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Lexical splits in the encoding of motion events from Archaic to Classical Greek

This chapter explores diachronic evidence from Ancient Greek as a source of data on categorization of motion verbs. Over its recorded history, Ancient Greek undergoes a change in the dominant goal-encoding strategy: from Homer to Classical Greek, it gradually develops into a consistently satellite-framed language. The study investigates statistical differences in the way the change affected individual verbs, suggesting that three major verb classes should be distinguished: verbs of self-propelled motion, verbs of externally caused motion, and verbs encoding a change of configuration. Change of configuration verbs, in particular, are shown to follow a peculiar pattern of development that ultimately leads to the rise, in Classical Greek, of a "lexical split" similar to the one attested in modern Russian.

Keywords: Ancient Greek, categorization, Russian, satellite-framed, change of configuration verbs, diachronic change

1. Motion encoding strategies: generalized types and language-specific deviations

From the onset of research into cross-linguistic differences in the encoding of motion events, the proposed language types were supposed to represent generalized abstractions over strategies available in a specific language (cf. Talmy 1985: 57, 2000: 27; Slobin 1996: 214, among others). Yet the focus of subsequent research in semantic typology has shifted so uncontroversially to differences between the "verb-framed" vs. "satellite-framed" and between the "manner" vs. "path" types that categorizing a language in terms of the two dichotomies has become common practice. The validity of the assignment of individual languages to specific types is rarely questioned, and systematic studies of the variety of "deviating" constructions that operate in specific languages along with the "dominant" motion-encoding strategy are virtually non-existent.

Studies addressing problems of classification typically deal with the problem of individual "dominant" strategies that do not fit nicely into the dichotomy and as such require special treatment (cf., e.g., Slobin 2004, 2006; Zlatev and Yangklang 2004; Chen and Guo 2009 on equipollent framing). The problem of co-existence of multiple strategies in the same language, on the other hand, has not received much attention, and little is known about specific factors determining the choice of a strategy in particular cases. The scarcity of systematic research in these issues is

surprising, in light of the ubiquitous intra-linguistic variation in the encoding of motion. Rarely does a language restrict its speakers to only one goal-encoding strategy. A typical inventory of available devices comprises several construction types, the choice of a particular strategy depending on the choice of the verb or other lexical and pragmatic factors.

Consider, for example, such a well-studied language as English, commonly regarded as a well-behaved instance of the satellite-framed type (Talmy 1985, 1991; Slobin 2003, among many others). Along with the satellite-framed strategy in (1a), however, speakers of American English regularly resort to the construction in (1b), suggesting that even in English, specialized goal-encoding satellites (such as *onto* and *into*) are not necessarily used to encode a goal in descriptions of directed motion. The choice between the two strategies depends on a number of factors, including the type of motion verb, the presence of directional adverbs, the type of reference object, etc. (Nikitina 2008).

(1) a. *Put the keys onto the table / into the chest.*
(direction = onto/into)
b. *Put the keys on the table / in the chest.*
(location = on/in)

In some languages, including American English, the variation in the encoding of motion events cross-cuts the division between various semantic classes of verb. In others, the variation is restricted to a small subset of motion verbs, sometimes to only a few verbs from a specific semantic class.

In modern Russian, as well as in some other Slavic languages, a variation similar to the one in (1a,b) is attested with change of configuration verbs, which can also describe motion, either with specialized directional prepositional phrases or with locational (inherently static) ones (Nikitina 2010).

(2) a. *Položi* *ključi* *na* *stol*.
put:IMPER keys:ACC on table:ACC
'Put the keys on the table.' (directional = na + Acc 'onto')

b. *Položi* *ključi* *na* *stole*.
put:IMPER keys:ACC on table:LOC
'Put the keys on the table.' (locational = na + Loc 'on')

Both in Russian and in English, the co-existence of alternative goal-encoding strategies is manifested in the availability of alternative expressions for some types of motion event. This type of variation is typical of languages that have the morphosyntactic means to unambiguously encode goals of motion (such as *into* or *onto* in English, specialized directional combinations of preposition and case in Russian): speakers rarely use such means indiscriminately, and sometimes choose not to encode a goal explicitly when the directional meaning is easily inferrable from context.

The co-existence of multiple strategies is not restricted to "satellite-framed" languages, or languages with specialized goal-encoding morphosyntactic means (cf. Beavers et al. 2010). Even in languages where no such means exists, verbs outside the class of specialized directional verbs may allow their locative argument to be interpreted, under certain

circumstances, as a goal of motion (cf. Cummins 1996: 48 for French, Folli 2001: 53 for Italian, Aske 1989: 3 for Spanish; Nikitina 2009 for Wan). What is most important for our study, the variation is typically restricted to a limited set of verbs, resulting in "lexical splits" in the encoding of motion events.

This chapter addresses the issue of co-existence of alternative goal-encoding strategies based on corpus data from Ancient Greek, available through the *Thesaurus Linguae Graecae*. In spite of recent major developments in the field of corpus linguistics, the study of diachronic patterns is still far from common practice in research on the encoding of motion. By using data from an ancient language, I aim to explore a new source of evidence for categorization of motion verbs.

Over its recorded history, Ancient Greek undergoes a change in the dominant goal-encoding strategy: from Homer to Classical Greek, it gradually develops into a consistently satellite-framed language. I argue that in order to account for important differences in the way the change affected individual verbs, the inventory of motion verbs should be stratified, and more specifically, verbs of manner of motion and verbs of self-propelled motion should be distinguished, on the one hand, from verbs of externally caused motion, and, on the other, from verbs encoding a change of configuration. Change of configuration verbs, in particular, follow a path of development that differs significantly from that of all other verbs, and

ultimately leads to the rise, in Classical Greek, of a "lexical split" similar to the one attested in modern Russian and some other Slavic languages.

2. Case study: Ancient Greek verb classes

2.1. Toward a consistent satellite-framed type

In typological literature, Ancient Greek is commonly classified as a typical representative of the satellite-framed type: goals of motion are encoded by specialized directional combinations of preposition and case, distinct from the combinations used to encode static locations. Table 1 lists several pairs of preposition + case combinations that describe (at least in some of their meanings) the same type of localization but differ in the directional vs. static interpretation.

Table 1. Selected Ancient Greek preposition + case combinations

directional	static
eis/*es* + NP-ACC 'into, to NP'	*en* + NP-DAT 'in, within NP'
epí + NP-ACC 'onto, up to, toward NP'	*epí* + NP-DAT 'upon, over, next to NP'
pará + NP-ACC 'to the side of'	*pará* + NP-DAT 'by the side of'
prós + NP-ACC 'to, toward'	*prós* + NP-DAT 'near, beside'

The sentence in (3) illustrates the way specialized directional preposition + case combinations are used in Classical Greek.

(3) *poiēsas* *dè* *tâuta* *heōutòn*
do:PRTC.AOR.NOM.SG PRT these:ACC REFL
esébale ***es*** ***tò*** ***pûr*** (Hdt. 7.107)
in.throw:AOR.3SG into ART:ACC.SG fire:ACC
'having done these things he threw himself into the fire'

Like some other ancient Indo-European languages, however, Ancient Greek undergoes a gradual change in the dominant strategy for encoding motion. At the earliest attested stages (Homeric Greek), goals of motion are commonly introduced by inherently static combinations of preposition and case, rather than by specialized directional ones. The example in (4) illustrates a difference in the ways goals of motion are encoded in Homer and in Classical Greek. The example involves the same motion verb and the same Ground as in (3), yet the static combination of *en* + dative is used instead of the directional *eis* + accusative, and the verb lacks a directional prefix – a rather typical feature of Classical Greek descriptions of motion.

(4) *hò* *d'* ***en*** ***purí*** *bálle*
he:NOM PRT in fire:DAT throw:IMPF.3SG
thuēlás (*Il.* 9.220)
firstlings:ACC
'he was throwing firstlings into the fire'

The major questions addressed in this chapter concern the spread of the change across individual verbs and semantic classes. Were all motion-encoding verbs affected by the change in the same way, and at the same time? What does the diachronic process tell us about classification of

motion verbs in Ancient Greek? How does the Ancient Greek system fit into the traditional satellite-framed vs. verb-framed dichotomy?

The data I use to address these issues comes from a study of the choice between the prepositions *en* 'in' and *eis* 'into' (Nikitina and Maslov to appear), where more specific details of the diachronic development are discussed, and more examples are given. Due to space limitations, I can only discuss the general trend here, skipping over many details, for which the aforementioned paper should be consulted.

2.2. Verbs of externally caused motion

One of the most important findings discussed in Nikitina and Maslov (to appear) is the difference in the way individual verbs behave with respect to the general shift toward the more consistent use of specialized directional (as opposed to inherently locative) expressions (cf. Maslov and Nikitina 2009). To trace the developments, several subcorpora were created, each characterized by a particular combination of genre and time period (Table 2).

Table 2. Subcorpora of *TLG* explored in this study

subcorpus	Authors	approx. time period
Homeric Greek	Homer: the *Iliad*, the *Odyssey*	8-7? c. BCE
Archaic lyric	Hesiod to Pindar, Bacchylides; excluding Aeschylus	7-mid. 5 c.BCE
Attic tragedy	Aeschylus, Sophocles, Euripides	5 c. BCE
Attic comedy	Aristophanes	late 5 - early 4 c. BCE
Classical Greek prose	Herodotus, Thucydides, Xenophon	mid. 5- mid. 4 c. BCE

Already in Homeric Greek, specialized expressions for the encoding of endpoints of motion are in common use. In order to describe directed motion, both manner of motion verbs and most inherently directional verbs of self-propelled motion require a specialized directional expression. Unlike in a typical satellite-framed language, however, manners of motion are rarely described (at least in pre-Classical Greek) by combinations of a corresponding verb with a goal of motion; rather, the manner of motion tends to remain implicit or be described outside the main verb, as in verb-framed languages (cf. Talmy 2000). Example (5a) illustrates the use of the basic directional verb *érxomai* 'go, come' with a separate encoding of the manner of motion (with adjectival 'being on foot'). In (5b), the manner of motion ('running' = 'in swift course') is encoded by a participle.

(5) a. *hṑs* *lípon,* *autàr* *pezdòs*
so leave:AOR.1SG but on.foot:NOM.SG.MASC
es *Ílion* *eilḗloutha* (*Il.* 5.204)
to Ilion:ACC go:PERF.1SG
'So I left them and went on foot to Ilion.'

b. *all'* *hóte* *dḕ* *kaì* *keînos*
but when indeed and that.one:NOM
iṑn *epì* *oínopa*
go:PRTC.PRES.NOM on wine-colored:ACC
pónton *en* *nēusì* *glafupēisi*
sea:ACC in ships:DAT hollow:DAT
Maleiáōn *óros* *aipù*
Malea:GEN mountain:ACC steep:ACC
hîkse *théōn* (*Od.* 3.287)
come:AOR.3SG run:PRTC.PRES.NOM
'But when he too, passing over the wine-colored sea in the hollow ships, reached in swift course at the steep mount of Malea…'

Verbs of externally caused motion, on the other hand, tend to allow the goal of motion to be encoded by an inherently static preposition + case combination. Such verbs include both intransitive (*píptō* 'fall') and transitive verbs (*bállō* 'throw, cast', *elaúnō* 'drive (a weapon into smb.)'), cf. (5a,b), as well as example (4) above.

(6) a. *en* *dè* *purḗi* *pesétēn,*
in PRT fire:DAT fall:AOR.3DU
méga *d'* *íaxe*
large:NOM.SG PRT cry:IMPF.3SG
thespidaès *pûr* (*Il.* 23.216)
prodigious:NOM.SG fire:NOM
'and they [the Winds] fell upon the pyre, and a large prodigious fire roared.'

b. *neiaírēi* *d'* *en* *gastrì* *dià*
lower:DAT PRT in belly:DAT through

zdōstêros *élasse* (*Il.* 5.539)

belt:GEN drive:AOR.3SG

'and he drove [the spear] into [his] lower belly through the belt.'

In fact, as I show below, the static preposition + case combinations are by far the preferred way of encoding goals of motion with such verbs in Homer. This fact complicates the view of the Archaic stage of Ancient Greek as a representative of a "satellite-framed" type, as static prepositional phrases are commonly used in descriptions of externally caused motion. The challenge such constructions present to the "satellite-framed" classification is aggravated by the general avoidance of constructions where a finite manner of motion verb would combine with a description of a spatial goal (this feature is in general atypical of satellite-framed languages, cf. Talmy 2000).

At later stages, Ancient Greek gradually approaches the satellite-framed "standard": verbs of externally caused motion start combining with specialized directional expressions, and in the Classical period, the old "verb-framed" pattern is virtually replaced by the new, "satellite-framed"

one.[1] The following example illustrates the use of the verb *píptō* 'fall' in Classical Greek;[2] for an example with *bállō* 'throw, cast', see (3).[3]

(7)	*kaì*	*hoi*	*mèn*	*empíptousin*	*autō̂n*
	and	ART:NOM.PL	PRT	in.fall:PRES.3PL	they:GEN
	eis	*tḕn*	*thálattan,*	*olígoi*	*dé*
	into	ART:ACC.SG	sea:ACC	few:NOM.PL	PRT
	tines	*metà*	*tō̂n*	*hippéōn*	*eis*
	some:NOM.SG	with	ART:GEN.PL	horsemen:GEN	into
	Léxaion		*esṓthēsan*	(Xen. *Hell.* 4.5.17)	

[1] In post-Classical Greek, the distinction between directional and inherently static preposition + case combinations is no longer straightforward, due to the gradual loss of the dative case (Skopeteas 2008a).

[2] The following example from Xenophon is sometimes assumed to feature a goal of motion encoded by a static prepositional phrase (Smyth 1956: 368; Skopeteas 2008a,b). On closer examination, it should be interpreted as an instance of a non-directional use of the verb 'fall', in the meaning of 'die, perish' (note the absence of a directional prefix, atypical of Classical Greek uses of motion verbs).

(i)	*kaì*	*hoi*	*mèn*	*autō̂n*	*euthùs en*
	and	ART:NOM.PL	PRT	they:GEN	straight in
	tō̂i	*potamō̂i*	*épeson,*	*hoi*	
	ART:DAT.SG	river:DAT	fall:AOR.3PL	ART:NOM.PL	
	d'	*álloi*	*éfeugon*	(*Hell.* 4.4.24)	
	PRT	others:NOM	flee:IMPF.3PL		

'And some of them fell [= died] immediately in the river, while others tried to escape.'

[3] The verb *elaúnō* in the meaning 'drive (a weapon into smb.)' falls out of use soon after Homer, and is not attested after Pindar. The same verb continues to be used in the meaning 'drive (to an area)'; this reading is only attested with specialized directional expressions (the number of instances is too small to draw a definite conclusion as to the unacceptability of the alternative).

Lechaeum:ACC rescue:AOR.PASS.3PL

'And some of them plunged into the sea, and a few others escaped to Lechaeum with horsemen.'

Table 3, followed by Figure 1, represents the gradual shift in the goal-encoding strategy with the verbs *bállō* 'throw, cast' and *píptō* 'fall' (as well as the same verbs with the prefixes *em-* 'in' and *es-* 'into').[4] The counts for the two verbs are presented together, as the verbs follow essentially the same path of development, and do not differ in their preferred goal-encoding strategy at any one of the stages.

Table 3. Goals of motion with the verbs *bállō* 'throw, cast' and *píptō* 'fall' (taken together)

	Homer	Arch. lyric	Attic trag.	Attic com.	Historians
en + dat	63 (89%)	15 (58%)	13 (28%)	0 (0%)	1 (2%)
eis + acc	8 (11%)	11 (42%)	33 (72%)	20 (100%)	43 (98%)
Total	71 (100%)	26 (100%)	46 (100%)	20 (100%)	44 (100%)

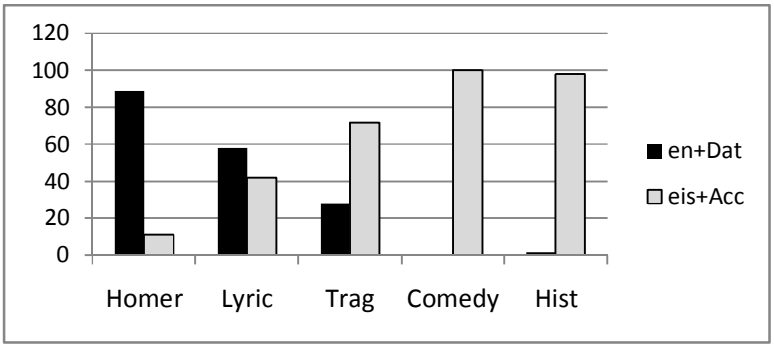

Figure 1. Gradual shift in the goal-encoding strategy with *bállō* 'throw, cast' and *píptō* 'fall'

[4] The decision to include verbs with these two prefixes was motivated by the general preference for prefixed verbs in descriptions of directed motion in Classical Greek (in Homer, plain verbs are used instead).

As represented in Figure 1, in Classical Greek, the two verbs of externally caused motion are virtually unattested with the static preposition + case combination, which is still predominant in Archaic lyric. The pattern suggests that these verbs switched to the new way of encoding goals of motion sometime in the 5th century BCE, joining the verbs of self-propelled motion, which required the directional *eis* + accusative ('into NP') combination already in the Homeric epic.[5]

2.3. Change of configuration verbs

2.3.1. Attested constructions

The situation is different with change of configuration verbs, which do not follow the same pattern as verbs of externally caused motion. They also differ from regular motion verbs in their interpretation. In particular, such verbs can be interpreted in two ways: (i) as describing a change of configuration/position without displacement, e.g., from sitting or lying to standing, or vice versa; and (ii) as describing an event of assuming a position in a new location, following a displacement.

[5] It is important to keep in mind that, with the possible exception of characters' speech in Aristophanes, we only have access to the norms of written language, which reflects a more conservative pattern than the one observed in colloquial speech. It is quite possible that the proportion of specialized directional expressions was higher in actual usage than in the attested writings.

The two readings are illustrated in (8a,b) with the verb *hístēmi* 'make stand, set; (intrans.) stand'.[6] In (8a), it is clear from the context that no displacement preceded the change of position: the character stands up to speak to his companions, among whom he had been sitting. In (8b), the speaker is telling the story of his visit to a goddess, and the gates are the final destination of his journey.

(8) a. *stê̂* *d'* *orthòs* *kaì*
stand:AOR.3SG PRT upright:NOM.SG.MASC and
mûthon *en* *Argeíoisin* *éeipen*
speech:ACC in Argive:DAT speak:AOR.3SG
(*Il.* 23.271)
'And he stood up and delivered a speech among the Argives.'

b. *éstēn* *d'* *einì* *thúrēisi*
stand:AOR.1SG PRT in doors:DAT
theâs *kalliplokámoio* (*Od.* 10.310)
goddess:GEN with.beautiful.locks:GEN
<… and my heart boiled a lot as I went.> 'And I stood at the gates of the goddess with beautiful locks.'

In cases where the verb describes an event of assuming a position in a new location, the new location may be described in one of two ways: by a

[6] Individual verbs offer a variety of additional meanings that go beyond the two senses outlined above. The verb *hístēmi*, for example, can also be used in the meaning 'halt (e.g., a horse)'. In this chapter, I focus on examples with the basic change of configuration readings, and ignore, due to space limitations, all other senses.

specialized directional preposition + case combination (which encodes the endpoint of motion explicitly, as in 9) or by a static combination (as in 8b).

(9) *kaì* *tà* *mèn* *es* *peírintha* *títhei*
and they:ACC PRT into basket:ACC put:IMPF.3SG
Peisístratos *hḗrōs* *deksámenos* (*Od.* 15.131)
P.:NOM hero:NOM take:PRTC.AOR.NOM
'And hero Peisistratus, having taken [the gifts], put them into a basket.'

Although the new location can be encoded in the same way as a goal of motion, I would like to suggest that the directional preposition + case combination actually encodes in this case an argument different from spatial goal. In the next section, I argue that change of configuration verbs combine with a result argument, rather than with a goal, and that the semantic difference between such verbs and verbs of motion correlates with a difference in the way the two verb classes undergo the shift toward a more consistent use of specialized directional expressions.

2.3.2. Results vs. goals

In Nikitina (2010), I discuss differences between change of configuration verbs and motion verbs based on data from Russian, suggesting that change of configuration verbs take a result argument, rather than a goal. In this section, I use some of the same criteria to argue that the same distinction holds for Ancient Greek and explains similarities in the way change of configuration verbs function in the two languages.

More specifically, change of configuration verbs differ from motion verbs in two major respects. First of all, there are two ways in which the meaning of directional motion is conveyed by a motion verb: some verbs imply a change of location (these are the so-called verbs of directional motion, such as the English verbs *go* or *throw*); others describe an activity that is typically (albeit not necessarily) associated with a change of location (these are the so-called manner verbs, such as the English verbs *walk* or *run*). In both cases, the change of location is temporally co-extensive with the event described by the verb: verbs of directional motion simply describe a change of location; in the case of manner of motion verbs, motion usually lasts as long as the accompanying activity goes on.[7]

The situation is different with change of configuration verbs, which neither entail a change of location nor describe activities temporally co-extensive with such changes. Rather, change of configuration verbs describe an event of assuming a specific position, leaving it to the hearer to infer that such an event was *preceded* by a change of location. The change of location is never interpreted as co-extensive with the event of assuming the position; rather, it is inferred to have occurred *prior* to it (e.g., 8b). In this sense, change of configuration verbs do not describe changes of location in the

[7] In the case of caused motion, i.e. when a change of location is caused by a certain action (e.g., *push*), the motion may continue after the event. I regard such cases as instances of temporally co-extensive events.

same way as motion verbs do, and should not be expected to select for the same kind of goal argument.

The difference between a directional argument of a change of configuration verb and a goal of motion becomes obvious when the corresponding verb is combined with a source argument. Motion verbs impose no restriction on such combinations: the source of motion can be expressed either instead or along with the goal of motion. Change of configuration verbs, on the other hand, cannot combine with sources of motion, even in cases where a change of location is inferred from context.

Descriptions of changes of configuration/position without displacement cannot include spatial goals; they can only accommodate static locative phrases (as in 8a). Change of configuration verbs can, however, combine with descriptions of the original position or state, which may be encoded using the same devices as the ones marking a spatial goal. In (10), for example, a prepositional phrase with a source-marking preposition introduces the original state (the state of sleeping) from which a "standing" (= "normal") position was assumed.[8]

(10)	*hoû*	*dḗ,*	*téknon,*	*poían*	*m'*
	he:GEN	indeed	child:VOC	of.what.sort:ACC	me:ACC
	anástasin		*dokeîs*	*autō̂n*	
	raising:ACC		think:PRES.2SG	they:GEN	

[8] Combinations of *hístēmi* and a source phrase are often used to describe a return from a "marked" state to a "normal" condition, not necessarily implying, literally, a standing resulting position.

bebṓtōn *eks* *húpnou* *stē̂nai*

go:PRTC.PERF.GEN.PL from sleep:GEN stand:INF.AOR

tote (Sophocles, *Philoct.* 277)

then

'Can you imagine, boy, what kind of awakening I had when they had gone, and I rose from sleep that day?'

Importantly, no change of location takes place in (10). Spatial sources are not attested with Ancient Greek change of configuration verbs. In contexts implying a change of location, change of configuration verbs cannot combine with descriptions of sources of motion (even though they do combine with directional phrases), and the starting point of motion must be encoded using a different verb. In (11), for example, where the change of position was preceded by a change of location, the two components must be described by two separate verbs: a motion verb with a source ("lifted"), and a change of configuration verb ("put").

(11) *prṑton* *Odussē̂a* *glafurē̂s* *ek* *nēòs*

first O.:ACC hollow:GEN from ship:GEN

áeiran *autṑi* *sún* *te* *línōi* *kaì*

lift:AOR.3PL he:DAT with and linen:DAT and

hrē̂geï *sigalóenti,* *kàd* *d'* *ár'* *epí*

rug:DAT shining:DAT down PRT then on

ksamáthōi *éthesan*

sand:DAT put:AOR.3PL

dedmēménon *húpnōi* (*Od.* 13.119)

overcome:PRTC.PERF.PASS.ACC.SG sleep:DAT

'First they lifted Odysseus from the hollow ship along with the

linen sheet and shining rug, and then they put [him] down on the sand, overpowered by sleep.'

The same strategy is used in (12) to describe a change of location followed by an event of assuming a new position; the two cannot be described using the same change of configuration verb, even though such verbs may imply motion and combine with directional phrases.[9]

(12) *tôi* *d'* *ára* *kḗruks* *moîran*
he:DAT PRT then herald:NOM portion:ACC
helṑn *etíthei* *kanéou*
take:PRTC.AOR.NOM.SG put:IMPF.3SG basket:GEN
t' *ek* *sîton* *aeíras* (*Od.* 17.335)
and from bread:ACC lift:PRTC.AOR.NOM.SG
'And then a herald, having taken a portion [of meat], placed it for him, and [he did so] having lifted bread from a basket.'

2.3.3. Changes in the encoding preferences

[9] In the few apparent exceptions, the source phrase can be argued not to function as a source argument of a change of configuration verb. Both *Il.* 21.145 and *Od.* 19.445 feature the adverb *antíos* 'opposite', and the source phrase can be interpreted as specifying the orientation of the Figure, rather than the starting point of motion (the Figure opposes the other character, facing away from the Ground). Some uses of source phrases, such as the use of *ek toû prósthen* in the Historians, clearly encode static locative ('in front of'), rather than directional ('from the front of') meaning (cf. Nikitina and Spano forthc. for more examples of the ablative-prolocative uses). In Sophocles *Oed. Col.* 484, the source phrase can be interpreted as modifying a noun phrase ("lay on it nine branches of olive from both hands"), not a source argument of the verb.

The fact that sources of motion cannot combine with change of configuration verbs suggests that the directional argument of such verbs is also not a goal of motion, but rather an argument specifying the result of a change of state. The result argument can describe a resulting configuration (e.g., *eis orthón* '(stand up) upright') or a resulting location (if there was prior motion); in the latter case, the meaning is similar to that of a goal of motion.

On the other hand, with change of configuration verbs, locative phrases are taken to specify the place where the new configuration was assumed. In the case of an implied change of location (which is interpreted to have occurred prior to the change of configuration), that place is taken to coincide with the endpoint of motion, hence the interchangeability of locative and directional phrases with change of configuration verbs that describe location changes.

The peculiar semantics of change of configuration verbs helps explain the differences between such verbs and motion verbs in the distribution of static locational and specialized directional preposition + case combinations. Not only do change of configuration verbs have a consistently higher proportion of static locational phrases than motion verbs in all five subcorpora, but the shift toward directional marking is never completed for change of configuration verbs, even at the latest stages of Classical Greek.

Table 4 represents the gradual change in the proportion of the two preposition + case combinations for two major change of configuration verbs, *hístēmi* 'set; (intrans.) stand' and *títhēmi* 'put, place'.[10] As with motion verbs in the previous sections, only those examples are included where a change of location is implied, and the preposition + case combination describes the endpoint of motion. While Attic tragedy sees a sharp increase in the use of specialized directional marking, the proportion remains the same in Attic comedy and the prose of the Historians, suggesting that the static encoding was never eliminated. Figure 2 represents the same tendency, demonstrating a constant proportion of specialized directional marking in the three subcorpora that represent the latest stages in the development of Ancient Greek (Attic tragedy, Attic comedy, and the Historians).

Table 4. Endpoints of motion with *hístēmi* 'stand, set' and *títhēmi* 'put, place' (taken together)

	Homer	Arch. lyric	Attic trag.	Attic com.	Historians
en + dat	129 (95%)	29 (94%)	25 (57%)	4 (57%)	61 (56%)
eis + acc	7 (5%)	2 (6%)	19 (43%)	3 (43%)	48 (44%)
Total	136 (100%)	31 (100%)	44 (100%)	7 (100%)	109 (100%)

[10] I treat the two change of configuration verbs together due to space limitations, but also because they have essentially identical diachronic profiles.

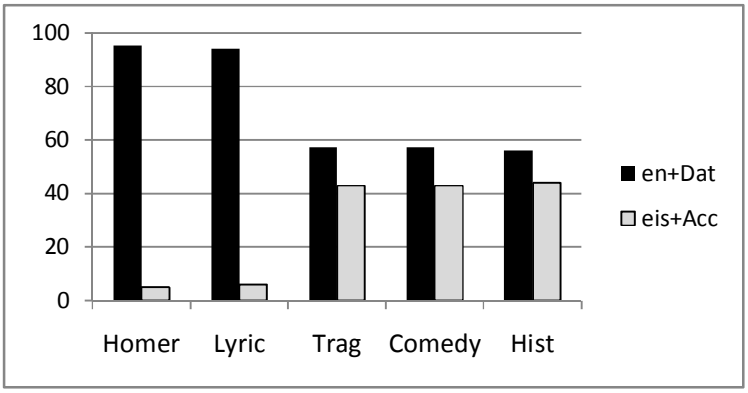

Figure 2. Gradual shift in the goal-encoding strategy with *hístēmi* 'stand, set' and *títhēmi* 'put, place'

3. Concluding remarks

Table 5 summarizes the patterns discussed above for three semantic verb classes. Verbs of self-propelled motion require specialized directional preposition + case combinations as early as in Homer. Verbs of externally caused motion show variation at early stages, but combine almost exclusively with directional combinations in the last two subcorpora (Attic comedy and the Historians). Change of configuration verbs combine predominantly with static combinations at the earliest two stages (Homer and Archaic lyric), but show a stable proportion of directional vs. static combinations in the last three subcorpora (Attic tragedy, Attic comedy, the Historians).

Table 5. Overview of the attested preposition + case combinations, by verb class

motion	Homer	Arch. lyric	Attic trag.	Attic com.	Historians
self-propelled	specialized directional	specialized directional	specialized directional	specialized directional	specialized directional
externally caused	both	both	both	specialized directional	specialized directional
change of position	mostly static	mostly static	both	both	both

The differences suggest that the three verb classes undergo a similar type of change (a shift toward a more consistent use of specialized directional satellites), but at different rates and possibly in slightly different ways. The specialized directional marking gradually replaces static preposition + case combinations as the standard means of encoding endpoints of motion, spreading from verbs of self-propelled directional motion to other verb types. Change of configuration verbs, however, resist that tendency and never shift completely to the new pattern.

The data suggests that among all verbs used to describe directional motion, change of configuration verbs form their own separate class with distinct semantic properties. Instead of entailing a change of location or describing activities canonically associated with such changes, verbs of configuration imply that a change of location may have taken place prior to the event of assuming a new configuration/position. This semantic difference corresponds to a difference in the interpretation of the directional argument: rather than introducing a goal of motion, the directional argument

of a change of configuration verb encodes a result state, which may (but need not) represent the endpoint of motion. This difference explains why such result states, unlike goals of motion, may not combine with spatial sources.

Whenever a result argument of a change of configuration verb describes an endpoint of motion, the construction is roughly synonymous with the use of the same verb with a locative argument (since the location where the change of configuration takes place coincides with the endpoint of motion that is inferred to have occurred prior to it).

The special properties of change of configuration verbs make them a peculiar class of motion-encoding verbs that has been largely ignored in the literature. It is rather common, however, for such verbs to present a challenge to the study of language-specific goal-encoding strategies. For example, in modern Russian, change of configuration verbs differ from motion verbs in allowing for the same kind of variation as the one attested in Classical Greek: the same situation can often be described with a specialized directional or an inherently static preposition + case combination (see ex. 2 and further discussion in Nikitina 2010).[11]

[11] In Russian, the choice between the two alternatives tends to be determined by factors subsumed under the notion of event construal, such as the perceived duration of the result state. Further investigation is needed to establish similar factors for Ancient Greek (e.g., perfect forms seem to favor the inherently static preposition + case combinations over the directional ones, suggesting a correlation between the motion-encoding strategy and aspect).

The striking similarity between the Russian pattern (also attested in Polish and some other Slavic languages) and the pattern observed in Classical Greek points to the need for a broader cross-linguistic investigation of change of configuration verbs as a probable context of synchronic variation in the encoding of endpoints of motion.

The results of this case study highlight the role contextual information plays in the encoding of motion events, in two important ways. First, in a language like Ancient Greek, where specialized directional preposition + case combinations regularly encode endpoints of motion with some of the motion verbs, other verbs may not require – and may even disprefer – the use of such combinations. They may instead combine with inherently static expressions, leaving it to the hearer to infer the directional meaning. In other words, when it comes to the study of language-specific motion-encoding strategies, characterizations in terms of the verb-framed vs. satellite-framed distinction should be treated with caution, as they often conceal a more complex, lexically stratified encoding system.

Second, change of configuration verbs provide an interesting example of the way directional meaning that is not entailed by the verb can be inferred from context. By combining with result arguments, such verbs are capable of encoding a change of location, along with the event of assuming a particular configuration. The fact that change of configuration verbs behave in a similar way in such different languages as Ancient Greek and modern Russian suggests that the same mechanism of contextual

inference is responsible for creating similar patterns of variation across languages.

More generally, this case study is an attempt at bridging the gap – especially evident in lexical semantics – between corpus-based research on intra-linguistic variation and the study of language change. Investigation of diachronically stratified corpora may lead to further insight into categorization of verbs, classification of arguments, and cross-linguistic validity of verb classes.

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