**A diachronic semantic map for the Latin preposition** ***secundum***

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**Abstract**

This paper plugs a gap in the literature by providing a corpus-based diachronic semantic analysis of the preposition *secundum* while also contributing to a larger body of cognitive-functional studies of prepositions. The data, retrieved from the *Latin Library* corpus prose section and spanning over a period of over 800 years, are analysed both from a qualitative and a quantitative point of view. The meanings of *secundum* are grouped into three cognitive-functional domains (the spatio-temporal one, the domain of logical relations and the (inter)subjective domain) within and across which metaphorical and metonymic links are identified. On the basis of these data, a conceptual space is drawn on which four semantic maps are carved, representing four different stages of evolution in the semantics of *secundum*. The semantic change undergone by *secundum* supports the idea of the centrality of the spatio-temporal domains and shows a gradual tendency towards (inter)subjectification – in line with a plethora of studies within grammaticalisation theory and semantic change. Particularly interesting is the development of the meanings of evidentiality and attribution, two meanings that had been previously overlooked. The semantic space identified has potential cross-linguistic applications.

**Key words:** *secundum*, preposition, semantic change, semantic map, subjectification, intersubjectification, metaphor, metonymy, inference, evidentiality

**1. Introduction**

A grammaticalisation path FOLLOW > ACCORDING TO has been noticed for Latin *secundum* (1) and *Swahili kufuatana na* (2) (Heine & Kuteva 2002: 139):

(1) Latin

“*Sequi* ‘follow’, secundus ‘following’ (gerund, de-verbal adjective) > preposition *secundum* ‘along’, ‘(immediately) after’, ‘according to’, ‘for (the benefit of)’.”

(Kühner & Holzweissig [1912] 1966: 935; quoted in Heine & Kuteva, 2002: 139) see also in particular Hofmann-Szantyr, 1972: 248f., with lit.)

(2) Swahili

 “*Ku-fuatana na* ‘to follow each other’ > *kufuatana na* ‘following, according to’.”

 (Heine & Kuteva, 2002: 139.)

Heine & Kuteva (2002: 139) suggest that more research is “required on the exact nature and the genetic and areal distribution of the process”. This paper sets out to begin to address this gap by investigating the semantics of Latin *secundum* NP expanding the only two existing descriptions (Ferrari 1998 and Rocha 1998), which are quite skecthy.

In doing so, this paper adds to a limited body of works on Latin prepositions (Pinkster 1972: 145 ff, 1990: 65-72, Baldi 1979, Lehmann 1983, Luraghi 1989, Vincent 1999, Bubenìk 2006, Martìn Puente & Conde Salazar 2006, 2012, 2014, 2015, Luraghi 2010b, Brucale & Mocciaro 2011, Trabelsi 2015). The perspective taken here is broadly functional, and occasionally will rely on concepts from Cognitive Linguistics (for an overview see Geeraerts & Cuykens 2010: 3-4 and Nuyts 2010: 543; Croft & Cruise 2004). By adding to studies on Latin prepositions, this research also contributes to a larger body of knowledge on prepositions (and cases) in a number of languages within the cognitive-functional paradigm (Geeraerts 1992, Dirven 1993, Cuykens 1993a, 1993b, Dewell 1994, Delbeque 1996, Meex 1997, Beitel et al. 1997, Dąbrowkska 1997, Kristoffersen 2001, Luraghi 2003, Evans & Tyler 2004a, 2004b, Tyler & Evans 2007, Šaric 2012, among others). The semantic analysis undertaken in this paper culminates in a diachronic semantic map for the *secundum* NP construction.

This paper is organised as follows. Section 2 presents my data-set and the semantic map methodology. Section 3 offers an analysis of the spatio-temporal meanings of *secundum* NP showing a close parallelism between the domains of space and time, understood as the fundamental domains of cognition. Next, section 4 moves on to the broad area of logical reations between participants, and deals in particular with the conformity and limitation functions.Various meanings (co-variation, similarity, role, criterion), are presented according to whether they emerge by extension from the space meaning, the conformity meaning, or the limitation meaning. Then, section 4.4 presents some meanings (cause/reason, agent, and instrument) for which evidence is scant but which may relate to the meanings of time, conformity and limitation. Section 5 deals with *secundum* NP no longer used as a VP modifier but as a conjunct and a disjunct. [[1]](#footnote-1) In terms of meaning, this section deals with the intersubjective meanings of the *secundum* NP construction: first, it presents the construction *secundum ea* ‘furthermore’ used as a textual connective, then it analyses the meanings of evidentiality and attribution. Finally, section 6 focuses on the meaning relations between the senses identified, provides a commentary to the semantic map and offers some reflections on language change. Section 7 concludes the paper and suggests directions for further research.

**2. Data and methodology**

The semantic analysis presented here is based on a representative sample of 890 occurrences of *secundum* NP extracted from the 6M prose-section of the *Latin Library* corpus (https://cqpweb.lancs.ac.uk/latinlib/index.php). Four sub-corpora have been considered: Classical Latin (106 BC – 17 AD), Silver Latin (100-258), Late Latin (330-469) and Early Medieval Latin (530-704) thus spanning across 800 years. For the first three periods, a sample of 250 instances has been considered, whereas only 140 instances have been considered for the Early Medieval era, that is all the instances retrieved for this period. These instances make up the sample of *secundum* NP analysed here (890 instances). All the instances have been categorised, in line with the total accountability principle of corpus-based Linguistics (McEnery & Hardie 2011: 14ff.).

The relationship between the various meanings of *secundum* NP have then been used to create the conceptual space for the *secundum* NP construction i.e. the “geometrically ordered set of meanings” (Zwarts 2010) “that may be associated with a single form cross-linguistically” (Cristofaro 2010: 35). The semantic map proper is a connected region of the conceptual space, expressed by a language-specific construction, in this case *secundum* NP, and conventionally indicated by a closed line.

A semantic map is “a representation of a multifunctionality pattern attested in a particular language whereby the same linguistic form is used in different contexts to express a range of different conceptual situations”, i.e. meanings, functions or uses (Cristofaro 2010: 35). The basic principle informing semantic maps is Haiman’s isomorphism principle, that is, the assumption that formal identity reflects functional similarity[[2]](#footnote-2)” (Haiman 1980: 516, 1985: 19; Haspelmath 2003; see Wälchli 2010b for a ‘weaker’ version of the principle and Cristofaro 2010: 52 for a different view). The theoretical foundation for semantic maps lies in similarity semantics and exemplar semantics (Wälchli 2010b: 364, Croft 2007), and their main advantage is to provide a falsifiable model of semantic relations (Haspelmath 2003). Semantic maps render the similarity principle graphically by representing similar meanings as closer together and dissimilar meanings as more distant (Zwarts 2010: 377). The relative position of the various meanings is then regulated by the semantic connectivity hypothesis, according to which “any relevant language-specific and construction-specific category should map onto a connected region in conceptual space” (Croft 2001: 96).

Not all possible semantic maps are equally interesting. Maps showing universal restrictions, especially implicational maps, are more interesting than “vacuous” maps, i.e. possible maps in which all functions connect with all functions (Haspelmath 2003: 218, Narrog 2010b: 233, see also Sansò 2010a: 291). Although a dynamicisation of a semantic map, showing directions of change, can add meaning also to (otherwise) vacuous maps (Narrog 2010b: 233-234), scarcity of data in historical analysis does not always make it possible to establish a clear direction. Semantic maps are particularly suitable to capture diachronic change, and particularly the unidirectional semantic change associated with grammaticalisation (Haspelmath 2003, Croft & Poole 2008: 5).

There are two types of semantic maps: first-generation, “traditional” semantic maps and second-generation “probabilistic” semantic maps (Cysouw 2007, Majid 2008, Croft & Poole 2008, van der Auwera 2008, Sansò 2010b, Wälchli 2010b, Malchukov 2010, Narrog 2010a, 2010b, Mauri 2010). Because of the way in which probabilistic maps are built, the semantic map connectivity hypothesis does not apply (Wälchli 2010b: 337). Since my analysis is diachronic in nature, the better model is provided by traditional semantic maps, which rely on the connectivity hypothesis, “promote a diachronic perspective” (van der Auwera 2010), and offer “a very satisfactory model of synchronic variation and semantic change” (ibid.) (see also van der Auwera 2008, Wälchli 2010c: 375). In order to overcome the limitation of not incorporating frequency data, I will provide information about the token-frequency of the various meanings in the form of tables. All figures from the Early Medieval period have been normalised to 250 instances (Biber et al. 1998: 265-267) thus allowing direct comparison of raw figures across different sample sizes.

**3. The space and time domains**

The space and time domains are basic to cognition (Langacker 1987: 148, Haspelmath 1997: 1, Evans 2004, Croft & Cruse 2004: 24; see Lakoff & Johnson 1980: ch.12, Luraghi 2014: 106 arguing that space is more basic than time) and they are often construed in parallel. The space and time meanings of *secundum* NP occur when the argument indicates a physical object and a time expression respectively. The specific type of argument is crucial for refining the space and time meanings.

If the argument is point-like in space or is bounded in time, *secundum* means ‘following behind, going behind’ (3) or ‘coming (immediately) after’ (4).

(3) *Nam praetervectas Apolloniam Dyrrachiumque naves*

In.fact sent-ACC.F.PL Apollonia-ACC.F.SG Dyrrachion-ACC.N.SG-and ship-ACC.F.PL

 *vid-erant ipsi, ut iter* ***secundum eas****…*

 see-IND.PLUPRF.3P.PL they-NOM.M.PL as route(ACC.N.SG) behind this-ACC.F.PL

*direxerant*…

direct(PRF)-IND.PLUPRF-3P.PL

‘In fact they had seen the ships pass by beyond Apollonia and Dyrrachion as they had directed their itinerary following (behind) those ships…’ (Caes. *Civ*. 3. 30)

(4) *Tua ratio est, ut* ***secundum*** *binos* ***ludos***

 POSS.2P.SG-NOM.F.SG intention.NOM.F.SG is that after two-ACC.M.PL game-ACC.M.PL

 *mihi respondere incipias*.

me.DAT reply-INF.PRS start-SBJV.PRS.2P.PL

‘Your intention is to start replying to me after the two games.’ (Cic. *Verr*. I 34)

If the referent of the argument of *secundum* is elongated is space or expresses duration, *secundum* means ‘along’ (5) and ‘during’ respectively (6).

 (5) *Sex legiones ad oppidum Gergoviam* ***secundum flumen***

Six legion-ACC.F.PL to city-ACC.N.SG Gergovia-ACC.F.SG along river(ACC.N.SG)

*Elaver*  *dux-it*

Elaver led(PRF)-IND.PRF.3P.SG

‘(He) led six legions to the city of Gergovia along the Elaver river.’ (Caes. *Gall*. 7.34.2)

 (6) *Ei*  ***secundum quietem*** *visam esse Iunonem.*

 Him.DAT during sleep-ACC.F.SG seen-ACC.F.SG be.PRS.INF Juno-F.ACC.SG

 ‘[It is said] that during his sleep Juno appeared to him.’ (Cic. *Div.* 1. 24. 48)

Example (5) above represents a context of motion. In static contexts, the interpretation is either ‘near’ or ‘behind’, as shown in (7) and (8), below, or ‘alongside,’ as in (9), depending on the dimensions of the referent of the argument (point-like, elongated) and those of the participant which is located in relation to this.[[3]](#footnote-3)

 (7) *Reliqui … Icarum …*  ***secundum arborem*** *edfoderunt.*

 Other-NOM.M.PL Icarus-ACC.M.SG near tree-ACC.M.SG buried-IND.PRF.3P.PL

 ‘The others… buried Icarus near a certain tree.’ (Hyg. *Astr*. 2. 4. 10)

(8) *P.Postumius … nuntiavit M.Marcellum… duo vulnera*

 P.Postumius-NOM.M.SG told(PRF)-IND.PRF.3P.SG M.Marcellus-ACC.M.SG two wound-ACC.N.PL

 *accepisse, unum in stomacho, alterum in capite*

got(PRF)-INF.PST one-ACC.M.SG in stomach-ABL.M.SG other-ACC.N.SG in head-ABL.N.SG

***secundum aurem***.

 behind ear-ACC.F.SG

 ‘P.Postumius told that M.Marcellus received two wounds, one in the stomach and the other behind his ear.’ (Cic. *Fam*.4.12.2)

 (9) *Si erunt moenia* ***secundum mare***eqs.

 If be.IND.FUT.3P.PL wall-NOM.N.PL along sea-ABL.N.SG

 ‘If there are city walls along the sea…’ (Vitr. 1.7. 1)

Occasionally, there is ambiguity of interpretation, when the referent of the argument is open to interpretation as point-like or elongated (e.g. *behind the wall* or *along the wall*); or bounded or continuous (e.g. *after the war* or *during the war*). This is usually disambiguated by context.

As evidenced by tables 1 and 2, below, both the spatial and temporal meanings are mainly found in Classical Latin.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | Normed to 250# | % |
| **Space** | 65 | 26 | 5 | 2 | 1 | 0.4 | 1.8[[4]](#footnote-4) | 0.7 |

**Table 1.** Frequency of *secundum* NP with spatial meaning.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # | % |
| **Time** | 50 | 20 | 2 | 0.8 | 1 | 0.4 | 0 | 0 |

**Table 2.** Frequency of *secundum* NP with spatial meaning.

Within the space domain, the most frequent meaning is ‘along’, whereas in the time domain ‘after’ is more frequent than ‘during’. In the spatial domain, the use of *secundum* in static contexts outweighs its use in dynamic contexts (57/65, 87.7% versus 8/65, 12.3%), which suggests that spatial *secundum* has distanced itself semantically from the original sense of the verb *sequor* ‘follow’, from which it derives, which is dynamic in nature.

|  |  |  |
| --- | --- | --- |
| **Classical Latin** |  |  |
| **Space** | **#** | **%** |
| After/Behind | 5 | 7.7 |
| Along | 38 | 58.5 |
| Near | 22 |  33.8 |
| **Total** | **65** | **100** |

**Table 3.** Frequency of the spatial sub-meanings of *secundum* NP.

|  |  |  |
| --- | --- | --- |
| **Classical Latin** |  |  |
| **Time** | **#** | **%** |
| After | 44 | 88 |
| During | 6\* | 12 |
| **Total** | **50** | **100** |

**Table 4.** Frequency of the temporal sub-meanings of *secundum* NP. \*The meaning ‘during’ is only found in the idiomatic expression *secundum quietem* ‘during sleep/in a dream’.

**4. The domain of logical relations**

By the label ‘logical relationships’ I refer to those relations between entities that are construed by the conceptualiser outside the space and time domain. Examples are the causal (or reason-result) relationship, the conditional relationship, the confomity/compliance relationships, the dependency relationship, the comparison relationship.

**4.1 Extensions of spatial meanings**

In the domain of logical relations between participants, there are three extensions of the spatial meanings. These are ranking, beneficiary and distribution. Sentence (10) is an example of ranking.

 (10) ***Secundum te*** *nihil est mihi amicius*  *solitudine.*

 After you.ACC nothing.NOM.N is me.DAT friendly-COMPTV.NOM.N.SG solitude-ABL.F.SG

‘After you/next to you, there is nothing friendlier to me than solitude.’ (Cic. *Att*.12.15)

In Guardamagna (forth.a), where I discuss these meanings in greater detail, I argue that this meaning extension can be explained with the metaphors IMPORTANCE IS PRECEDENCE (Lakoff et al. 1991) and LINEAR SCALES ARE PATH (Lakoff 1993: 214). The ranking meaning of *secundum*, which is only found in Classical and Silver Latin, is quite rare.

|  |  |  |
| --- | --- | --- |
|  | **Classical** | **Silver** |
|  | # | % | # | % |
| **Ranking** | 17 | 6.8  | 1 | 0.4 |

**Table 5.** Frequency of *secundum* NP with ranking meaning.

As stated in Luraghi (2003: 40), the function of beneficiary expresses “the (human) entity in favour of which an action is performed”. It is exemplified in (11), below.

 (11) ***Secundum te***  *iudicatum erit.*

 In.favour.of you.ACC judged- ACC.N.SG be-FUT.3P.SG

‘It will be judged in your favour’ Gell. 5. 10. 10).

In most cases, the argument of *secundum* encodes human beneficiaries. There are, however, a few exceptions, discussed in Guardamagna (forth.a), namely the legal expressions *litem dare secundum aliquem* ‘judge in favour of someone’ and *vindicias secundum libertatem/servitutem dare/cedere* ‘to enslave someone, to free someone’ (lit. to decide a claim in favour of freedom/slavery) (see Adam 1807, Gardin Dumesnil 1825, Lewis & Short 1879 *vindiciae*, Nettleship 1889, Laffi 2007: 52-53).

The beneficiary meaning of *secundum* NP may derive from the proximity meaning ‘alongside, near’ of *secundum*, and it may be explained with the metaphor IN FAVOUR OF IS ON THE SIDE OF discussed in Luraghi (2003: 325). There is only one instance of ‘behalf beneficiary’ (12) which may have arisen via the implicature “acting in someone’s place usually implies acting for his/her benefit”, as suggested by Luraghi (2010b: 75).

(12) *Qui esset* ***secundum postumum*** *et natum et*

REL-NOM.M.SG be.SBJV.IMPF-3PSG in.place.of child-ACC.M.SG both born-ACC.M.SG and *mortuum heres institutu* eqs.

dead-ACC.M.SG heir-NOM.M.SG nominated-NOM.M.SG

 ‘[If] a man was appointed as substitute (second)[[5]](#footnote-5) heir to a child (posthumously) who is born and then dies’ (Cic. *De Orat*.1. 180)

Even if it is quite infrequent, the beneficiary meaning of *secundum* is attested in Classical Latin, and to some extent also in Silver and Late Latin (table 6, below).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** |
|  | # | % | # | % | # | % |
| **Beneficiary** | 24 | 9.6  | 3 | 1.2 | 2 | 0.8 |

**Table 6.** Frequency of *secundum* NP with beneficiary meaning.

Finally, there is only one instance of *secundum* with meaning of distribution attested in Jerome’s *Vulgata*:

(13) *Sive lingu-a quis loqu-itur* ***secundum du-os***

 Or tongue-ABL.F.SG someone.NOM.M.SG speak-IND.PRS.3P.SG.DEP by two-ACC.M.PL

 ‘If any speak with a tongue, let it be by two.’ (Hier. *Vulg I Cor*. 14.27)

In all likelihood, as discussed in Guardamagna (forth.a), *loquitur* *secundum duos* translates Greek λαλεῖ κατὰ δύοand is probably a calque.

**4.2 Conformity and its extensions**

***4.2.2 Conformity***

Examples (14) and (15) below represent the meaning of conformity or accordance conveyed by *secundum*.

(14) *Ita finis bonorum existit,* ***secundum naturam***

 So end-NOM.F.SG good-GEN.N.PL exist-IND.PRS.3P.SG in.accordance.with nature-ACC.F.SG

*vivere.*

live-INF.PRS

‘Thus arises ‘the end of goods’, namely to live in accordance with nature.’ (Cic. *Fin*. 5. 24)

(15) *Acceperat a domino suo … disciplinam*

Took(PRF)-IND.PLUPRF.3P.SG from God-ABL.M.SG POSS.3P.SG-ABL.M.SG rule-ACC.F.SG

***secundum legem***  *vivendi*.

in.accordance.with *law*-ACC.F.SG live-GEN.GER

‘He had received from his Lord… the rule to live according to the law.’ (Tertullian, *Liber* *Scorpiace* 5, 11)

Regarding the origin of this meaning, it is possible to put forwards two hypothesis. The first one, reflecting Luraghi’s (2010b: 203; 2003: 200) analysis of Greek κατὰ , the translational equivalent of *secundum*, is that the conformity meaning arose via the metaphorical mapping CONFORMITY IS MOTION ALONG in specific downstream motion contexts. This is suggested by examples like (5), repeated here as (16):

(16) *Sex legiones ad oppidum Gergoviam* ***secundum flumen***

 Six legion-ACC.F.PL to city-ACC.N.SG Gergovia-ACC.F.SG along river.ACC.N.SG

*Elaver*  *dux-it.*

 Elaver led(PRF)-IND.PRF.3P.SG

‘(He) led six legions to the city of Gergovia along the Elaver river.’ (Caes. *Gall*. 7.34.2)

However, as discussed in Guardamagna (2016b), frequency considerations seem to suggest that this explanation is not the most likely. As an alternative (or possibly an addition) (ibid.) I propose that the conformity meaning might have arisen as a projection onto the logical domain of the relationships of dependency between participants in the physical context represented by the verb *sequor*, where the leading participant determines the direction and trajectory of movement and the following entity merely conforms its movement to that of the leader (see also Guardamagna forth.b ).

The conformity meaning of *secundum* is the most frequent throughout the history of Latin. If token frequency is taken as a measure of the centrality of a sense under a prototype theory of meaning, then conformity may be said to be the core meaning of the *secundum* NP construction.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # normed to 250 | % |
| **Conformity** | 91 | 36.4 | 156 | 62.4 | 166  | 66.4  | 100  | 40  |

**Table 7.** Frequency of *secundum* NP with conformity meaning.

***4.2.3 Co-variation***

The interpretation of conformity arises when the argument of *secundum* is construed as fixed and invariable. When the argument is conceptualised as a variable entity,[[6]](#footnote-6) then the meaning of co-variation arises. This is exemplified in (17), below, in which the *actus*, i.e. ‘the deeds’, of the various people talked about are conceptualised as being either good or bad.

(17) *Donec reddat hominibus* ***secundum actus***

 Until give.back-SBJV.PRS.3P.SG man-DAT.M.PL according.to deed-ACC.M.PL

*suos*.

POSS.3P.SG-ACC.M.PL

‘Until he has rendered to men according to their deeds/in proportion to their deeds’ (Hier.*Vulg. Eccles*. 35. 24)

The state of affairs encoded by the verb *reddat* ‘has rendered’ is seen as dependent on the changeable deeds: God’s rendering to human beings came in large rewards if the people behaved well, small rewards if they behaved badly and little or no reward at all if their behavior was utterly evil.

Similarly to (17), in (18) a person’s facial expression changes depending on their *voluntas* ‘mood.’ For example, if their mood is good, their face is going to be smiling; if their mood is sad, they will be frowning, and so on. In (18) the construal of variation is further prompted by the verb *mutatur* ‘changes, is changed’.

(18) *Vultus vero dictus, eo quod per eum*

Face-NOM.M.SG truly said-NOM.M.SG for.this.reason because through it-ACC.M.SG

*animi voluntas ostenditur.*  ***Secundum voluntatem***

soul-GEN.M.SG mood:NOM.F.SG show-IND.PRS.3P.SG-PASS According.to mood-ACC.F.SG

 *enim in varios motus mutatur* eqs.

therefore in various-ACC.M.PL movement-ACC.M.SG change-IND.PRS.3P.SGPASS

 ‘But facial expression (*vultus*) is also so called because the inclination of the will is displayed by it. The expression {of the face} changes in various moments according to/depending on the will.’ (Isid. *Orig*.11.1.34)

The main difference between the meaning of proportion in (17) and that of dependency in (18) is that in the former the entity codified in the NP can be seen as a continuous variable (e.g. quantity, size) whereas in the latter it is understood as a discrete variable (e.g. different types of facial expressions).

The dependency of the state of affairs on the values taken by the ‘independent variable’ codified in the argument NP is in some cases made explicit through a list of alternatives, as shown in (19) and (20).

(19) *Et uni dedit quinque talenta, alii*

And one-DAT.M.SG gave(PRF)-IND.PRF.3P.SG five talent-ACC.N.SG other-DAT.M.PL

*autem duo, alii vero unum, unicuique* ***secundum***

on.the.contrary two other-DAT.M.PLtruly one-ACC.M.SG each.and.every:DAT.M.SG according.to

*propriam* ***virtutem*** eqs.

own-ACC.F.SG virtue-ACC.F.SG

 ‘And to one he gave five talents, and to another two, and to another one, to every one according to his own ability.’ (Hier.*Vulg.Matth*. 25. 15)

(20) *Quoties de pupillorum tutela tractatur,*

 As.often about pupil-GEN.M.PL protection-ABL.F.SG deal-IND.PRES.3P.SG.PASS

*debent primi patriae cum iudice,*

must-IND.PRS.3P.PL first-NOM.M.PL country-GEN.F.SG with judge-ABL.M.SG

***secundum aetates***  *minorum, aut tutorem aut curatorem*

according.to age-ACC.F.PL minor-GEN.M.PL or tutor-ACC.M.SG or curator-ACC.M.SG

*eligere*.

choose-INF.PRS

‘As often the problem arises concerning the guardianship of pupils, the chief decurions of the municipality, along with the judge, must select either a tutor or a curator, according to the age of the minor.’ (*Cod. Theod*. 3,17.3.2)

As multiple conceptualisations are available for some NPs, the contrast between the conformity and the co-variation reading is not always clear-cut, and alternative readings are possible – sometimes disambiguated in context. This may suggest that the co-variation meaning is merely a contextual modulation of the conformity meaning, which can be accounted for in terms of pragmatics instead of semantics. However, the meaning of co-variation is considered here as distinct from conformity because there are languages, like Italian, which have a dedicated expression for the co-variation meaning: the complex preposition *a seconda di* ‘depending on’ (see 21, below) is a cognate of *secondo* ‘in accordance with’ (< Latin *secundum*).

 (21) Italian

*I livelli di HbA1c variano* ***a seconda*** *della stagione*

The.M.PL level-MPL of HbA1c vary depending. of.the.F.SG season(F)-SG

*e della temperatura esterna.*

and of.the.F.SG temperatura-F.SG external-F.SG

 ‘HbA1c levels vary according to/depending on the season and the outside temperature.’ (“L'emoglobina glicosilata varia a seconda della stagione”. In *Diabete.net*, http://www.diabete.net/notizie/lemoglobina-glicosilata-varia-a-seconda-della-stagione/ Accessed 21 January 2015).

***4.2.4 Similarity***

Even if the main preposition which expresses similarity in Latin is *sicut* ‘like’, a similarity meaning is also attested for *secundum*, in examples like the following:

(22) *Igitur, si antichristus est, et est* ***secundum creatorem*** eqs.

 Therefore if antichrist-NOM.M.SG is and exists/is according.to creator-ACC.M.SG

‘Therefore, if there is an antichrist and it is similar to the creator…’ (Tert. *Adv. Marc.* 5, 16, 5)

(23) *Eum filium hominis in causa odii*

 This-ACC.M.SG son-ACC.M.SG man-GEN.M.SG in cause-ABL.M.SG hatred-GEN.M.SG

*constitu-it qu-i erat* ***secundum***

indicate(PRF)-IND.PRF.3P.SG REL-NOM.M.SG be/exist.IND.IMPF.3P.SG according.to

***creatorem****.*

creator-ACC.M.SG

‘This son of the man he indicates as the reason for that hatred, he who was similar to the Creator’ (Tert. *Adv. Marc*. 4, 14, 16)

Haspelmath & Buchholz (1998: 313) define similarity constructions as “simple phrases, consisting of a similative marker (‘like’) and a standard, which function as manner adverbials” (e.g. ‘she sings *like* a nightingale’). In examples (22) and (23) above, the *secundum* NP phrase can be interpreted as a manner specification of the verb *esse* ‘to be’ (understood as ‘to exist’ instead of a copular verb).

A possible link between conformity and similarity may have arisen via inference from the conformity construction, exemplified below for static (a) and dynamic (b) states of affairs:

1. *if* A exists in a way that conforms to B, *then* A is similar to B (= A is like B).
2. *if* A does something in conformity to B (= the way B does it), *then* A does something like B.

Occurrences allowing both conformity and similarity readings are also attested, which can be interpreted as bridging contexts corroborating the invited inferences outlined in (a) and (b), above:

(24) *Et acceperunt lapides integros… et aedificaverunt*

And take(PRF)-IND.PRF.3P.PL stone-ACC.M.SG whole-ACC.M.PL and build(PRF)-3P.PL

*altare novum*  ***secundum illud***  *quod*

 altar-ACC.N.SG new-ACC.N.SG according.to that.ACC.N.SG REL-NOM.N.SG

 *fuit prius*.

before be(PRF).IND.PRS.3P.SG

‘Then they took whole stones… and built a new altar, according to the shape of the former/similar to the former.’ (Hier. *Vulg*. I *Macc* 4.47)

(25) *Eum qui*  ***secundum deum***  *creatus est.*

 Him-ACC.M.SG REL-NOM.M.SG according.to God-ACC.M.SG created-NOM.M.SG is

‘(a) He who was created according to God; (b) He who was created similar to God’ (Aug. *Trin.* 12. 7.12)

(26) *Et anima dicitur mori ...* ***secundum id***

And soul-NOM say-IND.PRS.3P.SGPASS die-INF.PRS.DEP a ccording.to it.ACC.N.SG

 *quod destitit esse quod erat.*

 REL.NOM.N.SG cease-IND.PRS3P.SG be.INF.PRS REL.NOM.N.SG be.IND.IMPF.3P.SG

‘(a) Also the soul is said to die… in accordance with what ceases to be what it was;

(b) Also the soul is said to die… like what ceases to be what it was.’ (Isid.*Orig*. 7. 1. 9)

The pure similarity meaning is attested only in Tertullian (Silver Latin; table 8, below) whereas overlaps between conformity and similarity, although quite rare overall, are attested also in Late and Medieval Latin (table 9, below).

|  |  |
| --- | --- |
|  | **Silver** |
|  | # | % |
| **Similarity** | 2 | 0.8 |

**Table 8.** Frequency of *secundum* NP with similarity meaning.

|  |  |  |
| --- | --- | --- |
|  | **Late** | **Early Medieval** |
|  | # | % | # normed to 250 | % |
| **Conformity** **& Similarity** | 4 | 1.6% | 3.6 | 1.44  |

**Table 9.** Frequency of *secundum* NP with conformity and similarity meanings (overlapping).

***4.2.5 Role phrase***

Role phrase markers “express a role or function in which a participant appears” (Haspelmath and Buchholz 1998: 322). They can be either appositive (or ‘attributive’) (Andorno 2003: 114) or predicative (Haspelmath and Buchholz 1998: 322, Andorno 2003: 114), depending on whether they are within an NP (e.g. *Charles, as a dad, is very tender*) or a VP (e.g. *Charles is talking to you as a friend*). In Latin the scope is only over the VP; therefore, there has not been a shift from verbal modifier to verbal complement or nominal apposition.

(27) *Tum… desider-et… aliud*  ***secundum proprietat-em****.*

 Then desire-SUBJ.PRS.3P.SG something.else.ACC.N.SG as property-ACC.F.SG

‘Then, it is one thing to desire…something as property.’ (Ter. *Anim.* 38. 4)

(28) *Vt et deus … cognosceretur …* ***secundum creatorem****.*

 For also God know-SUBJ.3P.SG.PASS according.to creator-ACC.M.SG

‘In order for God to be known as the creator’ (Ter. *Adv. Marc.* 1. 11. 9)

In the following example, the role phrase *as a man* can be seen as connected to a manner expression (*in the manner/way of a man*), which is an instance of the conformity meaning.

(29) *Adhuc, inquit,* ***secundum hominem*** *dico.*

 Still say-IND.PRS.3P.SG as man-ACC.M.SG say-IND.PRS.1P.SG

‘I still, he says, speak as a man/in the manner of a man.’ (Ter. *Adv. Marc.* 5.4.1)

In (30) below, a third reading is possible, thus allowing an interpretation as conformity, similarity, or role phrase. The role phrase interpretation becomes available in the context of the Christian Holy Trinity, in which God is seen as triune (the Father, the Son and the Holy Ghost). The earthy, human nature of the Son is brought to the fore in (30).

(30) *Quod … crucifixus est,*  ***secundum hominem***  *crucifixus est.*

 Because crucified-NOM.M.SG is as man-ACC.M.SG crucified-NOM.M.SG is

(a)Because he was crucified in the way that a man gets crucified (conformity of manner);

(b)Because he got crucified like a man does (similarity); (c) Because he got crucified as a man (‘in his capacity as man,’ role phrase)’ (Aug. *Fid. et Symb.* 1. 4. 9)

The meaning chain connecting conformity, similarity, and role phrase results in two possible implicatures.

e.g.  *I am talking to you in conformity with the way a friend talks*  conformity

Implicature A

* I talk to you like a friend does similarity
* I talk to you as a friend role phrase

OR

Implicature B

* I talk to you as a friend role phrase
* I talk to you like a friend does similarity

Latin *secundum* NP fits a cross-linguistically attested type, showing polysemy between similarity and role phrase (Haspelmath & Buchholz 1998: 322), as exemplified by Italian *come* ‘like, as’ (*canta come un usignolo* ‘she sings like a nightingale’; *come papà, non sei male* ‘as a dad, you are not bad’), but differently from English, which has a dedicated marker for each function (*like* and *as* respectively).

As table 10, below, shows, the meaning of role is quite marginal throughout the history of Latin.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # | % |
| **Role** | 0 | 0 | 3 | 1.2 | 5 | 2 | 0 | 0 |

**Table 10.** Frequency of *secundum* NP with role meaning.

***4.2.6 Criterion***

A meaning appearing only in Silver, Late and Medieval Latin, though quite rare, is that of criterion (table 11, below). This meaning is clearly connected to that of conformity, as shown by “ambiguous” cases (labelled conformity-criterion in table 11).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Silver** | **Late** | **Early Medieval** |
| # | % | # | % | # normed to 250 | % |
| **Criterion** | 1 | 0.4 | 5 | 2 | 5.3  | 2.1 |
| **Conformity-Criterion** | 0 | 0 | 4 | 1.6 | 3.6 | 1.4 |

**Table 11.** Frequency of *secundum* NP with co-variation meaning.

In the following examples, the argument of *secundum* indicates the principle based on which the event coded in the verb is brought about.

(31) *Hi filii Sem in tribubus suis* ***secundum***

 They.NOM.M.PL son-NOM.M.PL Sem in tribe-ABL.F.PL POSS.3P.SG-ABL.F.PL according.to

***linguas*** *suas… et in gentibus suis*.

language-ACC.F.PL POSS.3P.SG-ACC.F.PL and in people-ABL.F.PL POSS.3P.SG-ABL.F.PL

 ‘These are the sons of Shem, after their families, after their tongues… after their nations (=organised by nations).’ (Aug. *Civ*. 16, 3.2)

(32) *Et elegit sibi viros Ezras sacerdos,*

 And choose(PRF)-IND.PRF.3P.SG REFLEX.DAT man-ACC.M.SG Ezra.NOM.M.SG priest-NOM.M.SG

*principes magnos ...* ***secundum nomina****.*

 prince-ACC.M.PL great-ACC.M.PL by name-ACC.N.PL

‘Ezra the priest chose for himself the leading men… by name.’ (Hier.*Vulg. Ezdras* 1,9.16)

(33) *Dicitur igitur mulier* ***secundum*** *femineum*

 Say-IND.PRS.3P.SG.PASS therefore woman(NOM.F.SG) according.to female-ACC.M.SG

***sexum****, non* ***secundum corruptionem*** *integritatis: et hoc*

sex-ACC.M.SG not according.to corruption-ACC.F.SG integrity-GEN.F.SG and this.NOM.N.SG

*ex lingua sacrae Scripturae*.

from language-ABL.F.SG sacred-GEN.F.SG Scripture-GEN.F.SG

‘So, ‘woman’ (*mulier*) is named based on her feminine sex, not based on a corruption of her integrity.’ (Isid.*Orig*. 11.2.20)

A definition formulated in accordance with something (languages and nations in (31); sex in (33)) can be seen as achieved on the basis of that something, which is therefore conceptualised as its criterion, or foundation. Similarly, a decision made in line with something, as in (32), can be thought of as being taken on the basis of something, that is, using that something as its criterion.

Like the conformity meaning, the criterion relationship encodes dependency between the two entities. However, instead of a relation of compliance, here the relevant relation is one whereby the entity encoded in the NP is seen as the independent variable on the basis of which the state of affairs takes place.

**4.3 Limitation**

The function of limitation is defined broadly by Radden, who calls it “area”, as “the thematic context or field in which an event is seen” (1989: 448). Dirven defines it more narrowly as “topic” (1995: 113). Luraghi (2003: 48) points out that “[a]rea is also the S[emantic]R[ole] of NPs that specify the extent to which the state of affairs denoted by the verb applies” or “a quality that affects a referent to a certain extent” and gives the following examples (ibid.):

(a) These two skirts differ in size.

(b) John is a lawyer by profession.

Tyler & Evans (2007: 95-96) call this meaning the “Focus of Attention Sense”. In Latin the meaning of limitation is generally expressed by the plain ablative case (34):[[7]](#footnote-7)

(34)[*Sempronia*] ***genere***  *atque* ***forma****, praeterea* ***viro****,*

 Sempronia-NOM.F.SG kin-ABL.N.SG and beauty-ABL.F.SG furthermore husband-ABL.M.SG

***liberis***  *satis fortunata fuit.*

 child-ABL.M.PL quite lucky-NOM.F.SG be.PRF.3P.SG

‘(Sempronia) was quite lucky regarding her kinship, beauty, and furthermore, her husband and children.’ (Sall. *Catil.* 5.1)

Most descriptive grammars of Latin (Henle 1958: 233, Flocchini et al. 1991: 404-45, Panhuis 2006: 66, 79-82, Pinkster 2015: 806, 1229) do not recognise the usage of *secundum* NP in the limitation function, despite it being well-attested throughout the history of Latin, especially from the Silver period onward (table 12, below).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # normed to 250 | % |
| **Limitation** | 1 | 0.4 | 17 | 6.8 | 37 | 14.8 | 75 | 30 |

**Table 12.** Frequency of *secundum* NP with limitation meaning.

The following examples are from Classical (35) and Silver (36) Latin.

(35) *Dedimus operam ut …*  ***secundum*** *eius* ***fidem******et***

Give(PRF)-IND.PRF.1P.PL work-ACC.F.SG for as.far.as POSS.3P.GEN.SG trust-ACC.F.SG and

***sedulitatem*** *existimatio tua* *conservetur*.

honesty-ACC.F.SG reputation-NOM.F.SG POSS.2P.SG-F.SG save-SUBJ.PRS.3P.SG.PASS

‘I have made it my object to ensure that your reputation should be fully maintained as far as his honesty and assiduity are concerned.’ (Cic. *Fam.* 8. 3)

(36) *Qui definit-us est fili-us de-i* ***secundum***

REL-NOM.M.SG defined-NOM.M.SG is son-NOM.M.SG God-GEN.M.SG as.far.as

***spirit-um*** *– hic erit de-us*.

spirit-ACC.M.SG here be.FUT.3P.SG God-NOM.M.SG

***‘***That person who is defined Son of Good in spirit – he will be God.’ (Tert. *Adv.Prax.* 27 . 11)

On top of these instances, there are also some less prototypical occurrences, which I call ‘relation’, and subsume under the function of limitation. These represent a state of affairs which holds in relation to a participant, even if the limitation sense is less prominent, as in (37).

(37) *Catholic-a, universal-is… id est* ***secundum******tot-um***.

 Catholic-NOM.F.SG universal-NOM.F.SG it.NOM.N.SG is in.relation.to whole-ACC.N.SG

‘“Catholic” [is translated as] “universal” (*universalis*)… that is “with respect to the whole”.’ (Isid.*Orig*. 8.1.1)

Cross-linguistically, a range of spatial expressions have been noted as diachronic sources for limitation expressions. Among these are prepositions indicating superiority (English *over*, *on*, Tyler & Evans 2007: 95-96; Latin *super* ‘over, on’); a variety of location expressions (‘around’, ‘about’, ‘above’, ‘proximal to, by, near’); and expressions of direction (‘towards’) (Luraghi 2003: 207 on Ancient Greek). One possible explanation of the limitation sense of *secundum* NP may therefore be connected to the meaning of proximity of *secundum* NP ‘near, alongside’.

Whereas my data do not show an overlap in meaning between the location and limitation senses of *secundum* NP, there are a few examples of overlaps between conformity and limitation, starting from Silver Latin (38), and then continuing all the way through Early Medieval Latin (39), thus suggesting a semantic extension path from conformity to limitation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # normed to 250 | % |
| **Conformity - Limitation** | 0 | 0 | 1 | 0.4 | 4 | 1.6 | 10.7 | 4.3 |

**Table 13.** Frequency of *secundum* NP with overlapping conformity and limitation meaning.

Examples of overlap between conformity and limitation are the following:

(38) *Visum quidem deum* ***secundum*** *hominum* ***capacitates****,*

 Seen-ACC.M.SG indeed God-ACC.M.SG according.to men-GEN.M.PL ability-ACC.F.SG

*non secundum plenitudinem divinitatis*.

not according.to fullness-ACC.F.SG divinity-GEN.F.SG

‘God was seen indeed according to the faculties of men, not in accordance with the full glory of God.’ (Tert. *Adv. Prax.* 14, 2)

(39) *Vnde et quaedam de illo in Scripturis* ***secundum***

 From.where and some.things.NOM.F.PL about that-ABL.M.SG in Scripture-ABL.F.SG regarding

***formam***  *Dei, quaedam secundum formam*

 form-ACC.F.SG God-GEN.M.SG some.things.NOM.F.PL regarding form-ACC.F.SG

*servi dicuntur*.

servant-GEN.M.SG say-IND.PRS.3P.PL

‘For this reason, some things are said of him in Scripture according to the form of God, some according to the form of a slave.’ Interpretations: (a) in accordance with the form of God; (b) limited to the form of God/regarding the form of God.’ (Isid. *Orig*. 7. 2. 46)

A similar semantic evolution from conformity to limitation is also noted by Luraghi (2003: 213) for Greek κατὰ. The meanings of conformity and limitation are highly compatible because the limitation sense can be inferred from the conformity meaning, interpreted as posing a restriction on a certain state of affairs: if something holds in conformity with something else, it may be that it holds in conformity *only* with it (that is, it may not hold in conformity with anything else).

**4.4 Marginal meanings: Cause/reason, instrument and agent**

This section presents very marginalexpressions , in which *secundum* NP fulfils the functions of cause/reason, instrument and agent. The evidence in my data is too scant for generalising on the basis of a few occurrences, so the observations presented here are to be considered as tentative. These meanings are listed in table 14, below.

|  |  |  |
| --- | --- | --- |
|  | **Late Latin**  | **Early Medieval Latin****# Normed to 250** |
| Time and Cause | 1 | 0 |
| Cause, Instrument and Agent | 1 | 0 |
| Conformity and Instrument | 1 | 0 |
| Conformity and Cause | 0 | 3.6 |
| Cause and Limitation | 0 | 1 1.78 |

**Table 14.** Frequency of *secundum* NP with overlapping conformity and limitation meanings.

In my corpus there is one instance of *secundum* NP expressing a function which can be seen as either cause, instrument, or agent, meanings often related by polysemy (Luraghi 2010a: 67), as in (40).

(40) *Et ego constans animo factus sum* ***secundum***

 And I.NOM constant(NOM.SG) soul-ABL.M.SG made-NOM.M.SG am because/through/by

***opitulationem*** *Domini Dei mei.*

help-ACC.F.SG Lord-GEN.M.SG God-GEN.M.SG POSS.1P.SG-GEN.M.SG

 ‘I was encouraged by my God’s help (thanks to my God’s help, through my God’s help, by the help of my Lord).’ (Hier. *Vulg*. *Ezdras* 8. 30)

This isolated meaning of *secundum* NP is not likely to be an autonomous development within Latin. In fact, it is possible that it is a calque of *katà* in the Greek Bible from which the *Vulgata* was translated (κατὰ tῆν αντίλημψινκυρίου‘according to God’s help’, cfr. the use of κατὰ discussed in Luraghi 2003: 212).

In my corpus there is a handful of instances in which the cause meaning appears as overlapping with other meanings, namely time in Late Latin and conformity and limitation meanings in Early Medieval Latin. Example (41) shows an instance of *secundum* NP affording both a temporal and causal reading.

(41) *Qu-ae consuetudo in naturam versa est* ***secundum***

 REL-NOM.F.SG habit-NOM.F.SG in nature-ACC.F.SG transformed-ACC.F.SG is after/because

***generationem*** *mortalem peccato primi hominis*

generation-ACC.F.SG mortal-ACC.F.SG sin-ABL.M.SG first-GEN.M.SG man-GEN.M.SG

‘This habit then got transformed into a natural trend after/because of the mortal generation that we owe to the first man.’ (Aug. *Fid. et Symb.* 10. 23)

The semantic evolution from the temporal domain into the causal domain can be explained through an inferential process of the type: if something happens after something else, it may happen because of something else (see also Traugott & König 1991on the grammaticalisation of English *since* from a temporal into a causal marker). Regarding the overlap between cause and limitation, shown in (42), the area in which a state of affairs holds can be reinterpreted as the reason *why* the state of affairs holds (for a similar development, see Luraghi’s 2003: 281 analysis of Ancient Greek *perí* + accusative).

(42) *Vnde et ipse homo*  ***secundum mentem*** *imago*

 Whence also he.NOM.SG.M man-NOM.M.SG because mind-ACC.F.SG image-NOM.F.SG

*Dei dicitur.*

God-GEN.M.SG say-IND.PRS.3P.SG.PASS

‘(a) It is for this very reason also that the human being, due to his mind, is said to be the image of God; (b) It is for this very reason also that the human being, as far as his mind is concerned, is said to be the image of God.’ (Isid. *Orig*. 11. 1. 12)

Similarly, moving on to the overlap between conformity and cause, shown in (43), if a state of affairs holds in conformity with something, one may think that it holds because of it.

(43) *Alia* ***secundum*** *inmaturam et intemperatam* ***creationem****,*

 Other-NOM.N.PL according.to immature-ACC.F.SG and untimely-ACC.F.SG creation-ACC.F.SG

*sicut hi qui dentati nascuntur*

like those.NOM.M.PL REL-NOM.M.PL with.teeth-NOM.M.PL be.born-IND.PRS.3P.SG.DEP

*sive barbati vel cani.*

or bearded-NOM.M.PL or white.haired-NOM.M.PL

‘(a) Other [portents] (occur) in accordance with a feature that is premature or untimely, as those who are born with teeth or a beard or white hair;

(b) Other [portents] (occur) because of a feature that is premature or untimely, as those who are born with teeth or a beard or white hair.’ (Isid. *Orig*. 11. 3. 10)

Finally, the instrumental meaning appears to overlap only with the conformity meaning, as shown in (44).

 (44) *Cum te non* ***secundum******intellectum***  *mentis .*..

 When you.ACC non according.to/through intellect-ACC.3P.SG mind-GEN.F.SG

*sed* ***secundum******sensum***  *carnis quaererem*.

but according to/through sensuality-ACC.M.PL flesh-GEN.F.SG seek-SUBJ.IMPF.1P.SG

‘(a) When I was looking for you not observing the intellectual capacity of the spirit, but following the sensuality of the flesh (Conformity); (b) When I was looking for you not through the intelligence of the spirit but through the sensuality of the flesh (Instrument)’ (Aug. *Trin.*12.7.12)

The meaning of instrument is often associated with an original semantic meaning of path (see A διά + genitive in Attic Greek, Luraghi 2003: 322; English *through*; Italian *attraverso* ‘through’, *per via di* ‘by means of’) via the INTERMEDIARY IS A CHANNEL metaphor.

However tentative, the explanations proposed in this section complete my exploration of the semantics of the construction *secundum* NP over the history of Latin, as far as its uses as an adjunct are concerned. The next section deals with *secundum* NP used as a conjunct and a disjunct.

**5. The domain of (inter)subjectivity**

Broadly speaking, the domain of subjectivity indicates functions that are grounded in the conceptualiser. For Traugott (1989, 1995, 1999, 2003, 2010; Traugott & Dasher 2002), subjectivity corresponds to self-orientation, i.e. the indexing of a proposition as the speaker’s attitudes or beliefs. Epistemic modality is a subjective category because it expresses the speaker’s evaluation of the likelihood of occurrence of a state of affairs and his/her degree of commitment to it. Also textual connectives may be subjective in nature because in addition to serving as local connectors they may convey the speaker’s attitudes to the text (Traugott 2010). Another example of a subjective category is evidentiality (see Aikhenvald 2004: 13 for a history of this concept), indicating the source of information the speaker has for uttering a proposition: in fact the qualification of the source of information for a proposition is grounded in the conceptualiser/speaker.

Alongside Traugott’s definition of subjectivity, a prominent place in the literature is occupied by Langacker’s cognitive interpretation of the concept. For Langacker (1985, 1990, 1997, 1998, 1999a, 1999b, 2002, 2008), subjectivity is a type of construal, and as such it is opposed to objectivity. This contrast in conceptualisation is based on the asymmetric relation between the observer in a perceptual relation (i.e. the cogniser) and the object being observed. These two alternative types of construal are understood in terms of viewing arrangement: an entity is construed subjectively when it is put off-stage and left implicit, whereas it is construed objectively when it is on-stage and the focus of attention. In (45b) the speaker explicitly refers to him/herself, i.e. is put on-stage as an object of conception. On the other hand, example (45a) is subjectively construed: here the speaker is put off-stage and his/her point of view implicitly coincides with the conceptualiser’s.

(45) a. *Vanessa is sitting across the table*.

b. *Vanessa is sitting across the table* ***from me****.* (Langacker 1999b: 17-20, bold mine)

Traugott’s and Langacker’s views of subjectivity are “not incompatible”, but “not commensurate either” (Athanasiadou et al. 2006: 2). This section combines the two approaches in order to account for different senses of *secundum* NP: the reportative and the inferential evidential meanings.

The domain of intersubjectivity captures how an individual (the speaker, the conceptualiser) relates to other people, who may or may not be present in the communicative situation. Traugott (2010: 29) has a narrow understanding of intersubjectivity, understood as indexing “the speaker’s attention to the addressee’s self-image”. Tantucci (2013: 217), elaborating on Nuyts (2001: 393) dubs this concepts “immediate intersubjectivity” and contrasts it with “extended intersubjectivity” capturing the involvement of a third party who is understood as sharing the information communicated by the speaker to the hearer. An example of intersubjective category is given by “interpersonal evidentiality” (Tantucci 2013: 218), which presupposes that knowledge is shared with a third party. Another (partly) intersubjective category is attribution (Guardamagna forth.c). Attribution is a semantic-pragmatic category through which the speaker assigns a proposition to someone other than him/herself (other-attribution) or to him/herself as an opinion, thought or belief. This category presents an affinity with the function *judicantis* (e.g. Dressler 1970: 34, van Hoecke 1996 Draye 1996: 203, Haspelmath 2003) – which, however, seems to be a more specific manifestation of attribution linked to the experiencer and beneficiary roles. Attribution is both a subjective category, expressing the speaker’s perspective on a state of affairs, and an intersubjective category, capturing how the speaker assigns a proposition to a third party.

The domains of subjectivity and intersubjectivity are not totally separated, but are historically related through language change. This section presents the (inter)subjective meanings of *secundum* NP and their development from logical meanings.

**5.1 The textual connective *secundum ea* ‘furthermore’**

The expression *secundum ea* has a textual value of addition (‘secondly’, ‘in addition’, ‘furthermore’) and occurs only twice in the *Latin Library* sample, both times in Classical Latin (see examples (46)-(47), below).

|  |  |
| --- | --- |
|  | **Classical** |
|  | # | % |
| ***secundum ea*** | 2 | 0.8 |

**Table 15.** Frequency of *secundum* NP with the textual connective meaning “furthermore”.

This construction is closely connected to the spatio-temporal meaning of *secundum* NP indicating sequence, but it indicates something that comes afterward in discourse, so it operates at the textual level.

(46) *Et* ***secundum ea***  *multae res eum*

 And after this.ACC.N.PL many-NOM.F.SG thing(NOM.F.PL) he.ACC.SG

*hortabantur.*

exhort-IND.IMPF.3P.PL.DEP

‘And on top of the things (already said), many observations pushed him.’ (Caes. *Gall.* .33)

(47) *patres conscripti ... vellem ... maxime deberi*

 Father-VOC.M.PL elected-VOC.M.PL want-SBJV.IMPF.1P.SG most-ly owe-INF.PRS.PASS

*mihi beneficia a populo Romano, quibus non*

me.DAT privilege-ACC.N.PL by people-ABL.M.SG Roman-ABL.M.SG REL-ABL.N.PL. not

*egerem…* ***secundum ea****, si deside-anda erant,*

need-SUBJV.IMPF.1P.SG after this.ACC.N.PL if need-GERV-ACC.N.PL be.IND.IMPF.3P.PL

*uti debitis uterer.*

like debt-ABL.N.PL use-SUBJV.IMPF.1P.SG.DEP

‘Senators, I would like — on the side of the Roman People — to be owed favours which I do not need; secondly, if these were to be indispensable, I would like to use them as if they were favours owed to me.’ (Sall. *Iug.*14.4)

The construction *secundum ea* ‘in addition’ might have been formed by analogy with the adverbs *postea* ‘after this, hereafter’ and *antea* ‘before this, beforehand’. Lewis & Short (1879: *postea*), based on Corssen (1868: 769), suggest that *postea* can be de-composed into the preposition *post* ‘after’ and *eă* ‘these things’ (the accusative plural of the neuter demonstrative pronoun *id* ‘this’). Lewis & Short (ibid.) go on to point out that *eă* originally had a long vowel (*eā*), but they do not elaborate on this further. The same ending is found in *antea* ‘before this, beforehand’, about which Corssen (ibid.) says that he “regards the pronoun as an old accusative with the *a* final long [*sic*, CG]”. Key (1856, quoted in Lewis & Short 1879: *postea*) regards the suffix “as corrupted from the accusative of pronouns in –*am*”. Against these opinions, Luraghi (1989: 255) explains the long vowel in *antea* and *postea* as “an ablative element” *eā* instead of an accusative pronoun. Specifically, the long *–ā* can be connected to ablative feminine forms as found in the locative adverbs *eā* ‘on that side, that way, there’ and *quā* ‘where, in what way’ on the one hand, and in the ending of adverbials like *ultrā* ‘on the other side’, *intrā* ‘on the inside, within’, *extrā* ‘on the outside, without’, *citrā* ‘on this side’, *contrā* ‘against’, and *praetereā* ‘besides’ (Lewis & Short 1879) on the other.

Whatever their historical origin, it is possible that by the Classical era units like *anteā (anteă)* and *posteā (posteă)* were (re)analysed as *ant-eă* ‘before these things, before this’, and *post-eă* ‘after these things, after this’, in which *eă* is the neuter pronoun ‘these things.’ It is reasonable to suggest that *secundum ea* might have been modelled on *ant-eă* and *post-eă* by analogy.

From a cognitive point of view, it is possible to identify a metaphorical link between the spatio-temporal meaning ‘after’ and the meaning of (textual) sequence expressed by *secundum ea* (ORDER IN TEXT IS ORDER IN SPACE).

The development of a connective function out of a logical meaning of conformity follows a well-attested diachronic pattern of the type propositional > textual (see Traugott & Dasher 2002: 95, 157-173 for the semantic evolution of English *in fact, indeed* and *actually*). Textual uses show increased intersubjectivity because “they are a rhetorical subjective device with the intersubjective purpose of conveying to the addressee what sort of textual connectivity is implied” (Traugott & Dasher 2002: 174; see chapter 3, section 1 of this thesis for a critical discussion of the notion of (inter)subjectivity). These uses are few and fairly isolated in Latin, suggesting that the *secundum ea* construction with textual function did not conventionalise or spread beyond the Classical period.

Having discussed the textual function of *secundum* *ea* ‘in addition, furthermore’ and its origins, it is now possible to move on to the meanings of evidentiality and attribution, for which the relevant tendency toward subjectification results in *secundum* NP conveying an increased involvement of the speaker in the proposition s/he communicates.

**5.2 Evidentiality**

Reportative evidentiality indicates that the speaker has obtained the information s/he conveys from someone else (and it is therefore both subjective and intersubjective in nature – a case of “interpersonal evidentiality,” a term coined by Tantucci 2013: 218).

(48) ***Secundum Lucam***… *non* … *hoc dicit*

 According.to Luke-ACC.SG not this.ACC.N.SG say-IND.PRS.3P.SG -

*dominus*…

God-NOM.M.SG

‘According to Luke, the Lord did not say this.’ (Aug. *Serm.* 71, 34)

Reportative evidentiality is likely to have emerged in contexts of prophecy through the reinterpretation of the conformity meaning with narrow scope over the VP and function of manner modifier (stage 1) as a modifier of the whole sentence (stage 2), still with a conformity meaning. Finally, the sentence modifier is likely to have been reinterpreted as a reportative evidential expression (stage 3). The possibility of these multiple readings is illustrated here with the following example from the Niceno-Contantinopolitan Creed (381 AD) (49).

 (49) *Credo… in unum Dominum Iesum*

 Believe-IND.PRS.1P.SG in one-ACC.M.SG. Lord-ACC.M.SG Jesus-ACC.M.SG

*Christum … qui … resurrexit tertia*

Christ-ACC.M.SG REL-NOM.M.SG. resurrect(PRF)-IND.PRF.3P.SG third- ABL.F.SG

*die,*  ***secundum Scripturas.***

day(ABL.F.SG)according.to Scripture-ACC.F.PL

‘I believe in Jesus Christ, our (lit. the only) Lord, who rose <from the dead> on the third day, according to the Scriptures’ (Niceno-Constantinopolitan. Cred, 381, *Missale Romanum*, editio typica tertia, 2002).

(a) I believe in Jesus Christ, our Lord, who [[[rose] [from the dead] [on the third day]] [*fulfilling/accomplishing* the Scriptures]]].

(b) I believe in Jesus Christ, our Lord, [[who rose from the dead on the third day], [as is written in the Scriptures]].

(c) I believe in Jesus Christ, our Lord, [[who rose from the dead on the third day], [*which I know/I have learnt based on* the Scriptures]].

The mention of a source of information for such a well-known event within the Christian community can be explained with the notion of extended intersubjectivity (see Guardamagna forth.c for a more detailed explanation). By quoting the Bible – seen as the source of all knowledge – they reiterate their sense of belonging to a community which needed to distinguish itself from the Jews and hold strong together in the face of persecutions. The pragmatic function of extended intersubjectivity is likely to have been reinterpreted as source of information when less known events from the Bible were mentioned. It is likely that the reportative meaning has spread from contexts of prophecy to non-prophecy contexts first, and then from Biblical to non-Biblical contexts (as explained in Guardamagna forth.c). Christianity is also relevant for the development of the new construction *evangelium secundum* Nevangelist ‘the Gospel according to Nevangelist,’ possibly emerged as a calque from Greek, and suitable to expresses a theologically important stance about the word of the Lord – as discussed in Guardamagna (forth.c).

Inferential evidentiality is extremely rare, so any generalisations need to be approached tentatively. The sample from the *Latin Library* corpus returned only two instances of inferentials, both with sentential scope and from the Silver Latin period, reproduced in examples (50) and (51), below.In both instances, the argument of *secundum* is *ratio* ‘reasoning’ (or ‘calculation’, a type of reasoning in scientific texts).

(50) ***Secundum*** *quam* ***rationem*** *... hic annus …*

 According.to REL-ACC.F.SG calculation-ACC.F.SG this.NOM.M.SG year-ACC.M.SG

*ab olympiade prima millensimus est*

from olympic.game-ABL.F.SG first-ABL.F.SG thousandth-NOM.M.SG is

*et quartus decimus.*

and fourth-NOM.M.SG tenth-NOM.M.SG

‘According to this calculation/Based on this calculation, this year is the 114th from the Olympics.’ (Cens. 22)

(51) *Itaque* ***secundum*** *hanc* ***rationem***

 Therefore according.to this.ACC.F.SG calculation-ACC.F.SG

*heptámēnoi* *nascuntur* *katà*

 [period of] seven months-NOM.M.PL be.born-IND.PRS.3P.PL.PASS according.to

*diámetr-on*, *enneámēnoi*

diameter ACC.F.SG [period of] nine.months-NOM.F.PL

*autem katà trígōnon*, *dekámēnoi*

on.the.contrary according.to triangle-ACC.N.SG [period of] ten.months-NOM.F.PL

*vero* *katà tetragonon*.

truly according.to with.four.angles/square-ACC.N.SG

‘Based on this calculation, therefore, [the children] are born in [the space of] seven months under the influence of the *katà diámetron* aspect, in [that of] nine months under the *katà trígōnon* aspect and in [that of] ten months under the *katà tetrágōnon* aspect.’ (Cens. 8)

These two instances are compatible with one of four existing types of inferentials, i.e. the type compatible with the ‘mode of knowing,’ as proposed by Willett (1988), indexing the speaker’s reasoning process. This type, for instance, is also found in the Bulgarian preposition *spored* ‘according to’ (see Makartsev 2010: 185 ff.). Other types of inferentials consists of (a) reasoning based on a stimulus connected to sensorial stimulation (‘circumstantial inferential’ in Aikhenvald 2004: 55); (b) expressions indexing the self, i.e. the deictic source for the reasoning process (Squartini 2008: 912, based on Frawley 1992: 413) and (c) expressions simply indexing the fact that the modified statement is the result of a reasoning process (‘assumed inferentiality’ in Aikhenvald 2004: 49).

A neighbouring function to inferential evidentiality is that of criterion (see chapter 4.2.6, above). There are five instances of the logical meaning of criterion in Late Latin and three in Early Medieval Latin, but none in Silver Latin. Finally, there are overlapping meanings between conformity and criterion in Silver Latin (one occurrence), Late Latin (two occurrences) and Early Medieval Latin (two occurrences).

The following two examples ((52) from Late Latin and (53) from Early Medieval Latin) represent criterion, without any inferential interpretation.

(52) ***Secundum******propositum*** *Dei vocantis*

According.to proposal-ACC.M.SG God-GEN.M.SG calling-PTCP.PRS.-GEN. M.SG

 *electi*.

 chosen-NOM.M.PL

‘Chosen in conformity with/based on the will of God who designates them’ (Prosp. c.coll., 11. 12)

(53)  *Dicitur igitur mulier* ***secundum*** *femineum* ***sexum****,*

 Say-IND.PRS.3P.SG therefore girl according.to feminine-ACC.M.SG sex-ACC.M.SG

*non secundum corruptionem integritatis: et hoc ex*

not according.to corrpuption-ACC.F.SG integrity-GEN.F.SG and this.NOM.N.SG from

*lingua sacrae Scripturae.*

language-ABL.F.SG sacred-GEN.F.SG Scripture-GEN.F.SG

‘Therefore, ‘woman’ (*mulier*) is named in accordance with/based on her feminine sex, not based on (lit. from) a corruption of her integrity.’ (Isid. *Orig*. 11. 2. 20)

An example of pseudo-inferential meaning is found in (54) from Silver Latin. By pseudo-inferential constructions I mean expressions which modify a verb of reasoning in the first person, and express conformity/criterion. In example (54), below, the plural is a form of *pluralis modestiae* (Head 1978: 164-165 and fn. 10), so the referent is the speaker.

(54) *Et magister unus Christus dictus. At enim*

 And master(NOM.M.SG) one-NOM.M.SG Christ-NOM.M.SG say-NOM.M.SG But in.fact

*legimus quod magister sit*  *etiam apostolus*

read-IND.PRS.1P.SG that master(NOM.M.SG) be.SBJV.PRS.3P.SG also apostle.NOM.M.SG

*Paulus. Non ergo iam unus magister; duos*

Paul-NOM.M.SG Not thus still one-NOM.M.SG master(NOM.M.SG) two-ACC.M.PL

 *enim magistros secundum ista colligimus.*

 in.fact master-ACC.M.PL according.to that-ACC.N.PL gather-IND.PRS.1P.PL

‘Furthermore, Christ is called “the one master”, yet we read that the apostle Paul is also a Master. We no longer have one master; for according to these observations, we gather that there are two masters.’ (Novatian. *Trin.* 30. 23. 8)

It is possible to arrange expressions of criterion, pseudo-inferentiality and inferentiality proper according to their degree of increasing subjectivity, where subjectivity is understood in this case according to Langacker’s (1985, 1990, 1997, 1998, 1999a, 1999b, 2002, 2008) definition of the concept. The cline in (55) is also illustrated with examples from English in (56)-(58), below:

(55) criterion (56) > pseudo-inferential (57) > inferential (58)

(56) *Based on its small size and pelvic shape*, they concluded it was female and named it 'Lucy' after 'Lucy in the Sky with Diamonds'.

(http://www.bbc.co.uk/sn/prehistoric\_life/human/human\_evolution/mother\_of\_man1.shtml Accessed 2 July 2015)

(57) *Based on tonight's experience* I conclude I'm never going to find the right girl and shall probably be single for eternity.

(https://twitter.com/jackjdrew/status/556587348331622400 Accessed 2 July 2015)

(58) *Based on this survey*, the use of WebCT as a VLE was piloted with students enrolled on the optional “ICT and Education” module. (Little 2008: 110)

Now, the question is whether this cline can be interpreted diachronically, i.e. as a historical evolution from less subjectified to more subjectified meanings. Unfortunately, the Latin data are too scant to explore this hypothesis. Further research into the diachronic evolution of inferential markers in Latin and other languages is therefore needed in order to shed some light on this point.

In terms of distribution, table 16, below, sums up the frequency of occurrence of the reportative and the inferential meanings. There are no cases of reportative meaning ruling out an interpretation of conformity with sentential scope. The inferential meaning is very infrequent and so are the criterion-inferential (pseudo-inferential) constructions to which it appears to be related, as suggested above.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # normed to 250 | % |
| **Conformity-Reportative**  | 0 | 0 | 42 | 16.8 | 10  | 4  |  28.6 |  11.4 |
| **Conformity (criterion) – Inferential** **(pseudo-inferential)** | 0 | 0 | 1\* | 0.4  | 0 | 0  | 0  | 0  |
| **Inferential** | 0 | 0 | 2 | 0.8  | 0 | 0 | 0 | 0 |

**Table 16.** Frequency of *secundum* NP with evidential meaning. \* See also table 11.

**5.3 Attribution**

Alternative possible interpretations for the conformity, limitation and other-attribution meanings, as exemplified in (59), below, suggest that these three meaning may be tightly connected. This sentence is taken from a text in which Aulus Gellius presents various legal terms and considers, compares and contrasts various definitions offered by authorities on the matter.

(59) *Plebisscitum igitur est* ***secundum*** *eum*  ***Capitonem***

 Plebisscitum-ACC.N.SG therefore is according.to he-ACC.3P.SG Capito-ACC.M.SG

*lex, quam plebes, non populus,*

law(NOM.F.SG) REL-ACC.F.SG plebs-NOM.F.PL not people-NOM.F.SG

*accipit*.

adopt-IND.PRS.3P.SG

‘Therefore, according to (this person) Capito, a plebisscitum (a decree binding on the plebs) is a law which the commons adopt, and not the people.’ (Gell.10. 20. 6)

(a) Therefore, in accordance with what Capito writes/thinks, a *plebisscitum* is a law which the commons adopt – and not the people. (broad conformity)

(b) Therefore, as far as Capito is concerned (= as far as Capito’s thoughts are concerned), a *plebisscitum* is a law which the commons adopt – and not the people. (limitation)

(c) Therefore, Capito believes that a *plebisscitum* is a law which the commons adopt – and not the people. (attribution)

(d)\*Therefore a *plebisscitum* is a law which the commons adopt – and not the people; a fact I know based on Capito’s writings. (reportative evidentiality)

The type of link between conformity, limitation and attribution can be explained via invited inference. If a definition is in line with what an author wrote (conformity), then it may be that it actually holds only for that author (limitation) – while other definitions may be possible for other people. Finally, if a definition is valid (only) for one author, then it can be seen as reflecting that author’s thought, opinion or belief.

Self-attribution is extremely rare. Inspecting the whole Latin Library corpus yielded only four instances, all from Tertullian – which may suggest this is a feature of his idiolect. Examples are (60)-(61), below:

(60) *At enim felicior erit, inquit,*

 But in-fact happy-COMPTV.NOM.M.SG be-IND.FUT.3P.SG say-IND.FUT.3P.SG

*si sic permanserit,* ***secundum*** *meum*

if like.this remain-IND.FUT.PRF.3P.SG according.to POSS.1P.SG-ACC.N.SG

***consilium*.**

opinion-ACC.N.SG

‘“But happier will she be”, he says, “if she shall remain permanently as she is, in accordance with my opinion/as far as my opinion is concerned/in my view”.’ (Tert. *Castit.* 4, 4)

(61) *Superest ut* ***secundum me*** *quidem credibile sit …*

 Remain.IND.PRS.3P.SG that according.to I.ACC indeed credible-NOM.N.SG be.SUBJ.PRS.3P.SG

*virtutes et potestates creatoris deum…*

Virtue-ACC.F.SG and power-ACC.F.SG creator-GEN.M.SG God-ACC.M.SG

*crucifixisse*

crucify-INF.PRF

‘Indeed it remains [the fact] that in accordance with my thoughts/as far as my thoughts are concerned/in my opinion it is credible that the virtues and the powers of the Creator crucified God.’ (Tert. *Adv. Marc.* 5. 6)

Multiple interpretation as conformity (with sentential scope), limitation and attribution are accessible for all four cases of self-attribution. The meaning of attribution is simply foregrounded in context.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Classical** | **Silver** | **Late** | **Early Medieval** |
|  | # | % | # | % | # | % | # normed to 250 | % |
| **Conformity-Limitation-Attribution** | 0 | 0 | 12 | 4.8 |  6  | 2.4 |  16.1 |  6.4 |

**Table 17.** Frequency of *secundum* NP with conformity-limitation-attribution meaning.

The lack of clear-cut examples of attribution without any polysemy with limitation and conformity suggests that this meaning is not fully conventionalised in Latin.

This would suggest excluding the meaning of attribution from the conceptual space. However, there are languages in which there are dedicated expressions of attribution, such as the following from English, which suggests that the two meanings should be kept distinct:

(62) In Paul’s eyes/view/opinion, John is an idiot.

To my mind, John is an idiot.

 For/To Paul, John is an idiot.

**6. Discussion: creating a diachronic semantic map for *secundum* NP**

On the basis of the detailed semantic analysis above, I created a conceptual space against which four semantic maps (one for each period) are plotted (figure 1, below).

All the relevant meanings identified for *secundum* NP have been included in order to create a conceptual space for *secundum* NP, with three exceptions. The first one consists in the meanings of distribution and cause-instrument-agent. As discussed in sections 4.1 and 4.4, above, there is only one of each instances in my corpus, which have been discussed as calques from Greek: therefore, I argue that these meanings do not connect in an obvious manner with other internal developments within Latin, so they have been excluded from the map. This was particularly clear in the case of the distributive meaning. Also, I did not include the space meaning for the Early Medieval period even if it appears once in the sub-corpus. This meaning appears in a quote of an old-fashioned usage taken from Isidore’s encyclopedia *The* *Etymologies*. In (63), the very need of spelling this meaning out for the reader can be interpreted as indicating the compiler’s awareness that that this use was no longer understood by his contemporary speakers:

(63) *Vnde et seconda fortuna dicitur,*

 Whence also favourable-NOM.F.SG fortune-NOM.F.SG say-IND.PRS.3P.SG.PASS

*quod* ***secundum nos*** *est, id est*

because following/after us be.IND.PRS.3P.SG this.NOM.N.SG be.IND.PRS.3P.SG

*prope nos.*

near us

‘Whence fortune is called favourable (*secunda*) because it is following after (*secundum*) us, that is near us’ (Isid. *Orig*. 10. 2.257)

Since, in my view, this meaning does not reflect current usage at the time, I did not plot it on the conceptual space for *secundum* NP.

Moving on to the space and time domains, instead of a single point indicating space, two points have been identified, i.e. ‘during’ and ‘after’. This decision is based on the fact that there are languages (for instance, English), which have a dedicated construction for these two meanings. The same principle has been applied to the time domain, which shows three points (‘after, behind’, ‘along’, and ‘near’), and the distinction between conformity and co-variation (see English ‘in accordance with’ vs ‘depending on’, and Italian *secondo* NP ‘in line with NP’ and *a seconda di* NP ‘depending on NP’). So, when investigating one language only, cross-linguistic data are useful in making decisions aligned with Haspelmath’s (2003) idea that a meaning should be included in the conceptual space if at least two languages display it.

The semantic analysis proposed in this chapter confirms the centrality of the space domain for the evolution of the other functions represented by *secundum* NP. A metaphorical transfer TIME IS SPACE explains the semantic extension to the time domain. Whereas the parallelism between ‘along’ and ‘during’ is apparent, the connection between ‘behind’ and ‘after’ appears to be less straightforward. However, it can be explained by referring to the conceptualisation of time as a moving entity directed towards the conceptualiser (Evans 2004: 62; Guardamagna forth.a). The connection between the two concepts ‘behind’ and ‘after’ is backed up by cross-linguistic evidence (in terms of both polysemy patterns and diachronic development) (Haspelmath 1997: 59-60). The space and time meanings are quite frequent in Classical Latin, but decline through Silver and Late Latin and virtually disappear in Early Medieval Latin.

Within the logical domain, the ranking and beneficiary functions are directly connected to the space domain. The meaning of ranking is only found in Classical and Silver Latin, whereas beneficiary is attested from Classical to Late Latin. The ranking meaning derives from the location meaning via the metaphorical extension IMPORTANCE IS PRECEDENCE, based on the idea that LINEAR SCALES ARE PATHS. This meaning is attested only in Classical and Silver Latin. The semantic evolution connecting ‘follow’ to beneficiary contributes to the study of under-explored development paths in which the beneficiary meaning is not derived from direction and/or recipient. In my analysis I argue that the beneficiary meaning is connected to the proximity meaning of *secundum* NP via the metaphor IN FAVOUR OF IS ON THE SIDE OF. In Guardamagna (2016b) I also explore the role that force dynamics play in the semantics of *secundum* NP as a beneficiary construction, connecting it directly with the meaning of conformity. The meaning of conformity is the most frequent meaning of *secundum* NP throughout the history of Latin. Guardamagna ( 2016b) discusses the possible origin of the conformity meaning out of the expressions meaning ‘downstream’, in parallel to a development suggested by Luraghi (2003: 200) for Ancient Greek κατὰ + accusative, and suggests a possible alternative explanation based on the force dynamics model of construal of events (Talmy 1976, 1985, 1988, 2000a: 409-470).

Within the discussion about the conformity meaning, the meaning of co-variation was also analysed: the senses pf conformity or co-variation occur in context depending on the conceptualisation of the argument of *secundum*. Similar to the internal distinctions within the domains of space and time, this meaning has been included as separate from conformity on the basis of cross-linguistic evidence.

As said in section 2, the most interesting maps are those which can be interpreted in synchrony as implicational maps and in diachrony as showing directionality of change. However desirable it is to obtain semantic maps which meet these criteria, the data do not always allow one to establish a clear relationship between the meanings identified. This was for instance the case for the similative and role phrase functions, for which I was not able to identify a direction of development. Also the spatial and temporal specific meanings are linked to each other without a clear definition of the diachronic relation between their sub-functions. Even if my analysis does not show conclusive results regarding the meanings of role and similarity, it suggests that both meanings are connected with the meaning of conformity, presumably via inference. The similarity function is found in Classical and Silver Latin, while *secundum* NP with a role phrase meaning is attested from Classical to Late Latin. Both are marginal meanings in terms of frequency.

The criterion meaning is rare and attested only in Late and Early Medieval Latin. It indicates the principle on the basis of which the event coded by the verb is brought about, and it bears affinities with the conformity meaning. It is likely that there is a metonymic extension between conformity and criterion: for instance a decision made in conformity with something can be interpreted also as a decision made on the basis of something.

The limitation meaning is the second most frequent one for *secundum* NP during Silver, Late and Early Medieval Latin, whereas it is only marginal in Classical Latin. This may be why this meaning is not recorded in traditional Latin grammars. I suggest that the meaning of limitation may have originated out of the conformity meaning via inference: if a state of affairs holds in conformity with something, it may be that it actually occurs *only* in conformity with it, i.e. its validity is limited to it. Overlapping meanings with conformity can be interpreted as bridging contexts for semantic change.

There are also some very marginal meanings within the domain of logical relations, which occur only as overlaps with others, namely time, conformity and limitation. The metaphor INTERMEDIARY IS CHANNEL is proposed for the instrument meaning (found in Late Latin only), whereas the other cases are explained through inferences: if A happens after B, then it may happen because of B (time-cause/reason; Late Latin); if A holds in conformity with B, then it may hold because of B (conformity-cause/reason; Early Medieval Latin); if A occurs (only) within (the logical area) A, it may occur because of A (limitation-cause/reason; Early Medieval Latin).

Moving on to the (inter)subjective domain, there is a metaphorical link (ORDER IN TEXT IS ORDER IN SPACE) connecting it to the spatial meaning ‘after.’ All the other connections between the logical and interpersonal domains are metonymic in nature.

Both the reportative and attribution uses arise out of the logical meaning of conformity, but their development path is different. The reportative meaning probably arose in contexts of prophecy in which a marker of conformity of an event to something which was foretold in the Scriptures is reinterpreted as a marker of the source-text in which the relevant event is mentioned. On the other hand, the attribution meaning is tightly linked to the meaning of limitation, in turn linked to conformity, suggesting that an assertion is valid (only) for the person whose opinion is expressed. The appearance of the attribution meaning out of the limitation sense of *secundum* NP is not linked to Christianity, but emerges at the same time as the reportative meaning. Data for the inferential meaning are very scant, so my proposed explanation that inferential may be developed from the meaning of criterion is to be considered as tentative. Invited inferences are to be understood as metonymic in nature (Traugott & Dasher 2002: 78-81).

My study showed that evidentiality (a subjective category) can develop out of intersubjectivity (via interpersonal evidentiality), provided that intersubjectivity is understood as extended (Nuyts 2001: 393, Tantucci 2013). This suggests the existence of a diachronic path of the type in (64):

(64) non-subjective > [extended] intersubjective > subjective

This path represents an alternative to Traugott’s one shown in (65) below (where intersubjectivity corresponds to immediate[[8]](#footnote-8) intersubjectivity in Nuyts (ibid.) and Tantucci (ibid.) — hence the addition of the term ‘immediate’ to Traugott’s term ‘intersubjective’ in (63), below.

(65) non-subjective > subjective > [immediate] intersubjective.

These observations on directionality of change find a parallelism in Cornillie’s (2008) study of evidential (semi)-auxiliaries in Spanish.

My research suggests that extended intersubjectivity (interpersonal evidentiality) may precede subjectivity (reportative evidentiality). From a cognitive point of view, psychological research (Halligan & Oakley 2015: 26, 27) suggests that consciousness and self-awareness (the dimensions most closely connected to the linguistic category of subjectivity) phylogenetically “emerged alongside other developments in brain processing that conferred a powerful social evolutionary benefit of communicating our internal thoughts to others”. Specifically, the researchers point out that sharing with other people “selected contents” from one’s consciousness, “including beliefs, prejudices, feelings and decisions” can be advantageous from an evolutionary viewpoint because it may facilitate “adaptive strategies… which could be beneficial to species survival” (ibid.). Importantly, Halligan & Oakley (ibid.) point out that “consciousness and the sense of self are elaborate contrivances… designed to benefit the group”, thus suggesting that the interpersonal dimension acts as the ultimate motivator for the development of subjectivity. From a linguistics point of view, these recent advances in psychology summarised by Halligan & Oakley (2015) suggest that subjectivity is indeed tightly bound to intersubjectivity, and that the path in (64) above is a cognitively plausible one. Against this background, supplemented by the knowledge of the ontological development of the self in its relationship with the others (e.g. ‘theory of mind’), the exact relationship between subjectivity and extended/immediate intersubjectivity remains to be investigated by future research.

By plotting the diachronic development of the interpersonal function against the conceptual space defined by all the meanings of *secundum* NP in Latin, it appears very clear that there has been an evolution over time towards more subjectified meanings. In particular, the Early Medieval period (530-704) sees a clear shift towards the (inter)subjective functions (reportative and attribution) while retaining logical meanings of conformity, limitation, and criterion, and displaying isolated instances of conformity and cause on the one hand and cause and limitation on the other.

The map for *secundum* NP shows a clear example of semantic change occurring through extension, as in the ‘classical’ chains suggested by Hopper & Traugott (2003: 121-122). The original spatio-temporal meanings of the *secundum* NP construction (A) have already expanded into logical meanings (B) by the Classical Latin period (A > A/B): a period in which only the spatio-temporal meanings were available is not attested in my data, hence the square brackets in (61), below. Then, in Silver Latin, some logical meanings expand into (inter)subjective meanings indicated with the letter (C) (B> B/C). Therefore, in Silver Latin, the three sets of meanings co-exist (A/B/C). In Early Medieval Latin, a transition occurs away from the spatio-temporal meanings (A) towards the (inter)subjective meanings (C), but the logical meanings (B) are still well represented (B/C). This chain can be summarised as (66):

(66) [A >] > A/B > A/B/C > B/C

In terms of subjectivity and subjectification, I regard the spatio-temporal meanings of *secundum* NP as the oldest and least subjectified; I consider the logical meanings slightly more subjectified because they express relations which are not in the outside world, but are grounded in the cogniser; finally I view the evidential and (self-)attribution meanings as the most subjectified. Over time, there is a shift away from the spatio-temporal meanings towards maximally subjectified senses; there is, however, an area of transition, which is represented by the conformity, criterion, and limitation meanings.

The type of semantic evolution outlined by *secundum* NP is aligned with a wealth of evidence from various languages suggesting that subjectification is a unidirectional process, through which meanings tend to become more subjective over time (but not the opposite way round) (Traugott 1982: 256, Traugott & Dasher 2002). As Hollmann (2009: 534) points out, no conclusive explanation has been established to account for the directionality of subjectification. One tentative explanation he puts forward is that subjectification may be the result of a more general ‘egocentric’ tendency in grammar: “[p]erhaps we are inclined to reinterpret situations, and linguistic expressions describing those situations, in our own subjective terms” (ibid.).

Regarding the mechanisms of language change involved, my analysis has shown the interplay of metaphor and metonymy, the former being more frequent at the initial stages of semantic change and the latter being more frequent in the most advanced stages of semantic evolution. This is consistent with traditional studies on grammaticalisation, such as Heine et al. (1991), Bybee et al. (1994), and Svorou (1994). However, more recent advances in grammaticalisation theory dispute the very possibility of rigidly assigning metaphor and metonymy to different stages of language change, and favour the view of an interplay of the two phenomena at all times (Hopper & Traugott 2003; see also Esseesy 2010: 63-64 for a discussion).

**7. Conclusion**

This paper plugged a gap in research on Latin prepositions by offering a detailed analysis of *secundum*. On the basis of the data analysed here, it is possible to conclude that the semantic evolution of the construction *secundum* NP is much more complex than the one outlined in previous literature on the topic (e.g. Ferrari 1998, Rocha 1998), suggesting that the ‘reportative’ meaning (not identified as such) is developed from the spatial meaning of *sequor* via the metaphor THOUGHT IS TRAVEL. As pointed out by one of the editors (fn.8), the development of reportative evidentiality via metaphor~metonymy – as a result of brevity and similarity - seems to respond well to an ancient grammatical-rhetorical criterion of course within a theory of semantic change developed well before grammaticalisation theory.

The semantic analysis presented here resulted in the creation of a semantic map for the *secundum* NP construction. The issue of whether the conceptual space and semantic maps have mental reality is a hotly debated one. Regardless of the format adopted, the conceptual space is seen as “a common human cognitive heritage, indeed the geography of the human mind” (Croft 2003: 139; see also Croft 2001: 105, Haspelmath 2003, Croft & Poole 2008: 2) by scholars sharing an orientation towards Cognitive Linguistics. The fundamental assumption behind the idea that conceptual space is universal lies in the experiential view of language in cognitive-functional theories (Disney 2012: 25). This means that the map identified may have cross-linguistic validity. Indeed, a preliminary investigation into ‘according to’ expressions in a variety of languages has shown that the polysemy between conformity and reportative evidentiality is widespread in the languages of Europe. Examples are German *zufolge*, *gemäß*, and *laut*; English *according to*; Italian *secondo*; Spanish *según*; French *selon*; Russian *soglasno*; Bulgarian *spored*; Croatian *prema*; Georgian *mixevit*, *tanaxmad*, and *cnobit* (all in Wiemer 2010: 107-109); as well as Dutch *volgens*; Modern Greek *kata* and *symphona me*; Romanian *după*; Czech *podle*; and Slovene *glede na*. All are translated as both ‘in accordance with’ and ‘according to’. However, there are also ‘according to’ NP expressions which do not show this polysemy, but only express attribution/reportative evidentiality or conformity/co-variation: examples are Modern Greek *analoga me*, Czech *v souladu s*, Lithuanian *pasak,* Romanian *potrivit*, Bulgarian *săobrazno s*, and English *in conformity with, in line with,* and *in harmony with*. In this light, ascertaining the cross-linguistic validity of the semantic paths identified through my study of Latin *secundum* NP appears to be a promising field of research.





**Figure 1.** Semantic map for spatial-temporal, logical and (inter)subjective meanings of *secundum* NP

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1. This paper does not discuss two *secundum quod* conjunctions (one occurring in the Silver and Late Latin periods) for which the reader is referred to Guardamagna (2016: 224-229). [↑](#footnote-ref-1)
2. For an extended discussion on the concept of similarity, see Wälchli (2010a), and for factors other than similarity producing polysemy see Malchukov (2010). [↑](#footnote-ref-2)
3. In Cognitive Linguistics terms, echoing Luraghi (Luraghi 2003: 25, 2006) this is a distinction in plexity of the landmark (codified as the NP argument of *secundum*) and the trajector. The concept of plexity (Talmy 2000a: 58-59, 2000b: 458-459) captures the internal structure of an entity and distinguishes simplex/uniplex entities, construed as ‘point-like’ and ‘bounded’ (e.g. ‘apple’), from multiplex/complex entities, construed as continuous (e.g. mass: ‘milk’), duplex (e.g. ‘eyes’) or discontinuous (e.g. made up of internal sub-units: ‘apples’). Importantly, plexity does not coincide with grammatical number: for instance some singular countable nouns are simplex (e.g. ‘apple’) whereas others are multiplex (e.g. ‘road’), because they refer to a single entity occupying an extended area (in the case of the road, an elongated area). [↑](#footnote-ref-3)
4. This isolated instance is found Isidore’s (560 - 636) *Etymologiae*, where it presumably refers to an already obsolete use of the preposition.

	1. *Unde et second-a fortun-a dic-itur,* Whence also favourable-NOM.F.SG fortune-NOM.F.SG say-IND.PRS.3P.SG.PASS

*quod* ***secundum nos*** *est, id est*

because following/after us be.IND.PRS.3P.SG this.NOM.N.SG be.IND.PRS.3P.SG

*prope nos.*

near us

‘Whence fortune is called favourable (*secunda*) because it is following after (*secundum*) us, that is near us’ (Isidore, *Etymologiae*, 10, 2, S, 257) [↑](#footnote-ref-4)
5. One must be very carefully in the use of terms because this was the famous *causa Curiana*, discussed (94-92) by Crassus and Scaevola, the great jurist, with incredible juridical attention to the terms employed, cf. on the subject Calboli Montefusco,1986: 155f. and Leeman-Pinkster-Nelson 1985: 68-71. [↑](#footnote-ref-5)
6. These distinction in construal are also distinctions in plexity, see fn.2 above. [↑](#footnote-ref-6)
7. Especially in poetry, also the so-called “Greek accusative” (adverbial modifier of respect). The genitive is also found, both in prose and in poetry. [↑](#footnote-ref-7)
8. As pointed out by one of the editors, a specific feature of metaphor (and metonymy), is to allow one to obtain immediate knowledge (cf. G. Calboli. Rhetorica ad Her., p.379-382; see also. L. Calboli Montefusco, 2004, who following Aristotle points out that brevity is the key peculiarity of metaphor: “a metaphor, being “the ἐπιφορά of a word that belongs to another thing” (Po.1457 b 6f.), represents the briefest way to create knowledge in the minds of the hearers” (Calboli Montefusco, 2004: 50). [↑](#footnote-ref-8)