκοιτο	*ho:s dè es tè:n Mile:síe:n apíkoito*	and whenever he came to the Milesian territory	VPG S1S* A1G
Hdt. 1.17.3	ἀπαλλάσσετο ὀπίσω	*apallásseto opíso:*	and so returned to where he came from	VO S1S* Mod1T
Hdt. 1.19.2	μετὰ δὲ τῆς στρατιῆς ἀπικομένης ἐς Σάρδις	*metà dè tês stratiês apikoméne:s es Sárdis*	but after the army had returned to Sardis	VPG S1S* A1G
Hdt. 1.19.3	τοῖσι δὲ ἡ Πυθίη ἀπικομένοισι ἐς Δελφοὺς οὐκ ἔφη χρήσειν	*toîsi dè he: Puthíe: apikoménoisi es Delphoùs ouk éphe: khré:sein*	but when the messengers came to Delphi	VPG S1S* A1G
Hdt. 1.22.2	ἀπῆλθε ἐς τὰς Σάρδις	*apêlthe es tàs Sárdis*	and returned to Sardis	VB S1S A1G
Hdt. 1.23.1	Ἀρίονα τὸν Μηθυμναῖον ἐπὶ δελφῖνος ἐξενειχθέντα ἐπὶ Ταίναρον	*Aríona tòn Me:thumnaîon epì delphînos exeneikhthénta epì Taínaron*	the landing on Taenarus of Arion of Methymna, brought there by a dolphin	VCt S1S A1G
Hdt. 1.24.1a	πλῶσαι ἐς Ἰταλίην τε καὶ Σικελίην	*plôsai es Italíe:n te kaì Sikelíe:n*	to sail to Italy and Sicily	VM A1G
Hdt. 1.24.1b	ὀπίσω ἐς Κόρινθον ἀπικέσθαι	*opíso: es Kórinthon apikésthai*	to come back to Corinth	VPG S1S* A1G
Hdt. 1.24.2a	ὁρμᾶσθαι μέν νυν ἐκ Τάραντος	*hormâsthai mén nun ek Tárantos*	then he left from Tarentum	VCi A1S
Hdt. 1.24.2b	τοὺς δὲ ἐν τῷ πελάγεϊ ἐπιβουλεύειν τὸν Ἀρίονα ἐκβαλόντας	*toùs dè en tôi pelágei epibouleúein tòn Aríona ekbalóntas*	they plotted to cast Arion overboard	VCt S1S A1G
Hdt. 1.24.3	ἢ ἐκπηδᾶν ἐς τὴν θάλασσαν τὴν ταχίστην	*è: ekpe:dân es tè:n thálassan tè:n takhíste:n*	or else to jump into the sea at once	VM S1S A1G Mod1M
Hdt. 1.24.5a	ἀναχωρῆσαι ἐκ τῆς πρύμνης ἐς μέσην νέα	*anakho:rêsai ek tês prúmne:s es mése:n néa*	drew away toward the waist of the vessel from the stern	VPS S1T A1S A1G
Hdt. 1.24.5b	ῥῖψαί μιν ἐς τὴν θάλασσαν ἑωυτὸν	*rhîpsaí min es tè:n thálassan heo:utòn*	he threw himself into the sea	VCt A1G
Hdt. 1.24.6a	καὶ τοὺς μὲν ἀποπλέειν ἐς Κόρινθον	*kaì toùs mèn apopléein es Kórinthon*	so the crew sailed away to Corinth	VM S1S A1G

Hdt. 1.24.6b	ἐξενεῖκαι ἐπὶ Ταίναρον	*exeneîkai epì Taínaron*	bore him to Taenarus	VCt S1S A1G
Hdt. 1.24.6c	ἀποβάντα δέ	*apobánta dé*	landing there	VB S1S
Hdt. 1.24.6d	αὐτὸν χωρέειν ἐς Κόρινθον	*autòn kho:réein es Kórinthon*	he went to Corinth	VPS A1G
Hdt. 1.24.7a	οὐδαμῇ μετιέντα	*oudamêi metiénta*	letting him go nowhere	VCt S1T Mod1G
Hdt. 1.24.7b	ὥσπερ ἔχων ἐξεπήδησε	*hó:sper ékho:n exepé:de:se*	just as he was when he jumped from the ship	VM S1S
Hdt. 1.27.2	Βίαντα τὸν Πριηνέα ἀπικόμενον ἐς Σάρδις	*Bíanta tòn Prie:néa apikómenon es Sárdis*	Bias of Priene came to Sardis	VPG S1S* A1G
Hdt. 1.27.3a	ἐς Σάρδις τε καὶ ἐπὶ σὲ ἐν νόῳ ἔχοντες στρατεύεσθαι	*es Sárdis te kaì epì sè en nóo:i ékhontes strateúesthai*	intending to march to Sardis	VM A1G
Hdt. 1.27.3b	ἐλθεῖν ἐπὶ Λυδῶν παῖδας σὺν ἵπποισι	*eltheîn epì Ludôn paîdas sùn híppoisi*	to come on horseback against the sons of the Lydians	VB A1G
Hdt. 1.29.1a	ἀπικνέονται ἐς Σάρδις ἀκμαζούσας πλούτῳ ἄλλοι τε οἱ πάντες ἐκ τῆς Ἑλλάδος σοφισταί	*apiknéontai es Sárdis akmazoúsas ploúto:i álloi te hoi pántes ek tês Helládos sophistaí*	all the sages from Hellas who were living at that time came to Sardis	VPG S1S* A1G A1S
Hdt. 1.29.1b	ἀπεδήμησε ἔτεα δέκα	*apedé:me:se étea déka*	went abroad for ten years, sailing forth to see the world, he said	VPS S1S*
Hdt. 1.29.1c	κατά θεωρίης πρόφασιν ἐκπλώσας	*katá theo:ríe:s próphasin ekpló:sas*	sailing forth to see the world, he said	VM S1S
Hdt. 1.30.1a	αὐτῶν δὴ ὧν τούτων καὶ τῆς θεωρίης ἐκδημήσας ὁ Σόλων εἵνεκεν	*autôn dè: ôn toúto:n kaì tês theo:ríe:s ekde:mé:sas ho Sólo:n heíneken*	so for that reason, and to see the world	VPS S1S*
Hdt. 1.30.1b	ἐς Αἴγυπτον ἀπίκετο παρὰ Ἄμασιν καὶ δὴ καὶ ἐς Σάρδις παρὰ Κροῖσον	*es Aígupton apíketo parà Ámasin kaì dè: kaì es Sárdis parà Kroîson*	Solon went to visit Amasis in Egypt and then to Croesus in Sardis	VPG S1S* A1G A1G
Hdt. 1.30.1c	τὸν Σόλωνα θεράποντες περιῆγον κατὰ τοὺς θησαυρούς	*tòn Sólo:na therápontes periêgon katà toùs the:sauroús*	his attendants showed Solon around his treasures	VCt S1T A1T
Hdt. 1.30.2	παρ᾽ ἡμέας γὰρ περὶ σέο λόγος ἀπῖκται πολλὸς	*par' he:méas gàr perì séo lógos apîktai pollòs*	we have heard a lot about you	VPG S1S* A1G
Hdt. 1.31.2a	ἔδεε πάντως τὴν μητέρα αὐτῶν ζεύγεϊ κομισθῆναι ἐς τὸ ἱρόν	*édee pánto:s tè:n me:téra autôn zeúgei komisthênai es tò hirón*	and their mother absolutely had to be conveyed to the temple by a team of oxen	VCt A1G
Hdt. 1.31.2b	οἱ δέ σφι βόες ἐκ τοῦ ἀγροῦ οὐ παρεγίνοντο ἐν ὥρῃ	*hoi dé sphi bóes ek toû agroû ou paregínonto en hó:re:i*	but their oxen had not come back from the fields in time	Vst S1G A1S

Hdt. 1.31.2c	εἷλκον τὴν ἅμαξαν	*heîlkon tè:n hámaxan*	and drew the wagon	VCt
Hdt. 1.31.2d	σταδίους δὲ πέντε καὶ τεσσεράκοντα διακομίσαντες	*stadíous dè pénte kaì tesserákonta diakomísantes*	travelling five miles	VCi S2T
Hdt. 1.31.2e	ἀπίκοντο ἐς τὸ ἱρόν	*apíkonto es tò hirón*	until they arrived at the temple	VPG S1S* A1G
Hdt. 1.31.5	οἱ νεηνίαι οὐκέτι ἀνέστησαν	*hoi nee:níai oukéti anéste:san*	the youths never rose again	VCi S1T
Hdt. 1.34.1	μετὰ δὲ Σόλωνα οἰχόμενον	*metà dè Sólo:na oikhómenon*	but after Solon's departure	VPS
Hdt. 1.34.3	μή τί οἱ κρεμάμενον τῷ παιδὶ ἐμπέσῃ	*mé: tí hoi kremámenon tôi paidì empése:i*	lest one should fall on his son	VPT+M S2L
Hdt. 1.35.1a	ἀπικνέεται ἐς τὰς Σάρδις ἀνὴρ	*apiknéetai es tàs Sárdis anè:r*	a man came to Sardis	VPG S1S* A1G
Hdt. 1.35.1b	παρελθὼν δὲ οὗτος ἐς τὰ Κροίσου οἰκία	*parelthò:n dè hoûtos es tà Kroísou oikía*	this man came to Croesus' house	VB S1G A1G
Hdt. 1.35.3	κόθεν τῆς Φρυγίης ἥκων	*kóthen tês Phrugíe:s hé:ko:n*	and from what place in Phrygia do you come	VPG Mod4S
Hdt. 1.35.4	ἐλήλυθας ἐς φίλους	*elé:luthas es phílous*	you have come to friends	VB A1G
Hdt. 1.36.1a	ὁρμώμενος δὲ οὗτος ἐκ τοῦ ὄρεος τούτου	*hormó:menos dè hoûtos ek toû óreos toútou*	who would come off that mountain	VCi A1S
Hdt. 1.36.1b	πολλάκις δὲ οἱ Μυσοὶ ἐπ᾽ αὐτὸν ἐξελθόντες	*pollákis dè hoi Musoì ep' autòn exelthóntes*	the Mysians had gone up against him often	VB S1S A1G
Hdt. 1.36.2a	τέλος δὲ ἀπικόμενοι παρὰ τὸν Κροῖσον τῶν Μυσῶν ἄγγελοι	*télos dè apikómenoi parà tòn Kroîson tôn Musôn ággeloi*	at last they sent messengers to Croesus	VPG S1S* A1G
Hdt. 1.36.2b	ὡς προθυμοτάτοισι συνεξελεῖν ὑμῖν τὸ θηρίον ἐκ τῆς χώρης	*ho:s prothumotátoisi sunexeleîn humîn tò the:ríon ek tês khó:re:s*	so that we may drive him out of the country	VCt S1S A1S
Hdt. 1.37.1	ἐπεσέρχεται ὁ τοῦ Κροίσου παῖς	*epesérkhetai ho toû Kroísou paîs*	but the son of Croesus now entered	VB S1G S1G
Hdt. 1.37.2	ἔς τε ἀγορὴν καὶ ἐξ ἀγορῆς φοιτέοντα	*és te agorè:n kaì ex agorês phoitéonta*	whenever I go to and from the market-place	VM A1G A1S
Hdt. 1.37.3	ἐμὲ ὦν σὺ ἢ μέτες ἰέναι ἐπὶ τὴν θήρην	*emè ôn sù è: métes iénai epì tè:n thé:re:n*	so either let me go to the hunt	VCt A1G
Hdt. 1.40.1	σὲ ἰέναι ἐπὶ τὴν ἄγρην	*sè iénai epì tè:n ágre:n*	you go to the chase	VB A1G
Hdt. 1.41.1	ἀπικομένῳ δέ οἱ λέγει τάδε	*apikoméno:i dé hoi légei táde*	when he came addressed him thus	VPG S1S*
Hdt. 1.41.2	φύλακα παιδός σε τοῦ ἐμοῦ χρηίζω γενέσθαι ἐς ἄγρην ὁρμωμένου	*phúlaka paidós se toû emoû khre:ízo: genésthai es ágre:n hormo:ménou*	I ask that you watch over my son as he goes out to the chase	VCi A1G
Hdt. 1.42.1	ἄλλως μὲν ἔγωγε ἂν οὐκ ἤια ἐς ἄεθλον τοιόνδε	*állo:s mèn égo:ge àn ouk é:ia es áethlon toiónde*	I would not otherwise have gone into such an arena	VB A1G

Hdt. 1.42.2	ἀπήμονα τοῦ φυλάσσοντος εἵνεκεν προσδόκα τοι ἀπονοστήσειν	*apé:mona toû phulássontos heíneken prosdóka toi aponosté:sein*	look for him to come back unharmed	VPS S1S
Hdt. 1.43.1a	ἦισαν μετὰ ταῦτα	*é:isan metà taûta*	then they went out	VB
Hdt. 1.43.1b	ἀπικόμενοι δὲ ἐς τὸν Ὄλυμπον τὸ ὄρος	*apikómenoi dè es tòn Ólumpon tò óros*	when they came to Mount Olympus	VPG S1S* A1G
Hdt. 1.43.3	ἀπικόμενος δὲ ἐς τὰς Σάρδις	*apikómenos dè es tàs Sárdis*	and coming to Sardis	VPG S1S* A1G
Hdt. 1.45.1a	παρῆσαν δὲ μετὰ τοῦτο οἱ Λυδοὶ	*parêsan dè metà toûto hoi Ludoì*	soon the Lydians came	Vst S1G
Hdt. 1.45.1b	ὄπισθε δὲ εἵπετό οἱ ὁ φονεύς	*ópisthe dè heípetó hoi ho phoneús*	with the murderer following after	VPG Mod4L
Hdt. 1.46.2	τοὺς μὲν ἐς Δελφοὺς ἰέναι, τοὺς δὲ ἐς Ἄβας τὰς Φωκέων, τοὺς δὲ ἐς Δωδώνην	*toùs mèn es Delphoùs iénai, toùs dè es Ábas tàs Pho:kéo:n, toùs dè es Do:dó:ne:n*	sending messengers separately to Delphi, to Abae in Phocia, and to Dodona	VB A1G
Hdt. 1.47.1	ἀπ᾽ ἧς ἂν ἡμέρης ὁρμηθέωσι ἐκ Σαρδίων	*ap' hês àn he:mére:s horme:théo:si ek Sardío:n*	from the day they left Sardis	VCi A1S
Hdt. 1.47.2	ὡς ἐσῆλθον τάχιστα ἐς τὸ μέγαρον οἱ Λυδοὶ	*ho:s esêlthon tákhista es tò mégaron hoi Ludoì*	no sooner had the Lydians entered the hall	VB S1G A1G
Hdt. 1.48.1a	ἀπιόντες ἐς τὰς Σάρδις	*apiónte:s es tàs Sárdis*	the Lydians went back to Sardis	VB S1S A1G
Hdt. 1.48.1b	ὡς δὲ καὶ ὦλλοι οἱ περιπεμφθέντες παρῆσαν	*ho:s dè kaì hôlloi hoi peripemphthéntes parêsan*	when the others as well who had been sent to various places came	Vst S1G
Hdt. 1.50.3	οὗτος ὁ λέων (...) κατέπεσε ἀπὸ τῶν ἡμιπλινθίων	*hoûtos ho léo:n (...) katépese apò tôn he:miplinthío:n*	this lion fell from the ingots	VPT+M S1T A1S
Hdt. 1.51.4	ἀλλ᾽ ὁ μὲν παῖς, δι᾽ οὗ τῆς χειρὸς ῥέει τὸ ὕδωρ	*all' ho mèn paîs, di' hoû tês kheiròs rhéei tò húdo:r*	the figure of a boy, through whose hand the water runs	VM A1T
Hdt. 1.55.2	πολυψήφιδα παρ᾽ Ἕρμον φεύγειν	*polupsé:phida par' Hérmon pheúgein*	by the stone-strewn Hermus flee	VPS+M A1G
Hdt. 1.56.2	καὶ τὸ μὲν οὐδαμῇ κω ἐξεχώρησε, τὸ δὲ πολυπλάνητον κάρτα	*kaì tò mèn oudamêi ko: exekhó:re:se, tò dè polupláne:ton kárta*	the Pelasgian race has never yet left its home; the Hellenic has wandered often and far	VPS S1S Mod1G Mod1G Mod2M
Thuc. 1.1.1	τεκμαιρόμενος ὅτι ἀκμάζοντές τε ἦσαν ἐς αὐτὸν ἀμφότεροι παρασκευῇ τῇ πάσῃ	*tekmairómenos hóti akmázontés te êisan es autòn amphóteroi paraskeuêi têi páse:i*	the preparations of both the combatants were in every department in the last state of perfection	VB A1G
Thuc. 1.2.1a	ἀλλὰ μεταναστάσεις τε οὖσαι τὰ πρότερα	*allà metanastáseis te oûsai tà prótera*	on the contrary, migrations were of frequent occurrence	N1 S1T

Thuc. 1.2.1b	καὶ ῥᾳδίως ἕκαστοι τὴν ἑαυτῶν ἀπολείποντες βιαζόμενοι ὑπό τινων αἰεὶ πλειόνων	*kaì rhaidío:s hékastoi tè:n heautôn apoleípontes biazómenoi hupó tino:n aieì pleióno:n*	the several tribes readily abandoning their homes under the pressure of superior numbers	VPS S1S
Thuc. 1.2.2a	οὐδ᾽ ἐπιμειγνύντες ἀδεῶς ἀλλήλοις οὔτε κατὰ γῆν οὔτε διὰ θαλάσσης	*oud' epimeignúntes adeôs allé:lois oúte katà gên oúte dià thalásse:s*	without freedom of communication, either by land or sea	A1T A1T
Thuc. 1.2.2b	οὐ χαλεπῶς ἀπανίσταντο	*ou khalepôs apanístanto*	they cared little for shifting their habitation	VCt S1S S1T
Thuc. 1.2.6a	διὰ τὰς μετοικίας	*dià tàs metoikías*	through the migrations	N2 S1T
Thuc. 1.2.6b	ἐκ γὰρ τῆς ἄλλης Ἑλλάδος οἱ πολέμῳ ἢ στάσει ἐκπίπτοντες	*ek gàr tês álle:s Helládos hoi polémo:i è: stásei ekpíptontes*	the most powerful victims of war or faction from the rest of Hellas	VPT+M S1S A1S
Thuc. 1.2.6c	παρ᾽ Ἀθηναίους οἱ δυνατώτατοι ὡς βέβαιον ὂν ἀνεχώρουν	*par' Athe:naíous hoi dunató:tatoi ho:s bébaion òn anekhó:roun*	took refuge with the Athenians as a safe retreat	VPS S1T
Thuc. 1.3.2	καὶ ἐπαγομένων αὐτοὺς ἐπ᾽ ὠφελίᾳ ἐς τὰς ἄλλας πόλεις	*kaì epagoméno:n autoùs ep' o:phelíai es tàs állas póleis*	and were invited as allies into the other cities	VCt S1G A1G
Thuc. 1.3.4	ἀλλὰ καὶ ταύτην τὴν στρατείαν θαλάσσῃ ἤδη πλείω χρώμενοι ξυνεξῆλθον	*allà kaì taúte:n tè:n strateían thalásse:i é:de: pleío: khró:menoi xunexêlthon*	Indeed, they could not unite for this expedition till they had gained increased familiarity with the sea	VB S1S
Thuc. 1.4.1	Κᾶρας ἐξελάσας	*Kâras exelásas*	expelling the Carians	VCt S1S
Thuc. 1.5.1	ἐπειδὴ ἤρξαντο μᾶλλον περαιοῦσθαι ναυσὶν ἐπ᾽ ἀλλήλους	*epeidè: é:rxanto mâllon peraioûsthai nausìn ep' allé:lous*	as communication by sea became more common	VPT A1G Mod3M
Thuc. 1.5.2	καὶ οἱ παλαιοὶ τῶν ποιητῶν τὰς πύστεις τῶν καταπλεόντων	*kaì hoi palaioì tôn poie:tôn tàs pústeis tôn katapleónto:n*	and by the question we find the old poets everywhere representing the people as asking of voyagers	VM S1T
Thuc. 1.7.1	τῶν δὲ πόλεων ὅσαι μὲν νεώτατα ᾠκίσθησαν καὶ ἤδη πλωιμωτέρων ὄντων	*tôn dè póleo:n hósai mèn neó:tata o:ikísthe:san kaì é:de: plo:imo:téro:n ónto:n*	with respect to their towns, later on, at an era of increased facilities of navigation	N1
Thuc. 1.8.2a	καταστάντος δὲ τοῦ Μίνω ναυτικοῦ πλωιμώτερα ἐγένετο παρ᾽ ἀλλήλους	*katastántos dè toû Míno: nautikoû plo:imó:tera egéneto par' allé:lous*	but as soon as Minos had formed his navy, communication by sea became easier	A1G N1

Thuc. 1.8.2b	οἱ γὰρ ἐκ τῶν νήσων κακοῦργοι ἀνέστησαν ὑπ᾽ αὐτοῦ, ὅτεπερ καὶ τὰς πολλὰς αὐτῶν κατῴκιζε	*hoi gàr ek tôn né:so:n kakoûrgoi anéste:san hup' autoû, hóteper kaì tàs pollàs autôn katói:kize*	as he colonized most of the islands, and thus expelled the malefactors	VCi S1T A1S
Thuc. 1.8.4	ἐπὶ Τροίαν ἐστράτευσαν	*epì Troían estráteusan*	they went on the expedition against Troy	VM A1G
Thuc. 1.9.2a	ἃ ἦλθεν ἐκ τῆς Ἀσίας ἔχων ἐς ἀνθρώπους ἀπόρους	*hà êlthen ek tês Asías ékho:n es anthró:pous apórous*	arriving among a needy population from Asia	VB A1S
Thuc. 1.9.2b	τυγχάνειν δὲ αὐτὸν φεύγοντα τὸν πατέρα διὰ τὸν Χρυσίππου θάνατον	*tugkhánein dè autòn pheúgonta tòn patéra dià tòn Khrusíppou thánaton*	who had left his father on account of the death of Chrysippus	VPS+M
Thuc. 1.9.2c	καὶ ὡς οὐκέτι ἀνεχώρησεν Εὐρυσθεύς	*kaì ho:s oukéti anekhó:re:sen Eurustheús*	as time went on and Eurystheus did not return	VPS S1T
Thuc. 1.9.3	φαίνεται γὰρ ναυσί τε πλείσταις αὐτὸς ἀφικόμενος	*phaínetai gàr nausí te pleístais autòs aphikómenos*	by the fact that his own was the largest contingent	VPG S1S* Mod3M
Thuc. 1.10.4a	περίνεως δὲ οὐκ εἰκὸς πολλοὺς ξυμπλεῖν	*períneo:s dè ouk eikòs polloùs xumpleîn*	now it is improbable that many supernumeraries sailed	VM
Thuc. 1.10.4b	ἄλλως τε καὶ μέλλοντας πέλαγος περαιώσεσθαι μετὰ σκευῶν πολεμικῶν	*állo:s te kaì méllontas pélagos peraió:sesthai metà skeuôn polemikôn*	especially as they had to cross the open sea with munitions of war	VPT
Thuc. 1.10.5	οὐ πολλοὶ φαίνονται ἐλθόντες	*ou polloì phaínontai elthóntes*	the number of those who sailed will appear inconsiderable	VB
Thuc. 1.11.1	ἐπειδὴ δὲ ἀφικόμενοι μάχῃ ἐκράτησαν	*epeidè: dè aphikómenoi mákhe:i ekráte:san*	even after the victory they obtained on their arrival	VPG S1S*
Thuc. 1.11.2	περιουσίαν δὲ εἰ ἦλθον ἔχοντες τροφῆς	*periousían dè ei êlthon ékhontes trophês*	if they had brought plenty of supplies with them	VB
Thuc. 1.12.2	ἥ τε γὰρ ἀναχώρησις τῶν Ἑλλήνων ἐξ Ἰλίου χρονία γενομένη πολλὰ ἐνεόχμωσε	*hé: te gàr anakhó:re:sis tôn Hellé:no:n ex Ilíou khronía genoméne: pollà eneókhmo:se*	the late return of the Hellenes from Ilium caused many revolutions	A1S N1 S1T
Thuc. 1.12.3a	ἐξ Ἄρνης ἀναστάντες ὑπὸ Θεσσαλῶν τὴν νῦν μὲν Βοιωτίαν	*ex Árne:s anastántes hupò Thessalôn tè:n nûn mèn Boio:tían*	the modern Boeotians were driven out of Arne by the Thessalians	VCt S1T A1S
Thuc. 1.12.3b	ἀφ᾽ ὧν καὶ ἐς Ἴλιον ἐστράτευσαν	*aph' hôn kaì es Ílion estráteusan*	some of whom joined the expedition to Ilium	VM A1G

Thuc. 1.13.3	ὅτε Ἀμεινοκλῆς Σαμίοις ἦλθεν	*hóte Ameinoklês Samíois êlthen*	that Ameinocles went to Samos	VB
Thuc. 1.13.5	οἰκοῦντες γὰρ τὴν πόλιν οἱ Κορίνθιοι ἐπὶ τοῦ Ἰσθμοῦ αἰεὶ δή ποτε ἐμπόριον εἶχον, τῶν Ἑλλήνων τὸ πάλαι κατὰ γῆν τὰ πλείω ἢ κατὰ θάλασσαν	*oikoûntes gàr tè:n pólin hoi Korínthioi epì toû Isthmoû aieì dé: pote empórion eîkhon, tôn Hellé:no:n tò pálai katà gên tà pleío: è: katà thálassan*	as formerly almost all communication between the Hellenes within and without Peloponnese was carried on overland	A1T A1T
Thuc. 1.15.1	ἐπιπλέοντες γὰρ τὰς νήσους	*epipléontes gàr tàs né:sous*	they were the means by which the islands were reached	VM S1G
Thuc. 1.15.2	οὐδ' αὖ αὐτοὶ ἀπὸ τῆς ἴσης κοινὰς στρατείας ἐποιοῦντο	*oud' aû autoì apò tês íse:s koinàs strateías epoioûnto*	no spontaneous combination of equals for confederate expeditions	N3
Thuc. 1.16.1	ἐπεστράτευσε καὶ τὰς ἐν τῇ ἠπείρῳ πόλεις ἐδούλωσε	*epestráteuse kaì tàs en têi e:peíro:i póleis edoúlo:se*	stopped not till he had reduced the cities of the coast	VM S1G
Thuc. 1.18.1	ὁ βάρβαρος τῷ μεγάλῳ στόλῳ ἐπὶ τὴν Ἑλλάδα δουλωσόμενος ἦλθεν	*ho bárbaros tôi megálo:i stólo:i epì tè:n Helláda doulo:sómenos êlthen*	the barbarian returned with the armada for the subjugation of Hellas	VB A1G Mod3T
Thuc. 1.18.2a	καὶ οἱ Ἀθηναῖοι (...) διανοηθέντες ἐκλιπεῖν τὴν πόλιν	*kaì hoi Athe:naîoi (...) dianoe:théntes eklipeîn tè:n pólin*	and the Athenians having made up their minds to abandon their city	VPS S1S
Thuc. 1.18.2b	ἐπιόντων τῶν Μήδων	*epiónto:n tôn Mé:do:n*	while the Medians came	VB S1G
Thuc. 1.18.2c	ἐς τὰς ναῦς ἐσβάντες	*es tàs naûs esbántes*	threw themselves into their ships	VB S1G A1G
Thuc. 1.23.2	οὔτε φυγαὶ τοσαίδε ἀνθρώπων καὶ φόνος	*oúte phugaì tosaíde anthró:po:n kaì phónos*	never was there so much banishing and blood-shedding	N1
Thuc. 1.24.1	Ἐπίδαμνός ἐστι πόλις ἐν δεξιᾷ ἐσπλέοντι ἐς τὸν Ἰόνιον κόλπον	*Hpídamnós esti pólis en dexiâi espléonti es tòn Ión:ion kólpon*	the city of Epidamnus stands on the right of the entrance of the Ionic gulf	VM S1G A1G
Thuc. 1.24.5a	τὰ δὲ τελευταῖα πρὸ τοῦδε τοῦ πολέμου ὁ δῆμος αὐτῶν ἐξεδίωξε τοὺς δυνατούς	*tà dè teleutaîa prò toûde toû polémou ho dêmos autôn exedío:xe toùs dunatoús*	the last act before the war was the expulsion of the nobles by the people	VPG S1S
Thuc. 1.24.5b	οἱ δὲ ἐπελθόντες μετὰ τῶν βαρβάρων ἐλῄζοντο τοὺς ἐν τῇ πόλει κατά τε γῆν καὶ κατὰ θάλασσαν	*hoi dè epelthóntes metà tôn barbáro:n elé:izonto toùs en têi pólei katá te gên kaì katà thálassan*	the exiled party joined the barbarians, and proceeded to plunder those in the city by sea and land	VB S1G

Thuc. 1.25.2a	ἐλθόντες δὲ οἱ Ἐπιδάμνιοι ἐς τὴν Κόρινθον	*elthóntes dè hoi Hpidámnioi es tè:n Kórinthon*	so the Epidamnians went to Corinth	VB A1G
Thuc. 1.26.1	οἰκήτορά τε τὸν βουλόμενον ἰέναι κελεύοντες	*oiké:torá te tòn boulómenon iénai keleúontes*	advertisement was made for volunteer settlers	VB
Thuc. 1.26.2a	ἐπορεύθησαν δὲ πεζῇ ἐς Ἀπολλωνίαν	*eporeúthe:san dè pezêi es Apollo:nían*	they marched by land to Apollonia	VCi
Thuc. 1.26.2b	δέει τῶν Κερκυραίων μὴ κωλύωνται ὑπ᾽ αὐτῶν κατὰ θάλασσαν περαιούμενοι	*déei tôn Kerkuraío:n mè: ko:lúo:ntai hup' autôn katà thálassan peraioúmenoi*	the route by sea being avoided from fear of Corcyraean interruption	VPT A1T
Thuc. 1.26.3a	καὶ φρουροὺς ἥκοντας ἐς τὴν Ἐπίδαμνον τήν τε ἀποικίαν Κορινθίοις δεδομένην	*kaì phrouroùs hé:kontas es tè:n Hpídamnon té:n te apoikían Korinthíois dedoméne:n*	when the Corcyraeans heard of the arrival of the settlers and troops in Epidamnus, and the surrender of the colony to Corinth	VPG A1G
Thuc. 1.26.3c	καὶ πλεύσαντες εὐθὺς πέντε καὶ εἴκοσι ναυσὶ	*kaì pleúsantes euthùs pénte kaì eíkosi nausì*	instantly putting to sea with five-and-twenty ships	VM
Thuc. 1.26.3d	ἦλθον γὰρ ἐς τὴν Κέρκυραν οἱ τῶν Ἐπιδαμνίων φυγάδες	*êlthon gàr es tè:n Kérkuran hoi tôn Hpidamnío:n phugádes*	it must be premised that the Epidamnian exiles had come to Corcyra	VB A1G
Thuc. 1.26.3e	ἣν προϊσχόμενοι ἐδέοντο σφᾶς κατάγειν	*hè:n proiskhómenoi edéonto sphâs katágein*	had appealed to their kindred to restore them	VCt S1T
Thuc. 1.26.4a	ἀλλὰ στρατεύουσιν ἐπ᾽ αὐτοὺς οἱ Κερκυραῖοι τεσσαράκοντα ναυσὶ	*allà strateúousin ep' autoùs hoi Kerkuraîoi tessarákonta nausì*	upon this the Corcyraeans commenced operations against them with a fleet of forty sail	VM A1G
Thuc. 1.26.4b	μετὰ τῶν φυγάδων ὡς κατάξοντες	*metà tôn phugádo:n ho:s katáxontes*	they took with them the exiles	VCt S1T
Thuc. 1.26.4c	καὶ τοὺς Ἰλλυριοὺς προσλαβόντες	*kaì toùs Illurioùs proslabóntes*	and also secured the services of the Illyrians	VCt S1G
Thuc. 1.26.5	τοὺς ξένους ἀπαθεῖς ἀπιέναι	*toùs xénous apatheîs apiénai*	and the foreigners, might depart unharmed	VB S1S
Thuc. 1.27.1a	ὡς αὐτοῖς ἐκ τῆς Ἐπιδάμνου ἦλθον ἄγγελοι ὅτι πολιορκοῦνται	*ho:s autoîs ek tês Hpidámnou êlthon ággeloi hóti poliorkoûntai*	receiving intelligence of the investment of Epidamnus	VB A1S
Thuc. 1.27.1b	ἐπὶ τῇ ἴσῃ καὶ ὁμοίᾳ τὸν βουλόμενον ἰέναι	*epì têi íse:i kaì homoíai tòn boulómenon iénai*	perfect political equality being guaranteed to all who chose to go	VB

Thuc. 1.27.1c	εἰ δέ τις τὸ παραυτίκα μὲν μὴ ἐθέλει ξυμπλεῖν	*ei dé tis tò parautíka mèn mè: ethélei xumpleîn*	any who were not prepared to sail at once	VM
Thuc. 1.28.1	ἐλθόντες ἐς Κόρινθον μετὰ Λακεδαιμονίων καὶ Σικυωνίων πρέσβεων	*elthóntes es Kórinthon metà Lakedaimonío:n kaì Sikuo:nío:n présbeo:n*	they came to Corinth with envoys from Lacedaemon and Sicyon	VB A1G
Thuc. 1.28.4	καὶ τοὺς βαρβάρους ἀπὸ Ἐπιδάμνου ἀπαγάγωσι	*kaì toùs barbárous apò Hpidámnou apagágo:si*	that if they would withdraw their fleet and the barbarians from Epidamnus	VCt S1S A1S
Thuc. 1.28.5	ἢν καὶ ἐκεῖνοι τοὺς ἐν Ἐπιδάμνῳ ἀπαγάγωσι	*è:n kaì ekeînoi toùs en Hpidámno:i apagágo:si*	if Corinth would withdraw her troops from Epidamnus	VCt S1S
Thuc. 1.29.1a	οἱ ξύμμαχοι παρῆσαν	*hoi xúmmakhoi parêsan*	and their allies had come in	Vst S1G
Thuc. 1.29.1b	ἄραντες ἑβδομήκοντα ναυσὶ καὶ πέντε δισχιλίοις τε ὁπλίταις	*árantes hebdomé:konta nausì kaì pénte diskhilíois te hoplítais*	and getting under weigh with seventy-five ships and two thousand heavy infantry	VCi Mod3M
Thuc. 1.29.1c	ἔπλεον ἐπὶ τὴν Ἐπίδαμνον Κερκυραίοις ἐναντία πολεμήσοντες	*épleon epì tè:n Hpídamnon Kerkuraíois enantía polemé:sontes*	sailed for Epidamnus to give battle to the Corcyraeans	VM A1G
Thuc. 1.29.3	οἱ Κερκυραῖοι κήρυκά τε προύπεμψαν αὐτοῖς ἐν ἀκατίῳ ἀπεροῦντα μὴ πλεῖν ἐπὶ σφᾶς	*hoi Kerkuraîoi ké:ruká te proúpempsan autoîs en akatío:i aperoûnta mè: pleîn epì sphâs*	the Corcyraeans sent on a herald in a light boat to warn them not to sail against them	VM A1G
Thuc. 1.29.4	ἀνταναγαγόμενοι καὶ παραταξάμενοι ἐναυμάχησαν	*antanagagómenoi kaì parataxámenoi enaumákhe:san*	formed line and went into action	VCt S1G S1T
Thuc. 1.30.2a	ἐπειδὴ οἱ Κορίνθιοι καὶ οἱ ξύμμαχοι ἡσσημένοι ταῖς ναυσὶν ἀνεχώρησαν ἐπ᾽ οἴκου	*epeidè: hoi Korínthioi kaì hoi xúmmakhoi he:sse:ménoi taîs nausìn anekhó:re:san ep' oíkou*	defeated at sea, the Corinthians and their allies repaired home	VPS S1T A1G
Thuc. 1.30.2b	καὶ πλεύσαντες ἐς Λευκάδα	*kaì pleúsantes es Leukáda*	sailing to Leucas	VM A1G
Thuc. 1.30.3	τοὺς τῶν Κορινθίων ξυμμάχους ἐπιπλέοντες ἔφθειρον	*toùs tôn Korinthío:n xummákhous epipléontes éphtheiron*	and the allies of Corinth were harassed by Corcyraean cruisers	VM S1G
Thuc. 1.30.4a	ἐπέπλεον δὲ οὐδέτεροι ἀλλήλοις	*epépleon dè oudéteroi allé:lois*	neither party made any movement	VM S1G
Thuc. 1.30.4b	ἀλλὰ τὸ θέρος τοῦτο ἀντικαθεζόμενοι χειμῶνος ἤδη ἀνεχώρησαν ἐπ᾽ οἴκου ἑκάτεροι	*allà tò théros toûto antikathezómenoi kheimônos é:de: anekhó:re:san ep' oíkou hekáteroi*	and winter was at hand before either of them returned home	VPS S1T A1G

Thuc. 1.31.2	ἔδοξεν αὐτοῖς ἐλθοῦσιν ὡς τοὺς Ἀθηναίους ξυμμάχους γενέσθαι	*édoxen autoîs elthoûsin ho:s toùs Athe:naíous xummákhous genésthai*	decided to repair to Athens in order to enter into alliance	VB
Thuc. 1.31.3	οἱ δὲ Κορίνθιοι πυθόμενοι ταῦτα ἦλθον καὶ αὐτοὶ ἐς τὰς Ἀθήνας πρεσβευσόμενοι	*hoi dè Korínthioi puthómenoi taûta êlthon kaì autoì es tàs Athé:nas presbeusómenoi*	Corinth also, hearing of their intentions, sent an embassy to Athens	VB A1G
Thuc. 1.32.5	ἐπειδὴ δὲ μείζονι παρασκευῇ ἀπὸ Πελοποννήσου καὶ τῆς ἄλλης Ἑλλάδος ἐφ᾽ ἡμᾶς ὥρμηνται	*epeidè: dè meízoni paraskeuêi apò Peloponné:sou kaì tês álle:s Helládos eph' he:mâs hó:rme:ntai*	but they have now got together a still larger armament from Peloponnese and the rest of Hellas	VCi A1S A1G
Thuc. 1.35.4	ἡμᾶς μὲν γὰρ κινδυνεύοντας καὶ οὐκ ἐχθροὺς ὄντας ἀπώσεσθε	*he:mâs mèn gàr kinduneúontas kaì ouk ekhthroùs óntas apó:sesthe*	if we, who are in peril, and are no enemies of yours, meet with a repulse at your hands	VCt S1S
Thuc. 1.36.2	ὥστε μήτε ἐκεῖθεν ναυτικὸν ἐᾶσαι Πελοποννησίοις ἐπελθεῖν	*hó:ste mé:te ekeîthen nautikòn eâsai Peloponne:síois epeltheîn*	being able to bar the passage of naval reinforcements from thence to Peloponnese	VB S1G Mod4S
Thuc. 1.37.3a	διὰ τὸ ἥκιστα ἐπὶ τοὺς πέλας ἐκπλέοντας	*dià tò hé:kista epì toùs pélas ekpléontas*	because while they seldom make voyages to their neighbors	VM S1S A1G
Thuc. 1.37.3b	μάλιστα τοὺς ἄλλους ἀνάγκῃ καταίροντας δέχεσθαι	*málista toùs állous anágke:i kataírontas dékhesthai*	they are constantly being visited by foreign vessels which are compelled to put in to Corcyra	VCi S1T
Thuc. 1.38.4	οὐδ᾽ ἐπιστρατεύομεν ἐκπρεπῶς μὴ καὶ διαφερόντως τι ἀδικούμενοι	*oud' epistrateúomen ekprepôs mè: kaì diapherónto:s ti adikoúmenoi*	nor are we making war against them without having received signal provocation	VM S1G
Thuc. 1.40.1	‘ὡς μὲν οὖν αὐτοί τε μετὰ προσηκόντων ἐγκλημάτων ἐρχόμεθα	*'ho:s mèn oûn autoí te metà prose:kónto:n egkle:máto:n erkhómetha*	so then the reality of the grievances we come to complain of	VB
Thuc. 1.40.3	εἰ ἴτε μετ᾽ αὐτῶν	*ei íte met' autôn*	if you join in their attack	VB
Thuc. 1.40.4	εἰ δὲ μή, τοὐναντίον ἐπὶ τούτους μεθ᾽ ἡμῶν ἰέναι	*ei dè mé:, tounantíon epì toútous meth' he:môn iénai*	or failing this, you should on the contrary join us against them	VB A1G
Thuc. 1.41.2	ἄνθρωποι ἐπ᾽ ἐχθροὺς τοὺς σφετέρους ἰόντες τῶν ἁπάντων ἀπερίοπτοί εἰσι παρὰ τὸ νικᾶν	*ánthro:poi ep' ekhthroùs toùs sphetérous ióntes tôn hapánto:n aperíoptoí eisi parà tò nikân*	if ever, men are wont in their efforts against their enemies to forget everything for the sake of victory	VB A1G

Thuc. 1.44.1	εἰ γὰρ ἐπὶ Κόρινθον ἐκέλευον σφίσιν οἱ Κερκυραῖοι ξυμπλεῖν	*ei gàr epì Kórinthon ekéleuon sphísin hoi Kerkuraîoi xumpleîn*	Athens could not be required to join Corcyra in any attack upon Corinth	VM A1G
Thuc. 1.45.1	καὶ τῶν Κορινθίων ἀπελθόντων οὐ πολὺ ὕστερον δέκα ναῦς αὐτοῖς ἀπέστειλαν βοηθούς	*kaì tôn Korinthío:n apelthónto:n ou polù hústeron déka naûs autoîs apésteilan boe:thoús*	and on the departure of the Corinthians not long afterwards, sent ten ships to their assistance	VB S1S
Thuc. 1.45.3a	ἢν μὴ ἐπὶ Κέρκυραν πλέωσι	*è:n mè: epì Kérkuran pléo:si*	if it sailed to Corcyra	VM A1G
Thuc. 1.45.3b	καὶ μέλλωσιν ἀποβαίνειν ἢ ἐς τῶν ἐκείνων τι χωρίων	*kaì méllo:sin apobaínein è: es tôn ekeíno:n ti kho:río:n*	and threatened a landing on her coast	VB S1S A1G
Thuc. 1.45.3c	αἱ μὲν δὴ νῆες ἀφικνοῦνται ἐς τὴν Κέρκυραν, οἱ δὲ Κορίνθιοι	*hai mèn dè: nêes aphiknoûntai es tè:n Kérkuran, hoi dè Korínthioi*	and on the departure of the Corinthians not long afterwards	VPG S1S* A1G
Thuc. 1.46.1	ἔπλεον ἐπὶ τὴν Κέρκυραν ναυσὶ πεντήκοντα καὶ ἑκατόν	*épleon epì tè:n Kérkuran nausì penté:konta kaì hekatón*	and sailed for Corcyra with a hundred and fifty ships	VM A1G
Thuc. 1.46.3	ἀπὸ Λευκάδος πλέοντες	*apò Leukádos pléontes*	Sailing from Leucas	VM A1S
Thuc. 1.46.4a	ἐξίησι δὲ παρ᾽ αὐτὴν Ἀχερουσία λίμνη ἐς θάλασσαν	*exíe:si dè par' autè:n Akherousía límne: es thálassan*	by this city the Acherusian lake pours its waters into the sea	VCi S1S A1G
Thuc. 1.46.4b	διὰ δὲ τῆς Θεσπρωτίδος Ἀχέρων ποταμὸς ῥέων	*dià dè tês Thespro:tídos Akhéro:n potamòs rhéo:n*	which flows through Thesprotis	VM A1T
Thuc. 1.46.4c	ἐσβάλλει ἐς αὐτήν	*esbállei es auté:n*	and falls into the lake	VCi S1G A1G
Thuc. 1.46.4d	ῥεῖ δὲ καὶ Θύαμις ποταμός	*rheî dè kaì Thúamis potamós*	there also the river Thyamis flows	VM
Thuc. 1.47.1	οἱ δὲ Κερκυραῖοι ὡς ᾔσθοντο αὐτοὺς προσπλέοντας	*hoi dè Kerkuraîoi ho:s é:isthonto autoùs prospléontas*	when the Corcyraeans saw them coming	VM S1G
Thuc. 1.48.1	ἀνήγοντο ὡς ἐπὶ ναυμαχίαν ἀπὸ τοῦ Χειμερίου νυκτός	*ané:gonto ho:s epì naumakhían apò toû Kheimeríou nuktós*	and put out from Chimerium by night, ready for action	VCi S1T A1S
Thuc. 1.48.2a	καὶ ἅμα ἕῳ πλέοντες καθορῶσι τὰς τῶν Κερκυραίων ναῦς μετεώρους	*kaì háma héo:i pléontes kathorôsi tàs tôn Kerkuraío:n naûs meteó:rous*	sailing with the dawn, they sighted the Corcyraean fleet out at sea	VM
Thuc. 1.48.2b	τε καὶ ἐπὶ σφᾶς πλεούσας	*te kaì epì sphâs pleoúsas*	and coming towards them	VM A1G
Thuc. 1.49.1	ἐπειδὴ τὰ σημεῖα ἑκατέροις ἤρθη	*epeidè: tà se:meîa hekatérois é:rthe:*	as the signals were raised on either side	VCt
Thuc. 1.49.5a	καταδιώξαντες σποράδας ἐς τὴν ἤπειρον	*katadió:xantes sporádas es tè:n é:peiron*	And chased them in disorder to the continent	VPG S1T A1G Mod2M

Thuc. 1.49.5b	καὶ μέχρι τοῦ στρατοπέδου πλεύσαντες αὐτῶν	*kaì mékhri toû stratopédou pleúsantes autôn*	sailed up to their camp	VM A1G
Xen. Anab. 1.1.1	ἐβούλετο τὼ παῖδε ἀμφοτέρω παρεῖναι	*eboúleto tὸ: paîde amphotéro: pareînai*	he wished to have both his sons with him	Vst S1G
Xen. Anab. 1.1.2a	Κῦρον δὲ μεταπέμπεται ἀπὸ τῆς ἀρχῆς	*Kûron dè metapémpetai apò tês arkhês*	but Cyrus he summoned from the province	VCt S1T A1S
Xen. Anab. 1.1.2b	ἀναβαίνει οὖν ὁ Κῦρος	*anabaínei oûn ho Kûros*	Cyrus accordingly went up	VB S1T
Xen. Anab. 1.1.3	ἡ δὲ μήτηρ ἐξαιτησαμένη αὐτὸν ἀποπέμπει πάλιν ἐπὶ τὴν ἀρχήν	*he: dè mé:te:r exaite:saméne: autòn apopémpei pálin epì tè:n arkhé:n*	his mother, however, made intercession for him, and sent him back again to his province	VCt S1S A1G
Xen. Anab. 1.1.4	ὁ δ’ ὡς ἀπῆλθε	*ho d' ho:s apêlthe*	now when Cyrus had thus returned	VB S1S
Xen. Anab. 1.1.5	ὅστις δ’ ἀφικνεῖτο τῶν παρὰ βασιλέως πρὸς αὐτὸν	*hóstis d' aphikneîto tôn parà basiléo:s pròs autòn*	again, when any of the King's court came to visit him	VPG S1S* A1G
Xen. Anab. 1.1.7a	τοὺς δ’ ἐξέβαλεν	*toùs d' exébalen*	and banished others	VCt S1S
Xen. Anab. 1.1.7b	ὁ δὲ Κῦρος ὑπολαβὼν τοὺς φεύγοντας	*ho dè Kûros hupolabò:n toùs pheúgontas*	Cyrus thereupon took the exiles under his protection	VCt S1G
Xen. Anab. 1.1.7c	ἐπολιόρκει Μίλητον καὶ κατὰ γῆν καὶ κατὰ θάλατταν	*epoliórkei Míle:ton kaì katà gên kaì katà thálattan*	and laid siege to Miletus both by land and by sea	VO A1T A1T
Xen. Anab. 1.1.7d	καὶ ἐπειρᾶτο κατάγειν τοὺς ἐκπεπτωκότας	*kaì epeirâto katágein toùs ekpepto:kótas*	and endeavoured to restore the exiles to their city	VCt S1T
Xen. Anab. 1.1.9	ἐκ Χερρονήσου ὁρμώμενος	*ek Kherroné:sou hormó:menos*	and using the Chersonese as a base of operations	VCi A1S
Xen. Anab. 1.1.10	ἔρχεται πρὸς τὸν Κῦρον	*érkhetai pròs tòn Kûron*	he came to Cyrus	VB A1G
Xen. Anab. 1.1.11	ἐκέλευσεν ἄνδρας λαβόντας ἐλθεῖν ὅτι πλείστους	*ekéleusen ándras labóntas eltheîn hóti pleístous*	to come to him with as many men as he could get	VB
Xen. Anab. 1.2.1a	ἐπεὶ δ’ ἐδόκει ἤδη πορεύεσθαι αὐτῷ ἄνω	*epeì d' edókei é:de: poreúesthai autôi áno:*	when he thought the time had come to begin his upward march	VCi S3T
Xen. Anab. 1.2.1b	ὡς Πισίδας βουλόμενος ἐκβαλεῖν παντάπασιν ἐκ τῆς χώρας	*ho:s Pisídas boulómenos ekbaleîn pantápasin ek tês khó:ras*	that he wished to drive the Pisidians out of his land entirely	VCt S1S A1S
Xen. Anab. 1.2.1c	ἐνταῦθα καὶ παραγγέλλει τῷ τε Κλεάρχῳ λαβόντι ἥκειν	*entaûtha kaì paraggéllei tôi te Kleárkho:i labónti hé:kein*	at that time he also sent word to Clearchus to come to him	VPG

Xen. Anab. 1.2.1d	ἀποπέμψαι πρὸς ἑαυτὸν ὃ εἶχε στράτευμα	*apopémpsai pròs heautòn hò eîkhe stráteuma*	and send him the army which he had	VCt S1S A1G
Xen. Anab. 1.2.2a	καὶ τοὺς φυγάδας ἐκέλευσε σὺν αὐτῷ στρατεύεσθαι	*kaì toùs phugádas ekéleuse sùn autôi strateúesthai*	and urged the Milesian exiles to take the field with him	VM
Xen. Anab. 1.2.2b	πρὶν αὐτοὺς καταγάγοι οἴκαδε	*prìn autoùs katagágoi oíkade*	until he had restored them to their homes	VCt S1T Mod4G
Xen. Anab. 1.2.2c	παρῆσαν εἰς Σάρδεις	*parêsan eis Sárdeis*	and presented themselves at Sardis	Vst S1G A1G
Xen. Anab. 1.2.3a	παρεγένετο εἰς Σάρδεις	*paregéneto eis Sárdeis*	Xenias, then, arrived at Sardis	Vst S1G A1G
Xen. Anab. 1.2.3b	τῶν ἀμφὶ Μίλητον στρατευομένων	*tôn amphì Míle:ton strateuoméno:n*	the force that had been engaged in besieging Miletus	VM A1G
Xen. Anab. 1.2.4a	οὗτοι μὲν εἰς Σάρδεις αὐτῷ ἀφίκοντο	*hoûtoi mèn eis Sárdeis autôi aphíkonto*	all these came to Cyrus at Sardis	VPG S1S* A1G A2G
Xen. Anab. 1.2.4b	πορεύεται ὡς βασιλέα ᾗ ἐδύνατο τάχιστα	*poreúetai ho:s basiléa hêi edúnato tákhista*	he accordingly made his way to the King as quickly as he could	VCi A1G Mod1M
Xen. Anab. 1.2.5a	Κῦρος δὲ ἔχων οὓς εἴρηκα ὡρμᾶτο ἀπὸ Σάρδεων	*Kûros dè ékho:n hoùs eíre:ka ho:rmâto apò Sárdeo:n*	Cyrus was now setting forth from Sardis with the troops I have mentioned	VCi A1S
Xen. Anab. 1.2.5b	καὶ ἐξελαύνει διὰ τῆς Λυδίας σταθμοὺς τρεῖς παρασάγγας εἴκοσι καὶ δύο ἐπὶ τὸν Μαίανδρον ποταμόν	*kaì exelaúnei dià tês Ludías stathmoùs treîs parasággas eíkosi kaì dúo epì tòn Maíandron potamón*	I have mentioned; and he marched through Lydia three stages, a distance of twenty-two parasangs, to the Maeander river	VCi S1S A1T A2T A1G
Xen. Anab. 1.2.6a	τοῦτον διαβὰς	*toûton diabàs*	after crossing the Maeander	VB S1T
Xen. Anab. 1.2.6b	ἐξελαύνει διὰ Φρυγίας σταθμὸν ἕνα παρασάγγας ὀκτὼ εἰς Κολοσσάς	*exelaúnei dià Phrugías stathmòn héna parasággas oktò: eis Kolossás*	he marched through Phrygia one stage, a distance of eight parasangs, to Colossae	VCi S1S A1T A2T A1G
Xen. Anab. 1.2.6c	καὶ ἦκε Μένων ὁ Θετταλὸς	*kaì hêke Méno:n ho Thettalòs*	and Menon the Thessalian arrived	VPG
Xen. Anab. 1.2.7a	ἐντεῦθεν ἐξελαύνει σταθμοὺς τρεῖς παρασάγγας εἴκοσιν εἰς Κελαινάς	*enteûthen exelaúnei stathmoùs treîs parasággas eíkosin eis Kelainás*	thence he marched three stages, twenty parasangs, to Celaenae	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.7b	διὰ μέσου δὲ τοῦ παραδείσου ῥεῖ ὁ Μαίανδρος ποταμός	*dià mésou dè toû paradeísou rheî ho Maíandros potamós*	through the middle of this park flows the Maeander river	VM A1T
Xen. Anab. 1.2.7c	ῥεῖ δὲ καὶ διὰ τῆς Κελαινῶν πόλεως	*rheî dè kaì dià tês Kelainôn póleo:s*	and it flows through the city of Celaenae also	VM A1T

Xen. Anab. 1.2.8a	ῥεῖ δὲ καὶ οὗτος διὰ τῆς πόλεως	*rheî dè kaì hoûtos dià tês póleo:s*	the Marsyas also flows through the city	VM A1T
Xen. Anab. 1.2.8b	ἐμβάλλει εἰς τὸν Μαίανδρον	*embállei eis tòn Maíandron*	and empties into the Maeander	VCi S1L A1G
Xen. Anab. 1.2.9a	ὅτε ἐκ τῆς Ἑλλάδος ἡττηθεὶς τῇ μάχῃ ἀπεχώρει	*hóte ek tês Helládos he:tte:theìs têi mákhe:i apekhó:rei*	when he was on his retreat from Greece after losing the famous battle	VPS S1S A1S
Xen. Anab. 1.2.9b	καὶ ἦκε Κλέαρχος ὁ Λακεδαιμόνιος φυγὰς	*kaì hêke Kléarkhos ho Lakedaimónios phugàs*	and Clearchus, the Lacedaemonian exile, arrived	VPG
Xen. Anab. 1.2.9c	ἅμα δὲ καὶ Σῶσις παρῆν ὁ Συρακόσιος	*háma dè kaì Sôsis parên ho Surakósios*	at the same time came also Sosis the Syracusan	Vst S1G
Xen. Anab. 1.2.10a	ἐντεῦθεν ἐξελαύνει σταθμοὺς δύο παρασάγγας δέκα εἰς Πέλτας	*enteûthen exelaúnei stathmoùs dúo parasággas déka eis Péltas*	thence he marched two stages, ten parasangs, to Peltae	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.10b	ἐντεῦθεν ἐξελαύνει σταθμοὺς δύο παρασάγγας δώδεκα ἐς Κεράμων ἀγοράν	*enteûthen exelaúnei stathmoùs dúo parasággas dó:deka es Kerámo:n agorán*	thence he marched two stages, twelve parasangs, to the inhabited city of Ceramon-agora	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.11a	ἐντεῦθεν ἐξελαύνει σταθμοὺς τρεῖς παρασάγγας τριάκοντα εἰς Καΰστρου πεδίον	*enteûthen exelaúnei stathmoùs treîs parasággas triákonta eis Kaústrou pedíon*	thence he marched three stages, thirty parasangs, to Caystru-pedion	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.11b	καὶ πολλάκις ἰόντες ἐπὶ τὰς θύρας	*kaì pollákis ióntes epì tàs thúras*	they went again and again to his headquarters	VB A1G
Xen. Anab. 1.2.12	ἐνταῦθα ἀφικνεῖται Ἐπύαξα ἡ Συεννέσιος γυνὴ τοῦ Κιλίκων βασιλέως παρὰ Κῦρον	*entaûtha aphikneîtai Hpúaxa he: Suennésios gunè: toû Kilíko:n basiléo:s parà Kûron*	at this juncture arrived Epyaxa, the wife of Syennesis, the king1 of the Cilicians, coming to visit Cyrus	VPG S1S* A1G
Xen. Anab. 1.2.13	ἐντεῦθεν δὲ ἐλαύνει σταθμοὺς δύο παρασάγγας δέκα εἰς Θύμβριον	*enteûthen dè elaúnei stathmoùs dúo parasággas déka eis Thúmbrion*	thence he marched two stages, ten parasangs, to the inhabited city of Thymbrium	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.14	ἐντεῦθεν ἐξελαύνει σταθμοὺς δύο παρασάγγας δέκα εἰς Τυριάειον	*enteûthen exelaúnei stathmoùs dúo parasággas déka eis Turiáeion*	thence he marched two stages, ten parasangs, to Tyriaeum	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.16a	οἱ δὲ παρήλαυνον τεταγμένοι κατὰ ἴλας καὶ κατὰ τάξεις	*hoi dè paré:launon tetagménoi katà ílas kaì katà táxeis*	and they marched past with their cavalry formed in troops and their infantry in companies	VCi S1G

Xen. Anab. 1.2.16b	παρελαύνων ἐφ᾽ ἅρματος	*parelaúno:n eph' hármatos*	driving past them in a chariot	VCi S1G Mod3M
Xen. Anab. 1.2.17a	καὶ ἐπιχωρῆσαι ὅλην τὴν φάλαγγα	*kaì epikho:rêsai hóle:n tè:n phálagga*	and the phalanx move forward in a body	VPS S1G
Xen. Anab. 1.2.17b	προβαλόμενοι τὰ ὅπλα ἐπῆσαν	*probalómenoi tà hópla epêisan*	they advanced arms and charged	VB VCt S1G S1T
Xen. Anab. 1.2.17c	ἐκ δὲ τούτου θᾶττον προϊόντων σὺν κραυγῇ	*ek dè toútou thâtton proiónto:n sùn kraugêi*	and then, as they went on faster and faster	VB S1T A1S Mod1M
Xen. Anab. 1.2.17d	ἀπὸ τοῦ αὐτομάτου δρόμος ἐγένετο τοῖς στρατιώταις ἐπὶ τὰς σκηνάς	*apò toû automátou drómos egéneto toîs stratió:tais epì tàs ske:nás*	the troops broke into a run of their own accord, in the direction of the camp	A1G N3
Xen. Anab. 1.2.18a	ἥ τε Κίλισσα ἔφυγεν ἐπὶ τῆς ἁρμαμάξης	*hé: te Kílissa éphugen epì tês harmamáxe:s*	the Cilician queen took to flight in her carriage	VPS+M Mod3M
Xen. Anab. 1.2.18b	καταλιπόντες τὰ ὤνια	*katalipóntes tà ó:nia*	left their wares behind	VPS S1T
Xen. Anab. 1.2.18c	οἱ ἐκ τῆς ἀγορᾶς [...] ἔφυγον	*hoi ek tês agorâs [...] éphugon*	and took to their heels	VPS+M A1S
Xen. Anab. 1.2.18d	οἱ δὲ Ἕλληνες σὺν γέλωτι ἐπὶ τὰς σκηνὰς ἦλθον	*hoi dè Hélle:nes sùn gélo:ti epì tàs ske:nàs êlthon*	while the Greeks with a roar of laughter came up to their camp	VB A1G
Xen. Anab. 1.2.19a	ἐντεῦθεν ἐξελαύνει σταθμοὺς τρεῖς παρασάγγας εἴκοσιν εἰς Ἰκόνιον	*enteûthen exelaúnei stathmoùs treîs parasággas eíkosin eis Ikónion*	thence he marched three stages, twenty parasangs, to Iconium	VCi S1S A2T A1G Mod4S
Xen. Anab. 1.2.19b	ἐντεῦθεν ἐξελαύνει διὰ τῆς Λυκαονίας σταθμοὺς πέντε παρασάγγας τριάκοντα	*enteûthen exelaúnei dià tês Lukaonías stathmoùs pénte parasággas triákonta*	thence he marched through Lycaonia five stages, thirty parasangs	VCi S1S A1T A2T A2T Mod4S
Xen. Anab. 1.2.20a	ἐντεῦθεν Κῦρος τὴν Κίλισσαν εἰς τὴν Κιλικίαν ἀποπέμπει τὴν ταχίστην ὁδόν	*enteûthen Kûros tè:n Kílissan eis tè:n Kilikían apopémpei tè:n takhíste:n hodón*	from there Cyrus sent the Cilician queen back to Cilicia by the shortest route	VCt S1S A1G A2T
Xen. Anab. 1.2.20b	ἐξελαύνει διὰ Καππαδοκίας σταθμοὺς τέτταρας παρασάγγας εἴκοσι καὶ πέντε πρὸς Δάναν	*exelaúnei dià Kappadokías stathmoùs téttaras parasággas eíkosi kaì pénte pròs Dánan*	Cyrus marched through Cappadocia four stages, twenty-five parasangs, to Dana	VCi S1S A1T A2T A1G
Xen. Anab. 1.2.21a	ἐντεῦθεν ἐπειρῶντο εἰσβάλλειν εἰς τὴν Κιλικίαν	*enteûthen epeirônto eisbállein eis tè:n Kilikían*	from there they made ready to try to enter Cilicia	VCi S1G A1G Mod4S
Xen. Anab. 1.2.21b	ἡ δὲ εἰσβολὴ ἦν ὁδὸς ἁμαξιτὸς	*he: dè eisbolè: ên hodòs hamaxitòs*	now the entrance was by a wagon-road	N1 N2 S1G
Xen. Anab. 1.2.21c	ἀμήχανος εἰσελθεῖν στρατεύματι	*amé:khanos eiseltheîn strateúmati*	and impracticable for an army to pass	VB S1G
Xen. Anab. 1.2.21d	φυλάττων τὴν εἰσβολήν	*phulátto:n tè:n eisbolé:n*	guarding the entrance	N1 S1G

Xen. Anab. 1.2.21e	περιπλεούσας ἀπ᾽ Ἰωνίας εἰς Κιλικίαν Ταμὼν	*peripleoúsas ap' Io:nías eis Kilikían Tamò:n*	were sailing around from Ionia to Cilicia under the command of Tamo	VM S1T A1S A1G
Xen. Anab. 1.2.22a	Κῦρος δ᾽ οὖν ἀνέβη ἐπὶ τὰ ὄρη	*Kûros d' oûn anébe: epì tà óre:*	at any rate Cyrus climbed the mountains	VB S1T A1G
Xen. Anab. 1.2.22b	ἐντεῦθεν δὲ κατέβαινεν εἰς πεδίον μέγα καὶ καλόν	*enteûthen dè katébainen eis pedíon méga kaì kalón*	thence he descended to a large and beautiful plain	VB S1T A1G Mod4S
Xen. Anab. 1.2.23a	καταβὰς δὲ διὰ τούτου τοῦ πεδίου	*katabàs dè dià toútou toû pedíou*	after descending	VB S1T A1T
Xen. Anab. 1.2.23b	ἦλασε σταθμοὺς τέτταρας παρασάγγας πέντε καὶ εἴκοσιν εἰς Ταρσούς	*é:lase stathmoùs téttaras parasággas pénte kaì eíkosin eis Tarsoús*	after descending he marched through this plain four stages, twenty-five parasangs, to Tarsus	VCi A2T
Xen. Anab. 1.2.23c	διὰ μέσου δὲ τῆς πόλεως ῥεῖ ποταμὸς Κύδνος ὄνομα	*dià mésou dè tês póleo:s rheî potamòs Kúdnos ónoma*	and through the middle of the city flows a river named the Cydnus	VM A1T
Xen. Anab. 1.2.24	ταύτην τὴν πόλιν ἐξέλιπον οἱ ἐνοικοῦντες μετὰ Συεννέσιος εἰς χωρίον ὀχυρὸν ἐπὶ τὰ ὄρη	*taúte:n tè:n pólin exélipon hoi enoikoûntes metà Suennésios eis kho:ríon okhuròn epì tà óre:*	the inhabitants of this city had abandoned it and fled, with Syennesis, to a stronghold upon the mountains	VPS S1S A1G A1G
Xen. Anab. 1.2.25a	Ἐπύαξα δὲ ἡ Συεννέσιος γυνὴ προτέρα Κύρου πέντε ἡμέραις εἰς Ταρσοὺς ἀφίκετο	*Hpúaxa dè he: Suennésios gunè: protéra Kúrou pénte he:mérais eis Tarsoùs aphíketo*	now Epyaxa, the wife of Syennesis, had reached Tarsus five days ahead of Cyrus	VPG S1S* A1G
Xen. Anab. 1.2.25b	ἐν δὲ τῇ ὑπερβολῇ τῶν ὀρέων τῇ εἰς τὸ πεδίον	*en dè têi huperbolêi tôn oréo:n têi eis tò pedíon*	but in the course of her passage over the mountains to the plain	A1G N1 S1T
Xen. Anab. 1.2.25c	οἱ δὲ ὑπολειφθέντας	*hoi dè hupoleiphthéntas*	another story was that they had been left behind	VPS S1T
Xen. Anab. 1.2.26a	οἱ δ᾽ ἄλλοι ἐπεὶ ἦκον	*hoi d' álloi epeì hêkon*	and when the rest of Menon's troops reached Tarsus	VPG
Xen. Anab. 1.2.26b	Κῦρος δ᾽ ἐπεὶ εἰσήλασεν εἰς τὴν πόλιν	*Kûros d' epeì eisé:lasen eis tè:n pólin*	as for Cyrus, after he had marched into the city	VCi S1G A1G
Xen. Anab. 1.2.26c	ἔφη οὔτε τότε Κύρῳ ἰέναι ἤθελε	*éphe: oúte tóte Kúro:i iénai é:thele*	and he would not now put himself in the hands of Cyrus	VB
Xen. Anab. 1.3.1a	οἱ γὰρ στρατιῶται οὐκ ἔφασαν ἰέναι τοῦ πρόσω	*hoi gàr stratiôtai ouk éphasan iénai toû próso:*	for the soldiers refused to go any farther	VB

Xen. Anab. 1.3.1b	πρῶτος δὲ Κλέαρχος τοὺς αὑτοῦ στρατιώτας ἐβιάζετο ἰέναι	*prôtos dè Kléarkhos toùs hautoû stratió:tas ebiázeto iénai*	Clearchus was the first to try to force his men to go on	VB
Xen. Anab. 1.3.1c	ἐπεὶ ἄρξαιντο προϊέναι	*epeì árxainto proiénai*	as often as they began to go forward	VB S1T
Xen. Anab. 1.3.4a	ἐκ τῆς Χερρονήσου αὐτοὺς ἐξελαύνων	*ek tês Kherroné:sou autoùs exelaúno:n*	driving them out of the Chersonese	VCt S1S A1S
Xen. Anab. 1.3.4b	λαβὼν ὑμᾶς ἐπορευόμην	*labò:n humâs eporeuóme:n*	I took you with me and set out	VCi
Xen. Anab. 1.3.5a	ἐπεὶ δὲ ὑμεῖς οὐ βούλεσθε συμπορεύεσθαι	*epeì dè humeîs ou boúlesthe sumporeúesthai*	but you now do not wish to continue the march with me	VCi
Xen. Anab. 1.3.5b	ὡς ἐγὼ Ἕλληνας ἀγαγὼν εἰς τοὺς βαρβάρους	*ho:s egò: Hélle:nas agagò:n eis toùs barbárous*	after leading Greeks into the land of the barbarians	VCt A1G
Xen. Anab. 1.3.6a	ἐγὼ σὺν ὑμῖν ἕψομαι	*egò: sùn humîn hépsomai*	I shall follow with you and suffer whatever I must	VPG
Xen. Anab. 1.3.6b	ὡς ἐμοῦ οὖν ἰόντος ὅπῃ ἂν	*ho:s emoû oûn ióntos hópe:i àn*	wherever you go, I shall go also	VB Mod1G
Xen. Anab. 1.3.8	ὁ δὲ ἰέναι μὲν οὐκ ἤθελε	*ho dè iénai mèn ouk é:thele*	Clearchus refused to go to him	VB
Xen. Anab. 1.3.9a	καὶ τοὺς προσελθόντας αὐτῷ	*kaì toùs proselthóntas autôi*	those who had come over to him	VB S1G
Xen. Anab. 1.3.9b	ἐπεί γε οὐ συνεπόμεθα αὐτῷ	*epeí ge ou sunepómetha autôi*	since we decline to follow him	VPG
Xen. Anab. 1.3.11a	εἴ τε ἤδη δοκεῖ ἀπιέναι	*eí te é:de: dokeî apiénai*	if we count it best to depart at once	VB S1S
Xen. Anab. 1.3.11b	ὅπως ἀσφαλέστατα ἄπιμεν	*hópo:s asphaléstata ápimen*	how we are to depart most safely	VB S1S
Xen. Anab. 1.3.13	καὶ μένειν καὶ ἀπιέναι	*kaì ménein kaì apiénai*	either remaining or departing	VB S1S
Xen. Anab. 1.3.14a	ὡς τάχιστα πορεύεσθαι εἰς τὴν Ἑλλάδα	*ho:s tákhista poreúesthai eis tè:n Helláda*	to proceed back to Greece with all speed	VCi A1G
Xen. Anab. 1.3.14b	εἰ μὴ βούλεται Κλέαρχος ἀπάγειν	*ei mè: boúletai Kléarkhos apágein*	in case Clearchus did not wish to lead them back	VCt S1S
Xen. Anab. 1.3.14c	ὡς ἀποπλέοιεν	*ho:s apopléoien*	to sail away	VM S1S
Xen. Anab. 1.3.14d	ὅστις διὰ φιλίας τῆς χώρας ἀπάξει	*hóstis dià philías tês khó:ras apáxei*	to lead them homeward through a country that was friendly	VCt S1S A1T
Xen. Anab. 1.3.16	ὥσπερ πάλιν τὸν στόλον Κύρου ποιουμένου	*hó:sper pálin tòn stólon Kúrou poiouménou*	just as if Cyrus were going home again	N3

Xen. Anab. 1.3.17a	ἐγὼ γὰρ ὀκνοίην μὲν ἂν εἰς τὰ πλοῖα ἐμβαίνειν ἃ ἡμῖν δοίη	*egò: gàr oknoíe:n mèn àn eis tà ploîa embaínein hà he:mîn doíe:*	for my part, I should hesitate to embark on the vessels that he might give us	VB S1L A1G

Appendix B

Coding Manual

VERB	
CODING	**EXPLICITATION**
VB	Basic motion verb
VCt	Caused motion verb (transitive use)
VCi	Caused motion verb (intransitive use)[108]
VM	Manner verb
VPS	Source-oriented Path verb
VPT	Trajectory(Median)-oriented Path verb
VPG	Goal-oriented Path verb
VPS+M	Source-oriented Manner verb
VPT+M	Trajectory(Median)-oriented Manner verb
Vst	Stative verb
VO	Non-motion verb
IDIOM	Motion idiom[109]

NOUN	
CODING	**EXPLICITATION**
N1	Nominalization of a motion verb
N2	Predicative noun expressing motion
N3	Light-Verb construction

MODIFIER		
CODING		**EXPLICITATION**
Morphosyntactic information	M1	Adverbs/Adverbials
	M2	Adjectives
	M3	Prepositional phrases/Noun phrases
	M4	Complex modifiers
Semantic information	MS	Source modifier
	MT	Trajectory (Median) modifier
	MG	Goal modifier
	ML	Location modifier
	MM	Manner modifier

108 The label VCi has been employed to identify the intransitive use of the so-called labile verbs (cf. pp. 125ff.).
109 Motion idioms have been included within the category of verbs considering their holistic semantics.

SATELLITE		
CODING		EXPLICITATION
Morphosyntactic information	S1	Preverb
	S2	Relational preverb
	S3	Verb particle
Semantic information	SS	Source satellite
	ST	Trajectory (Median) satellite
	SG	Goal satellite
	SL	Location satellite
S*		Lexicalization

ADNOMINAL		
CODING		EXPLICITATION
Morphosyntactic information	A1	Prepositional phrase
	A2	Noun phrase
Semantic information	AS	Source adnominal
	AT	Trajectory (Median) adnominal
	AG	Goal adnominal
	AL	Location adnominal