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**The Role of Semantic,
Pragmatic, and Discourse Factors
in the Development of Case**

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The evolution of local cases and their grammatical equivalent in Greek and Latin

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The Indo-European languages attest to a PIE system with three local cases: locative, ablative, and (allative) accusative. I will focus on the system of local cases in Ancient Greek and in Latin. Both languages have a reduced number of case distinctions with respect to the PIE system; in the field of spatial relations, they display interesting differences. In Ancient Greek the locative has merged with the dative, the ablative has merged with the genitive, and the accusative is retained as such. The three cases can be reinforced with all types of nouns with three different prepositions, *en*, *ek*, and *eis* and express basic spatial relations. Thus, a connection continues to exist between cases and spatial semantic roles, as shown by the fact that a fourth preposition, *pará*, could take all three cases and express adessive, ablative, and allative meanings. In Latin the locative and the ablative merged; as a result, location and source could no longer be distinguished through case marking alone. Some toponyms retained the locative case until the end of the Classical period. Consequently, Latin displays a sub-system with three case distinctions for this group of toponyms. Within prepositional phrases, only two cases occur in Latin, i.e., the ablative and the accusative. Source is expressed through the ablative with a special set of prepositions, while location and direction are both expressed with the same set of prepositions. Consequently cases became increasingly disconnected from the semantic roles they used to express.

1. Introduction

The aim of my paper is to show how reduction of case systems can lead to quite different results in genetically related languages. I will argue that a central role in this development is played by the semantics of cases and by the frequency of their occurrence in certain syntactic functions.

In particular, I will concentrate on the expression of the three basic spatial relations in Ancient Greek and Latin: location, direction, and source. In both languages, prepositionless cases can express spatial relations to some extent; more frequently, cases occur with prepositions. In this paper, I will show that the contribution of cases

to the meaning of prepositional phrases was different in the two languages, and that, even within prepositional phrases, Ancient Greek preserved to a larger extent the original sub-system of local cases that are traditionally reconstructed for Proto-Indo-European, through exploitation of grammatical cases for spatial relations. In Latin, grammatical cases did not acquire a similar function, and the burden of expressing the meaning of prepositional phrases rested to a larger extent on prepositions, while cases tended to lose their independent meaning faster, at least in the field of spatial relations. As I will argue, this difference between the two languages is remarkable, because, at least with certain lexemes, Latin cases retained non-prepositional usage to a larger extent than Greek cases, but, in spite of this, their connection with the semantic roles they could express was weaker.

The paper is organized as follows. In Section 1 I will briefly describe the Proto-Indo-European case system, with special reference to cases that are reconstructed as occurring in spatial expressions. In Section 2 I will review the Greek evidence, starting with case syncretism; I will also show how plain cases and prepositional phrases expressed spatial semantic roles in Homeric Greek and in later prose. In Section 3 I will discuss the Latin data, again starting with case syncretism, and proceeding to the occurrence of plain cases and prepositional phrases in spatial expressions. In Section 4 I will summarize the evidence and contrast the Greek with the Latin data. Section 5 contains the conclusions.

2. The Proto-Indo-European case system

The case system traditionally reconstructed for Proto-Indo-European consisted of eight cases: nominative, accusative, genitive, dative, instrumental, locative, ablative, and vocative. Leaving aside the vocative, the remaining cases are traditionally divided into a group of 'grammatical' cases, i.e., those that mostly express grammatical relations, and a group of 'concrete' cases, i.e., those that mostly do not.¹

Grammatical cases include the nominative, which indicates the subject, the accusative, which indicates the direct object, the genitive, which indicates nominal dependency, and the dative, which indicates the indirect object.² In the Indo-European

1. The terms 'grammatical' and 'concrete' cases go back to Kuryłowicz (1949); see also Blake (2001: 31–33). In this paper I am going to use this terminology without further discussing it. It goes without saying that I am well aware of the fact that grammatical cases could also have 'concrete' functions while concrete cases could also have grammatical functions, as has even been shown by Kuryłowicz (1949).

2. Obviously, these cases also had other functions: this is a generalization that only serves the purposes of the present discussion. The complete list of functions of each case in

languages, these cases mostly occur with NPs that are required by the verbal valency; the genitive mostly indicates that an NP depends on another NP. The genitive also has several adverbial uses that I will not include in the present discussion, and in various languages including Greek it can be used as a partitive.³

Concrete cases include the instrumental, the locative, and the ablative, and mostly occur with NPs that are syntactically adverbials. Because such NPs (i.e., NPs that are syntactically adverbials) are not required by the verbal valency, their semantic role cannot be understood from the meaning of the verb. Very often in the Indo-European languages the occurrence of prepositionless cases in such NPs is conditioned by their lexical features: lexemes with unexpected referents may require extra marking and occur with adpositions. Thus, for example nouns with human referents with the function instrument are usually marked differently from nouns with inanimate concrete referents (see Luraghi 2003: 33–36).⁴

2.1 Case syncretism

The history of the Indo-European languages attests of an ongoing process of simplification of the case system, whereby concrete cases tended to be reduced, while grammatical cases were more likely to be retained. This process (i.e., simplification) is called case syncretism; it affected the case systems of virtually all Indo-European languages, albeit to different extents. As remarked, the general tendency in all the Indo-European languages was for grammatical cases to be retained longer than concrete cases: this tendency is in accordance with the stronger likelihood that cases code grammatical relations, rather than semantic roles (see Luraghi 1991).

The word 'syncretism' implies that cases are not simply lost, but rather 'mixed', in such a way that the functions of a case that has disappeared are taken over by some other case. In fact, this happened to different extents in different languages, as we will see in Latin and Greek. In some languages, the functions of cases that disappeared were taken over by adpositions, rather than by other cases. As will become clear in the course of the discussion, the likelihood that one or the other paths are followed is not dependent on the number of cases that were retained.

Proto-Indo-European is clearly far beyond the scope of this paper. For further discussion see Delbrück (1901).

3. The relevance of the partitive genitive for the development of Ancient Greek prepositional phrases is discussed at length in Luraghi (2003); see further below § 2.

4. In this respect Comrie (1986: 104) speaks of a 'correlation between linguistic markedness and situational markedness ... those constructions that involve less formal markedness linguistically correspond to those extralinguistic situations which ... are more expected'.

Traditional treatments of syncretism, such as classic Delbrück (1907) (but see further Meiser 1992) mostly assume that merger of different cases was partly brought about by phonological erosion, and was enabled by some sort of semantic similarity between them. In Luraghi (1987) I have shown that the similarity does not need to be semantic, but it can also consist in the fact of sharing the same syntactic function. Thus, one can distinguish between semantically based syncretism, and syntactically based syncretism. In such a framework, I have shown that case syncretism operated in quite different ways in Greek, where it was mostly semantically based, and in Latin, in which it was rather based on syntactic features of the cases involved. In particular, Latin cases that usually occurred with NPs that were syntactically adverbials all merged together and resulted in the so-called ablative. In other words, case syncretism in Latin, which involved merging of the Indo-European ablative, locative, and instrumental, was based on the frequency of these cases with adverbial NPs.⁵

In the discussion of the evidence that I will survey in the next Sections, we will see how these two different types of syncretism affected the local meaning of cases.

2.2 The sub-system of local cases

Local cases, i.e., cases that express spatial relations, such as location and source, are widely attested in the case systems of a variety of genetically unrelated languages. Local cases indicate the relative position of a trajector with respect to a landmark, and indicate whether the trajector is in motion or not.⁶ In many languages local cases can be viewed as constituting a sub-system within the wider frame of the case system of the specific language, because of the consistency among the semantic roles they express.

Among languages that display a big number of local cases we find, for example, Hungarian with nine cases that indicate both the position of the trajector, inside, near, or in contact with the surface of the landmark, and if the relation is static, or the trajector is in motion. Thus, in Hungarian there are three series of local cases, combining relative position and motion as shown in Table 1:

Table 1. Local cases in Hungarian.

	Location	Direction	Source
1 Interior	inessive	illative	elative
2 Proximity	adessive	allative	ablativ
3 Contact	supressive	sublative	delative

Other languages may display even more elaborate sub-systems of local cases, as shown in Stolz 1992 or Hjelmslev 1935.

As we will see, Ancient Greek developed a system for which the first two groups of relations (involving interior and proximity) were expressed with specific devices, but the first group relied on more distinctions.

Proto-Indo-European also had a sub-system of local cases that we can regard as 'basic': it consisted of three cases expressing the core spatial relations of location, direction and source, i.e., the locative, the accusative and the ablative respectively. From the distribution of prepositionless cases and cases with prepositions in Greek and Latin, one can argue that at least in these two languages – but this really seems to hold for the Indo-European languages in general – basic spatial relations correspond to the first group of local cases in Hungarian, i.e., inessive, illative, and elative. In other words, the default way of conceiving a spatial relation of a trajector with respect to a landmark was that in which the trajector was located relative to the landmark's interior (see Luraghi 2004a for a discussion of Homeric Greek in this respect).

According to Stolz (1992), who describes the system of local cases in several languages, the three spatial relations mentioned above are the ones that are most often encoded by cases: Stolz speaks of 'threefold' (*dreigliedrig*) systems of local cases as being basic. The fourth most frequently attested local case, the perlocative, which expresses path, is less frequent. In Proto-Indo-European, the instrumental case had a marginal function as perlocative, but this function is only relevant to a limited extent for Latin and Greek (for further discussion see Luraghi 2003: 20–27 and forthcoming).

Above, I have listed the accusative among grammatical cases and said that its function was mainly to indicate the direct object. The fact that grammatical cases could also have 'concrete' functions has been pointed out by several scholars, and I am not going to discuss the whole issue here; however, it must be remarked that, at least in the reconstructed system, the accusative was the only grammatical case that had such an important function in the sub-system of local cases. Simplifying, we can reconstruct the following system for Proto-Indo-European:⁷

5. Note that adverbials are not all semantically similar: typical semantic roles of adverbials include cause, instrument, time, location, etc.

6. This terminology is typical of Cognitive Grammar, see among others Taylor (1993) and Luraghi (2003).

7. I leave out the vocative, which did not have the function of expressing a semantic role or one of the core grammatical relations. Roles in parentheses are marginal with respect to other roles.

Table 2. The reconstructed case system of Proto-Indo-European.

	Nominative	Accusative	Genitive	Dative	Instrumental	Locative	Ablative
Grammatical relation	subject	direct object	nominal modifier	indirect object			
Spatial semantic role		direction			(path)	location	source
Non-spatial semantic role			partitive	beneficiary purpose	instrument comitative		(cause)

This table is by no means intended to be exhaustive. What I want to highlight with it is only that the accusative was the only grammatical case that had a clear and relevant role in the sub-system of cases expressing spatial relations.

3. Case syncretism in Ancient Greek

The Ancient Greek case system consists of five cases: nominative, accusative, genitive, dative, and vocative.⁸ At first sight, since all the cases I have listed in the 'concrete' group have disappeared, one could think that Greek cases were limited to the indication of grammatical relations, but this does not tell the whole story. On the one hand, it is true that Classical Greek heavily relied on prepositions, especially for spatial semantic roles, but on the other, as I will show below, grammatical cases were used in the place of concrete cases to a much larger extent than in the reconstructed system.

3.1 Locative

At a very early time, most likely before the earliest written sources, the dative merged with the locative in Greek.⁹ Note that this merger, as well as the merger of the dative-locative with the instrumental, illustrated in § 2.2, is clearly attested not only by the subsequent use of the dative, but by the origin of its morphological exponents as well. The endings

8. Throughout the paper, I use Ancient Greek (or simply Greek) when I refer to all Greek varieties attested in antiquity, and Classical Greek only when I refer to the literary language of the 5th and 4th centuries BCE.

9. See Delbruck (1907) and Luraghi (1987) on the semantic motivation for this merger.

of the dative case in Ancient Greek partly correspond to the endings of the dative, the instrumental, and the locative in the other Indo-European languages, thus attesting the morphological merger.¹⁰

In Homeric Greek, the dative can express location with certain types of inanimate NPs, i.e., toponyms (mostly city names), as in (1):

- (1) *Lakedaïmoni naietaôsēi.*
 Sparta:DAT live:PART.PRS.DAT.SG.F
 'to her, living in Sparta.' (Hom. *Il.* 3.387)

and further with nouns denoting portions of space, such as *agrōi* 'in the field', *pōntōi* 'in the sea', and nouns denoting social location, such as *trápezēi* 'at the table', and *mákhēi* 'in battle' as in example (2). (See Chantraine 1953. On the concept of social location, see Luraghi 2003: 66).

- (2) *geínato eito khéreia mákhēi*
 generate:AOR.MID.3SG DEM.GEN.M inferior:ACC battle:DAT.F
agorēi de t' amēinō.
 assembly:DAT.F PTC PTC better:ACC

'(the son that) he generated is worse than he in battle, though in the place of gathering he is better.' (Hom. *Il.* 4.400).

Example (2) also shows that the plain dative can have a locative meaning even in occurrences in which the NP in the dative is an adverbial, i.e., when its semantic function is not in some way specified by the verb.

Most often, and even as early as Homer, the dative is associated with the preposition *en* when it expresses location, both with the types of NP above, and with others:

- (3) *en Lakedaïmoni aúthi philēi en patriđi gaīi.*
 in L.:DAT there dear:DAT.F in homeland:DAT.F earth:DAT.F
 'there in Sparta, in their native land!' (Hom. *Il.* 3.244).

In post-Homeric prose, virtually all types of NP regularly take *en* in location expressions.

3.2 Instrumental

I will briefly illustrate the development that involved the instrumental case, because it is relevant for the rest of the discussion, as will become apparent in this Section.

10. On the origin of the Greek dative endings see Chantraine (1961); see further Hajnal (1995) on the possibility that a separate locative was still attested in Mycenaean.

The instrumental case was retained in Greek at least until the end of the second millennium BCE. In the Mycenaean tablets (around 1150 BCE) there are clear traces of a separate ending for this case in most paradigms (see Hajnal 1995 & Luraghi 2004b). However, in the centuries that separate Mycenaean Greek from the next written sources, i.e., the Homeric poems, the instrumental case merged with the dative.¹¹

The Indo-European dative had a limited use to express purpose with inanimate nouns; in general, however, the dative was most frequently associated with animate NPs, both in its grammatical (indirect object with trivalent verbs), and in its concrete function (beneficiary, so-called 'free dative'). The association of the dative with animacy was so relevant, that even some bivalent verbs that typically took animate second arguments, such as 'help', usually occur with the dative in the Indo-European languages.¹²

In Greek the dative of purpose is only marginally attested (see Schwyzler 1965: 139–140). Most inanimate NPs in the dative express instrument, or some other types of semantic role related to instrument, such as cause or manner, without further need of being specified by prepositions (unless they denote a portion of space, as shown in § 2.1; see further Luraghi 2003: 63–72, where I also discuss the semantic motivation for the merger of the instrumental with the dative-locative). Examples are *lógōi* and *érgōi* in (4):

- (4) *oúte lógōi oúte érgōi éblapsa oudéna*
 neither word:DAT nor deed:DAT damage:AOR.1SG none:ACC
tôn katégoroúntōn
 ART.GEN.PL accuse:GEN.PL
 'I did not damage any of my accusers, either with my words or with my deeds.'
 (Lys. 9.14).

3.3 The allative accusative

In Homeric Greek, some of the NPs that can occur in location expressions with the dative and do not need to be specified by prepositions (mostly nouns with spatial reference rather than toponyms) may also occur in direction expressions with the accusative, again without prepositions.¹³

11. The semantic motivation for this merger lies in the affinity between the instrumental and the locative value of the dative, see Luraghi (2003: 51–52, 66–67).

12. The association of the dative with animacy has long been acknowledged, see for example Havers (1911) for an early reference.

13. City names and some other toponyms occur in direction expressions with the prepositionless accusative mostly accompanied by the directive suffix *-de*, a particle that was productively used only in Homeric Greek, see Chantraine (1953).

- (5) *hikómetha dómata patrós.*
 go:SUBJ.AOR.1PL.M/P palace:N/A.PL father:GEN
 'let's go to the father's palace.' (Hom. *Od.* 6.296).

As seen for the dative, the accusative also tended to be specified by a preposition, *eis*. This was already true in Homeric Greek; the preposition was also used regularly after Homer:

- (6) *apébesan eis Marathóna.*
 disembark:AOR.3PL in M.:ACC
 'they went ashore in Marathon.' (Lys. 2.21).

3.4 The prepositions *en* and *eis*

The preposition *en* is one of the most widely attested adpositions/preverbs of the Indo-European languages, and it is cognate with English *in* among others.¹⁴ In Homeric Greek, as well as in Classical Greek, *en* could only take the dative. Clearly, this was a heritage of the ancient Indo-European locative that, as seen above, had merged with the dative.

In the other Indo-European languages, however, cognates of *en* could also take the accusative and express direction. The alternation between location and direction, indicated by the accusative and the locative (or the case that replaced it), is quite typical of the Indo-European languages, and is still present for example in German (see below, § 3, for Latin *in*):

- (7) *Hans wohnt in der Stadt.*
 Hans lives in the:DAT town
 'Hans lives in the town.'
- (8) *Hans fährt in die Stadt.*
 Hans drives in the:ACC town
 'Hans drives into town.'

Besides being attested to in the most widespread literary dialects, i.e., Ionic and Attic, Ancient Greek is also known to us from a variety of sources, in large part epigraphic, written in different vernaculars. Some of them attest to the use of *en* (or the cognate *in*) with both the dative and the accusative. This is the case in Arcado-Cypriot, where the same preposition *in* can take the dative and express location, or the accusative and express direction, i.e., in connection with case alternation, it has both the function of Attic-Ionic *en* and the function of Attic-Ionic *eis*. Other dialects in which *en* occurs

14. Preverbs constitute a separate word class in the Indo-European languages, see Delbrück (1901). In Proto-Indo-European, they could function as independent adverbs, verbal prefixes, and adpositions (mostly prepositions). The three-fold usage was still preserved in Homeric Greek, see Chantraine (1953: 82–86).

with both cases and expresses both location and direction are Thessalian, Beotian, Northwest Greek, and Elean.

The preposition which is commonly spelled *eis* (or *es* in Ionic) derives from *en* through the addition of *-s*. The form *ens* is also attested in the dialect of Crete; elsewhere the nasal has disappeared, determining compensatory lengthening of the vowel (the spelling *ei* stands for [e:]). Even in literary Attic-Ionic we find traces of the original situation, in which only *en* existed: for example, as a verbal prefix *en-* often occurs with motion verbs (for further details on the development of *en* and *eis* see Schwyzer (1965: 454–457)).

The newly created preposition *eis* only occurred with the accusative and denoted direction. I am going to discuss further the effect of this development below, in § 2.6, but before doing so I will illustrate the destiny of the Indo-European ablative.

3.5 Ablative

Contrary to cases seen so far, the ablative has a limited distribution in the Indo-European languages. As an independent case, with specific endings, it is only attested in Indo-Iranian and Anatolian. Latin also has a case commonly known as ablative, but, from the point of view of its function, this case is rather related to the Indo-European instrumental, as we will see below, § 4.1.¹⁵ In Sanskrit, the ablative has separate endings only in the declension of *-a-* stems; in all other paradigms it merged with the genitive. In Balto-Slavic, prepositions that denote ablative relations regularly take the genitive. The same happens in Ancient Greek, so the Greek genitive is considered the merger of the Indo-European ablative with the Indo-European genitive; but, contrary to what one can see for the dative, there is no morphological evidence for this merger (see Chantraine 1961). In other words, while the endings of the dative do in fact correspond to the endings of dative, locative, and instrumental in other Indo-European languages, the endings of the genitive only correspond to the endings of the same case elsewhere.

The ablative use of the prepositionless genitive is attested to especially in connection with certain verbs:

- (9) *eike, Diòs thúgater, polémou kai dēiôtētos.*
 flee:IMPRT.PRS.2SG Z::GEN daughter:VOC war:GEN and fight:GEN
 'O daughter of Zeus, flee from the battle and the fight!' (Hom. *Il.* 5.348).

15. Morphologically the Latin ablative can be shown to be the merger of the Indo-European locative, ablative and instrumental, see Prat (1975).

As shown in (10), it was already true in Homer that when a NP expressed source, and this was not clearly indicated by the verb, the genitive tended to be specified by the preposition *ek* 'out of':¹⁶

- (10) *elthōnt' ek polémou kai ainēs dēiôtētos.*
 come:PART.PRS.M out-of war:GEN and fearful:GEN fight:GEN
 'coming from the battle and the fearful fight' (Hom. *Il.* 5.409).

It is remarkable that the possibility for the genitive to denote source is dependent on the verb, while the possibility for the dative to denote location and for the accusative to denote direction is rather dependent on lexical features of the NPs involved. Besides, especially in the case of the dative, independence of the locative meaning from the verb is also shown by the fact that dative NPs with spatial referents can have locative meaning also when they function as adverbials. This never holds for the ablative genitive: genitive NPs which are syntactically adverbials never express source (see Luraghi 2003: 60–61).

This lesser autonomy of the ablative genitive depends on the fact that the genitive was widely used as a partitive in Ancient Greek. In particular, genitive adverbials may have a partitive reading; consequently, the ablative meaning is not possible. As such, the genitive could also occur in location expressions:¹⁷

- (11) *ē ouk Árgeos éen ...?*
 PTC not A::GEN be:IMPF.3SG
 'was he not in Argos?' (Hom. *Od.* 3.251).

Example (11) can be compared with (1), where the dative occurs: the dative NP *Lakedaimoni* in (1) and the genitive NP *Árgeos* in (11) both express location. The great relevance of the partitive meaning for the use of the genitive in reference to space is visible especially in the development of prepositional phrases; and had the consequence that the ablative meaning of the genitive in spatial expressions was limited even with prepositions, as I have argued at length in Luraghi (2003). For this reason,

16. Another Greek preposition, *apó* 'from', is also frequently used in source expressions; however from the distribution of *ek*, and of the prepositionless dative and accusative, as well as of the same cases with *en* and *eis* in Homeric Greek, one can conclude that it was *ek*, rather than *apó*, that stood on the same plane as the other two prepositions (this is also true from the etymological point of view, since *ek* means 'out of', i.e., it denotes elative rather than ablative, and similarly the basic meaning of *en* was inessive and the basic meaning of *eis* was illative). In later Greek the use of *apó* tended to extend at the expense of *ek*, see Luraghi (2003: 123–130).

17. The partitive genitive in location expressions indicated special features regarding the internal structure of the landmark, i.e., that the landmark was conceived of as multiplex discontinuous in the terminology of Talmy (2000), see the detailed discussion in Luraghi (2003).

for example, Greek had prepositional expressions based on case variation for relations of proximity, but not for relations of contact with the surface of the landmark (i.e., for group 2 in Table 1, but not for group 3), as we will see in the next Section.

3.6 Prepositions and basic spatial relations

Summarizing the discussion in the preceding Sections, one can say that in Classical Greek, in spite of syncretism, the sub-system of local cases continued with its tripartite structure, whereby basic spatial relations were expressed through simple and univocal expressions. With respect to the reconstructed system of Proto-Indo-European, in Greek we find precise equivalents of the cases that built the local sub-system:

Table 3. Spatial relations in Proto-Indo-European and in Ancient Greek.

Indo-European	Homeric Greek	Classical Attic-Ionic	Semantic role
locative	(<i>en</i>)-dative	<i>en</i> -dative	location
accusative	(<i>eis</i>)-accusative	<i>eis</i> -accusative	direction
ablative	<i>ek</i> -genitive	<i>ek</i> -genitive	source

With regard to cases only, one can note that the genitive and the dative, i.e., two grammatical cases (see above § 1), have taken over a spatial function that they did not have in Proto-Indo-European, thus becoming symmetrical to the accusative in this respect. Consequently, one can re-design the relevant part of Table 2 as in Table 4:

Table 4. Grammatical and spatial functions of cases in Ancient Greek.

	Accusative	Genitive	Dative
Grammatical relation	direct object	nominal modifier	indirect object
Spatial semantic role	direction	source	location

Ancient Greek had a variety of prepositions, and the value of cases within prepositional phrases is not simple to describe, especially on account of the wide prepositional usage of the partitive genitive. Consequently, one cannot generalize and say that the three cases (accusative, genitive, and dative) always continued the Proto-Indo-European accusative, ablative, and locative when they occurred with prepositions in spatial expressions: indeed they did this to a quite limited extent (see Luraghi 2003). However, at least in the case of the preposition *pará* '(near)by', this is exactly what happens:

- (12) *pár dé hoi hestēkei Sthēnelos.*¹⁸
 by PTC him stand:AOR.3SG S.:NOM
 'Sthenelos stood by him' (Hom. *Il.* 4.367);
- (13) *keithen dé Spártēnde pará xanthōn Menélaon.*
 thence PTC S.:ACC+PTC by fair:ACC M.:ACC
 'and thence (go) to Sparta, to fair Menelaos' (Hom. *Od.* 1.285);
- (14) *pár Zēnōs Olumpiou eilélouthen.*
 by Z.:GEN Olympian:GEN come:AOR.3SG
 'came back from the Olympian Zeus' (Hom. *Il.* 15.131).

Pará indicates that the trajector is located in the vicinity of the landmark, while the basic prepositions *en*, *eis*, and *ek* tend to take landmarks that can be conceived of as containers (see Luraghi 2004a), and indicate that the trajector is located at the interior of the landmark. Thus *pará* was often associated with human landmarks, as shown in the above examples. In Homer, other types of landmark occurred as well, with all three cases, while later on, in Attic-Ionic prose, the dative and the genitive virtually only occur with human landmarks; the accusative too was limited to human landmarks when denoting direction.¹⁹

Thus, reinforcing the spatial meaning of cases with prepositions, Greek had a rather elaborate sub-system of exponents of local relations, in which the group of relations that involve the inner part of the landmark has more distinctions, relying not only on variation among three cases, but on three distinct prepositions as well, while the group of relations that involved the landmark's proximity was encoded through case variation with the same preposition.

As I have remarked at the end of § 2.6, the three cases involved in spatial expressions, when occurring with different prepositions in Greek, correspond to the relations expressed by Hungarian local cases only in part, i.e., limited to the relations of type 1 and 2 in Table 1 (relations of containment and of proximity). In principle, one could expect that case variation with *epí* 'on' could express the group of relations involving the landmark's surface (corresponding to Hungarian superessive, sublative, and delative, group 3 in Table 1), but this is not the case. Indeed, the genitive with *epí* never functioned as an ablative, but had partitive value instead (see Luraghi (2003: 298–313). Consequently, *epí* with the dative and *epí* with the accusative correspond to some

18. The form *pár* contains apocope.

19. This preposition also had a wide use with the accusative and inanimate NPs, with the meaning 'along'. See Luraghi (2003: 131–145) for an exhaustive account of the use and meanings of *pará*.

extent to the superessive and the sublative case, but there is no correspondence for the delative.

3.7 Summary

In the above paragraphs, I have shown how case syncretism operated in Greek, taking the reconstructed Proto-Indo-European case system as a starting point. I have argued that reduction of the cases system, which involved disappearance of the instrumental, the locative, and the ablative, did not result in a complete loss of local cases. Rather, the functions of these cases were redistributed among the remaining ones. In particular, the functions of the instrumental and of the locative were taken by the dative, which could express instrument or location depending on the lexical features of the NPs involved. To a limited extent, the function of the ablative was taken by the genitive; the ablative value of the genitive was limited because the genitive also often functioned as partitive.

Most often, cases in spatial expressions were reinforced by prepositions. In Classical Greek, the three basic spatial relations, location, source, and direction, are encoded by means of three different prepositions, *en*, *eis*, and *ek*, each taking a different case: the dative for location, the accusative for direction, and the genitive for source. When the same spatial relations hold with reference to the proximity of a landmark, they are still connected with the three cases, together with the preposition *pará* 'nearby'.

4. Case syncretism in Latin

The Latin case system includes six cases: nominative, accusative, genitive, dative, ablative, and vocative. Limited to some toponyms and a few nouns with spatial reference, Latin also had a separate locative. At first sight, the Latin case system looks more conservative than the Greek one, but, as will become clear in the discussion of the data, this was not the case.

As already remarked in Section 1.1, case syncretism followed quite different paths in Latin and in Greek. In Latin, grammatical cases did not take over the spatial functions of the concrete cases that were lost: much to the contrary, all concrete cases merged together into the ablative. In other words, grammatical cases did not develop a new function in the encoding of spatial relations as they did in Greek. Latin cases are indicators of syntactic functions to a larger extent than Greek cases (See Pinkster 1985 and Serbat 1989).²⁰

20. Again, this is a generalization, even for grammatical cases. In particular, the dative, which did not acquire any new functions, retained the possibility to express purpose with inanimate (mostly abstract) NPs, and in such occurrences its primary function was to express a

4.1 The Latin ablative

The most typical function of the ablative without prepositions was not to denote source (as its name seems to imply) or any other spatial relation, but rather to denote instrument, as *ferro* and *voce* in (15), to be compared with *lógoi* and *érgoï* in (1):

- (15) *quos ferro trucidari oportebat, eos*
REL.ACC.PL iron:ABL kill:INF.P need:IMPF.3SG DEM.ACC.PL
nondum voce vulnero.
not.yet voice:ABL wound:PRS.ISG

'I do not yet attack, even by words, those who ought to be put to death by the sword.' (Cic. *Catil.* 1.9).

The ablative value of the ablative is mostly visible with verbs that require some sort of source expression, such as *liberare*:

- (16) *senatum et bonos omnis legis agrariae*
senate:ACC and good:ACC.PL all:ACC.PL law:GEN agrarian:GEN
metu liberavi.
fear:ABL free:PF.1.SG

'I delivered the senate and all virtuous citizens from the fear of an agrarian law.' (Cic. *Pis.* 4).

In spatial expressions not directly required by the verb, the prepositionless ablative mostly occurs with specific toponyms (city names and names of small islands), but its function depends on the inflectional class of the noun: with nouns of the first two declensions, which have a separate locative in the singular, the ablative mostly expresses source, while with nouns of the other declensions, as well as with plurals of all declensions, the ablative can express either source or location, as in:²¹

- (17) *dicam Athenis advenisse cum amatore aliquo*
say:PRS.ISG A.:ABL.PL come:INF.PF with lover:ABL INDEF.ABL
suo.
POSS.3SG.ABL

'I say she came from Athens with a lover of hers.' (Pl. *Mil.* 239);

semantic role, rather than a grammatical relation, in much the same way as in the occurrences in which it expressed beneficiary with animate NPs. See further Luraghi (forthcoming).

21. Various city names were *pluralia tantum*, such as *Athenae* 'Athens', *Syracusae* 'Syracuse', etc.

- (18) *si ego emortuosissim, Athenis te sit*
 if I die:SUBJ.PF.1SG A.:ABL.PL YOU:ABL be:SUBJ.PRS.3SG
nemo nequior.
 nobody:NOM worse:NOM
 'if I'm dead, there will be no one worse than yourself in Athens.' (Pl. *Pseud.* 339).

With other types of NP, basic location is expressed by *in* with the ablative, on which I will return below, § 3.3. It must be stressed that the locative was not only lexically restricted, but, to some extent, not even obligatory: apparently, nouns of the second declension were losing it in the 2nd century BCE already, and only nouns of the first declension preserved it longer.²² Besides, already in Early Latin, toponyms of the first two declensions could occur in location expressions with *in* and the ablative.²³

4.2 Toponyms

As has already been remarked, the singular of city names and names of small islands belonging to the first (-ā- stems) or second (-o- stems) declension, and a few other nouns, retained a separate locative case. Thus, such Latin toponyms were very conservative in that they could occur within spatial expressions without prepositions and continued the tripartite sub-system of Proto-Indo-European. We find for example: *Romae* (LOC.) 'in Rome', *Romā* (ABL.) 'from Rome', and *Romam* (ACC.) 'to Rome'. The locative of first and second declension nouns is homophonous with the genitive, while the locatives *ruri* 'in the field' from *rus*, and *domi* 'at home' from *domus*, that belonged to the third and fourth declension, were different from the genitive too.

This system was somewhat confused by the fact that, as already remarked, toponyms of the third, fourth, and fifth declension, as well as nouns of the first two declensions in the plural did not have a separate locative, and used the ablative instead; so only the context could indicate whether such a toponym in the ablative expressed location or source, as shown in examples (16) and (17) above.

On the other hand, the prepositionless accusative only expressed direction with toponyms of all inflectional classes, as shown in:

22. According to Löfstedt (1956: 75), the reason why the locative was preserved longer in -ā- stems was that the name *Roma* belonged to this declension, and the expression *Romae* 'in Rome' must have been a very frequent one: frequency of use preserved the form.

23. Indeed the rule by which toponyms did not take prepositions in space expressions was much more consistently followed in the highly artificial language of Classical writers than in Early Latin, see Bennett (1914) and Luraghi (forthcoming).

- (19) *his proximi habiti legati*
 DEM.DAT.PL next:NOM.PL stand:PART.PF.NOM.PL legate:NOM.PL
tres qui Athenas ierant.
 three:NOM.PL REL.NOM.PL A.:ACC.PL go:PPF.3PL
 'next to them were placed the three commissioners who had gone to Athens.' (Liv. 3.33.5).

Consequently, there was little symmetry between the local use of the accusative and the local use of the ablative: whereas the prepositionless accusative was connected with a specific spatial relation, the prepositionless ablative was not.²⁴

4.3 Cases and prepositions

As I have already mentioned in § 3.1, apart from a limited number of exceptions the ablative case took the preposition *in* in location expressions and the preposition *a(b)* in source expressions in Latin. In direction expressions, *in* occurred with the accusative.

Case alternation was far from systematic in Latin prepositional phrases, being limited to three prepositions, *in*, *sub* 'under', and *super* 'over'. With other prepositions, either the ablative or the accusative was obligatory; virtually all prepositions that only took the ablative and had spatial reference denoted source, rather than location. Thus, the association of the semantic role location with the ablative case was only partly reinforced by the usage of the prepositional ablative. Indeed, most prepositions that only took the accusative could occur both in direction and in location expressions, depending on the context:

- (20) *proelium factum sit ad Magetobrigam.*
 battle:N/A happen:SUBJ.PF.3SG.P at M.:ACC
 'there was a battle by Magetobriga.' (Caes. *Gal.* 1.31.12);
- (21) *quorum saepe et diu ad pedes iacuit.*
 REL.GEN.PL often and long at foot:ACC.PL lie:PF.3SG
 'at whose feet he often lay, and that for a long time.' (Cic. *Quint.* 96);
- (22) *sese omnes flentes Caesari ad*
 REFL all:NOM.PL weep:PART.PRS.NOM.PL C.:DAT at
pedes proiecerunt.
 foot:ACC.PL throw:PRET.3PL
 'they all threw themselves at Caesar's feet.' (Caes. *Gal.* 1.31.2).

24. Note further that, to a certain extent, the prepositionless ablative could even express path with certain nouns, such as *porta* 'gate', see Luraghi (forthcoming).

Furthermore, *in* with the accusative could denote location with abstract nouns:

- (23) *quae in amicitiam populi Romani*
 REL.NOM.PL in friendship people:GEN Roman:GEN
dicionemque essent.
 subjection:ACC-and be:SUBJ.IMPF.3PL

'which are allies and subjects of the Roman people.' (Cic. *div. in Caec.* 66).

Clearly, the possible semantic contribution of cases to the meaning of Latin prepositional phrases was completely different to their contribution in Greek, for at least four reasons:

- some Latin toponyms had a separate locative, but this case did not occur within any type of prepositional phrase;
- consequently, since the locative could not occur with prepositions, no preposition could take the three local cases and denote three different spatial relations, as *pará* did in Greek;
- with toponyms that had no locative, the ablative could denote both location and source, so it was not clearly associated with one and the same spatial semantic role;
- with prepositions that had no case alternation, the ablative mostly occurred in source expressions, while the accusative occurred both in location and in direction expressions.

4.4 Summary

In the preceding Sections I have discussed case syncretism in Latin. I have shown that the Latin ablative does not have a clear correspondence with a specific semantic role in spatial expressions. In fact, the Latin ablative can express either location or source, limited to toponyms and in association with verbs that require either local complement. The locative case is limited to some inflectional classes, and never occurs with prepositions. Furthermore, case alternation is limited to few prepositions; with other prepositions, the accusative can occur both in location and in direction expressions. As a consequence, there is no clear association of specific cases with any spatial semantic roles in Latin.

5. Comparison of the two languages

From the evidence adduced in the preceding Sections, it is apparent that the sub-system of local cases in Greek and Latin was quite different. In fact one could even say that only Greek actually had a sub-system of local cases. As we have seen in § 2, even in Homer, cases could appear without prepositions to a limited extent only – the

ablative genitive was even more restricted than the locative dative and the allative accusative – so prepositions had a relevant role in the coding of spatial relations. However, cases retained their independent meaning to a certain extent, as shown by their occurrence with *pará*.

The Greek subsystem of local cases was structured as follows:

Table 5. Coding of spatial relations in Ancient Greek.

	Location	Direction	Source
1 Interior	<i>en</i> -dative	<i>eis</i> -accusative	<i>ek</i> -genitive
2 Proximity	dative	<i>pará</i> accusative	genitive

In Latin, on the other hand, only a small number of nouns retained a three-fold system of local cases that could denote spatial relations without prepositions. In general, the usage of the preposition *in* implies a certain degree of merger of location and direction: only case variation keeps the two roles distinct, but even with *in* it seems to be partly redundant, as shown by occurrences such as (23); with most other prepositions the distinction between direction and location must be understood from the context, and is not connected with case variation. Besides, toponyms that do not have a separate locative attest to the typologically infrequent merger of location and source, since the ablative can express both semantic roles, as shown by occurrences such as (17) and (18).²⁵

Table 6. Lexically restricted coding of spatial relations in Latin

(a) singular toponyms of 1st and 2nd declension

Location	Direction	Source
locative	accusative	ablative

(b) other toponyms

Location/Source	Direction
ablative	accusative

Table 7. General coding of spatial relations in Latin.

	Location/direction	Source
	<i>in</i>	<i>ab</i> -ablative
ablative	accusative	

25. See Stolz (1992: 120–121). Several examples of merger of locative and ablative in presence of a separate allative are reviewed in Lachlan Mackenzie (1978).

Note that Latin could not have a way of coding spatial relations based on proximity by means of the same preposition with case variation (as Greek *pará*) because, as I have repeated, no preposition could take the locative, and case alternation was limited to two cases, i.e., the accusative and the ablative.

The contrasting situation in Greek and Latin is connected with two different types of syncretism, described above, in § 1.1. In Greek, semantic factors played a prominent role in the merger of cases, while in Latin syncretism was mostly conditioned by syntactic factors. As a consequence, and in spite of the fact that the Ancient Greek case system contains fewer distinctions than the Latin case system, Greek cases play an important role in the expression of semantic roles.

The relevance of cases for the expression of semantic roles in Greek can be seen especially within certain prepositional phrases. Indeed, if we limit our observation to plain cases, the difference between Greek and Latin seems smaller. Both Latin and Greek display a special case for the semantic role instrument (the Latin ablative and the Greek dative); this case can also occur in local expressions under similar lexical constraints (with toponyms and with certain nouns), while the accusative case can express direction in both languages, again with lexical constraints. Note that the local usage of the Greek dative is more limited in this respect, because plain cases in local expression only occur in the Homeric poems or in poetry. The most important difference between Latin and Greek, considering the local function of plain cases, lies in the fact that singular toponyms of the first two declensions in Latin have a locative case, while other nouns do not. As a consequence, only singular toponyms of the first two declensions have three distinct local cases (locative, accusative, and ablative), which express the three basic local semantic roles (location, direction, and source). In Greek, all nouns had a separate dative, accusative and genitive, so at least in principle the correspondence between morphological case and semantic roles was not dependent on inflectional classes.

However, if we turn to prepositional phrases, the difference between Latin and Greek becomes much clearer. Latin prepositions tend to take only one case: case variation is very limited, and the distinctions conveyed by different cases can also be understood from the context (for example, by the occurrence of a motion verb or of a verb of rest). In other words, cases are mostly redundant within prepositional phrases in Latin (see Luraghi 1989).

A further difference between Latin and Greek, which also holds for Latin prepositions that allow for case variation, is constituted by the fact that the Latin locative case never occurs with preposition. This means that a preposition can occur with two cases at the most, and can occur in expressions that involve two semantic roles, rather than all three basic spatial roles. Greek prepositions can take three cases; in the case of *pará*, I have shown that the same preposition can occur in location, direction, and source expressions, depending on the case.

The role of the verb and the syntactic function of local expressions deserve some more comments. Local expressions can be arguments of the verb or adverbials. Indeed, direction expressions usually occur with motion verbs, and are most often arguments of the verb, while location expressions may be arguments, as in (1), but they may often be adverbials (see Luraghi 1989). In the case of the Greek dative, I have shown in example (2) that the syntactic function of the NP did not affect its possible usage in location expressions. Indeed, the plain dative of certain nouns could express location, both inside and outside the verbal valency, at least in Homer. In the case of source expressions, I have shown that Greek tends to use prepositional phrases already at an early time (i.e., in Homer), unless the semantic role source is clearly required by the verb. I have argued that this peculiarity of the ablatival genitive is connected with the fact that a plain genitive is often interpreted as a partitive.

6. Recapitulation

In the present paper I have described the way in which the basic spatial relations location, direction and source were coded in Ancient Greek and in Latin. I have shown that, in spite of a smaller number of cases, Greek preserved the Proto-Indo-European sub-system of local cases to a larger extent than Latin. This difference ultimately goes back to different patterns of syncretism that underlie the merger of different cases in the two languages. While in Greek case semantics played a major role, in Latin it was the most frequent syntactic function of NPs in the locative, ablative and instrumental that determined their merger. Because such NPs most frequently had the function of adverbials, rather than arguments, they merged together into the so-called ablative.

List of abbreviations

Grammatical glosses

ABL	ablative	INDEF	indefinite
ACC	accusative	INF	infinitive
AOR	aorist	M	masculine
ART	article	MID	middle
DAT	dative	M/P	medio-passive
DEM	demonstrative	N/A	nominative/accusative
F	feminine		neuter
GEN	genitive	NOM	nominative
IMPF	imperfect	P	passive
IMPT	imperative	PART	participle

PF	perfect	Hom.	Homer
PL	plural	Liv.	Livy
PPF	pluperfect	Lys.	Lysias
POSS	possessive	Pl.	Plautus
PRET	preterite		
PRS	present	Works	
PTC	particle	<i>Catil.</i>	<i>Against Catilina</i>
REFL	reflexive	<i>div. in Caec.</i>	<i>Divinatio against Q. Caecilius</i>
REL	relative	<i>Gal.</i>	<i>The Gallic War</i>
SG	singular	<i>Il.</i>	<i>Iliad</i>
SUBJ	subjunctive	<i>Mil.</i>	<i>Miles Gloriosus</i>
VOC	vocative	<i>Od.</i>	<i>Odyssey</i>
		<i>Pis.</i>	<i>Against Piso</i>
		<i>Pseud.</i>	<i>Pseudolus</i>
		<i>Quint.</i>	<i>Letters to and from Quintus</i>
Classical authors			
Caes.	Caesar		
Cic.	Cicero		

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