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***THE SEMANTIC NETWORK OF THE LATIN PREPOSITION
PER: A DIACHRONIC INVESTIGATION***

Abstract

Proponiamo qui i risultati di uno studio corpus-based sugli slittamenti diacronici osservabili nel network semantico della preposizione *per* in latino. Sulla base della Cognitive Grammar, descriviamo la semantica di *per* situandola lungo un continuum che procede dal concreto all'astratto, a partire da un contenuto schematico originario; discutiamo, quindi, i percorsi attraverso i quali i nuovi significati astratti emergono attraverso slittamenti metonimici, focalizzando la nostra attenzione sui ruoli causali e sulla caratteristica di animatezza.

Parole chiave: Cognitive Grammar; Latin prepositions; Space; Causation; Animacy.

The article proposes a corpus-based analysis of the semantics of the Latin preposition *per* 'through' from the 3rd century BCE to the 4th century CE. Based on the insights of Cognitive Grammar, it will be argued that the diachronic shifts occurred within the semantic network of the preposition can be explained in the light of its basic spatial content. Starting from the original spatial meaning, the whole semantic network of *per* develops in diachrony along a continuum from spatial to abstract values via metonymical shifts. We will discuss these paths of development, focusing attention on the causal roles and on the feature of Animacy.

Keywords: Cognitive Grammar; Latin prepositions; Space; Causation; Animacy.

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1. Introduction

In this article, we propose a description of the semantics of the Latin prepositional phrase (PP) *per* 'through' + accusative from Early to Late Latin.

Previous studies conducted in the framework of Langacker's (1991) Cognitive Grammar (cf. Brucale and Mocciaro 2011, 2016) have shown that the analysis of the basic spatial content of the preposition allows us to arrange the meanings of *per* along a concrete-to-abstract continuum already in Early Latin. This continuum corresponds to a network of related and co-existing meanings associated to the preposition (that is, its polysemic network).

Starting from these results, we have analysed a corpus consisting of texts spanning from 3rd century BCE to 4th century CE, gathering together representatives of different literary genres and text types. The corpus contains, therefore, comedies and poems, scientific treatises in poetry and prose, historical works, letters, fables, biographies, cooking recipes, which we have electronically queried in the Library of Latin Texts Online (LLT-A)¹. This choice allowed us to observe the development of the *per*-phrases throughout a very wide timespan and to bring to light the semantic features which are responsible for the semantic development of the preposition.

Drawing upon the insights of Cognitive Grammar, we try to explain the path(s) through which new meanings arise via metonymical shifts. In particular, we will argue that semantic features such as abstractness of the event and animacy of the participants play a key role in the spread of the *per*-phrases to express causal roles.

¹ The corpus consists of the following texts: Plautus' Comedies, Cato's *De Agricultura*, Caesar's *De bello gallico* (I-III), Cicero's *Epistulae ad Atticum* (I-III), Lucretius' *De rerum natura* (I), Sallustius' *De Catilinae coniuratione*, Ovid's *Ars Amatoria*, Vergil's *Aeneid* (IV), Vitruvius' *de Architectura* (I-VII), Tacitus' *Germania*, Phaedrus' *Fables*, Seneca's *Epistulae ad Lucilium*, Petronius *Satyricon*, Quintilian's *Institutio Oratoria* (I-II), Celsus' *De medicina*, Suetonius' *Vitae Caesarum*, Apuleius' *Apologia*, Gellius' *Noctes Atticae*, Apicius *De re coquinaria*, Censorinus' *De die natali*, Aelius Spartianus' *Vita Hadriani* (*Historia Augusta*), *Biblia sacra iuxta Vulgatam versionem* (*Nouum Testamentum*), Vegetius' *Epitoma rei militaris*.

The paper is organised as follows: in section 2 we discuss the basic semantics of *per* and its instantiation in PPs expressing spatial and temporal relations; in section 3 we analyse the function of *per*-phrases in the expression of a set of semantic roles dealing with the domain of Causation; in section 4 we discuss the semantic feature of Animacy and the spread of the PP to express animate causal roles. Finally, in 5 we draw our conclusion.

2 The semantics of *per*.

Langacker (1987: 214-243; see also Lehmann 2002) analyses prepositions as relational predications, i.e. meaningful elements expressing various aspects of the spatial collocation of entities. More specifically, at a very basic level, a preposition describes the position of a foregrounded entity (trajector, TR) relative to a second entity (landmark, LM), which constitutes its point of reference and is elaborated by the nominal following the preposition. In general terms, the basic semantics of Latin *per* can be associated with the spatial configuration described for semantically similar prepositions in different languages (e.g. Engl. *through*, Fr. *à travers*, Germ. *durch*, etc.; see Taylor 1993; Dirven 1993; Evans and Tyler 2004). This configuration portrays an Extended Location consisting in an oriented multiplicity of contiguous points occupied by the TR through or across the LM, as it is represented in fig. 1:

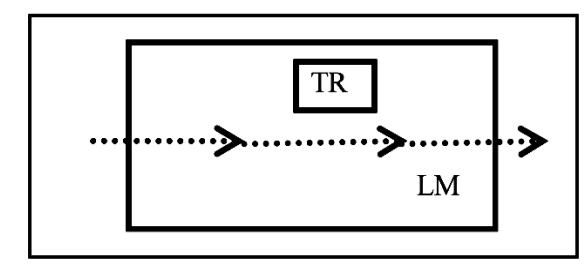


Fig. 1. Schematic representation of the *per*-relation.

This schematic representation is fully compatible with the wide range of meanings conveyed by *per*, which elaborate with greater

specificity the basic content depending on the other contextual information, namely the features of the LM, the features of the TR, and the semantics of the verb. The representation is also consistent with the reconstructions traditionally proposed for the Latin *per*, e.g. Pokorny (1959), who traces back the preposition to the Indo-European root **per(i)* '(to go) over', and Ernout and Meillet (1959: 497), who connect it to a wider group of Latin prepositions and preverbs conveying the fundamental sense of *en avant*, 'forward' which had developed the meaning 'through' in Latin, Slavonic and Baltic languages, and the sense of 'around' in Indo-Aryan languages and in Greek.

2.1 *Spatial values.*

As it is widely recognised, however, the spatial values expressed by *per* seem to be based on two different configurations, which are well attested and stable throughout the history of Latin (Kühner and Stegmann 1912 [1971]: 554 ff.; Leumann, Hofmann and Szantyr 1965: 239 ff.; Luraghi 2010).

In many cases *per* + accusative describes a multi-linear and non-continuous trajectory all around the LM, as it is represented in fig. 2:

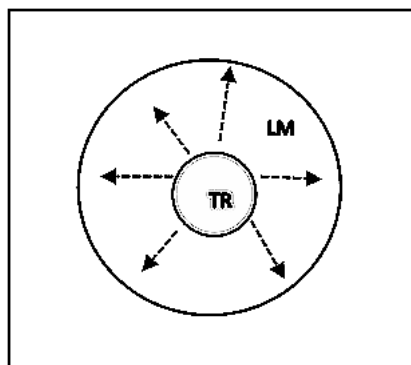


Fig. 2. *Multidirectional trajectory of per*

This trajectory does not necessarily imply a motion event; rather, the TR occupies a complex set of locations, potentially covering the whole extent of the LM. The LM itself consists of an extended and

bounded area, which is non-linear (as ‘city’ in 1 and 2) or discontinuous (especially with plural nouns, as ‘streets’ in 3):

(1)	<i>liberos</i> free:ACC.M.PL <i>modico</i> moderate:ABL.M.SG <i>gradu</i> pace:ABL.M.SG	<i>homines</i> man:ACC.M.PL <i>magis</i> more <i>ire</i> go:INF.PRS	<i>per</i> through <i>par</i> proper.NOM.N.SG	<i>urbem</i> city:ACC.F.SG <i>est</i> be.PRS.3SG
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‘it’s more proper for free men to go throughout the city at a moderate pace’ (Plaut., *Poen.* 522)

(2)	<i>item=que</i> also=and <i>totam</i> all:ACC.F.SG	<i>decrevere [...]</i> decree:PRF.3PL <i>urbem</i> city:ACC.F.SG	<i>Romae</i> Rome:GEN.SG <i>vigiliae</i> sentinel:NOM.PL	<i>per</i> through <i>haberentur</i> have:SBJV.IMPF.3PL.PASS
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‘and it was also decreed that sentinels were disposed throughout the city of Rome’ (Sall., *Catil.* 30.2.24.18)

(3)	<i>senecta</i> old:ABL.F.SG <i>vias</i> street:ACC.F.PL	<i>aetate</i> age:ABL.F.SG <i>ignave</i> sluggard:VOC.M.SG	<i>unguentatus</i> perfumed:NOM.M.SG <i>incedis?</i> walk:PRS.2SG	<i>per</i> through
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‘at your old age, you fool, are you walking through the streets all perfumed?’ (Plaut., *Cas.* 240)

On the other hand, *per* frequently describes a Path, i.e. a unilinear and unidirectional trajectory from one side of a LM to the other, thus implying an End-Point (or a Goal) to achieve through a progression of contiguous locations. The End-Point is frequently overtly expressed (by a directional PP, a local adverb or a bare case) or recoverable in the context (due to the presence of telic verbs of motion/perception, which are frequently prefixed²). The LM is structured as a ‘channel’ (fig. 1), variously conceived depending on its physical features, i.e. a two-dimensional surface, as *provincia* ‘prov-

² It is widely recognised that prefixation in Latin frequently constitutes a means through which the event denoted by the verb is represented as *bounded*, i.e. containing an End-Point (see Brucale and Mocciaro 2016b for references).

ince' in (4); an opening in the boundaries of a three-dimensional container, e.g. a bodily opening, as *os* 'mouth' in (5); a 'barrier' hindering the passage of the TR, as *cribrum* 'sifter' in (6):

(4)	<i>Caesari</i>	<i>cum</i>	<i>id</i>	<i>nuntiatum esset</i>
	Caesar:DAT	when	it.NOM.N	announce.SBJV.IMP.3SG.PASS
	<i>eos</i>	<i>per</i>	<i>provinciam</i>	<i>nostram</i>
	they.ACC.M.PL	through	province.ACC.F.SG	our:ACC.F
	<i>iter</i>	<i>facere</i>	<i>conari,</i>	<i>maturat</i>
	path:ACC.N.SG	do:INF.PRS	try:INF.PRS.DEP	hasten:PRS.3SG
	<i>ab</i>	<i>urbe</i>	<i>proficisci</i>	
	from	city:ABL.F.SG	depart:INF.PRS.DEP	

'when it was announced to Caesar that they were trying to make their way through our province, he hastens to set out from the city' (Caes., *Gall.* 1.7.1.3.28)

(5)	<i>nonnumquam</i>	<i>bilis</i>	<i>per</i>	<i>os</i>	<i>reditur</i>
	sometimes	bile:NOM.F.SG	through	mouth.ACC.N.SG	give.back:PRS.3SG.PASS

'sometimes bile is regurgitated through the mouth' (Celsus, *Med.* 5.26.188.29)

(6)	<i>caseum=que</i>	<i>per</i>	<i>cribrum</i>	<i>facito</i>
	cheese:NOM.N.SG=and	through	sifter:ACC.N.SG	make:IMP.FUT.2SG
	<i>transeat</i>	<i>in</i>	<i>mortarium</i>	
	through.go:SBJV.PRS.3SG	into	mortar:ACC.N.SG	

'and force the cheese through the sifter into the mortar' (Cato, *Agr.* 76.3.66.10)

The cases in (4)-(6) variously instantiate a unique configuration in which a moveable TR crosses the boundaries of a two- or three-dimensional LM, as it is represented in fig. 3:

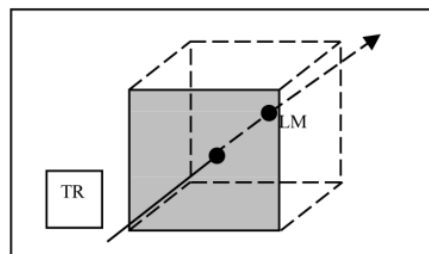


Fig. 3. *Crossing the boundaries trajectory of per*

2.2 Time metaphor.

The presence of abstract LMs like *dies* ‘day’, *ver* ‘spring’, *tempus* ‘time’, etc. produces the meaning of ‘temporal extension’, i.e. a metaphorical transfer of the spatial configuration onto the abstract domain of Time. Since Time is typically conceived as unidimensional and unidirectional (at least in the Western culture, see Haspelmath 1997; Radden 2003), this projection entails the selection of the linear configuration (Path). In other words, the temporal extension is conceived as the Extended Location of an event, a bounded span of time within which the event takes place. The transfer to the domain of Time, however, highlights the component of Duration, which is only implied in the spatial configuration; at the same time, it obscures the telic component, i.e. the implication of a Goal to achieve, which is instead part of the Path schema. The LM denotes in fact canonical time periods, i.e. natural cyclical events or culture-bound artificial time units (days, seasons or other spans of time framing periodical and habitual events), by means of which other situations are located and measured (de la Villa 1996; Haspelmath 1997: 25):

(7)	<i>irarum=que</i>	<i>et</i>	<i>molestiarum</i>	<i>muliebrum</i>
	anger:GEN.F.PL=and	and	annoyance:GEN.F.PL	feminine:GEN.F.PL
	<i>per</i>	<i>diem</i>	<i>per=que</i>	<i>noctem</i>
	through	day:ACC.M.SG	through=and	night:ACC.F.SG
	<i>scatebat</i>			
	abound:IMPF.3SG			

‘with a constant flood of feminine tantrums and annoyances day and night’
(Gell., NA 1.17.1.75.25)





When the span of time involves a quantified multiplicity of days, we are dealing with a multiplex LM (Talmy 2000), whose internal space is discontinuous and analysable in different subunits; consequently, the event is necessarily conceived as reiterated ‘day by day’:

(8)	<i>eos</i> this:ACC.M.PL <i>decem</i> ten <i>idem</i> the.same.ACC.N.SG <i>Matris</i> Mother:GEN.F.SG	<i>ludos</i> game:ACC.M.PL <i>P. Cornelius</i> P.Cornelius:NOM.M.SG <i>fere</i> nearly <i>Magnae</i> Great:GEN.F.SG	<i>per</i> through <i>fecit.</i> do:PRF.3SG <i>tempus</i> time:ACC.N.SG <i>dedicata est</i> consecrate.PRF.3SG.PASS	<i>dies</i> day:ACC.M.PL <i>per</i> through <i>aedes</i> temple:NOM.F.SG
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‘Publius Cornelius celebrated those public games for ten days. Nearly during the same time the Great Mother temple was consecrated’ (Liv., 36.36.3.401)

3. Causation

A complex semantic domain expressed by the PP is Causation, i.e. a set of semantic roles taken by participants exerting a more or less decisive part in bringing about a certain state of affairs, e.g. Agent, Intermediary, Instrument, Means, Cause, etc. (Luraghi 2010). These roles have been organised by Croft (1991: 184 ff.) along a *causal chain*, metaphorically derived from the basic domain of Space, as it is represented in Table 1:

SOURCE DOMAIN: <i>SPACE</i>	SOURCE	LOCATION	DIRECTION
			
TARGET DOMAIN: <i>CAUSATION</i>	ANTECEDENT ROLES (Agent, Cause, Reason)	CONCOMITANT ROLES (Instrument, Means, Manner, etc.)	SUBSEQUENT ROLES (Purpose, Beneficiary)

Tab. 1. *Causal chain of the events (Luraghi 2010: 68, adapted)*

The position of the causal roles along the chain depends on their relation with the transmission of force determining a state of affairs. Croft (1991) distinguishes between *antecedent* roles, based on Source (Agent, Cause, Reason) and *subsequent* roles, based on Direction (i.e. End-Point). Luraghi (2001; 2010: 66 ff.) also includes *concomitant* roles, which are based on Location and, thus, directly involve the preposition we are dealing with. Due to their contiguity, the presence of over-

lapping areas among sub-domains, as well as the cases of metonymical shifts from one sub-domain to another are not unexpected.

3.1 Concomitant roles.

Per enters the domain of causation starting from the area of the Concomitant roles, which metaphorically express the path through which an event is realised (Lakoff 1993: 220; Lakoff et al. 1991: 21; Dirven 1993: 90-91).

The most ancient instances in the area of Concomitant roles only involve abstract and non-manipulated entities, which express Means rather than Instruments, according to Luraghi (2010: 44-70; see also Croft 1991). While both roles imply the existence of an Agent intentionally initiating a state of affairs, in the case of Means this state of affairs can be achieved through a certain power or abstract condition, as *per sycophantiam* and *per doctos dolos* in (9):

(9) <i>ecquas</i>	<i>viginti</i>	<i>minas</i>	<i>per</i>	<i>sycophantiam</i>
INT.ACC.F.PL	twenty	minae:ACC.F.PL	through	cunning:ACC.F.SG
<i>atque</i>	<i>per</i>	<i>doctos</i>	<i>dolos</i>	<i>paritas</i>
and	through	artful:ACC.M.PL	trick:ACC.M.PL	be.about:PRS.2SG
<i>ut</i>	<i>auferas</i>	<i>a</i>	<i>me</i>	
so.that	from.take:SBJV.PRS.2SG	from	I.ABL	

‘...so are you about to try to take twenty minæ from me through stealth and artful tricks?’ (Plaut., *Pseud.* 484-5)

Means is not only a stable value throughout the history of Latin, but it also represents the overwhelming value of *per* in the causal domain. Instances of *per* phrases with a Means value are found throughout our corpus, as can be seen in the examples in (10)–(12):

(10) <i>Ea</i>	<i>res</i>	<i>est</i>	<i>Helvetiis</i>
DIM.NOM.F.S	thing.NOM.F.SG	be.PRS.3SG	Helvetii:DAT.M.PL
<i>per</i>	<i>indicium</i>	<i>enuntiata</i>	
through	information:ACC.N.SG	disclose:PTCP.PRF.NOM.F.SG	

‘this scheme was disclosed to the Helvetii by information’ (Caes, *Gall.* 1.4.1.2.28)

(11)	<i>idcirco</i> therefore <i>quasi</i> as.if <i>et</i> and <i>conexum est</i> bind.together.PRF.PASS.3SG	<i>ex</i> from <i>per</i> through <i>copulam</i> connection:ACC.F.SG	<i>his [...]</i> DIM.ABL.F.SG <i>quendam</i> a.certain:ACC.M.SG <i>nomen</i> noun.NOM.N.SG	<i>uocibus,</i> term:ABL.F.SG <i>coitum</i> combination:ACC.M.SG <i>indutiarum</i> armistice:GEN.F.PL
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'Therefore, the word 'indutiae' is formed by those terms, through a sort of combination and connection' (Gell., NA 1.25.16.88.26)

(12)	<i>Signatis</i> mark: PTCP.PRF.ABL.M.PL <i>cottidiana</i> daily:ACC.N.PL <i>demonstranda</i> prove: GRDV.NOM.F.SG	<i>itaque</i> therefore <i>exercitia</i> exercise:ACC.N.PL <i>doctrina</i> doctrine: NOM.F.SG	<i>tironibus</i> recruit:ABL.M.PL <i>armorum</i> weapon:GEN.F.PL	<i>per</i> through <i>est</i> be.PRS.3SG
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'Once, therefore, that the recruits have been marked, the doctrine of weapons must be proven through daily exercises' (Veg., Mil., 1.8.6.19.243)

Inanimate and concrete nouns introduced by *per* are only occasional in Early Latin and can be interpreted as peripheral Intermediaries, rather than Instruments, according to Luraghi (2010). An Intermediary is a sort of secondary Agent, which actually realises (i.e. *controls*) an action on behalf of the primary and intentional one; consequently, it typically involves animate LMs. Prototypical cases of Intermediary, however, are only sporadically attested in Early Latin, as *per nuntium* 'through a messenger' in (13), alongside a few instances involving concrete and inanimate entities used in transfer information, and thus metaphorically conceived as acting as intermediaries in communication (Luraghi 2010: 60), as *per epistulam* 'through a letter' again in (13):

(13)	<i>per</i> through <i>nuntium</i> messenger:ACC.M.SG	<i>epistulam</i> letter:ACC.F.SG <i>quasi</i> just.as	<i>aut</i> or <i>regem</i> king:ACC.M.SG	<i>per</i> through <i>adiri</i> to.go:INF.PRS.PASS
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<i>eum</i>	<i>aiunt</i>
he.ACC.SG	say:PRS.3PL

‘they say that he is usually addressed, like a king through letters or messengers’ (Plaut., *Mil.* 1224)

Our corpus data also shows different entities involved in various communication events, e.g. ‘voice’ in (14), ‘discourse’, ‘prayers’, etc., which can be interpreted as metonymical manifestations of human beings, hardly analysable as proper Instruments:

(14) <i>praeco</i> [...]	<i>exerce</i>	<i>vocem</i> ,	<i>quam</i>
herald.VOC.M.SG	exercise: IMP.PRS.2SG	voice:ACC.F.SG	which:ACC.F.SG
<i>per</i>	<i>vivis=que</i>	<i>et</i>	<i>colis</i> .
through	live:PRS.2SG=and	and	take.care.of:PRS.2SG

‘Herald, exercise your voice, by means of which you subsist and flourish’ (Plaut., *Poen.* 13)

Prototypical Instruments do not occur in Early Latin, in which the bare ablative case is preferred in expressing this role. Occasional occurrences of non-animate concrete nouns are attested in Classical Latin, as *per scamillos impares* in (15), although these cases remain sporadic still in the 2nd century CE (see Svetonius, *de Vita Caesarum*, 74: *Philemonem a manu seruum, qui necem suam per uenenum inimicis promiserat, non grauius quam simplici morte puniit* ‘He put to death without torture Philemon, his amanuensis, who had promised his enemies to kill him with poison’). On the other hand, a few instances of animate entities can be interpreted as peripheral Instruments, rather than Intermediaries, as in (16) in which *per natos suos* ‘through her sons’ does not express any active involvement in the event:

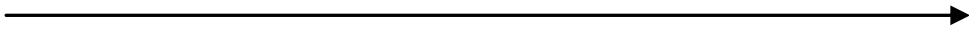
(15) <i>uti</i>	<i>habeat</i>	<i>per</i>	<i>medium</i>
so.that	have:SBJV.PRS.3SG	through	middle.ACC.N.SG
<i>adiectionem</i>	<i>per</i>	<i>scamillos</i>	<i>impares</i>
addition: ACC.F.SG	through	little.stool:ACC.M.PL	unequal:ACC.M.PL

‘so that, by means of small stools, it may be highest in the middle’ (Vitr., *De arch.*, 3.4.5)

- (16) *est* *Barbara* *per* *natos*
 be.PRS.3.SG barbarous:NOM.F.SG through be.born:PTCP.ACC.M.PL
 Phasias *ulta* *suos.*
 Phasian-NOM.F.SG avenge.PTCP.NOM.F.SG POSS.ACC.M.PL

'...savage Medea avenged herself through her children' (Ov., *Ars* 2.373)

To sum up, the presence of the PP in the sub-domain of the Concomitant roles shows a gradual character: *per* is especially linked to the expression of abstract and non-manipulated Means, whereas prototypical Instruments are stably associated with the bare ablative. Within the continuum Means/Instruments, however, more sporadic and less prototypical instances show the progressive spread of the PP towards non-abstract entities (human Intermediaries, who are concrete but less manipulated than inanimate entities; non-prototypical Intermediaries; non-prototypical Instruments), whereas inanimate and concrete Instruments remain rather infrequent (cf. Luraghi 2010: 44-70). This progression is schematised in Table 2, in which the dotted frame represents the area of overlap between Intermediary and Instrument:

+ABSTRACT/-MANIPULATED ABSTRACT/+MANIPULATED 		
<u>inanimate/ abstract participants</u>	<u>human participants</u>	<u>inanimate/ concrete participants</u>
<u>Means</u>	<u>Intermediary/ (Instrument)</u>	<u>(Intermediary)/ (Instrument)</u>

Tab. 2. Metonymical shifts within the Concomitant sub-domain

3.2 Antecedent roles.

Per is also found in expressions denoting Cause, which is a metonymical extension of Means based on a few central features shared by both roles, i.e. abstractness, non-manipulation, and the implication of an Agent

who intentionally initiates a state of affairs. In general terms, a Cause is “an event (action or state) that causally immediately precedes the event sequence denoted by the main verb” (Croft 1991: 179). While this definition is neutral with respect to the existence of an intentional Agent (i.e., it can refer to both intentional and non-intentional causation, see Luraghi 2010; also Hofmann and Szantyr 1965: 241; Pinkster 1990: 118), the most ancient instances of Cause in Latin systematically imply an Agent and, consequently, they should be better analysed as Reason (or Motive, following Pinkster’s 1990 terms). Specifically, a Reason represents the motivation for an agent to act (in the sense of ‘because of’), as in (17) where *per amorem* ‘because of love’ represents the motivation for the active event (*feci*) brought about by the subject:

(17)	<i>Amans</i> love:PTCP.PRS.NOM.M.SG	<i>per</i> through	<i>amorem</i> love:ACC.M.SG	<i>si</i> if
	<i>quid</i> something.ACC.N.SG	<i>feci,</i> do.PRF:1SG	<i>Milphio,</i> Milphio.VOC.SG	<i>ignoscere</i> forgive:INF.PRS
	<i>id</i> it.ACC.N.SG	<i>te</i> you.ACC	<i>mi</i> I.DAT	<i>aequom</i> right: NOM.N.SG
	<i>est</i> be.PRS.3SG			

‘but if, being in love, I did anything because of love, Milphio, it’s only reasonable that you should forgive me for it’ (Plaut., *Poen.* 140).

On the other hand, Cause is the semantic role enabling the realisation of a state of affairs not necessarily controlled by an intentional Agent (in the sense of ‘due to’). Since it consists in the presence or absence of Agency in the caused situation, the difference between Cause and Reason lies more on the lexical semantics of the verb denoting the caused event, than on the inherent features of the noun following the preposition and, in fact, any entity can potentially cover this role (Luraghi 2010: 60 ff.). Nevertheless, human participants represent less suitable candidates for the expression of non-intentional causation, since Animacy provides them with a natural inclination to Intentionality; moreover, differently from a prototypical Cause, a human being can be manipulated to some ex-

tent (see section 3.1). The most ancient instances of Cause, however, are represented by sporadic cases of human LMs, as in (18); thus, also in this case *per* seems to gradually penetrate the sub-domain starting from the periphery, while the prototypical instances are generally conveyed by the bare ablative or by virtue of other prepositions (Luraghi 2005):

(18)	<i>quot</i> as.many <i>mora</i> delay:NOM.F.SG <i>degustet</i> [...] taste:SUBJ.PRS.3SG	<i>dies</i> day:NOM.M.PL <i>fuert,</i> be.PRF.FUT.3SG	<i>per</i> through <i>quominus</i> the.less	<i>dominum</i> owner:ACC.M.SG <i>vinum</i> wine:ACC.N.SG
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‘however many days of delay there could be because of the owner, the less wine he will sample [...]’ (Cato, *Agr.* 148.1.100.6)

Also in the area of Reason/Cause there is a diachronic shift from abstract to concrete causes (Brucale and Mocciaro 2011: 159-161), namely: Reason > animate Cause > inanimate Cause (abstract > concrete). Inanimate Causes spread starting from Classical Latin, as in (19), in which an abstract noun represents the cause of a non-agentive event (*insolescere*):

(19)	<i>eo</i> this.ABL.M.S <i>putabant</i> conceive:IMPF.3PL <i>animum</i> mind:ACC.M.SG	<i>modo</i> method.ABL.M.S <i>per</i> through <i>humanum.</i> human:ACC.M.SG	<i>minime</i> in.the.least <i>licentiam</i> licentiousness-ACC.F.SG	<i>posse</i> can.INF.PRS <i>insolescere</i> grow.haughty-INF.PRS
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‘for they conceived that, by this method, the human mind would be least likely to grow haughty due to licentiousness’ (Sall., *Catilin.* 6.7.7.21)

3.3 Semantic shifts and contextual inferences: beyond concomitant roles.

Manner is a concomitant role expressing the condition or the circumstance in which an event is brought about. The ambiguity be-

tween Reason/Cause and Manner is not unexpected, since the circumstance in which an event occurs could be viewed as the cause of the event (Dirven 1993: 89 ff.; see also Vester 1983), as in (20):

(20)	<i>nonne</i>	<i>emori</i>	<i>per</i>	<i>virtutem</i>
	not	die:INF.PRS.PASS	through	valiance:ACC.F.SG
	<i>praestat</i>	<i>quam</i>	<i>vitam</i>	<i>miseram</i>
	be.superior:PRS.3.SG	than	life:ACC.F.SG	wretched:ACC.F.SG
	<i>atque</i>	<i>inhonestam</i> [...]	<i>per</i>	<i>dedecus</i>
	and	dishonoured:ACC.F.SG	through	disgrace:ACC.N.SG
	<i>amittere?</i>			
	lose:INF.PRS			

‘Is it not better to die valiantly, than to ignominiously lose our wretched and dishonoured lives?’ (Sall., *Catil.* 20.9.18.10)

This ambiguity, however, does not produce a new stable value of the PP and it rather represents a possible context-dependent inference.

Already in Early Latin, abstract nouns introduced by *per* may receive a Purpose rather than a Reason interpretation. Purpose is a complex semantic role strongly linked in fact to the feature “intentionality” (Croft 1991: 179; Prandi et al. 2005: 93 ff.; Schimdtke-Bode 2009: 19). Croft (1991: 179) defines it as “[A]n event that is intended by an agentive initiator of the main verb causal segment to follow causally from the event denoted by the main verb causal segment.” In the example in (21), the *per* phrase *per dissimulationem* can be interpreted as the objective to which the action aims:

(21)	<i>et</i>	<i>spectaculo</i>	<i>publico</i>	<i>per</i>
	and	spectacle:ABL.N.SG	public:ABL.N.SG	through
	<i>dissimulationem</i>	<i>interfuit</i>		
	dissimulation:ACC.F.SG	be.present.PRF.3SG		

‘and, to keep up appearances, he attended a public spectacle’ (Suet., *Iul.* 31.1.16.5)

While the feature of “intentionality” represents the direct link between Reason and Purpose, this semantic extension still represents a ra-

dical shift with respect to semantic core of the *per*-phrase, as purpose is in fact a subsequent role. This shift shows the fluidity among the roles included within the causal chain (see also Luraghi 2010).

However, it should be observed that purpose expressions by means of *per* are anything but stable throughout the history of Latin. After Plautus, they are almost absent in the classical period and we only find sporadic instances in the prose of the Augustan and post-classical age (e.g., *consulti per ludibrium pontifices* ‘The pontiffs have been consulted for sake of joke’, Tac. *Ann.* 1.10.21) and in the late texts:

(22)	<i>ne</i>	<i>per</i>	<i>luxum</i>	<i>aut</i>
	so.that.not	through	luxury:ACC.M.SG	or
	<i>inanium</i>	<i>rerum</i>	<i>comparationem</i>	<i>ab</i>
	useless:GEN.F.PL	thing:GEN.F.PL	purchase:ACC.F.SG	from
	<i>contubernalibus</i>	<i>posset</i>	<i>absumi</i>	
	companion:ABL.M.PL	can:IMPF.SUBJ.3SG	consume:PRS.INF.PASS	

‘so that it couldn’t be used by companions for lavish spending or to purchase useless things’. (Veg., *Mil.* 2.20.1.85.520)

Due to the scarcity of the examples, Brucale and Mocciaro (2016a: 100) proposed considering purpose as a contextually inferred value, rather than a stable meaning within the semantic structure of *per*. Two recurring features can be singled out: (1) the intentionality of the action (which is an ontological feature of purpose), and (2) the presence of abstract LMs denoting situations ensued from the action. More specifically, the nouns governed by *per* indicate the desired effects of an intentional action. In other words, we are dealing with what Prandi et al. (2005: 93-127) define “prospective” reason, that is, the content of an intention.

4. Animate roles.

4.1 Appeal.

Since the age of Plautus, the PP occurs in expressions of Appeal with performative verbs such as *iuro* ‘to swear’, *oro* ‘to pray’, etc. These expres-

sions are used to place the truth of a statement under the guardianship of an entity somehow endowed with sacredness (e.g. gods, but also human beings, body parts, etc., see Monteleone 2007: 134 ff.; Zuccotti 2000; Calore 2000) and constituting the LM of the performative act. In other words, the realisation of this act passes through the LM, which constitutes the means through which the oath/invocation gains effectiveness. We are dealing with an early metonymical extension of Means, involving animate entities and thus preceding and possibly paving the way for the meaning of intermediation, which is in turn peripheral in Early Latin (see section 3.1):

- | | | | | |
|-----|------------------------|--------------|-----------------|------------|
| 23) | <i>Periplectomene</i> | <i>te</i> | <i>opsecro</i> | <i>per</i> |
| | Periplectomenus:VOC.SG | you:ACC | implore:PRS.1SG | through |
| | <i>deos</i> | <i>atque</i> | <i>homines</i> | |
| | god:ACC.M.PL | et | man:ACC.M.PL | |

‘Periplectomenus, I beseech you by Gods and men!’ (Plaut., *Mil.* 540)

This meaning remains stable throughout the history of Latin, as the following examples show:

- | | | | | |
|------|--------------|-------------------|-----------------|-----------------------|
| (24) | <i>eam</i> | <i>ab</i> | <i>iniuria</i> | <i>defendas,</i> |
| | DIM.ACC.F.SG | from | injury:ABL.F.SG | defend:SUBJ.PRS.2SG |
| | <i>per</i> | <i>liberos</i> | <i>tuos</i> | <i>rogatus</i> |
| | through | children:ACC.M.PL | your:ACC.M.PL | ask:PTCP.PRF.NOM.M.SG |

‘Protect her from any outrage: I ask you in the name of your children’. (Sall., *Catil.* 35.6.28.5)

- | | | | | |
|------|--------------------|-----------------|------------|-------------------|
| (25) | <i>Iurant</i> | <i>autem</i> | <i>per</i> | <i>Deum</i> |
| | swear:PRS.3PL | but | through | God:ACC.M.SG |
| | <i>et</i> | <i>Christum</i> | <i>et</i> | <i>sanctum</i> |
| | and | Christ:ACC.M.SG | and | holy:ACC.M.SG |
| | <i>Spiritum</i> | <i>et</i> | <i>per</i> | <i>maiestatem</i> |
| | Spirit:ACC.M.SG | and | through | majesty:ACC.F.SG |
| | <i>imperatoris</i> | | | |
| | emperor:GEN.M.SG | | | |

‘Therefore, they swear on God, Christ and the Holy Spirit and on the majesty of the emperor’ (Veg., *Mil.*, 2.5.3.61.167)

4.2 Judgement of licitness.

Another ancient and stable usage of *per* + animate LMs involves the impersonal verb *licet* ‘it is allowed’ and can be defined ‘judgement of licitness’ (Brucale and Mocciaro 2011). The human LM is generally encoded by means of 1st and 2nd person personal pronouns (*per me*, *per te*), representing the human means or intermediation through which a thing or an event becomes licit. Since in an impersonal event no other active entities are involved, the LM constitutes the entity providing the event with licitness, i.e., it is configured as the origin of licitness, thus expressing a sort of enabling force and ranking in a very high position in the causal chain:

- (26) *per me licet fuerit refertissimum*
 through I.ACC be.allowed:PRS.3SG be.FUT.PRF.3.SG full.ACC.N.SG.SUP

‘Still, I grant that it was stuffed’ (Apul., *Apol.* 55.62.9)

4.3 *Per se*.

Starting from the 1st century BCE *per* + accusative also involves the reflexive 3rd person pronoun *se* (see Luraghi 2010: 60). We are dealing with a metonymical extension from Means to Cause, although the exact value of this cause depends on the semantics of the verb involved.

When *per* + PP co-occurs with states (especially verbs of existence in philosophical texts), it emphasises the lack of an external causation, in that the subject is in itself and it does not need another cause to exist or to be conceived. In other words, it exists *through* itself, that is, it is inherently caused:

- (27) *omnis ut est igitur*
 all.NOM.F.SG as be.PRS.3SG then
per se natura duabus
 through REFL.ACC nature:NOM.F.SG two.ABL.F.PL
constitit in rebus
 consist:PRS.3SG in thing:ABL.F.PL

‘All nature, then, intrinsically, consists of two things’ (Lucr., 1.418)

With intransitive verbs, the PP highlights the internal causation (in terms of Levin and Rappaport Hovav 1995: 90 ff.), as *ardo* ‘burn (intr.)’ in (28), and *concido* ‘fall’ in (29):

(28)	<i>flammas</i> flame:ACC.F.SG	<i>ex</i> from	<i>igni</i> fire:ABL.M.SG	<i>non</i> not
	<i>recipit</i> take.back:PRS.3SG	<i>nec</i> and.not	<i>ipse</i> DIM.NOM.SG	<i>per</i> through
	<i>se</i> REFL.ACC	<i>potest</i> can:PRS.3SG	<i>ardere</i> burn:INF.PRS	

‘it is not subject to rot and the worm’s attack, neither will it take fire or burn of itself’ (Vitr., *De arch.* 2.9.14.)

(29)	<i>nullo</i> none: ABL.M.SG	<i>enim</i> in.fact	<i>modo</i> way.ABL.M.SG	<i>posse</i> can.INF.PRS	<i>video</i> see:PRS.1.SG
	<i>stare</i> Stay INF.PRS	<i>istum</i> this: ACC.M.SG	<i>diutius</i> longer	<i>quin</i> than	<i>ipse</i> DIM.NOM.M.SG
	<i>per</i> through	<i>se</i> REFL.ACC	<i>etiam</i> also	<i>languentibus</i> be.faint:PTCP.PRS.ABL.PL	<i>nobis</i> we.ABL.PL
	<i>concidat</i> fall: SBJV.PRS.3SG				

‘For I see that Caesar can in no way maintain his position much longer without causing his own fall, even if we are backward’ (Cic., *Att.* 10.8.6.3.394)

The PP sometimes occurs in active sentences to emphasise that the first participant, encoded as a grammatical subject, is the solely (external and agentive) cause of a state of affairs. In this case, *per* is frequently reinforced by the intensifier *ipse* ‘self’. Due to the co-reference with the agentive subject, *per* + PP inherits an agentive-like nuance, although it remains a Means or a Reason to act:

(30)	<i>Ipse</i> INT.NOM.M. SG	<i>per</i> through	<i>se</i> REFL.ACC	<i>amor, [...]</i> love: NOM.M.SG	<i>animos</i> mind: ACC.M.PL
	<i>in</i>	<i>cupiditatem</i>	<i>formae [...]</i>	<i>accendit.</i>	
	<i>in</i>	<i>desire:ACC.F.SG</i>	<i>beauty:GEN.F.SG</i>	<i>inflammare:PRS.3SG</i>	

‘Love by and of itself kindles the soul with desire for the beautiful object’ (Sen., *Epist.* 9.11.23)

4.4 Intermediation and Agency.

Starting from 1st century BCE, the frequency of PPs expressing Intermediaries dramatically increases, both in active and passive contexts. Especially in active sentences, the Intermediary is generally conceived as coexisting with a primary Agent, corresponding to the active subject, as in (31):

(31)	<i>quamquam</i>	<i>quid</i>	<i>attinet</i>	<i>veritatem</i>
	although	DIM.ACC.N.SG	pertain:PRS.3SG	truth: ACC.F.SG
	<i>per</i>	<i>interpretem</i>	<i>quaerere?</i>	
	through	intermediary:ACC.M.SG	search:PRS.INF	

‘But what is the use of trying to discover the truth through an interpreter?’ (Petron., *Sat.* 107.15.112.11)

The implication of a primary Agent is still present in Late Latin both in active and in passive contexts (see Mocciaro 2011), as respectively in (32) and (33):

(32)	<i>tirones</i>	<i>ne=que</i>	<i>in</i>	<i>ludo</i>
	recruits: ACC.M.PL	not=and	in	school:ABL.M.SG
	<i>ne=que</i>	<i>per</i>	<i>lanistas,</i>	<i>sed</i>
	not.and	through	trainer.of.gladiator:ACC.M.PL	but
	<i>in</i>	<i>domibus</i>	<i>per</i>	<i>equites</i>
	in	house:ABL.F.PL	through	horseman:ACC.M.PL
	<i>Romanos</i>	<i>atque</i>	<i>etiam</i>	<i>per</i>
	Roman:ACC.M.PL	and	also	through
	<i>senatores</i>	<i>armorum</i>	<i>peritos</i>	<i>erudiebat</i>
	senator:ACC.M.PL	arm:GEN.F.PL	expert:ACC.M.PL	educate:IMPF.3SG

‘he had the novices trained, not in a gladiatorial school by professionals, but in private houses by Roman knights and even by senators who were skilled in arms’ (Suet., *Iul.* 1.26.3.13.4-5)

(33)	<i>quod</i>	<i>dictum est</i>	<i>a</i>	<i>Domino</i>
	DIM.NOM.N. SG	PRF.3SG.PASS	from	Lord:ABL.M.SG
	<i>per</i>	<i>prophetam</i>	<i>dicentem...</i>	
	through	prophet:ACC.M.SG	say:PTCP.PRS.ACC.M.SG	

‘which was spoken by the Lord through the prophet Isaiah, saying...’ (Vulg., *Matth.*, 1.22)

In passive contexts, however, in which the Agent is typically defocused and only optionally realised as an oblique, the PP expressing intermediation sometimes seems to represent the highest role in the causal chain, i.e. it may lack the necessary implication of a primary Agent instigating the action, as in (34)-(35):

(34)	<i>ea</i> this.NOM.F.SG <i>more</i> custom:ABL.N.SG <i>permittitur</i> permit:PRS.3SG.PASS	<i>potestas</i> power:NOM.F.SG <i>Romano</i> Roman:ABL.N.SG	<i>per</i> through <i>magistratui</i> magistrate:DAT.M.SG	<i>senatum</i> Senate:ACC.M.SG <i>maxuma</i> greate.SUP.NOM.F.SG
------	---	--	--	---

‘the power, which according to Roman usage is thus conferred upon a magistrate by the Senate, is supreme’ (Sall., *Catil.*29.3.23.34)

(35)	<i>Per</i> through <i>strenuissime</i> very.strenuously <i>confecta</i> accomplish.PTCP.PRF.ACC.N.PL	<i>hos</i> this.ACC.M.PL <i>constat</i> be.well.known:PRS.3SG	<i>longo</i> long:ABL.N.SG <i>omnia</i> all.ACC.N.PL	<i>tempore</i> time:ABL.N.SG <i>bella</i> war:ACC.N.PL
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‘It is well known that for a long time the weight of all the wars was supported by them’ (Veg., *Mil.* 1.17.2.32.426)

In (28) the Senate is the participant actually conferring the power to the magistrates and the only other participant which we can imagine as being higher than the Senate is the *more romano*.

5. Conclusion.

The diachronic analysis on the semantic network of Latin *per* has shown a non-unidirectional development from concrete to abstract meanings. First the basic spatial meaning ‘through’ (‘path’ meaning) developed a less concrete time meaning and entered the domain of

Causation through Means, a semantic role typically involving abstract participants. Animacy is a rather ancient feature, represented already in Plautus in the expressions of Appeal and Judgment of licitness, which are however conventionalised usages highly dependent on expressive needs. The expression of concrete Instruments is instead a later development. In other words, the spread from concrete to abstract meanings draws the following trajectory: concrete (spatial path) > abstract (Means) > animate (> inanimate, concrete). We claim that Path-to-Time and Path-to-Means are metaphorical shifts from the concrete domain of physical world to the abstract domains of Time and Causation. They produce new meanings which are included in the semantic network of the preposition in a stable way. On the other hand, the extension from abstract to animate entities is a metonymical shift, which reflects the stable character of the meaning Means and its progressive generalisation, but remains however highly contextual dependent.

A similar path of change involves the Antecedent roles, represented already in Early Latin by the frequent cases of Reason, which is a metonymical extension of Means. Also in this sub-domain the extension from abstract to concrete entities passes through Animacy, documented already in Early Latin by sporadic occurrences of animate Causes. Starting from the 1st century BCE we find more frequent cases of human Intermediation. Moreover, the PP occurs with the reflexive pronoun *se* to express internal causation in intransitive contexts, or to highlight the agentive role of the subject of a transitive verb. Sporadically, we find cases of semantic ambiguity between Intermediary and Agent in passive contexts.

The analysis conducted thus far provides strong diachronic support for the path of semantic development of *per* + PP already sketched in Brucale and Mocciaro (2011) on the basis of the synchronic analysis of Early Latin data. Data do not allow to link the different semantic shifts observed to specific genres and types.

Possible further extensions of the semantic network of the preposition deserve to be investigated (e.g. the emergence of an agentive meaning) by extending the perspective from Latin to Romance. This will be issued at another time and place.

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