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Adverbials

1. Formal and syntactic aspects

Adverbials are sentence constituents not required by the verbal valency. In Latin, several types of constituent can carry the function Adverbial,¹ namely, noun phrases, prepositional phrases, adverbs, and subordinate clauses. In the present chapter, I limit myself to the description of the syntax of noun phrases and prepositional phrases functioning as adverbials.

In principle, adverbial modifiers included in this chapter are NPs and PPs not required by the valency of the verb. Note, however, that the status of a NP or a PP as argument or adverbial is not always easy to decide. In particular, NPs and PPs expressing local relations are often complements of certain verbs, and they are syntactically closer to arguments than to adverbials. Cabrillana (1997a, 1997b) discusses the syntactic function of NPs and PPs that co-occur with *eo* and *uenio* and denote Direction. Based on her data, such constituents would profit from a scalar definition of syntactic functions. In the present chapter, I take into account all types of NPs and PPs denoting spatial relations, even in cases where they belong in the valency of the verb, because they are often formally identical to adverbials bearing the same semantic roles. However, some formal differences do emerge: for example, the so-called “dative of approach” is virtually limited to the complements of certain verbs, mostly compounds such as *appropinquo*.² Furthermore, plain cases in spatial expressions occur more easily on the Argument level than on the Adverbial level, as for example in the case of the plain ablative, which occurs without lexical restrictions on the NP in Source expressions limited to verbs that requires a Source expression (for example, with verbs that have a prefix like *de-* or *a(b)-*). In other cases, such as with certain toponyms, it occurs as Adverbial (see the discussion of (6) below).

Typical adverbials occur in (1)–(2):

- (1) Caes. *Gall.* 5,50: ***prima luce*** *hostium equitatus ad castra accedit*
'at dawn the enemy's cavalry reached the camp'

1. Names of grammatical relations and semantic roles are capitalized when they refer to the function and not capitalized when they refer to a specific instantiation of the function.

2. See Hofmann & Szantyr (1965: 98–99) and Van Hoescke (1996); see further example (28) below.

- (2) Caes. *Gall.* 5,46: *exit cum nuntio Crassus*
'Crassus left with the ambassador'

In (1) an NP, *prima luce*, gives information about the temporal setting of the event. In (2) a PP, *cum nuntio*, modifies the verb phrase: it adds information regarding the participant that accompanies the agent. Adverbials of the type in (1) and (2) are also called "adjuncts".

Adverbials that modify a whole sentence are called "disjuncts". As shown by Pinkster (1995: 40–46), disjuncts form a heterogeneous class; often, we find adverbs or clauses in the function disjunct. An example of an NP, also given by Pinkster (1995: 42) is (3):

- (3) Sall. *Iug.* 24,2: *non mea culpa saepe ad vos oratum mitto*
'it is not my fault that I often address an appeal to you'

2. Semantic roles of adverbials

In the remainder of this chapter, I describe various types of adverbials following a classification of semantic roles worked out in Luraghi (2003a), mostly on the basis of Ancient Greek data. Not all possible semantic roles are grammaticalized in any language: accordingly, the classification that I adopt in this chapter is a revised version of Luraghi (2003a), based on what appears to be relevant for Latin. One of my basic assumptions, which has been demonstrated in detail for Latin by de la Villa (2001a), is that semantic roles are prototypical categories. The prototypical nature of semantic roles implies that various possible adverbials cannot be rigidly classified and forced into a certain category; in the meantime, it is of doubtful value to multiply semantic roles based on a set of rigidly distinguished features. It seems much more fruitful to allow for nonprototypical instantiations of semantic roles, in cases where a certain expression only meets part of the requirements for prototypical items.

I further assume that markers of semantic roles, that is, cases and adpositions, are meaningful elements and explain their usually high degree of polysemy in terms of affinities among semantic roles. I take the domain of space as basic for human cognition; consequently, I assume the use of cases and adpositions in local expressions to be basic and view their uses in more abstract domains as derived from their local meaning through metaphoric or metonymic processes. Following the terminology current in cognitive grammar, I describe the relation denoted by a certain case or adposition as holding between a foregrounded entity (the trajector, or figure) and a backgrounded one (the landmark, or

ground).³

Finally, it must be stressed that this is not a full list of all the most relevant semantic roles, but that it only includes the semantic roles possibly assigned to adverbials; in any case it does not include the semantic roles of constituents that are treated elsewhere in this volume. In particular, I do not discuss such semantic roles as Patient, Recipient/Addressee, and Possessor.

3. Space

The spatial relations discussed in this section include Location, Direction, Source, and Path.

Syntactically speaking, these four semantic roles are not all, and not always, on the same plane. In particular, Location is possibly argumental with verbs like ‘be’, ‘stand’, ‘abide’, as in (4):

- (4) Liv. 2,64,10: *cum manere in tentoriis quietum militem iussisset*
‘having ordered the troops to remain calm in their tents’

However, most frequently it is adverbial, as in (5):

- (5) Liv. 6,28,5: *dum conscribitur Romae exercitus*
‘while the army is being enrolled in Rome’

Source and Path seem to be mostly adverbial as well. This holds for Path more than for Source, which may be argumental with verbs that imply motion away from something, as with the verb *expellere* in (6):

- (6) Cic. Att. 10,4,1: *nisi me civitate expulissent*
‘if they had not expelled me from the state’

Note that *civitate* is a Source expression in the plain ablative. Usually, Source adverbials take some preposition, such as *ab*, *ex*, or *de*, unless they contain certain toponyms. The occurrence of the plain case in this example is made possible by the verbal meaning. This points toward a different syntactic status of this Source expression with respect to those where prepositions occur: most likely *civitate* in (6) is an argument of the verb, rather than an adverbial.

Direction mostly seems to be argumental, since it typically occurs with motion verbs, which are often held to be bivalent predicates.⁴ A typical Direction expression is *ad castra* in (1). The verb

3. For this approach to the meaning of prepositions see Taylor (1993) and Luraghi (2003a).

4. See Cabrilla (1997a, 1997b).

accedo in the meaning ‘to reach, to get close’ occurs only once without any Direction expression in Caesar (see Meusel 1887, s.v.). Most often, the Direction expression is a PP with *ad*, as in this case; at other times it can be a local adverb. Under such circumstances, the Direction expression is more like an argument than an adverbial.

From the above remarks, one can draw a scale along which NPs and PPs denoting local relations are closer to arguments or to adverbials (Figure 1).⁵

An interesting issue raised by Latin in the field of spatial relations is the use of plain cases versus PPs. It is well known that plain cases only occur with some toponyms and a restricted number of other nouns, mostly with spatial reference, and that their use partly involves retention of an otherwise lost case, the locative. The issue is further complicated by the fact that the locative only survives in the first and second declension (in which it merges with the genitive), while nouns of the third declension use the ablative in its place. So for nouns of the third declension, the ablative can express Location and Source (this happens to some extent in the second declension, too, see Section 3.1). With this situation one would expect an increase in the use of prepositions; however, this is apparently not the case until very late: in some semantic roles (e.g., Source with nouns that denote spatial regions), the use of plain cases increases after Plautus.

3.1. Location

Location denotes the physical place at which a state of affairs takes place. In Latin, it can be expressed through an NP in the locative or ablative, or through a PP.

The locative case in Latin is limited to the singular of *-ā-* and *-o-* stems and is only used for certain toponyms (city names and names of small islands); some other locative forms are attested for nouns of other inflectional classes, mostly with spatial reference, such as *domi*, *humi*, and *ruri*. The use of the plain ablative as a locative outside toponyms is very limited: handbooks only report as ancient the form *loco* (an example is in (59) below). Later, some other words that denote spatial regions also started to be used in Location expressions in the plain ablative, as *parte*, *regione* (cf. Hofmann & Szantyr 1965: 145):

- (7) Caes. Gall. 7,13,3: *Caesar ad oppidum Avaricum, quod erat maximum munitissimumque in finibus Biturigum atque agri fertilissima regione, profectus est*

‘Caesar marched to the Avaricum, which was the largest and best fortified town in the

5. For a definition of the syntactic function Complement, see Cabrillana (1997a).

territories of the Bituriges and situated in a most fertile tract of country’

(But note that the ablative *fertilissima regione* is coordinated with a prepositional phrase.)

At a very early stage, the locative of *-o-* stems started to be replaced by the ablative even with city names; retention of the locative case is more consistent for *-ā-* stems.⁶ As an effect, as I remarked in Section 3 above, to a certain extent city names could present no formal distinctions between Location and Source, which can also be expressed by the plain ablative.

In addition, already in Early Latin PPs can be found in Location expressions with nouns that also have a locative, as in (8):

- (8) Plaut. *Epid.* 541: *plane hicine est, qui mihi in Epidaurō primus pudicitiam pepulit*
‘surely it is he, who first violated my maiden modesty in Epidaurus’

The spatial preposition that expresses Location and does not add any further semantic specification to what could also be expressed by the locative case is *in* with the ablative. Equivalence is demonstrated by occurrences with attributes and adpositions. In Early Latin, we find expressions such as *in urbe Roma*, or *in urbem Romam*; later, when the city name also takes an adjective, PPs with *in* and the ablative can be apposed to locatives (the same holds for *in* with the accusative in Direction expressions):

- (9) Cic. *Rab. Post.* 26-27: *non in hortis aut suburbanis suis, sed Neapoli, in celeberrimo oppido*
‘not in their country seats or their suburban villas, but in Naples, a much-frequented town’

As argued in studies on equivalents of the preposition *in* in other languages, this preposition denotes a relation in which a trajector occupies a portion of the same space occupied by the landmark.⁷ Coincidence in space between a portion of the trajector and a portion of the landmark appears to be the unmarked option for Location in Latin. Other Location expressions usually add some specification as to the reciprocal position of the trajector and the landmark. For example, the preposition *ad* denotes Location in the vicinity of a landmark (or it may denote Direction, see below).

Most prepositions can occur in Location or Direction expressions, without case variation, except *in*, *sub*, and *super*. When case variation exists, the ablative consistently occurs in Location

6. According to Löfstedt (1956: 75), replacement of the locative by the ablative in the second declension was already common in the second half of the 1st century BCE; *-ā-* stems, on the other hand, consistently retained the locative until as late as the 4th century CE.

7. See Vandeloise (1994), Cuyckens (1993), and Luraghi (2003a).

expressions and the accusative in Direction expressions; however, the evidence of other space prepositions gives the impression that case variation was redundant for the distinction between Location and Direction:⁸

- (10) Cic. *Quinct.* 96: *quorum saepe et diu **ad pedes** iacuit stratus*
‘at whose feet he often lay, and that for a long time’
- (11) Cic. *Verr.* 1,1,45: *ipse denique Cn. Pompeius cum primum contionem **ad urbem** consul designatus habuit*
‘lastly, Gnaeus Pompeius himself, when first he delivered a speech by the city walls as consul elect’⁹
- (12) Cic. *Verr.* 1,1,23: *eadem illa nocte **ad me** venit*
‘he came to me on the same night’

Direction with human referents, as in (12), could not be denoted by *in*, which in such cases means ‘against’ or less frequently ‘for’ (see Sections 7.1 and 7.3 below).

Furthermore, outside concrete Location, the accusative sometimes occurs where one would expect the ablative. This happens as early as Plautus:¹⁰

- (13) Plaut. *Amph.* 180: *numero mihi **in mentem** fuit*
‘I had that number in mind’
- (14) Cic. *div. in Caec.* 66: *quae **in amicitiam** populi Romani **dicionemque** essent*
‘which are allies and subjects of the Roman people’

(See further the expression *in potestatem esse* ‘to be in control’ from legal texts.)

Polysemy involving Location and Source occurs as well, in cases where Source expressions denote distance, where it is said that a trajector is located away from a landmark. For example, the preposition *ab* with the ablative can, to a limited extent, encode Location as well as Source, as we will see in Section 3.3; cf. (15):

8. See Luraghi (1989).

9. Note that a translation ‘when first he delivered an address to the people as consul elect’, which would imply that *ad* denotes Addressee, is not accurate: indeed, *ad* denotes location close to the landmark, but not inside it. Pompeius, as a military commander (he had just come back from Spain), could not at that moment enter the city and had to deliver his speech outside the walls.

10. See Hofmann & Szantyr (1965: 276), where more examples are quoted.

(15) Liv. 5,6,4: *adeone effeminata corpora militum nostrorum esse putamus, adeo molles animos, ut hiemem unam durare in castris, abesse **ab domo** non possint?*

‘are we to suppose that the bodies of our soldiers are so effeminate and their spirits so enfeebled that they cannot hold out in camp or stay away from their homes for a single winter?’

In this occurrence, the use of a Source expression can be explained through the notion of “fictive motion” (Talmy 2000: 136): a location is referred to in terms of the trajectory that would lead from it to a reference point, if the trajector moved. Note that the verb *abesse* also indicates distance in (15).

A further step in the reanalysis of Source expressions as Location occurs in cases where the distance is not expressed by another element in the sentence. As remarked in Hofmann & Szantyr (1965: 255–256), the locative usage of *ab* is especially frequent in a number of expressions, such as *a parte*, *a dextra (laeva)*, *a tergo*, which refer to a side of a landmark:

(16) Liv. 2,65,2: *quamquam cessere magis quam pulsi hostes sunt, quia **ab tergo** erant clivi, in quos post principia integris ordinibus tutus receptus fuit*

‘but the enemies withdrew, rather than be pushed away, because behind them were hills, which offered a safe shelter to which they retreated in good order behind the first lines’

(17) Matth. 27,38: *tunc crucifixi sunt cum eo duo latrones unus **a dextris** et unus **a sinistris***

‘then there were two robbers crucified with him, one on his right hand and one on the left’

The notion of distance found in (14) is no longer active in (15) and (16) (*a tergo* in (15) does not mean ‘far from their back’, but simply ‘behind them’), and the prepositional phrases with *ab* simply denote Location on a certain side relative to a landmark. Note that this usage is lexically conditioned, so it does not generate ambiguity with possible Source expressions or expressions where *ab* denotes location at a distance.¹¹

Among spatial prepositions, *apud* (with the accusative) deserves some attention. Its meaning is similar to the meaning of *ad*: as opposed to *in*, it denotes vicinity of the trajector and the landmark, and no coincidence in space. However, the handbooks remark that both *ad* and *apud* can occur in contexts where one would expect *in*, already in Plautus. Hofmann & Szantyr (1965: 224) quote the following example:

(18) Plaut. *Amph.* 1011-1014: *nam omnis plateas perreptavi, gymnasia et myropolia / **apud** **emporium** atque in macello, in palaestra atque in foro / in medicinis, in tonstrinis, **apud omnis***

¹¹ The semantics of *ab* in such Location expressions is also discussed in De Felice (1954: 267–271), with various examples.

aedis sacras / sum defessus quaeritando

‘for through all the streets have I crawled, the wrestling-rings and the perfumers’ shops, to the market, too, and in the butcher shop, the school for exercise, and the Forum, the doctors’ shops, the barbers’ shops, and among all the sacred buildings, I am tired of looking for him’

Because *emporium* is not a frequent word in Location expressions (*ThLL s.v.*), it is hard to say whether the occurrence of *apud* here may be triggered by the co-occurrence of this specific lexical item (note further the occurrence of *apud* with *aedis sacras* in the same passage).¹²

As they do not denote coincidence of the trajector with a portion of the landmark, both *ad* and *apud* are especially suited to indicating a spatial relation relative to a human landmark. Close connection with human referents on the side of *apud* brought this prepositions to eventually encode Comitative in some Vulgar Latin/Early Romance varieties, as shown by some of the Romance languages (notably Gallo-Romance), in which it eventually replaced *cum*.¹³ Such development may have had a starting point in occurrences such as (19), where *apud* with a human landmark means ‘at one’s place’:

- (19) Catull. 13,1: *cenabis bene, mi Fabulle, apud me paucis, si tibi di fauent, diebus*
‘you will feast well with me, my Fabullus, in a few days, if the gods favor you’

Example (20) is quite typical, in the Classical authors, of the use of *apud* with plural nouns, with the meaning ‘among’; in (21) ‘to be by oneself’ denotes a mental or emotional state:

- (20) Sall. *Catil.* 9: *ius bonumque apud eos non legibus magis quam natura valebat*
‘justice and probity prevailed among them, thanks not so much to laws, as to nature’
(21) Ter. *Andr.* 408: *proin tu fac apud te ut sies*
‘take care to be yourself’

(On the use of *apud* in Direction expressions see Section 3.2.)

3.2. Direction

Direction is the semantic role of a landmark that denotes the direction or endpoint of a trajectory. As in

12. The expression *apud aedis sacras* is particularly frequent, as also remarked in Hofmann & Szantyr (1965: 224).

13. The Modern French preposition *avec* is not a direct reflex of *apud*, but it replaced another preposition, *op*, that occurs in Old French and regularly derives from *apud*; see Bloch and von Wartburg (1964) *s.v.* and Beckmann (1963: 269 ff.).

the case of Location, city names, names of small islands, and a few nouns with spatial reference require less morphological marking in Direction expressions and occur in the plain accusative, rather than with the preposition *in* and the accusative:

(22) Cic. *epist.* 3,8,3: *ut eorum causa legationes **Romam** uenirent*

‘that deputations had come to Rome on their behalf’

(23) Liv. 3,33,5: *his proximi habiti legati tres qui **Athenas** ierant*

‘next to them were placed the three commissioners who had gone to Athens’

It must be stressed that prepositional phrases with city names occur in Early Latin, in places where one would expect the plain accusative; the rule that city names only took the plain case, much as for Location expressions, seems to be more consistent in Classical Latin. Comparing Early with Late Latin, one has the impression that spatial relations with city names could be variously encoded through plain cases or (various) PPs. If one only takes into account Classical prose writers, on the contrary, prepositions with city names are virtually absent. In Plautus’s *Miles Gloriosus* the ratio of PPs with *in* to plain cases (counting together Location and Direction expressions) is 1/6, in Caesar’s *De Bello Gallico* there are no instances of PPs, and in John’s Gospel the ratio is 2/3: the change is dramatic even if we match the data from the New Testament with that of Early Latin. However, the evidence points toward the extension of a variant that already existed, rather than toward a complete innovation. The latter would be the conclusion if we had only the data from the Classical language available for contrast with Vulgar Latin.¹⁴

Some uses of *ad* in Direction expressions are also interesting. This preposition occurs with animate and inanimate nouns; in the case of animate nouns, it is sometimes thought to be interchangeable with the plain dative, in a somewhat puzzling manner. Let us first examine some examples:

(24) Caes. *Gall.* 3,19,3: *illi ... legatos **ad Crassum** mittunt seque in deditionem ut recipiat petunt*

‘they send ambassadors to Crassus and ask him to accept them as subjects’

(25) Caes. *Gall.* 6,32,1: *nihil se de bello cogitavisse, nulla **Ambiorigi** auxilia misisse*

‘that they had formed no plans of war, and had sent no auxiliaries to (*or*: for) Ambiorix’

14. Regarding the data from the New Testament, one must further remark that most city names do not have a regular Latin inflection, which may favor the use of PPs rather than plain cases. The use of the plain case with a city name such as *Roma* certainly survived much longer, see Väänänen (1981).

In the case of the verb *mittere*, if the landmark is human, *ad* is more frequent than the plain dative in general and much more frequent when the object of the verb is animate (e.g., in the case of *legatos mittere*). In (25), the dative *Ambiorigi* can be taken to be connected to be a Beneficiary rather than a Recipient. If the landmark is not a human being one finds PPs with *ad* (see *ad bellum* in (73) below) or *in*, or the plain accusative:¹⁵

(26) Caes. civ 1,6,3: *Faustus Sulla pro praetore in Mauretanium mittatur*
'that Faustus Sylla should be sent as propraeor into Mauritania'

There are other types of expression that attest to a similarity between the dative and Direction expressions, especially in metaphorical senses. For example, in the Classical prose writers one finds both *auxilio mittere* and *in auxilium mittere*. However, as noted in the handbooks, the extent to which the plain dative can encode Direction is very limited with intransitive motion verbs (such as *ire* and *venire*). In any case, the occurrence of *ad* with *mittere* and human referents does not seem to be a trace of a weakening of the dative as the case of the indirect object: most likely, the dative with *mittere* is not an indirect object of the same type as the third argument of *dare*, as shown by the facts that it can very often be missing, and that it can be replaced by a Direction expression, as in (26), which would be impossible with *dare* (or would activate a different meaning of the verb).

I would like to suggest that there is a difference in semantic roles mirrored by the alternate use of the plain dative, or of *ad* with the accusative: while the former denotes Recipient, the latter denotes Direction. The occurrences of each type of expression are summarized in Table 1.¹⁶ Verbs of giving and of communication, which normally take an indirect object in the dative, can, under certain circumstances, also occur with *ad* and the accusative. Pinkster quotes a number of examples from Plautus, among which is (27):

(27) Plaut. *Capt.* 360: *quae ad patrem uis nuntiari*
'the things that you want to be reported to your father'

According to Pinkster, "The *ad* expression conveys the idea of transportation towards someone, whereas the dative would mean 'to communicate to' ... [with *ad*] *nuntiare* ... may be regarded as [a]

15. The distribution of the dative versus *ad* with the accusative with *mittere* is also studied in Baños Baños (1996); on alternative use of plain cases or PPs in Cicero, see further Théoret (1982).

16. The count is based on a corpus that includes Caesar's *de bello civili* and Cicero's *epistulae ad familiares*. I have not included occurrences where *mittere* only takes a direct object and occurrences of such expressions as *auxilium mittere* and *mittere pila*.

two-place [verb] with an optional *ad* satellite” (1990: 202). In other words, these verbs can have different valencies; when used with a PP they are bivalent and the PP is not an argument. This fact, along with the greater meaningfulness of the preposition with respect to the plain dative, highlights the aspect of transfer included in the verbal meaning. In the case of verbs of giving, the idea of ‘transportation’ follows directly from the state of affairs: a concrete referent is transferred from an agent to a recipient.¹⁷ The schema of such verbs is extended to verbs of communication through the “conduit metaphor” (see Reddy 1979): words or messages are conceived as objects which are moved during the act of communication.

For the most part, examples of the plain dative in Direction expressions can hardly be qualified as adverbials, because they are connected with some specific verbs, such as *appropinquare*, which are perhaps bivalent:

(28) Caes. Gall. 7,47,3: *neque finem prius sequendi fecerunt quam muro oppidi portisque appropinquarent*

‘nor did they put an end to the pursuit, until they drew close to the wall of the town and the gates’

A frequently quoted (and isolated) poetic example which involves *ire* is:

(29) Verg. Aen. 5,451: *it clamor caelo*

‘the noise rises toward the sky’

We have seen in Section 3.1 that most space prepositions could occur in both Location and Direction expressions with the same case, the accusative. In the case of animate nouns, there were some attempts by the Latin grammarians to give precise rules in order to avoid ambiguity between the two semantic roles: in particular, concerning the difference between *ad* and *apud*, the grammarians tried to favor the use of *ad* for Direction and *apud* for Location. However, as early as Plautus there is evidence that *apud* was indeed used for Direction as well (see Bennett 1914: 230–236). On the other hand, *ad* occurred in Location expressions mostly with inanimate landmarks, while its use with animate ones seems to conform more closely to the rule of the grammarians (see (12) and (35)).

17. Note further that English does not especially help us to understand the possible difference between the dative and *ad*, since in English both Recipient and Direction are marked by *to*. This is not the case in many other languages, e.g. Italian or French, in which the difference between the two Latin expressions, at least with verbs such as *mittere*, can often be reflected in the translation. See also Baños Baños (2000).

In Section 3.1 I mentioned the possibility of Source prepositions encoding Location. Here it must be noted that no preposition can apparently encode both Direction and Source, with or without case variation.

3.3. *Source/Origin*

Source is the place from which a trajector moves along a trajectory. It can be variously conceived, depending on the initial position of the trajector relative to the landmark. In Latin, Source is mostly coded by means of three prepositions, *ex* ‘out of’, which denotes initial coincidence of the trajector with a portion of the space occupied by the landmark; *de*, which denotes motion from the vicinity of a landmark; and *ab*, which is neutral in this respect. Again, with city names, names of small islands, and, sporadically, names of countries, Source can be expressed through the plain ablative case rather than through a PP (see Bennett 1914: 288–289; Hofmann & Szantyr 1965: 102):

- (30) Plaut. *Rud.* 35: *senex qui huc Athenis exsul uenit*
‘an old gentleman who has come to this place as an exile from Athens’
- (31) Plaut. *Curc.* 225: *paues, parasitus quia non rediit Caria*
‘you are anxious because your Parasite has not returned from Caria’

The use of the plain case for Source with city names seems more consistent than the use of plain cases for Location and Direction: apparently, *ab* is used only when both Source and Direction expressions occur, and this seems to hold in Early Latin already. In Plautus, all combinations of plain cases or prepositional phrases occur in such contexts:

- (32) Plaut. *Truc.* 91: *nam ego Lemno aduenio Athenas nudius tertius*
‘now I arrived at Athens the day before yesterday from Lemnos’
- (33) Plaut. *Mil.* 384: *uenisse Athenis in Ephesum cum suo amatore quodam*
‘that she came from Athens to Ephesus with a certain lover of hers’
- (34) *CIL* i 551: *uiam feci ab Regio ad Capuam*
‘I took a journey from Reggio to Capua’

Already from an early stage, *de* tended to extend to occurrences where one would expect *ab*, and later also to those where one would expect *ex*.¹⁸ As remarked by Hofmann & Szantyr (1965: 262–

18. Note that the replacement of *ex* by *de* started later, but in the Vulgar Latin texts it looks further advanced than the replacement of *ab*.

264), this usage, possibly common in the spoken language, was resisted by the grammarians. It eventually took over, as testified by the Romance languages, in which there are scarcely any remnants of *ab* and *ex*.

Origin is an abstract semantic role, metaphorically derived from Source. The (concrete or abstract) origin of a trajector is conceived as a place from which the trajector moves away (cf. Luraghi forthcoming). Example (35) demonstrates the link between Source and Origin:

- (35) Caes. *civ.* 1,35,1: *euocat ad se Caesar Massilia XV primos*
'Caesar summons fifteen of the chiefmen from Massilia'

Bennett (1914: 289) also mentions the fact that "on coins the name of the town whence the coin came is sometimes indicated by the town name in the ablative". In such cases, as well as in (35), closeness of Source and Origin is particularly clear. But with the verb 'to be born' there is no need to imply any type of motion:

- (36) Plaut. *Amph.* 28: *humana matre natus, humano patre*
'born of a human mother, of a human father'

- (37) Sall. *Catil.* 5,1: *L. Catilina, nobili genere natus*
'Lucius Catilina, offspring of a noble family'

Among Source prepositions, *ex* appears most suitable for extension to Origin, most likely because of its specific meaning ('out of'). This preposition regularly occurs both in Early and in Classical Latin with personal pronouns (cf. Bennett 1914: 292) and frequently also with NPs of any type:

- (38) Ter. *Haut.* 1030: *ita mihi atque huic sis superstes ut ex me atque ex hoc natus es*
'so may you be the survivor of me and of him, you are my son and his'

Closely connected with Origin is Matter, also commonly encoded by *ex*, as in *pharetra ex auro*, 'a golden quiver' (Verg. *Aen.* 4,138); see further (39):

- (39) Verg. *Georg.* 3,26: *in foribus pugnam ex auro solidoque elephanto Gangaridum faciam*
'of gold and massive ivory on the doors I'll trace the battle of the Gangarides'

According to Lakoff and Johnson, the common connection between Origin and Matter is based on a metaphor, according to which "the object comes out of the substance" (1980: 73).

Another semantic role connected with Origin and Matter is Partitive, based on the metaphor according to which "wholes are origins" (see Nikiforidou 1991):

- (40) Hor. sat. 1,4,123: *unum ex iudicibus selectis obiciebat*
'he indicated one of the special judges'

In the Classical literary language, *ab*, *ex*, and *de* are generally kept distinct in a quite consistent manner. For example, in Cicero's *Verrinae*, *ab* denotes Source, mostly with human referents, as in (41); it occurs with verbs that express a request, as in (42), with adjectives denoting absence of something, and in Location expressions that contain adverbs with the meaning 'far from', as in (43); elsewhere (in the majority of occurrences), it denotes Agent with passive verbs. The preposition *ex* denotes Origin, as in (44), often referring to a source of information, as in (44), as well as Time; it also occurs in Source expressions with certain verbs, such as *tollo* and *subfero*, as in (46), or where it means 'out of', and is used in partitive expressions, as in (47). In its turn, *de* occurs in Source expressions virtually limited to verbs with the prefix *de-*; in most occurrences it denotes Area (for a definition of Area see Section 10). Partitive is also possibly expressed by *de* in Cicero, as shown in (48), though to a more limited extent than by *ex*.

- (41) Cic. Verr. 2,5,146: *eos sertorianos milites esse atque a Dianio fugere dicebat*
'he used to say that they were soldiers of Sertorius, and that they were fleeing from Dianium'
- (42) Cic. Verr. 2,1,98: *impetrat a senatu ut dies sibi prorogaretur*
'he prevails on the senate to grant him an adjournment'
- (43) Cic. Verr. 2,3,75: *summorum aratorum remotissimorum a foro, iudiciis, controversiis*
'of excellent agriculturists, men most remote from courts of law, from tribunals, and from disputes'
- (44) Cic. Verr. 2,2,185: *his exportationibus quae recitatae sunt scribit sestertium sexaginta milia socios perdidisse ex vicensima portorii Syracusis*
'by these exports, of which the list was read to you, he writes that the shareholders had lost sixty thousand sesterces by the five per cent due on them as harbor dues at Syracuse'
- (45) Cic. Verr. 2,2,179: *vos ex me causam non a me prolatam, sed ad me delatam audire oportere*
'and that you ought to hear the cause not as it might be produced by me, but as it has been brought to me'
- (46) Cic. Verr. 2,1,45: *quas tabulas pictas ex Achaia sustulerit*
'what paintings he carried off from Achaia'
- (47) Cic. Verr. 2,2,183: *de ceteris ex hoc coniecturam facere debebitis*
'and by this you will be able to form your conjectures as to the rest'

- (48) Cic. *dom.* 117: **de conlegio** quis tandem adfuit?
'of the college who was present then?'

If we turn to Petronius, chapters 41–46 of *Satyricon*, which contain speeches of the freedmen and are thought to constitute good examples of the language spoken in the first century CE, the picture changes. In this text, *de* is much more frequent than *ex* and *ab* and has expanded especially to the meanings that *ex* used to express in Cicero. In the *Itinerarium Egeriae*, written in the fourth century CE, *de* has expanded further, especially at the expense of *ex*; *ab* still occurs in all contexts in which it used to occur in Classical Latin but is much less frequent than *de*. Note that the extension of *de* to uses typical of *ex* must have started in the spoken language much earlier: Bennett (1914: 292) quotes an occurrence of *de* with *natus* already from Plautus. While *de* took over some of the functions of *ab* in the domain of local relations in the first centuries CE, the extension to passive agent seems to have started later, as is shown in Section 5.1.1.¹⁹

Examples of *de* in Petronius and in the *Itinerarium* are given below:

- (49) Petron. 44,10: *et quam benignus resalutare, nomina omnium reddere, tanquam unus de nobis!*
'and how friendly he was, returning everyone's greeting, calling us all by name, just like he was one of us!'
- (50) *Itin. Eger.* 11,3: *lectio ipsa de libris Moysi lecta*
'having read this text from the books of Moses'

3.4. Path

Path is the semantic role that denotes a region through which or along which a trajector moves along a trajectory. Path seems to be somewhat more complicated than the other spatial roles, as demonstrated by the relative infrequency of a perlocative case across languages (see Section 3.5).

There are various types of Path: in the first place, the trajectory can be contained at least in part in the area of the landmark, as in (51):

- (51) *I go through the door*

or it can be completely external to it, as in (52)–(54):

- (52) *I walk along the sea shore*

19. In the short passage from Petronius from which I took the above data, there is one occurrence of a passive agent, encoded, as in Classical Latin, through *ab* with the ablative.

(53) *The airplane flies across the mountains*

(54) *The house is across the street*

In (52) the landmark is conceived as an entity with a spatial extension, which shapes the trajectory along which the trajector moves; in (53) the landmark is crossed over as a whole and is surpassed by the trajectory. The trajectory can be fictive, as in (54). Furthermore, a trajectory can be straight, or unidirectional, as in (51), or it can be multidirectional, as in (55):²⁰

(55) *I walk around in the city*

In the last case, Path is encoded as Location, both in the English example and, often, in Latin.

Both unidirectional and multidirectional paths are normally coded through *per* with the accusative in Latin; examples are (56) (*per Sequanos*) and (57) respectively:

(56) Caes. Gall. 1,6,1: *erant omnino itinera duo, quibus itineribus domo exire possent: unum per Sequanos, angustum et difficile*

‘there were in all two routes by which they could go forth from their country: one through the Sequani narrow and difficult’

(57) Catull. 101,1: *multas per gentes et multa per aequora uectus*

‘through many nations and through many seas carried’

Multidirectional Path can also be coded as Location, through *in* with the ablative as in (58), or through a locative, as in the expression *terra marique*, ‘by land and sea’, where the landmark is profiled as a bounded region within which the trajector moves:

(58) Sen. epist. 103,5: *non arietant inter se nisi in eadem ambulantes via*

‘they do not bump into each other unless they are walking in the same street’

With some nouns referring to spatial regions which are typically passed through, unidirectional Path can be coded through the plain ablative, as *porta* in (59) and *iugo* in (60):

(59) Hor. carm. 3,27,40-42: *imago / uana, quae porta fugiens eburna / somnium ducit?*

‘a vague shade, which brings sleep while fleeing through an ivory door?’

(60) Caes. Gall. 7,45,5: *legionem unam eodem iugo mittit et paulum progressam inferiore constituit loco*

20. For a discussion of different types of perlocative expressions, and in particular of multidirectional motion, see Luraghi (2003a).

‘he sends one legion to the same hill, and after it had marched a bit, he stations it in the lower ground’

In (60), both Path (*eodem iugo*) and Location (*loco*) are denoted through the plain ablative; the semantic role is disambiguated by the lexical meaning of the nouns involved.

External Path is expressed by the adverbial prepositions *trans* or, less frequently, *praeter* ‘across’:

(61) Cic. *epist.* 2,15,5: *tuae res gestae ita notae sunt ut **trans montem Taurum** etiam de Matrino sit auditum*

‘your deeds are so well known that on the other side of Mount Taurus even the story of Matrinius was heard’

(62) Liv. 32,5,11: *maxime idoneum ad muniendum locum credidit esse **praeter** amnem Aoum*
‘he determined that a site across the river Aous was the most suitable place for a fortified base of operations’²¹

Perlative expressions also occur in the plain accusative. This usage is labeled “accusative of extent” in reference handbooks (see Hofmann & Szantyr 1965: 40–41; Bennett 1914: 229–230):

(63) Plaut. *Bacch.* 832–834: *Sequere hac me, faxo iam scies. :: Quo gentium? :: **Tres unos passus :: Vel decem***

‘Follow me this way; I’ll soon let you know. :: Where on earth? :: Only three steps. :: Even ten’

According to Hofmann & Szantyr, this type of perlative accusative was used with motion verbs originally and later extended to occurrences where no motion is implied. Such an extension is already attested in Early Latin and is mostly found with words such as *latus* or *longus*, which require that a certain stretch of space be specified:

(64) Plaut. *Poen.* 837: ***cubitum** longis litteris*

‘with a letter of a cubit’s length’

3.5. *Typological considerations*

Path may have a less central status with respect to the other spatial semantic roles, which are usually

21. The preposition *praeter* is mostly used in the abstract meaning ‘besides’; see Torrego (1998).

described as more “basic”: so Stolz (1992: 30), who considers *Dreigliedrigkeit* (‘three-partedness’) one of the prototypical features of the systems of local cases. *Dreigliedrigkeit* structures the Latin system of local cases to a limited extent. In the case of certain toponyms and a few other nouns, we find three different plain cases (see below). Outside this lexically conditioned area, spatial semantic roles are coded through PPs. With prepositions we find a threefold opposition, again to a limited extent: (i) Source is always expressed by specific prepositions; (ii) Location and Direction can be expressed by the same prepositions, and with only a few of them (notably *in*, *sub*, and *super*) is there an opposition between the ablative = Location and the accusative = Direction within the PP. Most prepositions take the accusative and can express either Direction or Location, depending on the context (usually, the opposition between the two semantic roles is expressed by the verb). See Figures 2 and 3. A closer relation between Location and Direction than either of these semantic roles has with Source is not a language-specific feature of Latin: several studies point out that bipartite systems of local semantic roles involve the occurrence of a specific case for Source plus another case for Direction/Location (see e.g. Stolz 1992: 17; Andrews 1985: 97; Dixon 2002: 296). It can be interesting to note that some of the Romance languages have reconstructed a *Dreigliedrigkeit*, while others have not (e.g., Spanish *de* Source, *a* Direction, *en* Location; in contrast with Italian and French *da*, *de* Source; Direction is the same as Location).²²

With city names, the issue is further complicated by the fact that the locative only survives in the first and second declensions, with nouns of the third declension using the ablative in its place. So for nouns of the third declension, the ablative can express Location, Source, and even Path. With this situation one would expect an increase in the use of prepositions; however, this is apparently not the case until very late: in some semantic roles (e.g., Source with nouns that denote spatial regions) the use of plain cases increases after Plautus. In some cases, with city names and nouns denoting spatial regions there is an alternative organization; see Figure 4. The only generalization made possible by the concrete usage of cases in spatial expressions is that Source and Direction are consistently kept distinct, while Location has closer links to Direction but can occasionally also be nondistinct from Source.

3.6. Diachronic considerations

The tripartite system of Figure 2 for local relations only really held for some city names and names of

22. The fact that Italian *da* can also express Location and Direction is irrelevant here, because it is conditioned by its occurrence with human nouns (and in any case, it confirms the tendency to have Location and Direction expressed by the same preposition in Italian). Note that with such nouns, *da* does not express Source.

small islands. Even the partial tripartite system of Figure 3 only held for a limited number of prepositions in Classical Latin. As we have seen in Section 3.2, abstract location could be encoded with *in* and the accusative, similar to motion, centuries before the beginning of the ablative/accusative merger. According to Hofmann & Szantyr (1965: 277), confusion in the use of the two cases with *in* was complete by the 2nd century CE.²³ The result is a system in which Location and Direction are no longer distinct; see Figure 5. The Romance languages in which the two semantic roles are kept distinct by means of different prepositions, such as Spanish (in which *en* is used for Location and *a* for motion), have reconstructed this distinction later. In some others, such as Italian, the distinction has disappeared completely, and it would be impossible to distinguish a sentence such as (65):

(65) Sall. *Catil.* 11: *exercitum quem in Asia ductauerat*
‘the army that he led (while he was) in Asia’

from a possible **in Asiam ductauerat*, if not through contextual knowledge.

As opposed to the partial or total fusion of Location and Direction, the distinction between either of them and Source is much more consistent. Polysemy involving Source and Location is only attested for city names and some other nouns with spatial reference to a limited extent; furthermore, Source prepositions can under certain circumstances express Location, either with the meaning ‘away from’ or under lexical constraints. Polysemous markers denoting both Source and Direction do not occur. In the field of ablatival relations, one can further observe the ongoing replacement of *ab* and *ex* by *de* (which also replaced the genitive case).

4. Time

Several scholars have observed that Time is most often conceived in terms of spatial relations—that is, that markers of spatial relations very often undergo semantic extensions that make them capable of expressing Time (the contrary process is very seldom attested); see Haspelmath (1997) for a survey.

Transposition of space expressions to Time also occurs in Latin; in general, because Time expressions most often contain nouns that have temporal reference, examples without prepositions have a wider use than for space. Furthermore, while the ablative can be shown to denote a metaphorical location in time, the accusative does not denote a metaphorical direction, but rather a duration in time. The semantic extension is based on the perlocative value of the accusative. Examples of plain cases in

23. In the letters of Claudius Terentianus, who lived during the 2nd century CE, the accusative often occurs with prepositions that took the ablative in Classical Latin; see Adams (1977).

Time expressions are the following:

- (66) Sall. *Iug.* 5,4: ***bello Punico secundo***, ... *Masinissa rex Numidarum in amicitiam receptus a P. Scipione ... multa et praeclara rei militaris facinora fecerat*
'in the second Punic war, Masinissa, king of the Numidians, being received into alliance by Publius Scipio, had performed many eminent exploits in the field'
- (67) Cic. *epist.* 1,2,1: ***eo die*** *nos quoque multa verba fecimus*
'on that day we too talked a lot'
- (68) Caes. *Gall.* 1,31,4: *hi cum tantopere de potentatu inter se multos annos contenderent*
'for many years they were struggling vehemently with one another for superiority'

Virtually all prepositions that occur in Space expressions can also denote Time in various ways.

A few examples may suffice:

- (69) Lucr. 1.22: *Memmiadae nostro, quem tu, dea, tempore in omni omnibus ornatum uoluisti excellere rebus*
'for our Memmius, whom you, O goddess, wanted to be peerless in every grace at every hour'
- (70) Frontin. *aq.* 1,6: ***post annos quadraginta*** *quam Appia perducta est*
'forty years after Appia was brought in'
- (71) Caes. *Gall.* 1,20,5: *monet ut in reliquum tempus omnes suspiciones uitet*
'he warns him for the future to avoid all grounds of suspicion'

5. Causal roles

Causal roles are semantic roles taken by the participant(s) that initiate or have a part in bringing about a certain state of affairs. Major causal relations are Agent, Instrument, and Cause, to which Reason, Force, Means, Causee, and Intermediary can be added.

5.1. Agent

5.1.1 Prototypical Agent

Typical features of Agent are intentionality and control. Intentionality implies animacy; the same implication, however, is not so clear in the case of control. In fact there are inanimate entities that not only cannot normally be controlled by agents (e.g., natural forces) but that are frequently conceived of as exerting control on human beings, notably emotions. So on a prototypicality scale, human beings

rank the highest, followed by natural forces and emotions, while other inanimate entities rank the lowest and cannot, under normal circumstances, be assigned the semantic role Agent (see Table 2).

In nominative-accusative languages, such as Latin, the role Agent is often assigned to the subject and expressed by the nominative. However, there are other types of clause structure, notably the passive, where the agent is an adverbial and consequently must be coded with specific morphology. A common metaphor for expressing Agent, and on which Latin relies, involves the use of Source/Origin expressions. In this perspective, states of affairs are conceived as moving entities (cf. Lakoff and Johnson 1980), and the agent is conceived as the point in space from which its trajectory starts. Other spatial metaphors involve different types of Location markers, variously intended to express a physical predominance of a trajector over a landmark, so that the metaphor that links space to agency is based on the feature of control (see Luraghi 2000, 2003b): this type of metaphor does not occur in Latin.

Prototypical agents of passive verbs in Latin are encoded by *ab* with the ablative, as in (44) and (66), and in (72)–(75):

(72) Sall. *Catil.* 31,5: *ipse lege Plautia interrogatus erat ab L. Paulo*

‘he had been questioned by Lucius Paulus under the Plautian law’

(73) Caes. *Gall.* 8,54,1: *fit deinde senatus consultum ut ad bellum Parthicum legio una a Cn. Pompeio altera a . Caesare mitteretur*

‘then there was a decision made by the senate, that one legion should be sent into the Parthian war by Gn. Pompeius, another one by G. Caesar’

(74) Caes. *Gall.* 5,9,4: *repulsi ab equitatu*

‘pushed back by the cavalry’

(75) Ioh. 1,6: *fuit homo missus a Deo cui nomen erat Iohannes*

‘there was a man sent by God whose name was John’

Note that the occurrence of passive verbs alone does not necessarily trigger an Agent interpretation for an *ab* phrase. Whenever the context also makes possible an interpretation as Origin, the latter is favored, both with animate and with inanimate nouns:

(76) Liv. 1,8,7: *patres certe ab honore patriciique progenies eorum appellati*

‘they received the designation of “fathers” from their rank, and their descendants were called “patricians”’

(77) Liv. 1,17,10: *si dignum qui secundus ab Romulo numeretur crearetis*

‘if you elect one who shall be counted worthy to follow Romulus’

(On the possibility that Agent is coded as Intermediary, i.e., through *per* with the accusative, see Section 5.2.3.)

Agent can also be coded through the plain dative (*dativus auctoris*):

(78) Catull. 8,5: *amata nobis quantum amabitur nulla*

‘loved by us as never a girl will ever be loved’

(79) Plaut. *Rud.* 1298: *adeundus mihi illic est homo*

‘this person must be approached by me’

(the last example is also cited by Hofmann & Szantyr [1965: 97]; see further *uobis* in (111) below).

The dative is mostly limited to nominal forms of the verb, and in particular to forms that express obligation, even if some occurrences with finite verb forms are also attested:

(80) Cic. *inv.* 1,86: *quare illa nobis alio tempore atque ad aliud institutum, si facultas erit, explicabuntur*

‘therefore this will be treated by us at another time and in another work, if there will be an opportunity’

The *dativus auctoris* is also attested in other Indo-European languages, in part with similar restrictions; see Hettrich (1990). Usually, the dative of Agent is explained through the Beneficiary meaning of this case: according to Hettrich, the dative can be reconstructed as the original case of the Agent in constructions that contain what he calls a *participium necessitatis*, not because this case conveys any special agentive meaning, but because it “gibt wie vielfach sonst, ... die ‘Gerichtetheit’ des Sachverhalts auf eine Person hin wieder. ... Der Dativ steht also in seiner Grundfunktion, ... kann man auch hier von einem *dativus commodi* sprechen” (1990: 73).²⁴ The relation between other occurrences of the dative denoting Beneficiary and the *dativus auctoris* is discussed by Hettrich (1990: 76) and Kühner & Stegmann (1912–1914 [1955]: 325). Hettrich quotes (81) in particular:

(81) Plaut. *Bacch.* 515: *nam mihi decretumst renumerare iam omne aurum patri*

‘for it is established for me that I will pay back all the gold at once to my father’

with an impersonal construction (*decretum est*), which can also be taken as passive, since the sense is ‘I

24. “[The dative] expresses, as in many other occurrences, the ‘orientation’ of a state of affairs toward a person. So the dative has its basic function, and one can speak even here of a *dativus commodi* [i.e., Beneficiary dative].”

have established'. Impersonal constructions are especially frequent in Early Latin, as argued by Bennett (1914: 166), but extension to finite verb forms is also attested (ibid. 170). Extension to finite verb forms was favored in Latin because the *dativus auctoris* became closely connected with personal pronouns in Agent expressions.

Suárez Martínez (2001) connects the dative of Agent with the *dativus iudicantis*, a type of Experiencer (see Section 8 below).

5.1.2 Force

Force is the semantic role assigned to nonprototypical agents. The status of Force is not the same across languages, because this semantic role is not always grammaticalized. As I have shown in Luraghi (1986), the Indo-European languages differ as to the extent to which an independent semantic role Force can be singled out; often, nonprototypical agents are simply treated as Agent. Latin belongs to the group in which Force and Agent are coded differently; note that the Indo-European languages in this group consistently code Force as Instrument (see Luraghi 1986, 1995). It is remarkable that the instrumental case has the function of expressing both Instrument and Cause in the Indo-European languages. This holds for languages such as Sanskrit, and it also holds for Latin, in which the ancient instrumental has fallen together with the ablative, a case which also had the function of expressing Cause in Proto-Indo-European (see Luraghi forthcoming).

Indeed, Force bears a close resemblance to Agent, Instrument, and Cause, because Force shares some features with all these roles: it denotes control over states of affairs, similar to Agent, but it is inanimate, in the same way as Instrument. Cause can be inanimate, like Force and Instrument; like Force, it does not imply the co-occurrence of a controlling agent, and, most important, it is not manipulated. Force only occurs in states of affairs in which there is no Agent, and it controls the states of affairs. Cause can co-occur with Agent (in which case it is sometimes labeled Reason, see Section 5.3), or it can occur where no Agent is implied.

As we will see in the discussion of the examples, it is sometimes unclear whether a certain NP in the ablative with a passive verb should be regarded as Force or Cause: this uncertainty depends on the very close association of the two concepts. It can be argued that Cause corresponds to Force in states of affairs denoted by intransitive verbs, as show by comparison of (82) with (83):

(82) *The old church collapsed because of an earthquake*

(83) *The old church was destroyed by an earthquake*²⁵

Furthermore, the plain ablative can also code Means, a semantic role close to Instrument that implies the existence of an Agent but points toward a lower degree of manipulation. This semantic role is somewhere between Instrument and Cause, as we will see in Section 5.2.2, but can under certain circumstances also be close to Force, when it occurs with a passive verb (the difference between Means and Force is discussed *ibid.*).

Nonprototypical agents can also be treated as prototypical agents and thus be coded with a Source expression. Besides, nouns denoting natural forces or emotions can always be understood as expressing Cause, when they occur in the plain ablative, even with passive verbs. Some examples of Force, both coded as Instrument and coded as Source, are given in (84)–(86):

(84) Sall. *Catil.* 53,5: *luxu atque desidia ciuitas disrupta est*
‘the city was ruined by luxury and laziness’

(Note that *luxu atque desidia* could also have the semantic role Cause, discussed in Section 5.3.)

(85) Cic. *off.* 1,68: *uinci a uoluptate*
‘to be overwhelmed by pleasure’

(86) Caes. *Gall.* 3,13,9: [*naues*] *ab aestu reiectae nihil saxa et cautes timerent*
‘the ships when thrown back by the tide, they feared nothing from rocks and shelves’

Reference handbooks point out that nouns denoting military forces can co-occur with passive verbs and be coded as Force—that is, with the plain ablative, rather than Agent. It should be mentioned that the frequency of the so-called *ablativus militaris* (Kühner & Stegmann 1912–1914 [1955]: 407–408) appears to be overstated at closer scrutiny. Let us first examine some examples.

(87) Liv. 4,55,8: *illa pro certo habenda, in quibus non dissentiunt, ab arce Caruentana, cum diu nequiquam oppugnata esset, recessum, Verruginem in Volscis eodem exercitu receptam, populationesque et praedas et in Aequis et in Volsco agro ingentes factas*
‘there is no dispute, however, that the Romans withdrew from the citadel of Carventum after a long and futile siege, and that Verrugo was recaptured by means of the same army after committing great devastation and securing many spoils in both the Volscian and Aequian territories’

25. See Luraghi (1995) for further discussion.

- (88) Cic. *Flacc.* 26,63: *quae tam procul a Graecorum omnium regionibus, **disciplinis linguaque** **divisa cum in ultimis terris cincta Gallorum gentibus barbariae fluctibus adluatur**, sic optimatum consilio gubernatur ut omnes eius instituta laudare facilius possint quam aemulari*
 ‘(a city) which, though so far separated from the districts of all the Greeks, and from their fashions and language, and though placed in the extremity of the world and surrounded by tribes of Gauls, and washed with the waves of barbarism, is so well regulated and governed by the counsels of its chief men, that there is no nation which does not find it easier to praise its institutions than to imitate them’

Example (87) contains a plain ablative with a passive verb, but since the whole passage contains impersonal forms, one can hold this passive to be impersonal too and *exercitu* to be an Instrument (or Intermediary, see Section 5.2.3 below) expression.²⁶ A frequently mentioned example is (88), which is always quoted out of context: if one considers the context, *Gallorum gentibus* does not look much like an Agent phrase, because the state of affairs denoted by *cincta* is not dynamic.

In (89), an abstract noun is taken to refer to a group of people and occurs in an Agent phrase with *ab*:

- (89) Liv. 2,18,2: *eo anno Romae, cum per ludos **ab Sabinorum iuuentute** per lasciuam scorta raperentur*
 ‘during this year in Rome, because during the games some whores were carried off by Sabine youths in sheer wantonness’

The occurrence of *ab* with inanimate nouns is especially frequent in the New Testament. High frequency is a result of Jerome’s translation practice, which consisted of trying to keep the same Latin preposition as equivalent to each specific Greek complex of preposition plus case. In the case of Agent expressions, Greek has ὑΠΌ with the genitive for both prototypical and nonprototypical Agents; consequently, Jerome almost always chooses to translate with *ab* (exceptions are very few). This overextension of *ab* is made possible by the fact that the PP could indeed occur in place of the plain ablative, the only difference being that in a native Latin text it would be less frequently employed. (Note that the same inanimate landmarks that occur with the passive in *ab* phrases in the Vulgate could occasionally be coded as Agent, rather than Force, in Classical Latin; the difference between the

26. Hofmann & Szantyr (1965: 122) state that the use of the plain ablative for animate agents is particularly frequent in Livy and Tacitus; however, from a search of *exercitu* and *militibus* in these authors, (87) seems to be about the only possible Agent phrase.

Classical authors and Jerome lies only in frequency.)

5.2. *Instrument*

5.2.1 Prototypical Instrument

Instruments are prototypically inanimate and manipulated. Natural forces and emotions are to a great extent nonmanipulated, and in normal situations they cannot take the role Instrument (see the discussion of (100) below). Humans, who are usually presented as initiators of some state of affairs, can under some circumstances also be acted on by another agent in order to bring about a certain state of affairs. This situation can imply different relations between the (primary) agent and the other human, who, in spite of being manipulated, also has an active role in the accomplishment of an action: as we will see in Section 5.2.3, there appears to be what may be called “split agency”, whereby intentionality and control are ascribed to either human participant to different extents.

As for the expression of Agent, as well as for Instrument and related roles (e.g., Intermediary), cross-linguistic comparison shows that, although numerous spatial metaphors are available, there are a number of recurrent patterns. A widely attested metaphor for conceptualizing Instrument is the one described by Lakoff and Johnson (1980: 135), according to which “an instrument is a companion”: accordingly, in many languages, such as the Germanic and Romance languages, Instrument and Comitative are coded in the same way. This metaphor does not occur in Latin, where Instrument is coded through a special case, while Comitative is coded through a PP. In fact this metaphor is not as widely spread across languages as Lakoff and Johnson appear to think (see Stolz 1996).

In Latin, Instrument is normally encoded through the plain ablative:

(90) Cic. *Catil.* 1,9: *quos ferro trucidari oportebat, eos nondum uoce uolnero*

‘I do not yet attack, even by words, those who ought to be put to death by the sword’

(91) Caes. *Gall.* 3,8,1: *naues habent Veneti plurimas, quibus in Britanniam nauigare consuerunt*

‘the Veneti have a very great number of ships, with which they have been accustomed to sail to Britain’

(92) Plaut. *Men.* 1001: *quid ego oculis adspicio meis?*

‘what do I behold with my eyes?’

(Other examples are *ueneno* in (104) and *pecunia* in (108).)

Especially with abstract nouns, *per* with the accusative is often found, rather than a plain ablative. This usage may result from an extension of Intermediary, based on a metaphor described in

Luraghi (2001b), according to which “an Instrument is an Intermediary”; or it may derive directly from the perlativ meaning of *per* through the “channel metaphor”, according to which “an instrument serves as a path for the agent to perform an action”.²⁷ Indeed, *per* usually points toward a lesser degree of manipulation and can best be regarded as coding another semantic role, Means, which profiles the enabling force of an entity rather than its manipulation, as Instrument does (see Section 5.2.2 below). Only Vulgar Latin *per* is employed with concrete nouns in real Instrument expressions, especially with means of transportation:

- (93) *Itala*, cod. d., Ioh. 21,8: *discipuli per nauiculam uenerunt*
 ‘the disciples came in a small boat’²⁸

Since in Greek $\delta\acute{\iota}\alpha$ with the genitive could be used extensively for Instrument, and because Jerome always used *per* as the Latin equivalent of the Greek PP, the use of *per* for Instrument is particularly frequent in the Vulgate (on this matter, see further de la Villa 2001b).

Typical of Christian Latin is the instrumental use of *in* plus ablative. This usage was partly due to the interference of Greek $\acute{\epsilon}\nu$. The occurrence of the latter preposition in Instrument expressions, in its turn, has been explained as due to Semitic influence.²⁹ An example is (94):

- (94) Luc. 22,49: *si percutimus in gladio?*
 ‘should we fight with the swords?’

Comitative expressions start to be used for Instrument only at a late stage. Some early occurrences of instrumental *cum* are quoted in reference works; very often, they can be taken as denoting Attendant Circumstances rather than Instrument. An interesting example, discussed in Pinkster (1990: 203–204), involves parallelism between *cum* and *sine*:

- (95) *Cato agr.* 77–78: *in solo tracta cum melle oblinito bene ... in balteo tractis caseo ad eundem modum facito ... sine melle*

27. In Latin there is no clue as to whether animate nouns occur in Instrument/Intermediary expressions before inanimate ones, so it is hard to show how the meaning of *per* has evolved.

28. See Beckmann (1963: 25–35). The Vulgate has a plain ablative (*naugio*) instead of *per nauiculam*, and the Greek text has a plain dative.

29. See Moulton (1911) for the use of $\acute{\epsilon}\nu$ in New Testament Greek; Rubio (this volume). However, it must be remarked that Latin instrumental *in* also translated Greek $\acute{\epsilon}\pi\iota$. So the extent to which Latin *in* acquired instrumental value in Christian Latin is greater than the extent to which Greek $\acute{\epsilon}\nu$ also displayed such value. See Luraghi and Cuzzolin (2007).

‘cover the *tracta* on the crust thickly with honey ... follow the same directions with respect to the crust, *tracta*, and cheese but ... without honey’

Parallelism with *sine* points in the direction of a relation of Accompaniment, rather than Instrument: what is profiled is the presence versus absence of a certain ingredient.

More examples come from late technical texts, as the *Mulomedicina Chironis*:³⁰

(96) Veg. *mulom.* 201,26: ***cum traumatico curabis***

‘you will heal it with a bruise ointment’

Sporadically, and especially in late texts, the prepositions *ab* and *ex* also occur in Instrument expressions:³¹

(97) Apic. 11: *eodem momento, quo friguntur et levantur, ab aceto calido perfunduntur*

‘at the same moment when they fry, they are taken out of the pan and covered with hot vinegar’

5.2.2 Means

Croft (1991: 178–179) defines another semantic role, Means, which he only exemplifies with *by*-clauses, rather than with PPs. Radden (1989: 442–443) also defines Means as relevant for English; in his definition, PPs that bear the role Means are crucially identified by the occurrence of *through* or *by means of*. In comparison to Instrument, Means denotes a somewhat less manipulated and controlled entity but apparently implies the existence of an agent, as indicated by Croft (1991: 178), who holds that “the means clause must begin with a VOL[itional] arc—that is, it must be a volitional action.” In Luraghi (2003a) I argued against the relevance of a semantic role Means for Ancient Greek. In Ancient Greek, manipulation is the distinctive feature of Instrument; lack of manipulation is typical of Cause. The difference between manipulated and nonmanipulated entities is made clear by the distribution of cases with the preposition $\delta\iota\acute{\alpha}$: manipulated entities are denoted by NPs in the genitive, while nonmanipulated ones are denoted by NPs in the accusative. PPs with $\delta\iota\acute{\alpha}$ and the accusative come especially close to what is defined as Means by Croft and Radden, but case variation does not allow for an area of overlap where one finds “less manipulated” entities. In Latin, on the contrary, some

30. See Beckmann (1963: 35–47) and Grevander (1926).

31. Some occurrences in which *ab* has an instrumental meaning already occur in Classical Latin; see Beckmann (1963: 47–54).

occurrences of *per* are ambiguous as to the feature of manipulation and cannot be clearly classified as either Instrument or Cause. Consider the following examples:

(98) Cic. *Caecin.* 3: *qui per tutelam aut societatem aut rem mandatam aut fiduciae rationem fraudavit quempiam, in eo quo delictum maius est, eo poena est tardior?*

‘if a man, as a guardian, or as a partner, or as a person in a place of trust, or as any one’s agent, has cheated any one, the greater his offence is, the slower is his punishment?’

(99) Cic. *Mil.* 16,43: *qui ita iudicia poenamque contempserat ut eum nihil delectaret quod aut per naturam fas esset aut per leges liceret?*

‘who had shown such contempt for courts of justice and punishment that he took no pleasure in anything which was not either impious, from its disregard of the prohibitions of nature, or illegal, from its violation of law?’

In (98) and (99) we find different degrees of manipulation. In (98), the *per* phrase refers to a power which is intentionally and actively used by an agent in order to bring about a state of affairs. But manipulation is not what is profiled by the use of *per*: the preposition rather profiles the fact that the agent’s intentions are achieved by the enabling effects of certain powers. In (99), *per naturam* and *per leges* do not denote manipulated entities, as shown by the predicates *fas esset aut ... liceret*, but rather entities that help the agent to achieve a certain result, and come close to Cause (see further Section 5.3). This is what I have defined as “enabling Cause” in Luraghi (2003a); its range covers features of both Instrument and Agent. In such a context the ablative is also possible, as shown by comparison of (99) with (19).

Besides manipulation, the feature of control must also be understood differently with Means expressions. While the occurrence of an instrument implies the co-occurrence of an agent, which controls the state of affairs, with means it is only implied that a human benefits from the state of affairs, even without directly controlling it. This situation can be described in terms of features if we separate intentionality from control and understand intentionality as conformity to the aims of a human entity more or less actively implicated in the state of affairs. Such lesser controlled and hardly manipulated entities are understood as belonging to the same category in Latin, namely, Means. As we will see in the next paragraph, the possible lesser relevance of manipulation has consequences for the definition of Intermediary as well.

Because the feature of manipulation is not relevant for Means, *per* often occurs with nouns denoting nonprototypical Instrument—that is, abstract nouns. Concrete nouns are sporadic (see

Pinkster 1990: 205–206); they occur more frequently in technical texts. Means is usually coded through *per* with the accusative, but it can also be coded through the plain ablative. Abstract nouns also occur frequently in the plain (instrumental) ablative, and expressions such as *ui* ‘by force’ are as frequent as *per ui*; possible alternation between the plain ablative, *metu*, and *per* with the accusative is demonstrated in (100):

(100) Cic. *Verr.* 2,61,150: *sin autem metu coacti dederunt, confiteare necesse est te in prouincia pecunias statuarum nomine per uim ac metum coegisse*

‘but if they presented the statues under the compulsion of fear, you must confess that you exacted money in the province on account of statues by violence and fear’

Emotions are not commonly conceived as entities that can be controlled by human beings, so the occurrence of a noun denoting an emotion in an instrument expression is most unexpected. Indeed, the first occurrence of the same word in the ablative in this passage is understood as Force, or possibly Cause, but certainly not as Instrument. Passive voice (and in this case the occurrence of the passive participle *coacti*) does not by itself trigger a reading of the plain ablative or of any other type of expression as denoting Force, as shown by the occurrence of *ui* in (101) and *per uim* in (102), where the context makes clear that there is another entity that controls the state of affairs:

(101) Cic. *Tull.* 23,53: *non modo seruos M. Tulli occidere iure non potuisti uerum etiam, si tectum hoc insciente aut per uim demolitus esses quod hic in tuo aedificasset et suum esse defenderet, id ui aut clam factum iudicaretur*

‘you not only could not lawfully slay the slaves of Marcus Tullius, but even if you had demolished the house without his knowledge, or by violence, because he had built it in your land and defended his act on the ground of its being his, it would be decided to have been done by violence, or secretly’

(102) Cic. *Sull.* 66: *atque in ipsa rogatione ne per uim quid ageretur, quis tum nostrum Sullam aut Caecilium uerebatur?*

‘and even in regard to this very motion, who was there of us who had any fears of Sulla or Caecilius attempting to carry any point by violence?’

The occurrence of *per* usually prevents a Force interpretation: contrary to Force, Means occurs in events where an intentional Agent also occurs, and it points toward the fact that control is exerted by another entity (i.e., the agent, not the means). In terms of manipulation and control, causal semantic roles taken by inanimate entities display the distribution of features shown in Table 3.

Some occurrences of *per* with abstract nouns leave room for a Manner interpretation, as in *per iocum* ‘in fun’; see Section 10 below. Occurrences of certain concrete referents may be seen as inanimate Intermediary, as in *per litteras*; see Section 5.2.3.

5.2.3 Intermediary

With animate nouns, *per* denotes Intermediary. The latter is the semantic role taken by the (mostly animate) entity which performs an action on behalf of a primary agent, who is presented as exerting intentionality, and in some cases partial control, over the state of affairs. Some examples of Intermediary expressions are (103)–(106):

- (103) Plaut. *Mil.* 952: *condicio ... fertur per me interpretem*
‘conditions are established through my mediation’
- (104) Cic. *Cluent.* 22.61: *nempe quod Habitum per seruum medici ueneno necare uoluisset*
‘because he attempted to murder Habitus by poison, through the slave of the doctor’
- (105) Sall. *Catil.* 44,1: *sed Allobroges ex praecepto Ciceronis per Gabinium ceteros conueniunt*
‘the Allobroges, as Cicero recommended, introduced themselves to the other conspirators through Gabinius’
- (106) Matth. 1,22: *hoc autem totum factum est ut adimpleretur id quod dictum est a Domino per prophetam dicentem*
‘now all this has happened, that it might be fulfilled which was spoken by the Lord through the prophet’

The above examples demonstrate different degrees of active involvement on the part of the Intermediary. In (103) the act of establishing conditions is certainly done in the interest of some other agent, but the intermediary is the final performer of the actions involved. In (104) the action that the agent wants to bring about is to be performed by the intermediary, who has the ultimate responsibility for actually performing it: in other words, intentionality and control are divided between the agent and the intermediary. This is a case of what I have defined as “split agency” (see Luraghi 1989). Similar to Means, Intermediary implies that intentionality is assigned to another entity, in this case better described as the primary agent, on whose behalf the intermediary acts. So the intermediary, who can be manipulated to different extents, exerts control over the action, but the primary agent is responsible for intentionality.

In occurrences such as (104), Intermediary comes close to Causee, the semantic role of the second argument of causative constructions. Possibly Intermediary and Causee are at least in part the

same semantic role in two different syntactic constructions: while Causee is an argument, Intermediary is an Adverbial. Causee may be coded like Patient, as in (107):

(107) *He caused the slave to poison Habitus*

thus profiling only lack of intentionality; Intermediary, on the other hand, profiles both lack of intentionality and ultimate control.

Contrary to the examples discussed above, in (105) the intermediary Gabinius does not perform the action denoted by the verb *conuenire*, and the degree of manipulation is low. In this case, the intermediary is the human entity thanks to which the state of affairs is brought about: it is similar to an enabling Cause, in the terminology of Luraghi (2003a), and to certain Means expressions, as seen in Section 5.2.2; see also the discussion of (108)–(110). Finally, example (106) shows that an Intermediary expression can cooccur with an Agent expression.

Occasionally, *per* with the accusative may occur with passive verbs and come close to Agent. However, choice of a *per* rather than *ab* phrase always implies that the state of affairs is brought about in the interest of another participant:

(108) Cic. *epist.* 1,1,1: *Hammonius, regis legatus, aperte pecunia nos oppugnat; res agitur per eosdem creditores, per quos, cum tu aderas, agebatur*

‘the king’s agent, Hammonius, is openly attacking us by bribery. The business is being carried out by means of the same moneylenders as it was when you were in town’

(109) Cic. *epist.* 1,4,2: *dignitatis autem tuae nemo est quin existimet habitam esse rationem ab senatu; nemo est enim, qui nesciat, quo minus discessio fieret, per aduersarios tuos esse factum*

‘but as to your own claims, everyone considers that all proper regard has been paid them by the senate, for there is no one that is ignorant of the fact that it was all the doing of your opponents that no division took place’

(110) Cic. *epist.* 1,5b,2: *nunc id speramus idque molimur, ut rex, cum intellegat sese, quod cogitabat, ut a Pompeio reducatur, adsequi non posse et, nisi per te sit restitutus, desertum se atque abiectum fore, proficiscatur ad te*

‘my hope and my earnest endeavor now is that the king should pay you a visit, when he understands that he cannot obtain what he had in his mind, namely, restoration by Pompey, and that, unless he is restored with your help, he will be abandoned and neglected’

It can be remarked that the *per* phrases always occur in passages where some other agent is implied

who exerts intentionality. In (108) in particular *per creditores* is used as instrument by *Hammonius*, with some degree of manipulation. But note that manipulation is not necessary: in (109), *per aduersarios* may refer to persons instigated by the senate, but in (110), *per te* simply refers to somebody who may possibly help another person to reach his aims.

Note that in this last example, where we can translate *per te* as ‘by your help’, the human who exerts intentionality is presented as unable to act. In a sense, *per te* in this example is a real Agent phrase, because the referent has both intentionality and control, but the context makes clear that there is some other human entity that would profit from his action. This occurrence is the equivalent of the use of inanimate NPs with the semantic role Means seen in Section 5.2.2; the meaning of *per* in this example is ‘thanks to’.³²

Use of *per* with personal pronouns is frequent; the PP *per se*, with the reflexive, comes to mean ‘by oneself’:

- (111) Cic. *Phil.* 12,2,4: *ualde hercules uobis laborandum est, patres conscripti, ut uestram dignitatem amittatis, quae maxima est; Antoni, quae neque est ulla neque esse potest, retineatis, ut eam **per uos** reciperet quam **per se** perdidit*

‘you then, O conscript fathers, are to make great exertions for the express purpose of losing your own dignity, which is very great, and of preserving that of Antonius, which neither has nor can have any existence; and of enabling him to recover it by your conduct, which he has lost by himself’

The origin of the frequent expression *per deos immortalis* can be seen in (112):

- (112) Cic. *Manil.* 59: *sed in hoc ipso ab eo uehementissime dissentio, quod quo minus certa est hominum ac minus diuturna uita, hoc magis res publica, dum **per deos immortalis** licet, frui debet summi uiri vita atque uirtute*

‘but, in this case, I differ from him most strongly; because, the less certain and the less lasting the life of man is, the more the republic ought to avail itself of the life and valor of any admirable man, as long as the immortal gods allow it to do so’

Intermediary is a semantic role which is typically assigned to humans; metaphorically an

32. Sometimes *propter*, too, occurs in similar expressions, where it can be translated as ‘thanks to’: its occurrence points toward the close connection of this type of ‘enabling’ Intermediary with Cause. See Hofmann & Szantyr (1965: 247) for the examples.

intermediary can be an inanimate concrete entity, in the frequent case of *per epistulam, per litteras*: in such cases, the instrument used to transfer information is metaphorically conceived as acting as intermediary in communication.

5.3. Cause

In comparison to roles such as Agent and Instrument, Cause is more complex, because there appears to exist no natural class of causes: causes can be natural forces or emotions, abstract notions, other types of inanimate entity, human beings, or states of affairs. Languages display a much larger variety of expressions for Cause than for Agent and Instrument, as exemplified by English (see Dirven 1993, 1995; Radden 1985): while the features of animacy and manipulation help to identify prototypical classes of agents and instruments, there is hardly a class of “natural causes”.

As I have repeatedly remarked in the preceding paragraphs, Cause does not imply the existence of an agent who acts voluntarily, as Instrument and, to a lesser extent, Means do. However, this does not mean that Cause implies that there is no other entity which controls the state of affairs, as Force does; in other words, an agent can also co-occur. Compare the following examples:

(113) *Mary was shivering from the cold*

(114) *Paul decided to leave for fear of being late*

In (113) the cause brings about a certain state of affairs, and the human entity involved undergoes it unintentionally (the semantic role of *Mary* in this case is Experiencer). In (114) the referent of the Cause expression does not directly bring about the state of affairs, but it prompts the agent to bring it about. This second type of Cause is more properly called Reason. Although from a cognitive point of view Cause “proper” and Reason are significantly different, at least in the Indo-European languages they are not formally distinct: apparently the normal situation is one where there is only one grammaticalized semantic role, for which I use the name Cause without making any further subdivision. As we will see in Section 6, Reason is important because it constitutes an area of overlap of Cause with Purpose.

Cause may be coded like Instrument: in Latin we find the plain ablative for both. These two semantic roles are partly in complementary distribution, since Instrument can only occur with controlled states of affairs, while Cause can occur with uncontrolled states of affairs (but this does not mean that it cannot occur with controlled ones). As I have argued in Section 5.2.2 in the discussion of the semantic role Means, manipulation seems crucial to the definition of Instrument. Cause shares the

feature of nonmanipulation with Means and Force. Examples of the plain ablative in Cause expressions are (115)–(117):

- (115) Cic. *Cato* 28: *orator metuo ne languescat **senectute***
‘I fear that the speaker becomes weaker because of old age’
- (116) Verg. *Aen.* 4,696: *nam quia nec **fato**, **merita** nec **morte** peribat, sed misera ante diem*
‘for since the end came not by fate, nor by a death she had earned, but wretchedly before her day’
- (117) Tac. *Germ.* 5,1: *terra etsi aliquanto specie differt, in uniuersum tamen aut **siluis** horrida aut **paludibus** foeda*
‘there are some varieties in the appearance of the country, but broadly it is a land of wild forests and unhealthy marshes’

Examples (118) and (119) demonstrate the close relation between Cause and Means and Cause and Force: in (118) the ablatives *labore* and *iustitia* can be understood as Cause, since they refer to nonmanipulated entities, and there is no human entity exerting intentionality: but it can also be argued that the state of affairs is brought about in the interest of an entity which is understood as a plurality of human beings. In (119), the passive voice favors a Force interpretation, but Cause is not ruled out:

- (118) Sall. *Catil.* 10,1: *sed ubi **labore** **atque** **iustitia** res publica creuit, ...*
‘but when our country grew great through toil and the practice of justice’
- (119) Sall. *Catil.* 5: *agitabatur magis magisque in dies animus ferox **inopia rei familiaris** et **conscientia scelerum***
‘day by day his violent spirit was goaded more and more by the absence of his patrimony, and by his consciousness of guilt’

Most often, Latin employs two prepositions, *ob* and *propter*, which originally expressed proximity, following the Location metaphor (see Luraghi, 2005b): a location at which a state of affairs takes place is conceived of as its cause. The preposition *pro*, which codes Purpose or Beneficiary, can also code Cause.

The spatial meaning of *ob* was ‘in front of’, similar to *pro*. As I show in Section 7, location in front of a landmark could metaphorically be understood as replacement of the landmark by the trajector. This is clearest in the case of *pro*, but close scrutiny of the occurrences of *ob* in Cause expressions shows that, at least in Plautus, this preposition occurred when a cause could be understood as being involved in an exchange; it often occurs with *dare* or verbs with similar meaning. Consider

(120)–(121):

(120) Plaut. *Truc.* 589-590: *dic ob haec dona, quae ad me miserit, / me illum amare plurimum omnium hominum ergo*

‘tell him, that, in return for these presents which he has sent me, therefore I love him the most of all men’

(121) Plaut. *Asin.* 906: *pueri, plaudite et mi ob iactum cantharo mulsum date*

‘boys, clap your hands, and give me some honeyed wine in my cup, in honor of my throw’

In (120), the entity denoted by *haec dona* is a cause for the state of affairs denoted by *me illum amare*, but the state of affairs, being a result, is also viewed as a matter of exchange: in other words, the resulting state of affairs is viewed as a return for the entity that brought it about. Similar remarks can be made about (121), where the verb *dare* occurs. Furthermore, *ob* frequently occurs with the word *rem* (more than half of the occurrences in Cause expressions in Plautus) and does not usually occur with animate nouns.

The preposition *propter* has a different distribution: it occurs with a wider variety of verbs, and frequently with nouns that denote humans (often with personal pronouns). Examples are (122)–(123):

(122) Plaut. *Merc.* 959: *nam mea uxor propter illam tota in fermento iacet*

‘for my wife is lying all in a tizzy because of that girl’

(123) Plaut. *Capt.* 702: *sed hoc mihi aegre est, me huic dedisse operam malam, qui nunc propter me meaque uerba uinctus est*

‘but this thing grieves me, that I’ve done this person a bad turn, who is now in chains on account of me and my talking’

As I have argued in Luraghi (2005b), *ob* had become marginal in Cause expressions by the age of Caesar and Cicero, being mostly limited to expressions such as *ob eam rem/causam*, while *propter* was the most frequent way of coding Cause. Later authors, starting with Livy, revived the use of *ob*, using it in contexts in which it did not occur earlier and possibly never occurred in the spoken language, as in (124):

(124) Liv. 5,4,11: *decem quondam annos urbs oppugnata est ob unam mulierem ab uniuersa Graecia, quam procul ab domo?*

‘a city was once besieged by the whole of Greece for ten years, for the sake of one woman, and at what distance from home?’

In Late Latin *ob* is virtually nonexistent: it does not occur in *Aegeria*, and Jerome uses it infrequently when he has no clear translation equivalent, such as to translate causal ὄτι or the plain dative, while he only uses *propter* to translate διὰ with the accusative.

As noted above, Cause can also be coded through *pro* with the ablative. This preposition basically indicates an exchange, as shown in (125):

(125) Plaut. *Epid.* 363–365: *eum [ego] docebo, / siqui[d] ad eum adveniam, ut sibi esse datum argentum dicat / **pro fidicina** argenti minas se habere quinquaginta*

‘I’ll instruct him, if any one comes to him, to say that the money has been paid to him; that he gets fifty *minae* of silver as payment for the music-girl’

It can occur in Cause expressions in contexts similar to those in which *ob* also occurs:

(126) Liv. 5,36,8: *uicere seniores, ut legati prius mitterentur questum iniurias postulatamque ut **pro iure gentium uiolato** Fabii dederentur*

‘the older men thought that ambassadors should first be sent to Rome to make a formal complaint and demand the surrender of the Fabii as satisfaction for their violation of the law of nations’

Contextual factors trigger different interpretations of *pro* phrases as possibly expressing Cause, Purpose, or Beneficiary, as shown in de la Villa (1995). It must be noted that occasional overlap of Cause and Purpose is also attested with other prepositions. Only later, as remarked by Löfstedt (1911: 219), does overlap increase and in *Aegeria* it seems complete (see Luraghi 2005b and Section 5.5 below).

Especially with nouns denoting emotions, and in negative sentences (*causa impediens*), Cause can also be coded through *prae* with the ablative:

(127) Cic. *Att.* 11,7,6: *non possum **prae fletu et dolore** diutius in hoc loco commorari*

‘I cannot dwell on this topic any longer because of tears and grief’

Already in Plautus, *de* can also occasionally denote Cause. In this case, Cause is coded as Source or Origin. The metaphorical linking of spatial source with the concept of cause frequently operates across languages, as many authors have pointed out. Nikiforidou (1991) argues that such an extension is based on the metaphor “causes are origins”. Croft’s model of causal structure of events, discussed in Section 5.4 below, takes Cause to derive from Source via the mapping of the space domain onto the domain of causation (see Croft 1991). Hofmann & Szantyr (1965: 262) quote some

examples, remarking that one can usually see how abstract meaning was created out of the local meaning ‘from’. Causal usage of *de* is already attested in Early Latin and apparently increases in later stages of the language. Examples are (128)–(129):

- (128) Ter. *Hec.* 757: ***de tali causa*** *nuptae mulieri se ostenderet*
‘presented herself before a married woman for such a reason’
- (129) Ov. *am.* 3,5,6: *umida de guttis lene sonantis aquae*
‘damp from the stream of softly sounding water’

as well as the frequent expression *qua de causa* ‘for this reason’.

Causal *de* also occurs in the *Itinerarium* (See Luraghi 2005b) as well as in late technical texts:

- (130) Marcell. *med.* 1,62: *si de sole caput doleat*
‘if one has headaches caused by the sun’

In this and the preceding sections I have argued that Cause has close connections with the semantic role Means. Accordingly, Cause can be coded as Means, through *per* with the accusative. Consider (131)–(132):

- (131) Plaut. *Aul.* 247-248: *nam si opulentus it petitum pauperioris gratiam / pauper metuit
congregari, per metum male rem gerit*
‘for if a wealthy person goes to ask a favor of a poorer one, the poor man is afraid to meet with him; through his apprehension he hurts his own interest’
- (132) Tac. *Ag.* 37,4: *acceptum aliquod uulnus per nimiam fiduciam foret*
‘serious loss would have been sustained through the excessive confidence of our troops’

In (131) the *per* phrase indicates the cause of the state of affairs: the cause is coded as Means because the preposition profiles a manner of acting by an intentional agent; note, however, that, contrary to the common circumstances in which Means expressions occur, the possible behavior of the agent would not be intentional and would not be to his benefit. In (132) we find a passive; the state of affairs does not conform to the intentionality of the implied agent, nor does the latter profit from it. On the other hand, Cause can come close to Means when coded through *propter*. Example (133) shows how *per* and *propter* could overlap:

- (133) Sall. *Iug.* 26,1: *Italici, quorum uirtute moenia defensabantur, confisi deditioe facta propter
magnitudinem populi Romani inuiolatos sese fore*
‘the Italians, by whose valor the city was defended, and who trusted that, in the event of a

surrender, they would be able to escape without personal injury, out of respect for the greatness of Roman power’

The development of the causal meaning of *per* is illustrated in Hofmann & Szantyr (1965: 240–241).

5.4. Typological considerations

In the first place it is remarkable that Latin has a case which, in spite of being called “ablative”, functions as an instrumental and has as its main function the expression of Instrument and, to a lesser extent, Cause (and Manner, see below). Indeed, an instrumental case is frequently found in case systems of genetically unrelated languages which have more than four cases (see Luraghi 1991).

As already noted, Latin belongs to the group of languages that keep prototypical and nonprototypical agents formally distinct, thus having a grammaticalized semantic role Force. Furthermore, Latin has a specific type of expression for Intermediary, which also extends to nonprototypical Instruments (i.e., human ones). Intermediary expressions can, to some extent, extend to Agent. The extension of Intermediary to Agent, common in many Indo-European languages, is apparently restricted to this language family, according to the data in Palancar (2002). Limited to human referents, Agent can further be coded through the plain dative. Latin also has a further grammaticalized semantic role, halfway between Instrument and Cause, namely Means, that shares the feature of nonmanipulation with Cause and the feature of external control with Instrument.

The relation of Instrument to other semantic roles has been the topic of several typological studies. Stolz (1996) has introduced a classification, based on possible occurrence of a polysemous marker that encodes Comitative and Instrument, according to which languages are grouped as “coherent” (those in which Instrument = Comitative), “incoherent” (where Instrument ≠ Comitative), and “mixed”. Latin belongs to the group labelled “incoherent”, but it must be pointed out that Comitative is encoded by the same case as Instrument, plus a preposition. Languages of this type are frequent, both in Indo-European and in other language families (see Stolz 1996; Luraghi 2001b).

That the encoding of Cause relies on a wide variety of expressions is not surprising. When expressed through a plain case, Cause merges with Instrument in Latin. This type of polysemy occurs in other languages, both Indo-European and non-Indo-European (see Palancar 2002). Other common types of polysemy involve Cause and Source/Origin and Cause and Location. Of these, the former is not particularly frequent in Latin. On the other hand, Location, and specifically location in front of an entity, is extended to Cause with numerous prepositions: *prae*, *ob*, and *propter*.

Croft (1991: 194–196) put forward a model of event structure that can be defined as the “causal approach”. Following this approach, space is mapped onto the abstract domain of causation, and semantic roles are divided into antecedent and subsequent, depending on their location relative to the transmission of force that brings about an event. In Luraghi (2001a), I suggested a somewhat modified version that also includes concomitant (i.e., neither subsequent nor antecedent) semantic roles. Antecedent roles correspond to Source on the spatial plane, concomitant roles to Location, and subsequent roles to Direction. In Figure 6, I give a somewhat simplified picture of spatial and corresponding nonspatial roles.

According to Figure 6, Cause should be coded mostly as Source; a further prediction is that Cause should not merge with Purpose. As we have seen in Section 5.3, Cause is often coded as Location in Latin, and, as partly anticipated, polysemy involving Cause and Purpose is frequent. Because this polysemy also occurs in many other Indo-European languages, and because it is even more frequent in the Romance languages, I discuss it in Section 6.1 below.

5.5. Diachronic considerations

Except for the dative of agency, which had a limited distribution, Latin did not inherit a specific way of encoding the agent of passive verbs from Proto-Indo-European. As remarked by several scholars (see, e.g., Strunk 1991, Hettrich 1990, Luraghi 1986), Proto-Indo-European did not have a grammaticalized expression for this purpose (most likely because it lacked a fully developed passive voice, see Luraghi 1986). The extension of *ab* from Source to Agent must have taken place in Latin, rather than in the protolanguage; in Latin the use of *ab* appears to be well established already in early texts, to such an extent that Bennett (1914: 297) states that “it is superfluous to give examples”. The encoding of Agent remains very much the same throughout the history of Latin. Only very late does one find evidence for the replacement of *ab* by *de*, which leads to the situation attested in the early Romance languages, where Agent was encoded by prepositions derived from *de*. It must be remarked in any case that *de* did not directly substitute for agentive *ab*: rather, it started extending to concrete spatial usages of *ab* as early as Plautus. Replacement of agentive *ab* by *de* must be seen as the result of an ongoing process, by which *de* replaced *ab* in all its meanings.

To a limited extent, passive agent was expressed as Intermediary in the early Romance languages. This way of encoding Agent was especially relevant in Gallo-Romance, while in the other Romance languages coding of Agent as Source and coding as Intermediary competed for some time. In Medieval Spanish and Medieval Italian, both *de* and *por* and *da* and *per* occur in Agent expressions.

The modern languages followed divergent paths: while *por* has been virtually generalized in Spanish, *da* is the standard way to encode passive agent in Italian. Note that Gallo-Romance is the only dialect group that retained the distinction between *per* (Fr. *par*) and *pro* (Fr. *pour*); in Ibero-Romance the distinction *por/para* is also a late innovation. In Medieval Italian *per* could also express Agent, in the same way as *da*; later on the use of *per* became more and more restricted until it disappeared, and the expression of passive Agent remained limited to *da*.

I have shown that Latin has different codings for prototypical and nonprototypical Agent; the semantic role Force was grammaticalized, and it was coded as Instrument. In the Romance languages there is no specific coding for Force: nonprototypical agents are treated as Agent and are coded through the same prepositions.

The instrumental ablative is a direct outcome of the Indo-European instrumental case, to which it partly also goes back morphologically. The encoding of Instrument remains the same throughout the history of Latin; the only notable alternative construction, limited to Christian Latin, is *in* with the ablative, derived from Greek ἔν plus dative, and *per*, limited to the Vulgate, which Jerome used for translating Greek διὰ plus genitive. The instrumental use of *cum*, which attests the extension of Comitative to Instrument reflected in the Romance languages, only started late.

The ablative of Cause in Latin is synchronically the same as the ablative of Instrument, but its origin is partly different. As shown by comparative evidence, the expression of Cause was one of the functions of the Indo-European ablative: Cause expressions in the ablative occur in Sanskrit and in Hittite (see Luraghi forthcoming). The Indo-European instrumental case could also express Cause, as again shown by evidence from several languages, including Sanskrit, Hittite, Greek, and Slavic. So the merging of the two cases in Latin did not bring about any semantic conflict in the case of Cause. Among prepositional phrases, the use of *prae* for Cause is of Indo-European origin, as argued in Dunkel (1990).

As already remarked above, the *Itinerarium* attests to a complete confusion between Cause and Purpose: this state of affairs anticipates the Romance situation, as shown by It. *per*, Fr. *pour*, and Sp. *por* (*para* was created during the Middle Ages but does not belong to the earliest Spanish varieties; Corominas 1954 s.v.). I return to this development in Section 6.2 below.³³

The development of the causal meaning of *per* is interesting, because of the reflexes of this

33. See Luraghi (2005a, 2005b) on the merger of Cause and other semantic roles in Late Latin, and on a similar development in Byzantine Greek.

preposition in the Romance languages. According to Hofmann & Szantyr (1965: 241), the origins of this meaning must be seen in impersonal expressions such as *per aetatem licet* ‘it is allowed through age’, which according to the classification of semantic roles followed in this chapter should better be regarded as Means. I have argued in Section 5.3 that Means expressions extended to Cause in occurrences where events which are brought about are not in accordance with the intentionality of a co-occurring human entity. More Cause expressions occur in late technical texts, as the *Mulomedicina Chironis*, as shown in Hofmann & Szantyr (1965: 241).

6. Purpose

Common sources for Purpose expressions are allative markers, or markers of Recipient/Beneficiary. Another frequent source of Purpose expressions is Cause expressions.

Latin Purpose expressions include the plain dative (see Serbat 1996), the postpositions *causa* and *gratia* with the genitive, and various prepositional phrases, in particular with *ad* and *pro*. The use of the dative and of *ad* is motivated by a metaphor that equates Purpose with (abstract) Direction—according to Lakoff and Johnson (1980), “purposes are destinations”—and is in accordance with the predictions in Figure 6. (In the case of the dative, the existence of this metaphor has very interesting implications for a possible original meaning as Direction marker, a meaning that must have preceded the association of the Indo-European dative with animate nouns, and that can be found especially in Old Indic, and sporadically in Latin too.)³⁴

The dative of Purpose is limited to some special collocations, such as *auxilio mittere* ‘to send as help’ or *remedio adhibere* ‘to use as a remedy’, and has a close connection to the verb (see Hofmann & Szantyr 1965: 98). The preposition *ad* with the accusative is used in final clauses with the gerundive; its usage is described by Hofmann & Szantyr (1965: 373).

The use of *pro*, *causa*, and *gratia* demonstrates the fluidity of the border between Purpose and Cause:

(134) Liv. 7,25,6: *Latinos pro sua libertate potius quam pro alieno imperio laturos arma*

‘Latins prefer to bear arms in defense of their own liberty rather than in support of an alien dominion’

(135) Sall. *Catil.* 51,5: *sed postquam bello confecto de Rhodiis consultum est, maiores nostri, ne quis*

34. On the use of the dative and of *ad* with the accusative in Purpose expressions, see Hofmann & Szantyr (1965: 86, 93, 220).

diuitiarum magis quam iniuriae causa bellum inceptum diceret, inpunitos eos dimisere

‘yet, after the war was ended, and the conduct of the Rhodians was taken into consideration, our ancestors left them unpunished for fear that someone might say that war was made upon them for the sake of seizing their wealth, rather than of punishing their faithlessness’

(136) Cic. *S. Rosc.* 15: *quas, ut aequum est, familias honestatis amplitudinisque gratia nomino*
‘families which I name, as it is right I should, because of their honor and dignity’

In Vulgar Latin there are more signs of confusion between Cause and Purpose, as shown by

(137):³⁵

(137) *Itin. Eger.* 36,2: *candelae autem ecclesiasticae super ducente paratae sunt propter lumen omni populo*

‘over two hundred church candles have been arranged to provide light for all the people’

6.1. **Typological considerations**

The occurrence of a specific case, the purposive, for coding Purpose is frequent in many of the languages of Australia. Usually, the purposive case also encodes Direction, Recipient, and Beneficiary (see Blake 1977; Dixon 2002); in other words, it mostly corresponds to the dative of the Indo-European languages. Indeed, the Proto-Indo-European dative, when occurring with inanimate nouns, may well be reconstructed as a purposive. The dative denotes transfer, and possibly its original function was to denote Direction; extension of the dative to Purpose is based on its directional meaning. The Latin dative inherited this function to a limited extent only; the preposition *ad*, which conformed to the same metaphor, occurs with gerunds.

In the case of NPs, Purpose is mostly coded as Location, based on a metaphor which does not imply any directionality, and displays a strong tendency to merge with Cause. As I have already noted in Section 5.3, the relation of Cause to Purpose constitutes an interesting issue. In the first place, different hypotheses have been made about the possible direction of semantic spread, querying whether it is unidirectional (either from Cause to Purpose, or from Purpose to Cause) or bi-directional. Croft (1991: 293), mostly on the evidence of English *for*, argues that Purpose expressions can extend their meaning to also express Cause, and that the spread is unidirectional. However, evidence from other languages easily shows that the relation is bidirectional. This can be demonstrated by means of the

35. Sporadic extension of *propter* to Purpose also occurs in some post-Classical authors; see Hofmann & Szantyr (1965: 247).

Latin data, some of which have been discussed by de la Villa (1994, 1995); in Luraghi (2005a) I have shown that in Greek the semantic spread proceeded from Cause to Purpose: the Ancient Greek preposition $\delta\iota\acute{\alpha}$ with the accusative, which coded Cause, developed a final meaning and extended to Purpose and Beneficiary in Byzantine Greek.

In both Latin and Ancient Greek, Cause and Purpose could be expressed through various spatial metaphors: in particular, Cause could be coded as Location or Source, and Purpose as Location or Direction. In both languages, a merger of the two semantic roles takes place only with prepositions that express Location, rather than Direction or Source. In Luraghi (2005a) I have suggested that Location expressions constitute in the first place a metaphor for the semantic role Reason, which in its turn provides an area of overlap for Cause and Purpose. As remarked in Radden (1989: 562), “The objects we aspire for are usually also the cause for our aspiration”: a reason is both the cause for an agent’s intentional action, and the purpose at which this action aims. Merger of Purpose and Cause with prepositions that denote Location seems frequent in the Indo-European languages, but this matter has not been investigated outside Indo-European: for this reason, it is impossible to state its typological relevance; more research is needed on this topic.

6.2. Diachronic considerations

The ancient Indo-European languages attest to the final use of the dative with inanimate nouns. The dative of Purpose occurs for example in Sanskrit and, to a more limited extent, in Ancient Greek; in Latin, it is limited by lexical constraints. The preposition *ad* occurs with specific verb forms and should better be regarded as halfway between a preposition and a complementizer: indeed, in the Romance languages its reflexes have become complementizers and occur with non-finite Purpose clauses.

Purpose is mostly coded through reflexes of *pro* in Romance. As already noted in Section 5.3, Cause, Purpose, and Beneficiary merged completely in early Romance; as already remarked in Section 5.5, languages that have different prepositions for the two semantic roles restored the distinction in the Middle Ages.

7. Beneficiary

Beneficiary (also called Benefactive) is the role taken by the human in favor of whom a state of affairs is brought about. Variants include Behalf Beneficiary, a human on behalf of whom another human acts, and Malefactive, a human to the detriment of whom an action is performed. Spatial sources for Beneficiary expressions are markers of Direction or Location; often, in languages that have a dative

case, Beneficiary is expressed by the dative, much like Recipient, a semantic role that I do not discuss in detail in this chapter because it is assigned to arguments rather than to adverbials.

Recipient and Beneficiary are sometimes treated as the same semantic role, as for example by de la Villa (1989; see also Croft 1991). Similarity between the two semantic roles includes the fact that they are both typically assigned to human participants; furthermore, there is a conceptual link, provided by the assumption that if someone gives something to a recipient, the recipient is likely to benefit from the gift. However, there are also important differences between Recipient and Beneficiary: while Recipient implies a concrete transfer, Beneficiary does not, as (138)–(139) show:

(138) *John gave Mary the book*

(139) *Mary bought a book for her mother*

While (138) implies that the gift has been moved from the agent to the recipient, and one can conclude that the recipient has it as a result of the event, no such assumption can be done based on (139).

7.1. **Prototypical Beneficiary**

In Latin, Beneficiary can be coded through the plain dative, as in (140) and (141) (see also *sibi* in (42) above), or, most often, through *pro* with the ablative, as in (142), or *causa* and *gratia* with the genitive, as in (22); occasionally, *in* with the accusative can also code prototypical Beneficiary (most often it denotes Malefactive, see Section 7.3):

(140) Catull. 8,8: *fulsere uere candidi tibi soles*

‘truly, bright days once used to shine on you’

(141) Cic. *Cato* 25: *nec uero dubitat agricola, quamuis sit senex, quaerenti cui serat, respondere: dis immortalibus*

‘and certainly a farmer, even if he is an old man, does not hesitate to answer somebody who asks for whom he is sewing: for the immortal gods’

(142) Liv. 42,9,3: *aduersus se pro hostibus senatus consultum fecisset*

‘(the praetor) had proposed a decree of the Senate directed against the consul and in favor of the enemy’

In Plautus, *pro* often occurs with human landmarks but mostly denotes exchange, as in (125), or in (143):

(143) Plaut. *Cist.* 571: *ego amicae meae dedi, quae educaret eam pro filiola sua*

‘I gave her to a friend so that she can raise her as her own daughter’

In (143) it is not said that the agent raised someone “for the sake of her daughter”, as a Beneficiary meaning would imply, but rather “as if she were her daughter”: the meaning of *pro* here is based on the notion of exchange, already described in Section 5.3.

Occurrences where *pro* does express Beneficiary are few; an example is (144):

- (144) Plaut. *Epid.* 415: *te pro filio facturum dixit rem esse diuinam domi, quia Thebis saluos redierit*
‘he said that you were going to offer a sacrifice at home for your son, because he had returned safe from Thebes’

As already anticipated in Section 5.3, Beneficiary merged with Cause in Vulgar Latin; accordingly, *propter* occurs in Beneficiary expressions in the *Itinerarium*:

- (145) *Itin. Eger.* 38,15: *totum ad momentum fit propter populum, ne diutius tardetur*
‘everything is done quickly for the people, in order for them not to wait too long’

7.2. “Behalf” Beneficiary

Acting in someone else’s place usually implies acting for his/her benefit: Behalf is a common extension of prototypical Beneficiary, often coded in the same way. In Latin, Behalf is expressed by *pro* with the ablative:

- (146) Cic. *Verr.* 3,204: *multa Sosippus Agrigentinus apud Cn. Pompeium consulem nuper, homo disertissimus et omni doctrina et uirtute ornatissimus, pro tota Sicilia de aratorum miseriis grauius et copiose dixisse ac deplorassee dicitur*
‘Sosippus of Agrigentum, a most eloquent man, adorned with every sort of learning and with every virtue, is said to have spoken recently before Gnaeus Pompeius, when he was consul, on behalf of all Sicily, about the miseries of the farmers, with great earnestness and a great variety of arguments’

Similar to prototypical Beneficiary, Behalf is seldom coded through *pro* in Plautus, an example is (147):

- (147) Plaut. *Most.* 1131: *ego ibo pro te, si tibi non libet*
‘I will go in your place, if you don’t want to go’

7.3. “Malefactive”

Malefactive can be expressed by *in*, *adversus*, or *contra* with the accusative:

(148) Sall. *Catil.* 9: *in bello saepius uindicatum est in eos, qui contra imperium in hostem pugnauerant*

‘in time of war punishment was more often inflicted against those who had attacked the enemy against orders’

(149) Tac. *Ann.* 1,3: *bellum ea tempestate nullum nisi aduersus Germanos supererat*

‘he had no war on his hands at the time except against the Germans’

7.4. Typological considerations

In languages that have a dative case, Beneficiary is often coded through the dative. The data in Lehmann, Shin, and Verhoeven (2000) show that the dative can express Beneficiary in many genetically unrelated languages, such as Turkish, Korean, and Wardaman (Australian, non-Pamanyugan). A number of other languages, such as Tamil, encode Beneficiary through a complex adposition with the meaning ‘for the sake of’, which takes the dative case (Andronow, 1969). The coding of Beneficiary through the dative is also common in the Pamanyugan languages, see Dixon (2002). Furthermore, since the dative is often used for coding Purpose, polysemy of Purpose and Beneficiary is quite common.

As I have shown, the Latin dative was also used for Beneficiary; however, Latin mostly made use of the preposition *pro* with the ablative. It is no wonder that the coding of Beneficiary often requires extra morphology in languages that employ the dative, since Beneficiary can co-occur with Recipient and in such cases the two semantic roles need to be kept distinct, as in (150):

(150) *Mary gave me a present for my sister*

The original meaning of *pro* was ‘in front of’, and it is only occasionally attested: its most frequent use in Early Latin was to indicate substitution (see Section 5.3 above). Cause, Purpose, and Beneficiary evolved out of this latter meaning. It would be interesting to know how frequently the notion of substitution is used to conceptualize Beneficiary in genetically unrelated languages, but, as far as I know, there are no studies on this matter.

The Oceanic languages typically employ the genitive to encode Beneficiary (see Song 1998). This seems to be an areal feature, but it is worth mentioning because coding of Beneficiary and Possessor in the same way is also found in Latin (and in the other Indo-European languages); it does not involve the genitive case, but rather the dative (dative of possession, see Baldi and Nuti, this volume).

7.5. *Diachronic considerations*

Latin inherited from Proto-Indo-European the use of the dative for Beneficiary.³⁶ Many other Indo-European languages preserve this function of the dative and also display a variety of adpositional phrases for Beneficiary, so Latin may be thought to have inherited this second pattern as well, though not to have inherited a specific preposition. Note that the typical prepositions for Beneficiary are prepositions that also denote Purpose or Cause; when they have a spatial meaning, they denote some sort of Location, rather than Direction (the latter is more common for Malefactive).

As for the development of Beneficiary expressions in Vulgar Latin and later, I have already remarked in Sections 5.5 and 6.2 that it merged with Cause. Note that this merger does not concern the plain dative, which can under some circumstances still be used as Beneficiary in the Modern Romance languages (it is the only non-argumental usage of pronominal clitics).

8. Experiencer

In the Indo-European languages, the subject of perception verbs and verbs denoting emotional states is most often treated as the subject of action verbs; so, formally, Experiencer is treated as Agent. Furthermore, even in cases where this is not true (e.g., impersonal verbs), the role Experiencer is assigned to arguments of the verb and not to adverbials. The only relevant type of Experiencer that is syntactically an adverbial is the so-called *dativus iudicantis*:

(151) Sall. *Catil.* 13: ***quibus mihi uidentur ludibrio fuisse diuitiae***

‘to such men their riches seem to me to have been but a plaything’

(152) Cic. *Cato* 4: ***numquam tibi senectutem grauem esse senserim quae plerisque senibus sic odiosa est, ut onus se Aetna grauius dicant sustinere***

‘I never had the feeling that old age is such a big weight for you, while for most elderly people it is so heavy, that they say they bear a weight bigger than Mount Aetna’

(Note the co-occurrence in (151) of two datives, denoting two types of Experiencer: the first, *quibus*, is the *dativus iudicantis*, which we can define as an external experiencer; the second one, *mihi*, is the second argument of the verb *uidentur*).

The *dativus iudicantis*, or dative of reference, is the role taken by the human entity from whose vantage point a certain statement is true. Example (151) demonstrates the connection, and the

36. On the dative in the Indo-European languages, see Havers (1911).

difference, between Beneficiary and this type of Experiencer. In the passage it is not said that the participants denoted by *quibus* had a benefit from the riches that they had as toys, but rather that they considered their riches to be toys: some type of mental process is implied from the side of the experiencer.

9. Comitative

9.1. Prototypical Comitative

Comitative is a semantic role prototypically assigned to humans who perform an action together with another participant, whose vantage point is chosen as primary. Occurrences of Comitative *cum* can be found in (2), (16), and (32); a further example is (153):

(153) Catull. 67,35-36: *sed de Postumio et Corneli narrat amore / cum quibus illa malum fecit adulterium*

‘for she talks of the loves of Postumius and of Cornelius, with whom that one committed foul adultery’

Especially with nouns that denote military forces, Comitative can be coded through the plain ablative (the *ablativus militaris*), as in (154):

(154) Liv. 1,23,3: *Albani priores ingenti exercitu in agrum Romanum impetum fecere*

‘the Albans were the first to invade the Roman territory with an immense army’

Nouns such as *exercitus* denote pluralities of marginally individuated human entities, similar to collective nouns; low individuation makes such entities similar to inanimate entities.

9.2. Accompaniment

Inanimate entities that in some sense can be conceived of as accompanying an agent are commonly expressed as Comitative too, in sentences such as (155):

(155) *The boy goes to school with his books*

The semantic role of this nonprototypical comitative is called Accompaniment. In Latin, it is sometimes kept distinct from prototypical Comitative in its formal expression. Normally the preposition *cum* occurs not only for Comitative proper—that is, with nouns that denote human beings, but also for all other relations of accompaniment, as in (156):

(156) Cic. *Catil.* 1,32: *obsidere cum gladiis curiam*
'besiege the Senate-house with swords'

In Late Latin one would expect to see the spread of *cum* to Instrument at its onset. A study of the spread of PPs, and especially those involving *cum*, in place of the plain instrumental ablative is Beckmann (1963). The author tries to single out what he calls *Übergangsfälle* between Comitative and Instrumental from Plautus onward. An example is (157):

(157) Plaut. *Pseud.* 756-757: *hominem cum ornamentibus omnibus / exornatum adducite*
'bring the man here, dressed up with all his adornments'

where the past participle, with its passive meaning, can favor the shift from Accompaniment to Instrument. However, as I have already mentioned in Section 5.2.1, unambiguous occurrences of instrumental *cum* with nouns that denote prototypical instruments, agent expressions, and action verbs occur only starting with late technical texts, as shown in (96).

The plain ablative, too, could express Accompaniment. According to Bennett (1914: 299), this usage was infrequent in Early Latin: he only lists three examples, one of which is (158):

(158) Plaut. *Amph.* 219: *postquam utrimque exitumst maxima copia*
'after they had gone forth on either side in full array'

9.3. Attendant Circumstances

According to Dirven (1993: 91), Attendant Circumstances "is a conceptual domain that refers to a situation occurring or holding at the same time as or in a close vicinity of some other situation; though some link between the two situations is implied, the nature of this link is not specified". Comitative expressions often extend to Attendant Circumstances, as in (159):

(159) *With such bad weather I won't go out*

Attendant Circumstances can be expressed through the plain ablative or *cum* with the ablative, both in Early and in Classical Latin:

(160) Plaut. *Amph.* 1090–1091: *inuocat deos immortalis, ut sibi auxilium ferant, / manibus puris, capite aperto*

'she called on the immortal gods to help her with clean washed hands and covered head'

(161) Enn. *ann.* 484: *cum sonitu magno ... certant*
'they fight with a great noise'

(162) Liv. 3,31,6: *uterque magna patrum indignatione damnatur*

‘both were condemned, greatly to the indignation of the patricians’

(163) Cic. Verr. 1,63: *accidit ... ut illo itinere ueniret Lampsacum cum magna calamitate et prope pernicie ciuitatis*

‘he happened in the course of his journey to arrive at Lampsacum, with terrible and almost ruinous consequences to that community’

Predicative constituents can also be regarded as expressing Attendant Circumstances:

(164) Cic. epist. 16,7: *carus omnibus expectatusque uenies*

‘your arrival is eagerly expected, and you will find an affectionate welcome from everyone’

(Another example is *priuatum* in (174).) Predicative adverbials usually refer to either the subject or the object of a sentence and agree in case and number. This is the only type of adverbial in which the nominative case can occur. Predicative adverbials in the nominative are mostly participles.³⁷

9.4. Typological considerations

I have already mentioned in Section 5.2.1 the frequent polysemy of Comitative markers, which often extend to Instrument. Among languages in which Comitative and Instrument are coded differently, Stolz (1996, 1998) describes a subtype, where Comitative is encoded by the same morpheme as Instrument plus another morpheme. This subtype is fairly frequent among the Indo-European languages, including Latin. I discuss the diachrony of such a type of marking in Section 9.5 below; here it must still be noted that, while *cum* is virtually obligatory for prototypical Comitative—that is, for accompanying human participants, nonprototypical Comitative, as well as Attendant Circumstances, can often take the plain ablative. Cross-linguistic comparison shows that languages vary as to the point at which, on a scale that goes from Comitative to Instrument, the change in the means of coding is located. Such a scale can be set up as in Figure 7.

In Latin, the plain ablative can be used under certain circumstances for all items in the scale below Comitative, but its use is the default only for Instrument: most often, Accompaniment and Attendant Circumstances are encoded through the same formal means as Comitative: *cum* with the ablative. This is not so in all languages in which Comitative and Instrument are encoded differently: in Arabic, for example, the preposition ‘*im* encodes Comitative, while Accompaniment and Attendant

37. On predicative adverbials see Pinkster (1981, 1995: chap. 8) and Vester (1983: chap. 11).

Circumstances are encoded by *b-*, the same preposition that also denotes Instrument. So we have the two opposite situations shown in Table 4.

9.5. Diachronic considerations

An interesting question regards the extent to which the Indo-European instrumental could express Comitative without pre- or postpositions. In fact, the Sanskrit instrumental could express Instrument, Comitative, and Agent (among other functions). Polysemy involving Agent and Comitative is most infrequent, as argued in Luraghi (1986, 2001a, 2001b) and Stolz (1999). Most likely the function Agent was not primary for the instrumental case in Sanskrit: as I have argued in Section 5.5, Proto-Indo-European did not have a specific way of coding Agent with passive verbs. Indeed, the plain instrumental codes Comitative in Sanskrit, but, especially after the Vedic period, it is most often accompanied by an adverb or postposition that means ‘together’, while Agent with passive verbs always remains coded through the plain instrumental. Apparently, semantic roles typical of human participants, such as Comitative and Agent, tend to be kept formally distinct.

Polysemy involving Instrument and Comitative must have been pre-Indic and possibly go back to Proto-Indo-European. Cross-linguistic evidence shows that this (frequent) polysemy arises starting with a Comitative meaning (see Stolz 1996; Luraghi 2001b, 2003a); this apparently also holds for Sanskrit: Delbrück (1867: 50) remarks that the basic function of the Sanskrit instrumental was “*der des zusammenseins*” (‘that of being together’). If we have a look at historically attested cases, it is easy to find examples of the extension Comitative > Instrumental in the Indo-European languages. Latin *cum* itself is a good example: its meaning did not include Instrument in Classical Latin, but it extended to this semantic role later.

There is evidence from the Slavic languages for a “cycle”: at an early stage, the instrumental could express both Instrument and Comitative; later, Comitative receives further marking through a preposition that takes the instrumental; in languages such as Bulgarian, which have lost grammatical cases, the same preposition can express Instrument and Cause. So we have:

- Step one: instrumental = Instrument + Comitative
- Step two: instrumental = Instrument; *s* (or related prepositions) plus instrumental = Comitative
- Step three: *s* plus instrumental = Instrument + Comitative

(Other examples are available from Greek, Germanic, and others; see Luraghi 2001b).

The tendency to add an adposition to the instrumental case for encoding Comitative is common to numerous Indo-European languages; Latin may well have inherited this pattern from Proto-Indo-

European. Throughout the history of Latin, the expression of Comitative remains stable: most of the Romance languages have inherited the same preposition for this purpose, and those which have not have replaced the preposition but have preserved the pattern. Since the merger of Comitative and Instrument occurs in all the Romance languages, including those that have lost the preposition *cum*, it seems likely that the two semantic roles had fallen together already before this preposition disappeared.

10. Area

Area is the semantic role assigned to the topic of verbs of communication (Dirven 1995: 113); in a broader sense, Area can also be defined as “the thematic context or field within which an event is seen” (Radden 1989: 448). These two variants of the semantic role, which below I label Topic and (Limits of) Quality, are coded differently in Latin.

10.1. Topic

Topic is coded through *de* with the ablative, as in titles of literary works (*de bello civili* ‘The Civil War’; *de rerum natura*, ‘On the Nature of Things’); an example is (165):

(165) Cic. *Verr.* 2,1,72: **de quo** ne multa disseram tantum dico, ...

‘in order not to discuss this matter at length, I will only say ...’

(Several other occurrences of *de* in Topic expressions can be found in the examples in the preceding sections, see (25), (47), (61), (146), and (153)).

Note that, being connected with situations in which humans communicate, Topic implies some type of intentional mental activity. For this reason, Topic expressions come close to Reason (and hence Cause or Purpose), as in (166):

(166) Sall. *Iug.* 112: *Bacchus ... daret operam ut una ab omnibus quasi de pace in colloquium ueniretur, ibique sibi Sullam traderet*

‘Bacchus should endeavor to bring all parties together in a conference for peace, as if to settle the conditions, and then deliver Sulla into his hands’

Such usage is common with verbs of fighting, as in (68) above and in (167):

(167) Caes. *Gall.* 5,3,2: *in ea ciuitate duo de principatu inter se contendebant, Indutiomarus et Cingetorix*

‘in that state, two persons, Indutiomarus and Cingetorix, were then contending with each other for the supreme power’

In such cases the shift to Reason seems fully accomplished; the reason is conceived of as the topic of contention.

10.2. *Limits of a Quality*

Quality is coded through the plain ablative (*ablativus limitationis*) in Latin, as in (168)–(170):

(168) Sall. *Catil.* 25: *haec milier genere atque forma, praeterea uiro liberis satis fortunata fuit*
‘in birth and beauty, in her husband and children, this woman was abundantly favored by fortune’

(169) Cic. *dom.* 130 : *hic tribunus plebis scelere et audacia singulari*
‘he is a tribune of the plebs, unparalleled in criminal effrontery’

(170) Caes. *Gall.* 6,12: *si quis ex reliquis excellit dignitate*
‘if one of the others is preeminent in position’

11. Manner

While many of the semantic roles typical of adverbial NPs may also be expressed by adverbs, this possibility is most widespread for Manner. Languages typically rely on one or more derivational affixes to form manner adverbs; the formation of manner adverbs is often so regular that it comes close to inflectional processes (Greek grammarians often described the adverbial ending $-\omega\varsigma$ of manner adverbs as representing a sixth case).

As noted in Vester (1983), it is sometimes hard to distinguish between Attendant Circumstances and Manner, or Instrument and Manner (or Means and Manner as well). A possible way of establishing whether an adverbial has the role Manner would be to paraphrase it with an adverb, or with the expression “in a ... manner”, but for obvious reasons this is impossible with Latin. Discussing possible functions of converbs, which like adverbial NPs can express Manner or Attendant Circumstances, König (1995: 65–66) argues that “the former term [scil. Manner] should only be used for sentences describing two aspects or dimensions of only one event. ... The term ‘attendant circumstance’, by contrast, should be used for cases where two independent events or actions are involved, either of which could be stopped without affecting the other, but which manifest a unity of time and place and thus also a ‘perceptual unity’”. French examples are (171)–(172):

(171) *elle traversa le fleuve en nageant* (Manner)

(172) *dit-il en se levant* (Attendant Circumstances)

Still, it is not easy in the case of PPs to distinguish between “two dimensions” of an event and two events constituting a “perceptual unity”; furthermore, this distinction leaves out Instrument. From a cognitive point of view, there seems to be a continuum between Instrument and Manner, and in some cases it is impossible to make a sharp distinction between semantic roles. The following examples from Vester (1983: 57–58) demonstrate the overlap of Manner and Instrument (or Means, a semantic role that Vester does not use):

(173) Cic. *div.* 1,21: *qui populos urbisque modo ac uirtute regebant*

‘whose rule over peoples and cities was just and courageous’

(174) Liv. 3,11,13: *quem priuatum uiribus et audacia regnantem uidetis*

‘whom you see ruling as a private citizen by virtue of his strength and boldness’

Manner is most often coded through the plain ablative, *cum* with the ablative, or *per* with the accusative: in other words, it is most often coded as Instrument, Attendant Circumstances, or Means, in accordance with possible areas of overlap as discussed above. Examples of Manner adverbials are (175)–(178):

(175) Cic. *prov.* 41: *quae ego omnia non ingrato animo, sed opinatione quadam sententiae repudiaui*

‘all these offers I rejected with firm adherence to my principles, but not without a feeling of gratitude’

(176) Cato *agr.* 42: *ficos et oleas altero modo*

‘(how to graft) figs and olives in another way’

(177) Cic. *Quinct.* 61: *qui primus erat officii gradus seruatus est a procuratore summa cum diligentia*

‘his first duty as an agent was discharged by him with the greatest care’

(178) Sall. *Catil.* 42: *namque illi, quos ante Catilinam dimiserat, inconsulte ac ueluti per dementiam cuncta simul agebant*

‘for those whom Catiline had sent on ahead were doing everything at once, acting imprudently and almost insanely’

12. Cases and prepositions

12.1. *The distribution of plain cases and PPs in Latin*

Adverbials

Pinkster (1985) wrote that the Latin ablative should be considered the case of adverbials. He posited a strategy for the use of cases in Latin, “always use a residual case”, in which cases are considered residual based on the scale shown in Figure 8. Obviously this scale makes the right prediction for the nominative case; the accusative, when used without prepositions, also conforms to it for the most part, given the fact that its adverbial use is seriously restricted. The dative, on the other hand, has a wide adverbial usage, since it can express Purpose, Beneficiary, and Experiencer. These semantic roles are closely related in meaning, and, in much the same way, they are related to the semantic roles of the arguments that typically take the dative, such as Recipient and Addressee. Most of these semantic roles are assigned to humans; the only one which is typical of inanimates is Purpose. Indeed, Purpose seems to be distinct from Beneficiary through the feature of animacy only (see the discussion in Luraghi 2003a).

The Latin ablative has very limited use in argument position; its most frequent function as an adverbial is to denote Instrument, Cause, and Area (Quality), and it typically occurs with inanimate nouns.³⁸ Cause and Quality are semantic roles frequently associated with Instrument.

The occurrences of prepositional ablative constitute a recessive group, which can be viewed as a subgroup of prepositional phrases. By contrast, the accusative, in spite of having limited use as a plain case, is the most frequent case with prepositions, and the only productive one.

Based on these remarks, one can work out the classification of the functions of cases for adverbials shown in Table 5. In other words, a picture emerges in which, beside the “grammatical cases”, Latin had specific cases for denoting Instrument (and related semantic roles) and Purpose, while the dative encoded most semantic roles, argumental or adverbial, taken by human entities. Local cases were limited to toponyms. Furthermore, one of the grammatical cases, the accusative, also functioned as complement of prepositions.

From a typological point of view, the case system of Latin is not unexpected. Case systems that also include cases for semantic roles, besides cases for grammatical relations, typically have a set of local cases; the most frequent nonlocal cases are the instrumental and the purposive (see Luraghi

38. On the function of the ablative as the case of adverbial NPs see further Serbat (1989) and Luraghi (1987).

1991).

From the point of view of Proto-Indo-European, one must of course consider the loss of the ablative, which still functions as such only under lexical constraints: note however that the syncretism of ablative and instrumental had the effect of merging two cases that could already partly express the same semantic role outside local ones, namely, Cause. Another major difference is the high degree of grammaticalization of prepositional phrases. Apart from these two changes, the Latin case system is fairly conservative.

12.2. Internal structure of PPs

According to a rigid definition of government, in keeping with classic structuralism, when case variation is connected with different meanings an adposition cannot be said to “govern” a NP, but it should rather be regarded as modifying it (see for example Lehmann 1983a, 1983b). Following this approach, one should speak of two groups of prepositions in Latin, depending on the type of relation holding between the preposition and a co-occurring NP: (i) prepositions that do not allow for case variation, and govern their NPs, and (ii) prepositions that can take different cases, and modify their NPs.

12.2.1 The Indo-European preverbs: Categorical status

Such a distinction may be insightful as far as the historical development of prepositions is concerned: as is well known, primary adpositions in the Indo-European languages are ancient adverbs, belonging to a special class, called “preverbs”, that underwent a process of grammaticalization. The Indo-European languages preserve different stages in the grammaticalization process: in Sanskrit and Homeric Greek, for example, preverbs could also function as independent adverbs, while this was not possible even in Early Latin, where they had either coalesced with verbs³⁹ or had become prepositions.

Far from being a peculiarity of the early Indo-European languages, such ambiguous categorical status, halfway between preposition and adverb, also occurs elsewhere and is brought by the ongoing renovation of adpositions.⁴⁰ If we limit our analysis to the Romance languages, we can see that many of the Latin prepositions have disappeared and been replaced by new ones created out of former

39. Cases where preverbs can still occur separately from verbs are very few in Latin; see Hofmann & Szantyr (1965: 217).

40. On ongoing grammaticalization of adpositions in the ancient Indo-European languages, especially concerning Latin, see Baldi (1979), Lehmann (1983b), Coleman (1991), Vincent (1999), and Luraghi (2001c).

adverbs. These items, too, often present problems if one tries to assign them to a specific word class, as well as from the point of view of the relation (modification or government) that holds between them and the co-occurring NP. Consider the following Italian examples:

(179) *vado dentro*

‘I go inside’

(180) *vado dentro alla stanza*

‘I go into the room’

(181) *vado dentro, nella stanza*

‘I go inside, in the room’

(182) *vado all’interno della stanza*

‘I go into the interior of the room’

In (179) *dentro* is an adverb, but in (180) it is a preposition, because it determines the choice of the other preposition *a*. In (181) *dentro* is again an adverb, modified by an apposition, the PP *nella* (*in* + DET) *stanza*, which expresses the same semantic relation as *dentro*. In fact, this is the earliest type of construction that appeared historically, and it was already attested in Latin, where the adverb *intro* mostly occurred alone:

(183) Bell. Afr. 88: *ferrum intro clam in cubiculum ferre*

‘to bring the weapon secretly inside, in the bedroom’

Italian adverbial prepositions may have a modifier with the preposition *di*, which expresses nominal dependency. In Italian this does not happen with *dentro*, a very old adverb that derives from a Latin adverb, while modifiers of the latter type usually occur with adverbial heads of more recent nominal origin. The preposition *di* can occur with *interno*, as in (182), which still has its nominal character.

In sum, the same element can behave, within the same language and at the same time, as an adverb or as an adposition; furthermore, it can stand in a variety of relations with a co-occurring NP.

12.2.2 A scalar definition of government

Let us now return to the notion of government. Diachronically the occurrence of different cases with the same adposition is not problematic, since government often derives from modification. So if one adopts a diachronic perspective, one can see a motivation for the occurrence of different cases with the same adposition, in that NPs start out as dependents of adverbs and develop from modifiers into

complements. At an advanced stage of grammaticalization, the case marker on the NP only indicates that the NP is the complement of a preposition:

The more a case affix is grammaticalized, the more it comes to express ... just these syntactic relations. This is the relation of the nominative to the subject relation, ... and of the oblique grammatical cases to the preposition–complement relation. The attraction of an NP into the valence of its controller, so that it ceases to be a modifier, and the grammaticalization of the case suffixes are thus two processes that condition each other. ... Throughout the history of the Latin language, we observe a steadily increasing presence of government. The first step in this direction was the subordination of an NP to the adverb that accompanied it, and thus the creation of prepositional government. (Lehmann 1985: 95–96).

I have already remarked that case variation is very limited in Latin: it basically only involves three prepositions, *in*, *sub*, and *super*. We have seen in Section 3.1 a number of other prepositions, including *ad* and *apud*, that could express either Location or Direction and only took the accusative. This is also true of adverbial prepositions:

(184) Plaut. *Trin.* 909: *non placet qui amicos **intra dentes** conclusos habet*

‘I don’t like a person who keeps his friends between his teeth’

(185) Plaut. *Truc.* 42-43: *si ... **intra pectus** se penetrauit potio*

‘if the drink penetrated into (his) breast’

As I have argued previously (Luraghi 1989: 262), “The opposition rest/motion ... does not need any marker, since it is immediately recoverable from the context. Hence the case morpheme with prepositions like *in* can at most carry redundant information, just as with prepositions always taking the same case”. In other words, already in the Classical period the productivity of cases within the Latin PP was very low, and cases without prepositions still preserved a spatial meaning limited to some toponyms. Note further that this usage is highly idiosyncratic, as demonstrated by the fact that Location is expressed, depending on the inflectional class of the toponym, by the ablative or by the locative (which is synchronically a genitive).⁴¹

Lehmann (1999) summarizes the differences between adverbs and adpositions as in Table 6.

41. A few words also have a separate locative case, such as the word for ‘home’: *domi* (loc.) / *domus* (gen.) / *domo* (abl.).

In light of the above criteria, an interesting example of the development from body part noun to adverb is the English word *ahead*, which can occur either alone, or with a dependent *of* phrase. *Ahead* represents a less grammaticalized stage than the Latin prepositions, because its dependent is optional and can be viewed as a modifier (from this point of view the phrase headed by *ahead* is endocentric), but, according to criterion (c) in Table 6, it is a complement, since *ahead* uniquely determines the occurrence of the preposition *of* in the dependent phrase. So one can claim that *ahead* constitutes a parallel to Latin *in*, *sub*, and *super* which governs its dependent according to criterion (b), but raises problems if one considers it in light of criterion (c).

In order to build a scale by which we can say that we have instances of more or less prototypical government, we need an independent definition of government. Such a definition can be given in purely syntactic terms. Moravcsik (1995: 708) defines government as follows: “Constituent A governs constituent B if the syntactic function of B depends on A”.

The function of the noun phrases in Latin PPs is determined by the prepositions, even in the case of prepositions with case variation (except for a small number of toponyms): the NPs are complements of prepositions, and as such they cannot occur alone (as they could if their relation to their head were appositional, for example as in *nella stanza* in (181). Note that, by this criterion, the case of *ahead* is slightly different. On the one hand, it is true that *ahead* requires its dependent to be marked by the preposition *of* and that, most likely, a PP with *of* could not substitute for a PP with *ahead* (+ *of* ...). This depends on semantic, rather than syntactic, factors. Compare (186)–(188):

(186) *Mary came ahead of time*

(187) **Mary came of time*

(188) *Mary came on time*

So on a scale of prototypicality, prepositions which meet all the above criteria (such as Latin *ad*, which only takes the accusative, or *cum*, which only takes the dative) score the highest; a preposition such as Latin *in* constitutes a case of less prototypical government, while the relation between *ahead* and its dependent, while also displaying a feature of government, is closer to modification.

13. Summary: from Proto-Indo-European to Early Romance

13.1. *Adverbials in Proto-Indo-European*

Proto-Indo-European had a case system which included a larger number of cases than did Latin, and the cases that Latin lost were mostly used for adverbials: consequently, the role of prepositions in Latin is important for adverbial NPs. Note that the cases that can be reconstructed as having had mostly adverbial function in Proto-Indo-European, namely, the locative, the ablative, and the instrumental, all merged into the Latin ablative, which, as I have remarked in Section 12, is often regarded as the case of adverbials.⁴² Functional merger was accompanied by morphological merger, and some differences between the reflexes of the different endings can still be seen in Early Latin, as shown in Prat (1975); see further Vine (1993).

Latin retained cases used for core relations, as well as the genitive, which was used for nominal dependency. Leaving out this last case, and generalizing broadly, we can summarize the functions of cases in Proto-Indo-European as in Table 7.

In Latin we find the functions of cases as in Table 8. The biggest change is that a subsystem of existing cases for local roles is limited to toponyms; other types of NP rely on prepositions. Note further that the expression of Agent through a PP does not constitute a replacement of an earlier expression through a plain case but is an innovation (passive agents with finite verb forms cannot be reconstructed for Proto-Indo-European).

13.2. *Formal aspects of the evolution into Early Romance*

The most dramatic change from Late Latin to Romance is of course the loss of the case system. Within PPs, cases were virtually nondistinctive in Latin already. Loss of the plain ablative in Instrument function must be comparatively late, even though phonological changes that helped bring it about were already around in the first century CE (loss of final nasals and vowel length, see Allen 1978). The dative as it survives in the Romance languages is limited to some personal pronouns, but its use is mostly restricted to core constituents.

42. In Luraghi (1987), I have argued that the basis for syncretism of locative, ablative, and instrumental in Latin was syntactic, being connected with the frequency of these cases at the Adverbial level. On case syncretism in Latin see also Meiser (1992).

As a result of the disappearance of the cases, the semantic roles of adverbials are all coded through PPs. This change can be seen as an ongoing process, which had already started in Proto-Indo-European, where some adpositions can be reconstructed as coding specific semantic roles (notably Cause). The reduction of the case system from Proto-Indo-European to Latin basically affected only the Adverbial level, so the use of prepositions increased with respect to Proto-Indo-European, especially for coding spatial relations. This process is complete, as far as adverbials are concerned, in the Romance languages.

13.3. Semantic aspects

In Early Romance the distinction between Location and Direction was lost, and both semantic roles were coded as one, with the verb playing a role in disambiguation. This situation, which still exists in most Romance languages, also existed in Latin already, for prepositions that did not allow case variation (the vast majority).

The disappearance of *ab* caused changes in the expression of several semantic roles; in the case of passive Agent, most Romance languages replaced *ab* with *de*, thus continuing the Source/Origin metaphor, while Gallo-Romance changed metaphor by coding agent as Intermediary (French *par*). Note that Gallo-Romance is the only variety which preserves two different prepositions, emerging as French *par* and *pour*, that continue *per* and *pro*, while in all other varieties only one form is attested (It. *per*, Med. Span. *por*). The Romance languages allow coding of Force as Agent; that is, they do not have a grammaticalized means of expressing Force.

Beneficiary and Purpose merged with Cause in Late Latin. Further merger of Cause/Beneficiary with Means/Intermediary only affected some of the Romance languages and is related to retention or nonretention of the different prepositions deriving from *pro* and *per*, discussed above.

Because the ablative was the case that was most involved in coding adverbials without prepositions, I summarize the changes that affected it in Figure 9. The semantic roles coded through the ablative can be divided into two groups: on the left, causal semantic roles (in keeping with the order in Figure 6); and on the right, semantic roles close to Comitative and Attendant Circumstances.

The bidimensionality of Figure 9 does not do justice to all of the complex relations that hold among semantic roles. In the first place, there are contacts across the two groups. The semantic roles that appear to be more in contact are Manner and Means: as we have seen, Manner is close both to Attendant Circumstances (hence Comitative) and to Means/Instrument. Besides, Instrument should not be viewed as sharply separated from Cause; and similarly, there are contacts between Means and Force,

and Intermediary and Agent, as we have seen in the sections devoted to each role.

In Vulgar Latin, the group of semantic roles coded through Comitative markers extends to include Instrument: the ablative case that constituted a link between Comitative-like and causal semantic roles disappeared later, and the two groups of roles are divided in a more clear-cut manner as a result. Most prepositions that coded Cause disappeared, and *pro* extended its use, thus bringing about the merger of Cause, Purpose, and Beneficiary. The distinction between Agent and Force disappeared, and the two semantic roles got to be coded in the same way. At a later stage, Means and Intermediary, too, merged with Cause/Purpose/Beneficiary everywhere except for Gallo-Romance, in which Intermediary expressions had extended to Agent and Force. All semantic roles, except those at the two extremes, can be coded through the plain ablative or a PP. At the extremes we find semantic roles typical of human participants: Comitative and Agent. For these semantic roles, prepositions are virtually obligatory; the plain ablative only occurs occasionally, limited to nouns that denote military forces, and are low on the animacy scale. Apparently human participants require extra coding, as also shown by coding of Intermediary, as opposed to Means: while the latter semantic role can be coded through the plain ablative, the former always requires the preposition *per* with the accusative. In the case of Cause, only inanimate nouns can occur in the plain ablative, while animate nouns take *propter* with the accusative in Classical Latin.

Note that within Cause expressions the semantic space of the ablative interacts with the space where we find semantic roles typically expressed by the dative, because the preposition *pro* can stand for roles that can be coded through either case. It can also be noted in passing that the semantic space of the dative includes a smaller number of semantic roles, possibly because most of them are roles typical of human participants: again, with human participants coding means apparently do not allow so high a degree of polysemy as with inanimate participants. The semantic space of the dative is consequently less complex than that of the ablative, and it comprises a number of semantic roles typical of arguments, rather than adverbials. In Figure 10 I try to sketch the space of the dative, including the semantic role Recipient, which I did not discuss in this chapter. This schema is necessarily a generalization, because it leaves out some other semantic roles, such as Possessor, that are discussed elsewhere (Baldi and Nuti, this volume). Note that the semantic roles typically taken by adverbials tend to be coded by prepositional cases, and that the plain dative is virtually limited to arguments. (The few occurrences of *ad* with verbs of giving and communication can be analyzed as containing Direction adverbials, rather than third arguments with the function Recipient/Addressee).

In Figure 11 I give a semantic map of the roles of adverbials (plus Recipient), based on the

findings from the Latin data. Semantic roles typically taken by animate (mostly human) participants are **boldfaced**. The hatched ovals correspond to the four spatial semantic roles, *SOURCE*, *PATH*, *LOCATION*, and *DIRECTION*. They all have areas of overlap, except for Source and Direction. Overlap allows for different types of coding of the abstract semantic roles that are mapped onto the spatial plane. The figure must be seen as tridimensional, allowing more contacts between semantic roles that are not on the same line (notably between Cause, Reason, and Beneficiary). This is indicated by the lines that unite semantic roles which can be encoded in the same way: in other words, the lines indicate possible syncretism among semantic roles. Semantic roles that are close to each other or are connected with lines can syncretize, while those which do not display syncretism among each other are the ones that are on the edges of each field.

It should be noted that these are roles which are typically taken by human participants, namely, Agent, which is located in the area of the spatial semantic role Source; Comitative, in the area of Location; and Beneficiary (with the neighboring roles Experiencer and Recipient), in the area of Direction. They display the maximum distinctive encoding: while some other roles located in different areas may be encoded in the same way (e.g., Attendant Circumstances, Cause, and Reason), Agent, Comitative, and Beneficiary are always kept distinct. This is due to the fact that human participants can take a great variety of semantic roles, and, since they may or may not act voluntarily, their precise role in an event is more relevant than the role of inanimate entities.

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Figure 1. Syntactic functions of spatial expressions

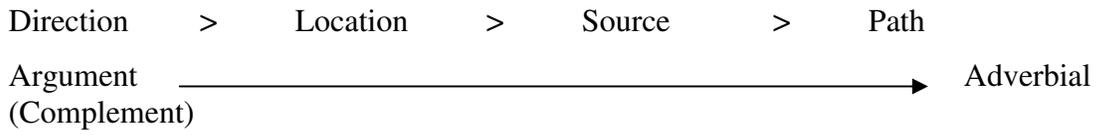


Figure 2. Lexically restricted coding of spatial semantic roles

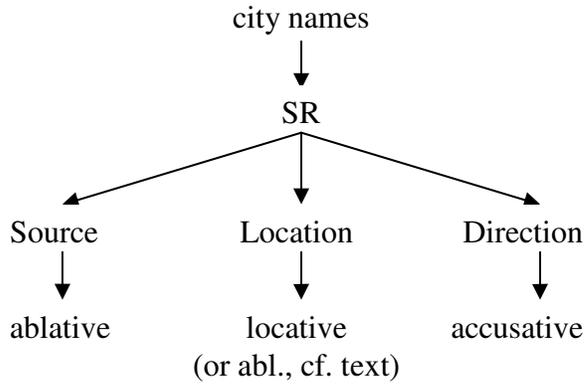


Figure 3. General coding of spatial semantic roles

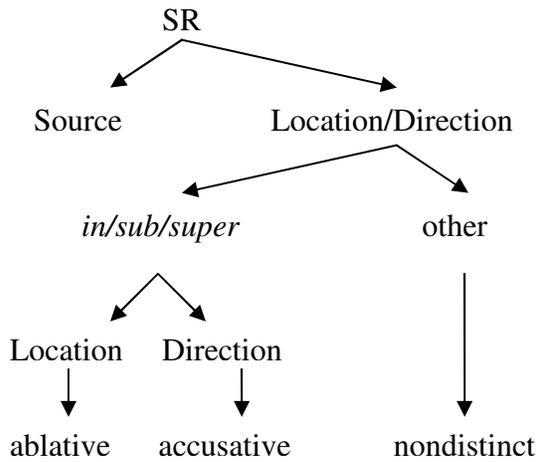


Figure 4. Coding of spatial semantic roles with third declension city names

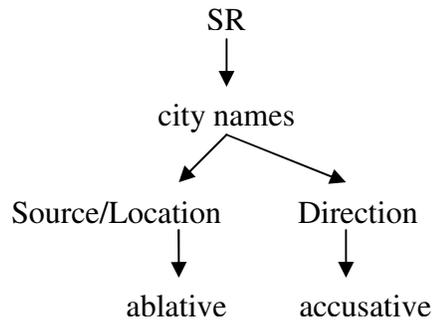


Figure 5. Coding of spatial semantic roles after the second century CE

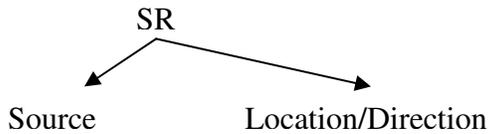


Figure 6. Mapping of space on the domain of causation

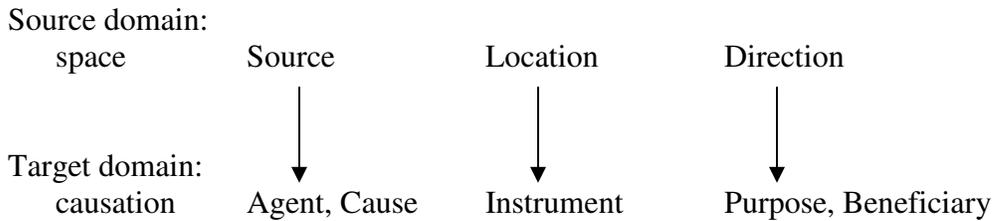


Figure 7. Comitative/Instrument scale

Comitative > Accompaniment > Attendant Circumstances > Instrument

Figure 8. Syntactic functions of cases in Latin

Nominative > accusative > dative > ablative
 1arg 2arg 3arg satellites

(The genitive is not included in the scale because it is used for nominal dependents.)

Figure 9. The space of the ablative in Latin and its reflexes in Romance

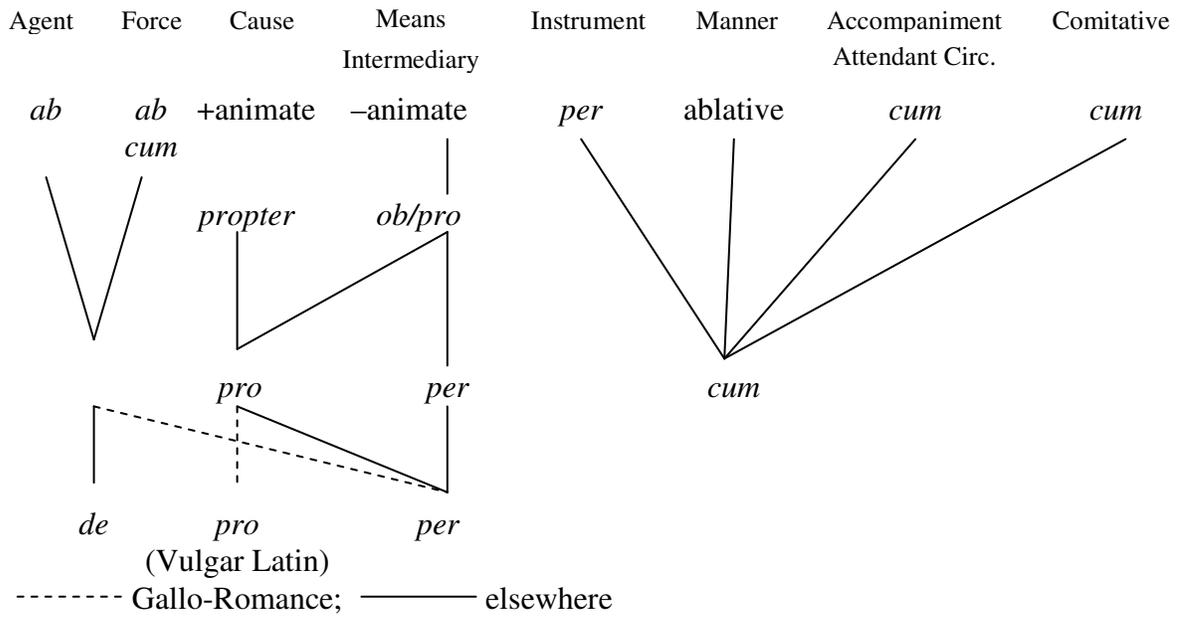


Figure 10. The space of the dative

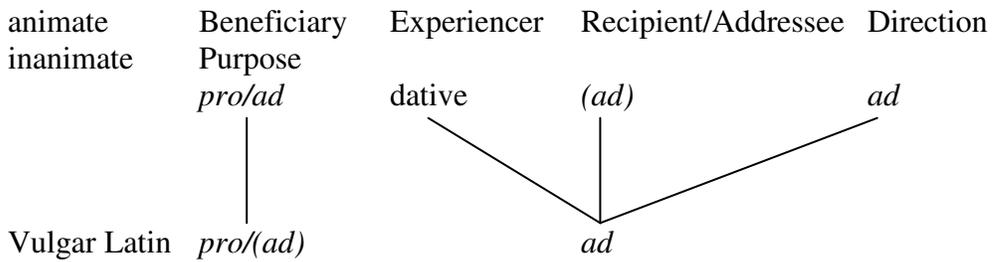


Figure 11. Semantic map of the roles of adverbials

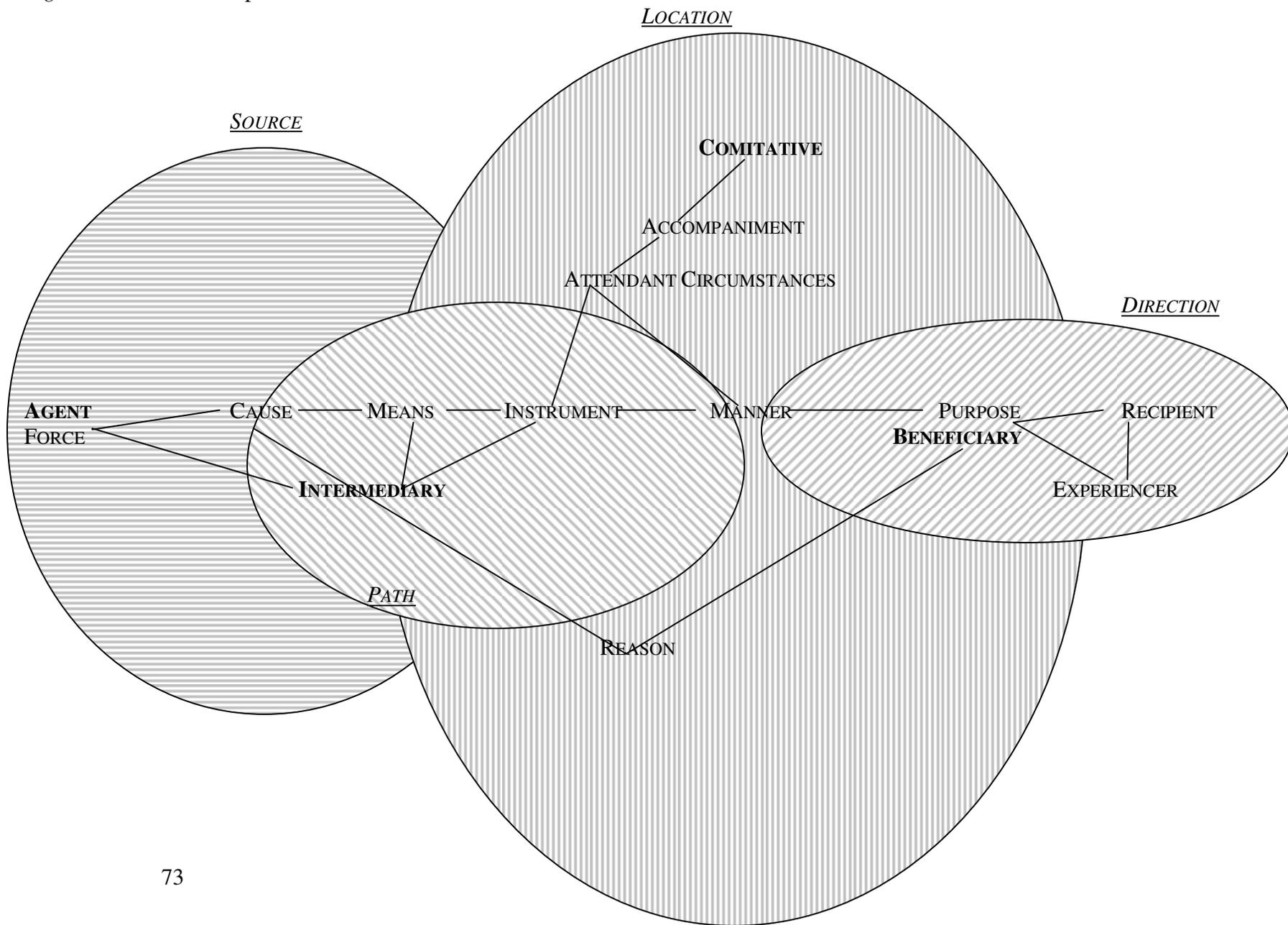


Table 1. Semantic roles with *mittere*

Trajector	Landmark	Marker	Semantic role
+human	+human	<i>ad</i> dative	Direction 36% Recipient 4%
-human	+human	<i>ad</i> dative	Direction 14% Recipient 14%
-human	-human	<i>in, ad</i>	Direction 32%

Table 2. Agency scale

	Control	Intentionality
Human beings	+	+
Natural forces, emotions	+	-
Other inanimate entities	-	-

Table 3. Instrumentality scale

Semantic role	Manipulated	External control	Intentionality
Instrument	+	+	+
Means	-	(+)	+
Force	-	-	-
Cause	-	± (nonrelevant)	± (nonrelevant)

Table 4. Coding of semantic roles related to Comitative

	Latin	Arabic
Comitative	<i>cum</i>	<i>'im</i>
Accompaniment	<i>cum</i>	<i>b-</i>
Attendant Circumstances	<i>cum</i>	<i>b-</i>
Instrument	abl.	<i>b-</i>

Table 5. Semantic functions of cases/PPs in Latin

dative	+anim. -anim.	Beneficiary, Experiencer Purpose
ablative PP	Instrument, Cause, Area all other adverbials	
subsystem of spatial relations	locative/ablative accusative ablative	Location Direction Source

Table 6. Dependents of adverbs and adpositions

	Adverb	Adposition
a. Dependency relation	modified by dependent	governs dependent
b. Dependent	optional	obligatory
c. Case relator or dependent	freely chosen according to meaning	uniquely determined by superordinate element

Table 7. Syntactic/semantic functions of cases in PIE

Case	Argument	Semantic role as Adverbial
Nominative	1st	(Predicative)
Accusative	2nd	Direction
Dative	3rd	Agent, Experiencer, Beneficiary [+animate] Purpose [-animate]
Ablative	—	Source, Cause
Locative	—	Location
Instrumental	—	Instrument, Cause, Area [-animate] Comitative [+animate]
Adpositional phrases	—	Cause

Table 8. Syntactic/semantic functions of cases in Latin

Case	Argument	Semantic role as Adverbial
Nominative	1st	(Predicative)
Accusative	2nd	(Direction)
Dative	3rd	Agent, Experiencer, Beneficiary [+animate] (Purpose [-animate])
Ablative	—	Instrument, Cause (Source, Location)
Prepositional phrases	—	Location, Direction, Source, Cause, Purpose, Comitative, Agent