

# Berthold Delbrück, Historical and Comparative Indo-European Syntax 1922–2022

Edited by

Paola Cotticelli-Kurras and Filip De Decker

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Edited by  
Paola Cotticelli-Kurras and Filip De Decker

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# Notes on the morphosyntax of subjecthood in Latin. A comparative-historical approach\*

Eystein Dahl

## 1. Introduction

This article takes a fresh look upon the morphosyntactic properties of the so-called subject argument in Latin. Drawing heavily on the account of Falk (2006), it first attempts to establish the relative complexity of the notion of subjecthood in Latin. Subjecthood is understood as the set of morphosyntactic properties characteristic of subjects in a sense to be defined below. Another aim is to establish to what extent this notion corresponds to analogous syntactic arguments in other, related languages, notably Ancient Greek, Vedic Sanskrit, and Hittite, contributing to clarifying whether or to what extent the notion of subjecthood remains stable across genetically related languages. This part of the article reports on ongoing data exploration and the discussion is based on a limited amount of data. Given that structural features generally provide a more reliable set of parameters for determining genetical affiliation than, for instance, lexical items, one would expect there to be detailed correlation across the various Indo-European languages in this realm. However, this expectation is not borne out, a fact suggesting that at least some types of subjecthood features do not belong to the inventory of morphosyntactic properties inherited from Proto-Indo-European but rather represent innovations at branch- or language-specific level.

Since the following observations are based on ongoing research, the results are preliminary and only allow for tentative conclusions. A more thorough corpus analysis including statistical results will be presented in future work. Nevertheless, I believe the data and findings are sufficiently interesting to be publishable.

## 2. Theoretical preliminaries

An important preliminary problem concerns the question about what constitutes a syntactic argument in general and a subject argument in particular. Since this volume is dedicated to the memory of the unparalleled comparative-historical scholar Berthold Delbrück, it seems fitting to take his definition of subject as a point of departure. In his delimitation of the functional realm of the nominative case, he states that ‘in ihn (sc. den Nominativ) trat ursprünglich jedenfalls der als thätig gedachte den Träger oder Mittelpunkt der Handlung bildende Substantivbegriff. Erst nachdem sich der passivische Ausdruck entwickelt hatte, konnte der Nom. auch zum leidenden Mittelpunkte der Handlung werden und erst auf dieses Stadium passt daher die Erklärung, dass der Nominativ den Gegenstand der Aussage, das grammatische Subjekt bezeichnet’ (Delbrück 1893: 188).<sup>1</sup> Although this remark essentially concerns the development of the nominative as a grammatical case, it gives a fairly precise idea about what Delbrück regarded as a grammatical subject, which under his analysis not only includes agentive verbal arguments but also

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<sup>1</sup> Cf. also Delbrück (1900: 6, 10).



patientive ones with passive constructions. Although Delbrück's definition clearly is tentative and exploratory rather than theoretically oriented, it is indeed tempting to interpret it as a statement to the effect that passivisation is a morphosyntactic diagnostic of subjecthood. A somewhat curious corollary of this is that it appears to restrict the notion of subjecthood to languages with a passive construction, although Delbrück appears to regard the lack of a passive construction in diachronic terms, as a primitive stage of historical development, rather than in synchronic terms, as a typological parameter. An important dimension of his historical speculations on this matter is that he believes the notion of subject to originally have been restricted to agentive (thätig) nouns, explicitly excluding neuter nouns, and identifying nominative case marking as the subject property *par excellence*.<sup>2</sup>

An interesting feature of Delbrück's definition is that he clearly regards the subject argument to have characteristic properties at a formal (nominative case), semantic (agentivity) and pragmatic (topicality) level. In other words, a plausible case can be made for the claim that he envisaged a multidimensional notion of subject. This would imply that his analysis to some extent is in line with Keenan's (1976) influential model of subjecthood, schematically represented in Figure 1.

<u>Coding Properties</u> position > case marking > verb agreement	>	<u>Behaviour and Control Properties</u> deletion, movement, case changing properties, control of cross-reference properties, etc.	>	<u>Semantic Properties</u> Agency, autonomous existence, selectional restrictions, etc.
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Figure 1. "Promotion to Subject Hierarchy" (Keenan 1976: 324)

Keenan's (1976) multidimensional framework has played a pivotal role in the study of subject arguments and their properties in the last several decades. Although Keenan explicitly aims to arrive at a universally valid definition of the notion 'subject', an important observation arising from his discussion is that extremely few, if any of the approximately 30 subject properties he discusses are universal in a strict sense of the word. A corollary of this observation is that language-specific inventories of subject properties are expected, and indeed turn out to show considerable differences. Keenan (1976) also discusses some cases where languages acquire specific subject properties, most notably coding properties, his analysis also allowing for diachronic variation within a language, a problem that has been further explored by, for instance, Ziv (1976) and Cole et al. (1980). Much of the pertinent diachronic research on this topic has primarily been carried out in the context of so-called oblique subjects, where especially behavioral subject properties are employed as diagnostics for determining the relative subject status of arguments lacking the coding properties characteristic of subjects. An important question that remains understudied is to what extent subjecthood defined as cluster of morphosyntactic properties characteristic of subjects remains stable within languages and/or branches belonging to the same linguistic family. The present paper aims to partly remedy this gap in our current understanding of the diachrony of subjecthood.

As a first approximation, note that the various archaic Indo-European languages all share a predominantly nominative-accusative alignment pattern, that is, the only argument of monovalent verbs generally shows the same coding pattern as the first or most agentive argument of bi- and trivalent verbs. In the following, trivalent verbs will be factored out for simplicity. To formally distinguish the nominative-accusative alignment pattern from other alignment patterns, I use the customary typological notation S

<sup>2</sup> Cf. Delbrück (1900: 6): 'Unter den Theilen des mehrgliedrigen Satzes nun sind einige obligatorisch, andere fakultativ. Die obligatorischen sind Subjekt und Prädikat. (...) Ich will diese Ausdrücke hier nicht in dem psychologischen Sinne verstanden wissen, wonach Subjekt die zuerst in das Bewusstsein tretende Masse, Prädikat aber die damit in Verbindung tretende neue Masse ist, sondern in dem hergebrachten grammatischen, der der Logik entlehnt worden ist. Ich verstehe also unter Subjekt ein den Mittelpunkt der Aussage bildendes im Nominativ stehendes Substantivum, unter Prädikat das von diesem Ausgesagte. Vielleicht ist es möglich, durch Zurückgehen in die Vergangenheit zu einer etwas lebensvolleren Definition zu gelangen. Da es wahrscheinlich ist, dass die Neutra ursprünglich nicht fähig waren, einen Nominativ zu bilden, und da es ferner wahrscheinlich ist, dass ursprünglich ein Passivum nicht vorhanden war, so darf man behaupten, dass in der Verbindung von Substantivum und Verbum das Subjekt der thätig gedachte Träger des Verbalvorganges war.'

for the monovalent argument, A for the most agentive bivalent argument, and P for the most patientive bivalent argument, arriving at the schematic representation in Table 1 (after Dahl 2021: 414).

Accusative	Ergative	Neutral	Tripartite	Double Oblique
A=S'P	A'S=P	A=S=P	A'S'P	A=P'S

Table 1. Some recurring alignment patterns (after Dahl 2021: 414)

In line with Haspelmath (2011), I take the notions A, and P to represent comparative concepts based on a subset of verbs, namely prototypical causative-transitive verbs with meanings like *kill*, *destroy*, *break*, *build*, *create*. Verbs of this type are widely recognized to show the canonical argument realization pattern across geographically and genetically unrelated languages and may thus be hypothesized to have a central status in the organization of language-specific argument realization systems independently of genetic and geographic factors. From this perspective, A and P represent subclasses of the first and second bivalent argument, respectively. This restriction is motivated by the fact that other classes of verbs, e.g., experiential verbs, show great variation as regards their selection of argument realization patterns. Consider, by way of illustration, the examples in (1).<sup>3</sup>

- (1) a. *hospes*                    *necavit*                    *hospitem*                    *captum*  
 host:NOM.SG            kill:PRF.3SG            guest:ACC.SG            take:PPP.ACC.SG  
*manu*  
 hand:ABL.SG  
 ‘A host killed a guest, taken by (his) hand’ (Pl. *Most.* 479)
- b. *br̥haspátir*                    *hánty*                    *amíttram*  
 Br̥haspati:NOM.SG            kill:PRS.3SG            enemy:ACC.SG  
 ‘Br̥haspati kills the enemy’ (RV VI 73.3)
- c. *aliyan=kan*                    *aliyanzinaš*                    *apēl=pát*  
 aliya-animal:ACC.SG=PTCL    aliyanzina:NOM.SG    DEM.GEN.SG=PTCL  
*mīyaš*                    *kuenzi*  
 miya:NOM.SG            strike:PRS.3SG  
 ‘The *aliyanzina*, its own *mīya* will strike the *aliya*-animal’ (KUB 30.36 ii 11–12; CTH 401.1.A)

These examples illustrate that active forms of bivalent causative-transitive verbs select a nominative-marked first argument and an accusative-marked second argument in Old Latin, Early Vedic, and Hittite. That this is not necessarily the case with experiential predicates, is illustrated by the examples in (2).

- (2) a. *Iuppiter (...)*                    *formidat*                    *malum*  
 Jupiter:NOM            fear:PRS.3SG            evil:ACC.SG  
 ‘Jupiter fears evil’ (Pl. *Amph.* 26)
- b. *átas*    *cid*                    *indrād*                    *abhayanta*                    *devá*  
 ADV    ADV                    Indra:ABL                    fear:IPF.3PL                    god:NOM.PL  
 ‘From that time, even the gods feared Indra’ (RV V 30.5)
- c. *naḥi=mu*                    *parašni*                    UR.BAR.RA-*ni*  
 fear:PRS.3SG=1SG.ACC            leopard:DAT/LOC.SG            wolf:DAT/LOC.SG  
 ‘I fear the leopard and the wolf’ (KBo 21.90 rev. 51–52 with dupl KBo 21.121 rev. 27–28)

<sup>3</sup> I use the following abbreviations in the glosses: ABL: ablative; ABS: absolutive; ACC: accusative; ADV: adverb; AOR: aorist; CNJ: conjunction; CONN: connective; DAT: dative; DEM: demonstrative; DU: dual; F: feminine; FUT: future; GEN: genitive; IMP: imperative; INDF: indefinite marker; INF: infinitive; INS: instrumental; INTERR: interrogative marker; IPF: imperfect; LOC: locative; M: masculine; N: neuter gender; NEG: negation; NOM: nominative; OPT: optative; PASS: passive; PTC: participle; PTCL: particle; PL: plural; POSS: possessive; PPP: perfect/past passive participle; PRF: perfect; PROH: prohibitive marker; PRP: preposition; PRS: present; PRT: preterite; PRV: preverb; PST: past; PTC: particle; REL: relative marker; RFL: reflexive marker; SBJ: subjunctive; SG: singular; SUP: superlative; VOC: vocative.

These examples illustrate that there is considerable variation in the argument realisation patterns selected by the semantically equivalent experiential verbs, Latin *formidō* selecting the canonical nominative-accusative pattern, Vedic *bhay-* selecting a nominative-marked experiencer and an ablative-marked stimulus, and Hittite *naḥ-* selecting an accusative-marked experiencer and a stimulus marked by the dative-locative. Data like those given in (1) and (2) indicate that restricting the S, A, P concepts to interlanguage comparison and employing some other, more inclusive terms for intralanguage description may be quite useful. Specifically, the languages under scrutiny have largely parallel alignment systems with a predominantly nominative-accusative pattern but differ in the extent to which they have generalized canonical argument realization morphosyntax to bivalent predicates, that is, in their *transitivity prominence* (cf., e.g., Say 2014, 2017, Haspelmath 2015, Creissels 2018).

The predominant nominative-accusative alignment patterns shown by the languages under scrutiny implies that the first argument of causative-transitive bivalent predicates has the same encoding as the monovalent argument, which generally selects nominative case, as illustrated in (3).

- (3) a. *Pater adest*  
 father:NOM be.present:PRS.3SG  
 ‘Father is present’ (Pl. *Most.* 364)
- b. *út sūryo jyótiṣā devá eti //*  
 up sun:NOM.SG light:INS god:NOM.SG go:PRS.3SG  
 ‘The sun, the god, goes up with his light’ (RV IV 13.1d after Jamison and Brereton 2014: 575)
- c. *ta LUGAL-waš <sup>LÜ</sup>hinkulaš paizzi*  
 CONN king-GEN.SG offerant:NOM.SG go:PRS.3SG  
 ‘The king’s offerant goes’ (KUB 2.7 ii 9, CTH 626.Tg04.I.1.B [Hittite])

Although some counterexamples exist, the examples in (3) illustrate that the monovalent argument generally has a unitary morphosyntactic encoding in archaic Indo-European languages. For the sake of consistency, I shall reserve the term S for cross-language comparison and use the term ‘monovalent argument’ in intralinguistic description. Likewise, I shall employ the terms ‘bivalent first argument’ and ‘bivalent second argument’ in intralinguistic description, reserving the terms A and P for cross-linguistic purposes.

Turning now to subjecthood, we have already noted that this represents a multidimensional notion in the present framework, potentially involving coding/morphological, behavioral/syntactic, and semantic/pragmatic features. Drawing on Keenan’s (1976) model, Falk (2006) explores subjecthood and the various features that may be constitutive of this concept, distinguishing two types of features, which he labels Type I and Type II subject properties. His classification is given in Table 2.

Type 1 subject properties (S/A)	Type 2 subject properties (S/P in syntactically ergative languages, nominative in Philippine-type languages)
Agent argument in the active voice	Shared argument in coordinated clauses
The addressee of an imperative	Controlled argument (PRO) (in some languages)
Most likely covert/empty argument	Raising
Anaphoric prominence	Extraction properties
[Switch-reference systems] <sup>4</sup>	Obligatory element
Controlled argument (PRO) (in some languages)	«External» structural position
Discourse topic	Definiteness or wide scope

Table 2. Two types of subject properties (adapted from Falk 2006: 16)

<sup>4</sup> This property has been put in square brackets because it does not play any role in Latin nor in the other languages we consider here and will therefore be left out of the following discussion.

Under Falk's (2006) analysis, properties of the first type are characteristic of S and A in all languages. Those of the second type, on the other hand, are characteristic of S and A in so-called same-subject languages, that is, languages with predominantly nominative-accusative morphosyntax and languages with predominantly ergative morphology and nominative-accusative morphosyntax. In languages with ergative morphology and syntax, as well as so-called Philippine-type languages, they select S and P instead, languages of these types constituting so-called different-subject languages. As a working hypothesis, I shall assume that all the languages under consideration here are of the same-subject type, which follows from their predominantly nominative-accusative morphosyntax. It should be noted, however, that it ultimately is an empirical question whether Falk's (2006) generalisation holds, but this is an issue that will not be dealt with in the present context.

While the properties given in Table 2 are generally agreed to represent bona fide subject features in at least some languages, we need to consider some methodological issues at this point. A first set of problems concerns how it can be established whether a given property is characteristic of subjects in some language. In the present work, a subject property is preliminarily defined as a construction which exclusively selects and is applicable to all monovalent arguments and bivalent first arguments in a language. This delimitation reflects two notions borrowed and adapted from Role and Reference Grammar (cf., e.g., Van Valin 2005), namely restricted neutralization of core arguments and syntactically privileged argument. Restricted neutralization of core arguments obtains when a given morphosyntactic construction selects a subset of the verbal core arguments in a language. Verb agreement represents a case in point. As illustrated by the examples in (4), finite verb agreement is restricted to the monovalent argument and the bivalent first argument in Latin.

- (4) a. *tum pol ego perii misera*  
 then by.Pollux 1SG.NOM be.ruined:PRF.1SG miserable:F.SG.NOM  
 'Then, by Pollux, I am ruined' (Pl. *Merc.* 510)
- b. *Quia ego hanc amo et haec me*  
 Because 1SG.NOM 3SG.F.ACC love:1SG.PRS and 3SG.F.NOM 1SG.ACC  
*amat*  
 love:3SG.PRS  
 'Because I love her and she loves me' (Pl. *As.* 631)
- c. \**Quia ego hanc amat et haec me*  
 Because 1SG.NOM 3SG.F.ACC love:3SG.PRS and 3SG.F.NOM 1SG.ACC  
*amo*  
 love:1SG.PRS

These examples suffice to illustrate that verb agreement is restricted to the monovalent argument and the bivalent first argument in Latin, as evidenced by the ungrammaticality of example (4c), where the verb agrees with the bivalent second argument. The question arises, however, whether the second part of the above condition holds, that finite verb agreement includes all monovalent and bivalent first arguments. Examples like the one cited in (5) suggest that this may not be the case.

- (5) a. *Pol, si aliud nil sit, tui me, uxor,*  
 by.Pollux if other:NOM.SG nothing:NOM.SG be:PRS.SBJ.3SG 2SG.GEN 1SG.ACC wife:VOC.SG  
*pudet.*  
 be.ashamed:PRS.3SG  
 'By Pollux, if there were nothing else, I would be ashamed of you, wife' (Pl. *As.* 933)
- b. *ita nunc pudeo atque ita nunc paveo*  
 thus now be.ashamed:PRS.1SG CNJ thus now be.afraid:PRS.1SG  
 'Therefore I am now ashamed, and therefore I am now afraid' (Pl. *Cas.* 877)
- c. *Non te haec pudent?*  
 NEG 2SG.ACC DEM.NOM.PL shame:PRS.3PL  
 'Don't these things make you ashamed' (Ter. *Ad.* 754)

Example (5a) illustrates that certain experiential verbs select an accusative-marked experiencer and a genitive-marked stimulus. From the perspective of the present paper, it is important to note that the verb form in this case is in the default third singular form, thus showing no agreement with any of the predicate's core arguments. This pattern is found with a small group of predicates and suggests that verb agreement does not include all bivalent first arguments in Latin. Thus, verb agreement does not help identifying which of the two arguments, if any, is the subject in this construction. It should also be observed, however, that these verbs also show, albeit very rarely, subject-verb agreement but with different semantics, as illustrated by examples (5b) and (5c), where the forms *pudeo* and *pudent* have a monovalent and a causative bivalent meaning, respectively. Constructions like the one seen in (5a) are often classified as impersonal, under the assumption that nominative case and verb agreement are necessary conditions for subjecthood. According to a different analysis (cf. e.g., Fedriani 2009), the accusative-marked experiencer is the most subject-like argument and may be regarded as a non-canonical subject, an analysis adopted here. Under the strict interpretation of the condition on argumenthood proposed above, the existence of non-canonical subjects entails that verb agreement is not a characteristic property of subjects in Latin. It is not clear that this is an advantage, however, since the construction illustrated in (5a) is rather uncommon, being restricted to five experiential predicates in Latin, while the canonical construction with nominative-marked subject and verb agreement is open-ended. One might instead adopt a somewhat weaker interpretation, that it suffices that a given construction shows restricted neutralization involving the monovalent and the first bivalent argument to be classified as a subject property. Even in its weaker form, this provides a sufficiently stringent heuristic cue to identify the set of constructions that constitute subjecthood in any given language. Based on the previous discussion, I conclude that a morphosyntactic subject may be defined as the subset of core argument functions that represents the generalized privileged syntactic argument, that is, the argument selected as the syntactically privileged argument by several predicate-centered constructions in a given language at a given chronological stage. Before concluding this section, it should be noted that the subject properties listed in Table 2 are taken to represent a selected subset of all possible constructions that may be constitutive of subjecthood in any individual language, since subjecthood represents a language-specific set of properties, shaped by a language's unique history.

### 3. Subjecthood Properties in Latin

This section attempts to establish whether or to what extent the construction types given in Table 2 are characteristic of subjects in Latin. The following discussion is based on data from Early and Classical Latin and the approach will to some extent be top-down, drawing heavily on previous works of Keenan (1976) and Falk (2006). First, we shall examine the use of the mediopassive as a valency-reducing marker, which arguably serves to suppress or demote the monovalent and first bivalent argument, as illustrated by the examples in (6).

- (6) a. *is*                      *amatur*                      *hic*                      *apud*                      *nos*  
           3SG.NOM                      love:PRS.PASS.3SG                      here                      PRP                      1PL.ACC  
           ‘He is esteemed here with us, who forgets that which he has given as given’ (Pl. *Truc.* 233)
- b. Sag. *Quid*                      *agitur?*                      Tox.                      *Vivitur.*  
           INTERR.NOM.SG.N                      do:PRS.PASS.3SG                      live:PRS.PASS.3SG  
           ‘Sag. “What is going on (lit. is being done)?” Tox. “I am being alive (lit. it is being lived)”’  
           (Pl. *Pers.* 17)

These examples indicate that passively used mediopassive forms characteristically demote the first bivalent and the monovalent argument, thus picking out these two arguments as the syntactically privileged argument. However, Pinkster (2015: 103) notes that the passive construction is not available for bivalent verbs with a non-accusative object. In other words, the canonical passive function seems to be restricted to verbs selecting canonical argument case marking. For example, mediopassive forms of experiential verbs selecting a dative-marked experiencer and a nominative-marked stimulus such as *placeo* ‘please’

tend to show an impersonal meaning, the dative-marked experiencer often appearing in the syntax, as illustrated in (7a). In that connection, it is worth noting that so-called cognate objects sometimes maintain their accusative case marking in the impersonal passive, as illustrated in (7b).

- (7) a. *ita divis est placitum, voluptatem*  
 thus god:DAT.PL be:PRS.3SG please:PPP.PRF.PTCP.NOM.SG.N enjoyment:ACC.SG  
*ut maeror comes consequatur*  
 CNJ mourning:NOM.SG companion:NOM.SG accompany:PRS.SBJ.3SG  
 ‘This is how it has pleased the gods, that mourning accompanies enjoyment as its companion’  
 (Pl. *Amph.* 635)
- b. *vitam vivitur*  
 life:ACC.SG live:PRS.PASS.3SG  
 ‘One lives life’ (Enn, *Trag.* 202)

From the perspective of the present paper, these and similar examples provide evidence in favour of the assumption that the passive construction represents a bona fide subject test in Latin, suppressing the monovalent argument and the bivalent first argument but not the bivalent second argument. In her important study of the impersonal passive in Latin, Napoli (2013) found that monovalent verbs with a highly affected subject tend not to appear in the impersonal passive construction. However, while this tendency clearly seems to be motivated by lexical semantic factors, it does not provide conclusive counterevidence against the present analysis. Thus, passivisation constitutes a subject feature in Latin, since it consistently picks out the monovalent and the first bivalent argument and excludes the second bivalent argument.

Turning now to the subjecthood properties listed in Table 2, it should be noted that the first property, being the agent argument in the active voice, seems to reflect a universal or quasi-universal tendency, that the most agentive argument of bivalent predicates by default is selected as their first or syntactically privileged argument with underived verb forms (cf., e.g., Dowty 1991). That is, cases like those cited in (8) are expected.

- (8) a. *alii turres reducerent*  
 other:NOM.PL tower:ACC.PL draw.back:IPF.SBJ.3PL  
*aggeremque interscinderent*  
 rampart:ACC.SG\_CNJ break.down:IPF.SBJ.3PL  
 ‘Others draw back the towers and break down the rampart’ (Caes. *Gal.* 7.24.5)
- b. *ipsusque Amphitruo regem Pterelam sua*  
 self:NOM.SG\_CNJ Amphitruo:NOM king:ACC.SG Pterela:ACC RFL. POSS.ABL.SG  
*obtruncavit manu*  
 kill:PRF.3SG hand:ABL.SG  
 ‘Amphitruo himself killed king Pterela with his own hand’ (Pl. *Amph.* 252)

From the perspective of the present work, however, it is dubious whether this criterion can be classified as a subject property in a strict sense, since it selects the bivalent first argument as its syntactically privileged argument, thus seemingly excluding the monovalent first argument. On the other hand, one might argue that the monovalent argument is the most agentive core argument of its predicate by default, no other argument being available. This analysis finds some support in the fact that the monovalent argument is generally selected as the first argument when monovalent predicates select a bivalent argument realization frame, as illustrated in (9).

- (9) a. Plan. *Libera ego sum nata.*  
 free:NOM.SG 1SG.NOM be:PRS.1SG born:NOM.SG  
 Cvr. *Et alii multi qui nunc serviunt.*  
 CNJ other:NOM.PL many:NOM.PL REL.NOM.PL now serve.as.slave:PRS.3PL

- ‘Plan. “I was born free” Curc. “and also many others, who are now serving as slaves’ (Pl. *Curc.* 607)
- b. *tu usque a puero servitutum servivisti*  
 2SG.NOM right.on PRP boy:ABL.SG servitude:ACC.SG serve.as.slave:PRF.2SG  
*in Alide*  
 PRP Alis:ABL  
 ‘You have been serving servitude as a slave from boyhood onwards in Alis’ (Pl. *Capt.* 544)
- c. *heia sudabis satis*  
 EXCL sweat:FUT.2SG sufficiently  
 ‘Indeed, you’ll sweat sufficiently’ (Ter. *Phor.* 628)
- d. *aes sonit, franguntur hastae,*  
 bronze:NOM.SG sound:PRS.3SG break:PRS.PASS.3PL lance:NOM.PL  
*terra sudat sanguine.*  
 earth:NOM.SG sweat:PRS.3SG blood:ABL.SG  
 ‘The bronze (weapons) sound, the lances break, the earth sweats with blood’ (Enn. *Scaen.* 181V<sup>2</sup> = *FRL* 2 fr. 69)

These examples illustrate that the monovalent argument of unergative predicates like *serviō* ‘serve (as slave)’ and of unaccusative predicates like *sudō* ‘sweat’ are selected as the first argument when the verb selects a bivalent argument realization frame. Interestingly, Baños (2015) draws attention to the fact that the so-called cognate object construction, illustrated in (9b) is restricted to unergative verbs, as also indicated by the fact that the second bivalent argument of *sudō* in (9d) has ablative case marking. In both cases, however, the original monovalent argument is promoted to first bivalent argument, thus providing indirect support for the assumption that the property of being the most agentive argument is a subjecthood property in Latin.

The second property listed by Falk (2006) is being the addressee of imperative forms. As shown by the examples in (10), this feature picks out the monovalent argument and the bivalent first argument, thus representing a clear-cut subject property in Latin.

- (10) a. *tu condicionem hanc accipe*  
 2SG.NOM proposal:ACC.SG DEM.ACC.SG accept:PRS.IMP.2SG  
 ‘You, accept this proposal’ (Pl. *Aul.* 237)
- b. *strenue curre in Piraeum*  
 quickly run:PRS.IMP.2SG PRP Piraeus:ACC  
 ‘Run quickly to Piraeus’ (Pl. *Trin.* 1102–1103)
- c. *Nunc profecto vapula ob mendacium*  
 now indeed be.flogged:IMP.2SG PRP lie:ACC.SG  
 ‘Now, indeed, be flogged because of (your) lie!’ (Pl. *Amph.* 370)

These examples illustrate that bivalent predicates as well as unergative and unaccusative predicates are compatible with the imperative, which thus clearly represents a subject property in Latin. This hardly comes as a surprise, since the property of being the addressee of imperatives may be hypothesized to represent a universal or quasi-universal feature of the subject function.<sup>5</sup>

The third potential property under consideration is being the most likely covert/empty argument. Since this is formulated as a relative property, it is dubious whether it qualifies as a subject property within the present framework. As a first approximation to this problem, we may note that Latin is a pro-drop language, where verb agreement serves to identify the subject argument of any given predicate with canonical agreement. Apart from some special uses, first and second person referents are strictly determined by the immediate context of the utterance, representing speech act participants

<sup>5</sup> Cf., however, Keenan (1976: 83–84) who notes that imperatives are often in non-active forms in Malayo-Polynesian languages.

which in most cases will be identifiable through verb agreement only. Third person referents, on the other hand, are less immediately identifiable and one would therefore expect this type of referent to be subject to certain restrictions as regards their omission. Pinkster (2015: 748–754) discusses the factors determining whether third person subjects are expressed, which, as any other discourse referent, must be expressed unless immediately accessible, either having been previously introduced or being inferable on the basis of general knowledge. As regards the omission of objects, Pinkster (2015: 757) notes that ‘The general condition for the object not to be expressed is that the entity it refers to is well-established in the communicative situation’, which essentially reflects the same constraints as the one determining the omission of subjects. These observations invite the conclusion that this criterion does not constitute a subjecthood property but is available for all core arguments (as well as non-argument constituents). To the extent that pronominal monovalent and bivalent first arguments are more prone to be omitted than pronominal bivalent second arguments, this probably reflects the fact that verb agreement indexes all or most of the pertinent information expressed by pronouns. Thus, the property of being the most likely covert/empty argument arguably represents a secondary behavioral property in Latin, directly reflecting morphological subject-verb agreement.

In many languages, anaphoric prominence with reflexives is a property singling out monovalent and first bivalent arguments. Restricting the present focus to pronominal expression of direct and indirect reflexivity, two sets of forms need to be considered, the reflexive pronoun *sē/sibi/suī* and the reflexive possessive adjective *suus*. These are used in two types of reflexive function in Latin, clause-bound and long-distance reflexivization. Consider first the examples in (11), which show the clause-bound uses of the reflexive pronoun.

- (11) a. *Perduelles<sub>i</sub> penetrant se<sub>i</sub> in fugam*  
 enemy:NOM.PL put:PRS.3PL RFL.ACC PRP flight:ACC.SG  
 ‘The enemies put themselves to flight’ (Pl. *Amph.* 250)
- b. *mortales inter sese pugnant proeliant*  
 mortals:NOM.PL PRP REFL.ACC fight:PRS.3PL make.battle:PRS.3PL  
 ‘Mortals fight and battle among themselves’ (Enn. *Scaen.* 5V<sup>2</sup> = *FRL* 2 fr. 7)
- c. *mirari non est aequom,*  
 be.surprised:PRS.INF NEG be:PRS.3SG reasonable:NOM.SG  
*sibi si praetimet*  
 REFL.DAT if be.afraid:PRS.3SG  
 ‘It is not reasonable to be surprised if he is afraid for himself’ (Pl. *Amph.* 29)
- d. *itaque ego paravi hic intus magnas machinas,*  
 in.this.way 1SG.NOM prepare:PRF.1SG here inside great:ACC.PL contrivance:ACC.PL  
*qui amantis<sub>i</sub> una inter se<sub>i</sub> facerem convenas.*  
 REL.ABL.SG lover:ACC.P together PRP REFL.ACC make:IPF.SBJ.1SG meeting:ACC.PL  
 ‘In this way, I have prepared here inside a great contrivance by which I shall make the lovers meet with each other’ (Pl. *Mil.* 138–139)

These examples demonstrate that reflexive binding shows unrestricted neutralization of core arguments in Latin, being compatible with the first bivalent argument (11a), the monovalent argument (11bc) and the bivalent second argument (11d). From the perspective of the present paper, this indicates that clause-bound reflexivization is not a subject property. As regards long-distance reflexivization, on the other hand, pertinent data are given in (12).

- (12) a. *nam me hodie oravit Argyrippus filius,*  
 CONJ 1SG.ACC today entreat:PRF.3SG Argyrippus:NOM son:NOM.SG  
*uti sibi amanti facerem argenti copiam*  
 CONJ REFL.DAT lover.DAT.SG make:IPF.SBJ.3SG money:GEN.SG amount:ACC.SG  
 ‘For today my son Argyrippus entreated me that I should give him an amount of money for his lover’ (Pl. *As.* 74–75)



- b. *memini Pamphilum Lilybitanum (...) mihi narrare*  
remember:prf.1sg Pamphilus:ACC Lilybitanus:ACC 1SG.DAT tell:PRS.INF  
*se sane tristem et conturbatum domum revertisse,*  
REFL.ACC very sad:ACC.SG CONJ confused:ACC.SG home:ACC.SG return:PRF.INF  
*quod vas eius modi, quod sibi a*  
CONJ vase:NOM.SG DEM.GEN.SG type:GEN.SG REL.NOM.SG REFL.DAT PRP  
*patre et a maioribus esset relictum*  
father:ABL.SG CONJ PRP forefather:ABL.PL be:IPF.SBJ.3SG leave:PPP.NOM.SG  
‘I remember Pamphilus Lilybitanus telling me that he returned home very sad and confused because the vase of that sort, which had been left him by his father and forefathers (...)’ (Cic. *Ver.* 2.4.32.6)
- c. *Italici (...) Adherbali suadent, uti seque et*  
Italian:nom.pl Adherbal:DAT advise:PRS.3PL CONJ REFL.ACC\_CONJ CONJ  
*oppidum Jugurthae tradat*  
town:ACC.SG Jugurtha:DAT hand.over:PRS.SBJ.3SG  
‘The Italians advised Adherbal that he should hand over himself and his town to Jugurtha’ (Sal. *Iug.* 26)
- d. *a Caesare valde liberaliter invidor in legationem*  
PRP Caesar:ABL very generously invite:PRS.PASS.1SG PRP legation:ACC.SG  
*illam, sibi ut sim legatus,*  
DEM.ACC.SG REFL.DAT CONJ be:SBJ.PRS.1SG ambassador:NOM.SG  
‘I have been very generously invited by Caesar into this legation, to be ambassador for him’ (Cic. *Att.* 2.18.3)

These examples illustrate the use of *sē/sibi/suī* in long-distance reflexive contexts. Examples (12a) and (12b) show that the antecedent of this pronoun can be anchored in the bivalent first argument and the monovalent argument, respectively.<sup>6</sup> Interestingly, example (12c) shows that the bivalent second argument is also eligible as antecedent for *sē/sibi/suī*, suggesting that this construction shows unrestricted neutralization of core argument functions, thus not representing a subject property in Latin. Example (12d) provides additional evidence in favor of this conclusion, demonstrating that even agent phrases of passive constructions can serve as antecedent for the pronoun *sē/sibi/suī*.

The reflexive possessive adjective *suus* is also compatible with both clause-bound and long-distance relativization. The examples in (13) and (14) illustrate that it shows unrestricted neutralization of core argument functions in both contexts, thus not being eligible as a subject property.

- (13) a. *is etiam corruptus porro suum*  
3SG.NOM CONJ corrupted:NOM.SG ADV REFL.POSS.ACC.SG  
*corrumpit filium*  
corrupt:PRS.3SG son:ACC.SG  
‘Corrupted as he is, he now is corrupting his son’ (Pl. *As.* 875)
- b. *nunc ille geminus (...) hodie in Epidamnum veniet*  
ADV DEM.NOM.SG twin:NOM.SG ADV PRP Epidamnus:ACC come:FUT.3SG  
*cum servo suo*  
PRP slave:ABL.SG REFL.POSS.ABL.SG  
‘Now that twin will come to Epidamnus today with his slave’ (Pl. *Men.* 69–70)
- c. *quem ego hominem, siquidem vivo,*  
REL.ACC.SG 1SG.NOM man:ACC.SG CONJ live:PRS.1SG

<sup>6</sup> It should be noted that examples of the reflexive pronoun *sē/sibi/suī* in long-distance reflexive contexts with a monovalent argument as antecedent are extremely rare. This probably reflects that long-distance reflexivity is closely related to indirect speech in Latin, typically being induced by a verb of speech or a related meaning. Similar observations apply to the reflexive possessive *suus* in long-distance reflexive contexts.

- vita*                      *evolvam*                      *sua*  
 life:ABL.SG              unroll:FUT.1SG              REFL.POSS.ABL.SG  
 ‘If I only live, I shall unroll that man from his life’ (Pl. *Men.* 903)
- (14) a. *me*              *a*              *portu*                      *praemisit*              *domum*,  
 1SG.ACC              PRP              harbour:ABL.SG              send:PRF.3SG              house:ACC.SG  
*ut*              *haec*                      *nuntiem*                      *uxori*                      *suae*  
 CONJ              DEM.ACC.PL              relate:SBJ.1SG              wife:DAT.SG              REFL.POSS.DAT.SG  
 ‘He sent me from the harbour to his house in order for me to relate these matters to his wife’ (Pl. *Amph.* 195)
- b. *Indignantēs*                      *militēs*                      *Caesar*,                      *quod*              *conspēctum*  
 be.angry:PRS.PTCP.ACC.PL              soldier:ACC.PL              Caesar:NOM              CONJ              look:ACC.SG  
*suum*                      *hostēs*                      *perferre*                      *possent*  
 REFL.POSS.ACC.SG                      enemy:NOM.PL              carry.out:PRS.INF              be.able:PRS.SBJ.3PL  
*tantulo*                      *spatio*                      *interiecto*                      (...)              *edocet*  
 so.little:ABL.SG              space:ABL.SG              intervening:ABL.SG                      instruct:PRS.3SG  
 ‘Caesar instructed the soldiers, who were furious because the enemy could get a good look at them because there was so little space in between’ (Caes. *Gal.* 7.19.4)

The examples in (13) illustrate that the reflexive possessive adjective *suus* alternately selects the bivalent first argument (13a), the monovalent argument (13b), or the bivalent second argument (13c) as antecedent in clause-bound reflexive contexts. Moreover, example (14a) demonstrates that it is compatible with bivalent first and bivalent second arguments in long-distance contexts. Somewhat curiously, no example of the reflexive possessive adjective with a monovalent argument as its antecedent turned up in extensive targeted corpus explorations, a fact that may be differently interpreted. First, one might assume that the antecedent of the reflexive possessive adjective is restricted to these two core argument functions under its long-distance reading, excluding the monovalent argument. This would imply that long-distance reflexivization operates on a double-oblique basis in Latin. Another possibility would be that the constellation with a monovalent argument as the antecedent of a long-distance reflexive is rare and that its failure to appear is due to an accidental gap in the corpus. An immediate advantage of an assumption along such lines is that it does not postulate any differences between the long-distance and clause-bound use of the possessive reflexive and that it assumes that the possessive reflexive adjective has essentially similar functions as the reflexive pronoun. In any case, neither the clause-bound nor the long-distance readings of the possessive reflexive adjective qualify as subject properties in Latin.

Turning now to control and raising constructions, we first need to establish a delimitation between these two construction types. As a first approximation, note that the common denominator of control and raising constructions is that they represent a type of subordinate construction where an argument of the subordinate clause is not overt but co-referent with an argument of the matrix clause (cf. also Falk 2006: 135). A common way to distinguish between control and raising constructions is to define control as a type of construction where the controller of the unexpressed argument in the subordinate clause is a thematic argument of the matrix predicate. Raising constructions, on the other hand, represent a type of construction where the controller of the unexpressed argument in the subordinate clause is not a thematic argument of the matrix predicate. This begs the question how one can determine whether a given controller is an argument of a matrix predicate or not in Latin.

Drawing on a recent study by Jøhndal (2012), I shall assume that this is reflected in the presence or absence of selectional restrictions. Control predicates characteristically select a sentient subject argument and a present infinitive, whereas raising predicates do not show any such restrictions in Latin (cf. Jøhndal 2012: 3). Consider, by way of illustration, the examples in (15), where the verb *volō* ‘want, wish’ is used as a (subject) control predicate.

- (15) a. *sed si nunc facere volt era<sub>i</sub> officium suom*  
 CNJ CNJ ADV do:PRS.INF want:PRS.3SG lady:NOM.SG duty:ACC.SG RFL.POSS.ACC.SG  
 ‘But if the lady would now do her duty’ (Pl. *Cas.* 508)
- b. *ego quoque volo esse liber; nequiquam volo*  
 1SG.NOM also want:PRS.1SG be:PRS.INF free:NOM.SG in.vain want:PRS.1SG  
 ‘I also want to be free; I wish in vain’ (Pl. *Trin.* 440)
- c. *\*volo amare me*  
 want:PRS.1SG love:PRS.INF 1SG.ACC
- d. *volo amari a meis*  
 want:PRS.1SG love:PRS.INF.PASS PRP POSS.PRON.1SG  
 ‘I want to be loved by my own ones’ (Pl. *As.* 67)

These examples illustrate that the subject control construction is restricted to the bivalent first argument (15a) and the monovalent argument (15b) in Latin. Example (15c) is intended to illustrate that this construction is not compatible with the bivalent second argument, which, however, can be targeted if the infinitive is passive, as in (15d). As noted previously, the Latin passive promotes the second bivalent argument to a monovalent first argument, so that the omitted argument of the infinitive in (15d) may be regarded as a derived monovalent argument. These observations warrant the conclusion that the so-called subject control construction qualifies as a subjecthood property in Latin. Note that in this construction the omitted subject of the infinitive inherits the selectional restrictions of the matrix predicate, since the two are co-referent.

Another, analogous construction is so-called object control. According to Bolkestein (1979), this construction exclusively selects the active present infinitive and presupposes that the matrix predicate object is sentient. A further characteristic feature of this construction is that the infinitive can be omitted without resulting in an ungrammatical phrase. Pertinent examples are given in (16).

- (16) a. *Cotum imperium deponere coegit*  
 Cotus:ACC command:ACC.SG lay.down:PRS.INF force:PRF.3SG  
 ‘He compelled Cotus to resign his command’ (Caes. *Gal.* 7.33.3.6)
- b. *Quisquis te flere coegit impetus*  
 INDE.NOM.SG 2SG.ACC cry:PRS.INF force:PRF.3SG impulse:NOM.SG  
 ‘Whichever impulse urged you to cry’ (Luc. *Civ.* 9.1055–1056)
- c. *Quid si ego tibi illam nolo vendere,*  
 INTERR CNJ 1SG.NOM 2SG.DAT DEM.ACC.SG not.want:PRS.1SG sell:PRS.INF  
*coges me?*  
 force:FUT.2SG 1SG.ACC  
 ‘What if I don’t want to sell her to you, will you force me?’ (Ter. *Ad.* 192–193)

These examples illustrate that the object control construction exclusively targets the bivalent first argument (16a) and the monovalent argument (16b), thus representing a subjecthood feature. Example (16c) demonstrates that the infinitive may be left out.

Thus, subject and object control constructions have at least two features in common in Latin. They presuppose that the subject argument of the infinitive is sentient and exclusively select the present infinitive. In contrast, raising constructions show neither of these restrictions. The examples in (17) provide evidence for the behaviour of the so-called raising-to-subject construction in Latin.

- (17) a. *geminos in ventre habere videor filios*  
 twin:ACC.PL PRP womb:ABL.SG have:PRS.INF see:PRS.PASS.1SG son:ACC.PL  
 ‘I seem to have twin sons in my womb’ (Pl. *Curc.* 221)
- b. *num tibi sordere videor?*  
 PTCL 2SG.DAT be.dirty:PRS.INF see:PRS.PASS.1SG  
 ‘Do I seem to you to be dirty?’ (Pl. *Truc.* 379)

- c. *post loquendi libere videtur tempus venisse.*  
 ADV talk:ger.gen freely see:PRS.PASS.3SG time:NOM.SG come:PRF.INF  
*atque occasio*  
 CONJ occasion:NOM.SG  
 ‘Finally, it seems to be time and occasion to talk freely’ (Pl. *Trin.* 998–999)

Examples (17a) and (17b) demonstrate that the raising-to-subject construction selects the first bivalent argument and the monovalent argument, thus representing a clear-cut subject property. Example (17c) shows that this construction is compatible with non-sentient subjects and not restricted to the present infinitive.

Another, analogous construction is the accusative with infinitive, which is rather common in Latin (cf. Pinkster 2015: 157–194). In this construction, the matrix verb does not impose any selectional restrictions upon the type of infinitive nor upon the subject argument of the infinitive, which surfaces in the accusative case. The examples in (18) suffice to illustrate the features of the accusative with infinitive construction in Latin.

- (18) a. *Eo dico, ne me thensauros repperisse censeas.*  
 CNJ say:PRS.1SG CNJ 1SG.ACC treasure:ACC.PL find:PRF.INF think:PRS.SBJ.2SG  
 ‘I say so, so that you won’t think that I have found treasures’ (Pl. *Aul.* 240)
- b. *quos periisse ambos misera*  
 REL.ACC.PL vanish:PRF.INF both:ACC poor:NOM.SG  
*censebam in mari*  
 think:IPF.1SG PRP sea:ABL.SG  
 ‘Whom I, poor one, thought had both vanished at sea’ (Pl. *Rud.* 452)
- c. *censebit aurum esse a patre allatum tibi*  
 think:FUT.3SG gold:ACC.SG be:PRS.INF PRP father:ABL bring:PPP.ACC.SG 2SG.DAT  
 ‘He’ll think that the gold has been brought to you from his father’ (Pl. *Trin.* 785)

These examples illustrate that the accusative with infinitive construction is not restricted to the present infinitive and that the subject argument of the infinitive can be either sentient or non-sentient. In these respects, it is parallel to the raising-to-subject construction and might be analysed as a raising construction as well, although an analysis along such lines is controversial (cf., Bolkestein 1979). In this construction, the monovalent argument and the first bivalent argument are ‘raised’ as objects of the matrix verb and at the same time function as the subject of the infinitive. Thus, the accusative with infinitive construction may be classified as a subject property in Latin.

Turning now to the issue of being the topic of discourse, Pinkster (2021: 839) notes that the only feature explicit topics have in common is that they tend to appear in the first available position in the clause. The examples in (19ab) illustrate that the monovalent argument and the first bivalent argument often coincide with the discourse topic in Latin. However, this function is not restricted to these two core argument functions, as shown by (19c), where the bivalent second argument seems to be in topic function.

- (19) a. *erus si veniet, si me quaeret, hic ero*  
 master:NOM.SG CNJ come:fut.3sg CNJ 1SG.ACC seek:FUT.3SG here be:FUT.1SG  
 ‘If the master comes, if he looks for me, I’ll be here’ (Pl. *Mil.* 480)
- b. *nam pater expectat aut me aut aliquem*  
 CNJ father:NOM.SG expect:PRS.3SG CNJ 1SG.ACC CNJ INDF.ACC.SG  
*nuntium*  
 messenger:ACC.SG  
 ‘For my father expects me or some other messenger’ (Pl. *Capt.* 382)
- c. *nam eccum erilem filium video*  
 CNJ DEM.ADV of.the.master:ACC.SG son:ACC.SG see:PRS.1SG  
 ‘There indeed I see the master’s son’ (Pl. *Most.* 82–83)

These data indicate that the property of being discourse topic does not show restricted neutralisation of core argument functions, and, consequently, does not represent a subject property in Latin.

Another construction that is typical of subjects across languages is omission under co-reference across coordinated clauses, also sometimes referred to as conjunction reduction. The examples in (20ac) illustrate that the monovalent first argument and the bivalent first argument can be omitted in coordination when they are co-referent with another argument of one of these types. On the other hand, when a monovalent or a bivalent first argument is co-referent with a bivalent second argument, both co-referent arguments are expressed, as illustrated in (4b) above and in (20de). Note that when the coordination structure involves two equivalent tense/aspect/mood forms of the same verb that differ only in agreement features, one form tends to be omitted, as shown in (20d). Finally, also note that co-referent bivalent second arguments also licence omission of one referent in coordination, as illustrated in (20fg).

- (20) a. *nam Amphitruo actutum uxori turbas conciet*  
 CNJ Amphitruo:NOM immediately wife:DAT.SG quarrel:ACC.PL start:PRS.3SG  
*atque insimulabit eam probri*  
 CNJ accuse:FUT.3SG 3SG.ACC adultery:GEN.SG  
 ‘For Amphitruo will soon begin a quarrel with his wife and accuse her of adultery’ (Pl. *Amph.* 476–477)
- b. *Postquam obsonavit erus et conduxit*  
 after buy.provisions:PRF.3SG master:NOM.SG CNJ hire:PRF.3SG  
*coquos tibicinasque hasce apud forum*  
 cook:ACC.PL music.girl:ACC.PL\_CNJ DEM.ACC.PL PRP forum:ACC.SG  
 ‘After my master had bought provisions and hired cooks and these music-girls at the marked’ (Pl. *Aul.* 280–281)
- c. *nam ille quidem aut iam hic aderit, credo*  
 CNJ DEM.NOM.SG ADV CNJ ADV ADV be.present:FUT.3SG think:PRS.1SG  
*hercle, aut iam adest.*  
 By.Hercules CNJ ADV be.present:PRS.3SG  
 ‘For he, indeed, either will be here soon or, I think by Hercules, he is here already’ (Pl. *Epid.* 255)
- d. *Tam hercle certe quám ego te aut tu me vides.*  
 ADV by.Hercules surely as 1SG.NOM 2SG.ACC CNJ 2SG.NOM 1SG.ACC see:PRS.2SG  
 ‘By Hercules, as certainly as I (see) you or you see me’ (Pl. *Merc.* 186)
- e. *ut quae te cupit, eam ne spernas,*  
 CNJ REL.NOM.SG 2SG.ACC long.for:PRS.3SG DEM.ACC.SG NEG reject:PRS.SBJ.SG  
*quae per tuam nunc vitam vivit*  
 REL.NOM.SG PRP POSS.2SG.ACC.SG ADV life:ACC.SG live:PRS.3SG  
 ‘That you don’t reject her, who loves you, who now lives through your life’ (Pl. *Mil.* 1050–1051)
- f. *malum quod tibi di dabunt,*  
 mishap:ACC.SG REL.ACC.SG 2SG.DAT god:NOM.PL give:FUT.3PL  
*atque ego hodie dabo*  
 CNJ 1SG.NOM today give:FUT.1SG  
 ‘The mishap that the gods will give to you, I will give to you today’ (Pl. *Amph.* 551)
- g. *Ita di faciant, ut tu potius sis*  
 thus god:NOM.PL do:PRS.SBJ.3PL CNJ 2SG.NOM better be:PRS.SBJ.2SG  
*atque ego te ut verberem*  
 CNJ 1SG.NOM 2SG.ACC CNJ beat:IPF.SBJ.1SG  
 ‘I wish the gods would make it thus, that it rather would be you, and that I would be beating you’ (Pl. *Amph.* 380)

Taken together, these examples show that all three core arguments can be omitted under coreference in coordinated clauses; however, the conditions under which they are omitted are distinct and well defined. While omission in coordination is licenced by coreference between two or more bivalent first arguments and monovalent arguments or between two or more bivalent second arguments, co-reference between a bivalent first argument or monovalent argument and a bivalent second argument does not licence omission but instead seems to trigger explicit argument expression. From the perspective of the present paper, these observations allow us to conclude that argument omission under co-reference in coordination singles out two distinct syntactically privileged arguments under somewhat different conditions, one comprising the monovalent argument and the first bivalent argument and one comprising the second bivalent argument. Thus, this may be argued to represent a clear-cut subject property in Latin.

A further construction that is restricted to subjects in some languages is extraction, which characteristically involves relative and interrogative clauses. Here, the focus shall be restricted to relative clauses under the working hypothesis that extraction constructions underlie the same general constraints within a language. As for Latin, this assumption finds empirical support in the fact that the paradigm of the relative pronoun is largely homonymous with that of the interrogative pronoun. The examples in (21) suffice to illustrate that bivalent first argument, monovalent arguments and bivalent second arguments alike can be extracted from relative clauses. In other words, extraction shows unrestricted neutralisation in Latin and consequently does not qualify as a subject property.

- (21) a. *sed sati=ne ego animum mente sincera gero,*  
 CNJ sufficiently=PTCL 1SG.NOM wits:NOM.SG mind:ABL.SG clear:ABL.SG have:PRS.1SG  
*qui ad hunc modum haec hic quae*  
 REL.NOM.SG PRP DEM.ACC.SG way:ACC.SG DEM.ACC.PL here REL.NOM.PL  
*futura fabulor?*  
 be:FUT.PTCP.NOM.PL chat:PRS.1SG  
 ‘But do I have possession of my wits with a clear mind, who chatters in this way about these things that will come to pass?’ (Pl. *Bacch.* 509–510)
- b. *Vbi sunt isti scortatores, qui soli*  
 where be:PRS.2PL DEM.NOM.PL fornicator:NOM.PL REL.NOM.PL alone:NOM.PL  
*inviti cubant?*  
 unwilling:NOM.PL sleep:PRS.3PL  
 ‘Where are these fornicators who only unwillingly sleep alone?’ (Pl. *Amph.* 287)
- c. *Sed quis hic est, quem astantem*  
 CNJ INTERR.NOM.SG DEM.NOM.SG be:PRS.3SG REL.ACC.SG stand:PRS.PTCP.ACC.SG  
*video ante ostium?*  
 see:PRS.1SG PRP door:ACC.SG  
 ‘But who is it whom I see standing in front of the door’ (Pl. *Bacch.* 451)

A further property included in Falk’s (2006) list of subject properties is being an obligatory element. One way to interpret this notion is that it implies that clauses without a slot for monovalent and/or bivalent first arguments are defective and would not be expected to appear regularly in natural discourse. An analysis along such lines would tie in with the fact that Latin finite verbs show morphological person/number marking, which contributes to identifying the monovalent argument and/or bivalent first argument in most cases. A possible type of counterexample to this set of assumptions is constituted by clauses involving meteorological predicates which do not seem to need a referential subject in order to be grammatical and/or interpretable, as illustrated in (22a) and possibly (22b). In such cases, the verb regularly appears in the third singular form, which is also the form used in so-called impersonal sentences in Latin. On the other hand, sentences like the one cited in (22c) indicate that verbs of this semantic class are compatible with referential subjects.

- (22) a. *eodem amictus, eodem tectus esse*  
 DEM.ABL.SG wrap:PRF.PTCP.NOM.SG DEM.ABL.SG cover:PRF.PTCP.NOM.SG be:PRS.INF  
*soleo, si pluit*  
 use.to:PRS.1SG CNJ rain:PRS.3SG  
 ‘I usually am wrapped in this, covered in this if it rains’ (Pl. *Rud.* 577)
- b. *tam hoc quidem tibi in proclivi*  
 so.much DEM.NOM.SG ADV 2SG.DAT PRP steep:ABL.SG  
*quam imber est quando pluit*  
 as rain.storm:NOM.SG be:3SG.PRS when rain:PRS.3SG  
 ‘That is so steep down for you as a rainstorm is when it is raining’ (Pl. *Capt.* 336)
- c. *non aliter quam decussa pluit arbore*  
 NEG otherwise than strike.down:PRF.PTCP.ABL.SG rain:PRS.3SG tree:ABL.SG  
*nimbus vel teretis mali,*  
 rain.shower:NOM.SG CNJ round:GEN.SG apple:GEN.SG  
*vel tectae cortice glandis*  
 CNJ cover:PRF.PTCP.GEN.SG case:ABL.SG chestnut:GEN.SG  
 ‘Not otherwise than when, a tree having been struck down, a shower of round apples or of chestnuts covered in their case rains’ (Col. *Rus.* 10.1.1.364)

In view of the construction in (22c), it is tempting to suggest an analysis of (22b) where the noun *imber* ‘rainstorm’ is an unexpressed, referential subject argument of *pluit* ‘rains’. At any rate, the fact that meteorological verbs like *pluit* are compatible with an expressed subject argument, is a strong indication that verbs of this type have a subject argument slot, as also assumed by scholars like Levin & Kreici (2018) and Dahl (2020). These considerations suggest that meteorological verbs do not provide counterevidence against the general assumption that subject arguments are an obligatory clausal constituent in Latin. Specifically, they do not represent a class of verb that are semantically zerovalent but constitute a subtype of monovalent verbs. Consequently, monovalent arguments and first bivalent arguments are regarded as obligatory constituents in sentences, a property distinguishing them from bivalent second arguments, which are not.

In addition to the properties discussed so far, Falk (2006) includes two further subjecthood properties, namely that subjects tend to have “external” structural position in configurational languages, and that they show definiteness or wide scope. Regarding the former feature, Danckaert (2017a, 2017b) has made a strong case for the claim that Latin has configurational syntax and outlines a very interesting analysis of the syntactic properties of subjects and objects. Unfortunately, I cannot at present offer a full discussion and evaluation of the proposals made in Danckaert’s work, since this would take us too far afield. Suffice it to say that the analyses presented there strongly indicate that there are systematic differences in what types of structural positions are available for monovalent and bivalent first arguments, on one hand, and bivalent second arguments, on the other. These observations indicate that certain word order constellations possibly may serve to distinguish the two classes of arguments, but a more thorough exploration of this possibility will have to be undertaken elsewhere. The second feature, definiteness or wide scope, has proven impossible to operationalise in a satisfactory manner and will therefore not be further pursued at present.

Summarising the findings of the present section, I observe that the morphosyntactic features characteristic of subjects in Latin include the following:

- Verb agreement
- Passivisation
- Being the most agentive argument
- Imperative addressee
- Control constructions
- Raising constructions
- Shared argument in coordinated clauses

## – Obligatory argument

Other possible subjecthood features are the property of being the most likely covert/empty argument, which, however, is a relative rather than an absolute parameter, and the property of having external structural position. These considerations suggest that subjecthood is a rather complex notion in Latin. In the next section, I shall briefly review some pertinent comparative data from other Indo-European languages, attempting to establish whether or to what extent the Latin notion of subjecthood is inherited or not.

## 4. Comparative data from other archaic Indo-European languages

This section briefly reviews some comparative data that may contribute to clarifying to what extent the complex notion of subjecthood found in Latin has parallels in other Indo-European languages. The languages under scrutiny are Homeric Greek, Early Vedic Sanskrit, and Hittite. The discussion will focus on a selection of the subject properties established for Latin in section 3, aiming to establish whether they are inherited or not. No attempt will be made at present to provide a full-fledged analysis of the inventory of subjecthood properties in the other languages under consideration. The focus will lie on the following properties:<sup>7</sup>

- Verb agreement
- Being the most agentive argument
- Imperative addressee
- Control constructions
- Raising constructions
- Shared argument in coordinated clauses
- Obligatory argument

## 4.1 Homeric Greek

This subsection explores data from Homeric Greek, the language of the Iliad and the Odyssey. First note that verb agreement is restricted to monovalent arguments and first bivalent arguments, as illustrated by the examples in (23). These examples also illustrate that the property of being the most agentive argument is restricted to the first bivalent and the monovalent arguments.

- (23) a. *téknon*            *tí*                    *klaíeis*  
 child:VOC.SG    INTERR.PTCL    cry:PRS.2SG  
 ‘Child, why are you crying?’ (Hom. *Il.* 1.362)
- b. *Idaí’*            *étoi*            *múthon*            *Akhaiôn*            *autòs*            *akoúeis*  
 Idaeus:VOC    ADV    word:ACC.SG    Achaean:GEN.PL    self:NOM.SG    hear:PRS.2SG  
 ‘Idaeus, verily you hear the word of the Achaeans yourself’ (Hom. *Il.* 7.406)
- c. \**Idaí’*            *étoi*            *múthon*            *Akhaiôn*            *autòs*            *akoúei*  
 Idaeus:VOC    ADV    word:ACC.SG    Achaean:GEN.PL    self:NOM.SG    hear:PRS.3SG
- d. *autàr*    *Akhilleùs*            *klaíen*                    *heòn*                    *patér’*  
 CNJ    Achilles:NOM    cry:IPF.3SG                    RFL.POSS.3SG                    father:ACC.SG  
 ‘But Achilles cried over his own father’ (Hom. *Il.* 24.511)

A further, related morphosyntactic feature exclusive of this cluster of argument functions is being the addressee of imperatives, as illustrated in (24).

- (24) *all’*            *íthi*                    *mé*            *m’*            *eréthize*  
 CNJ    go:PRS.IMP.2SG    PROH    1SG.ACC    provoke:PRS.IMP.2SG  
 ‘But go! Do not provoke me!’ (Hom. *Il.* 1.32)

<sup>7</sup> Passivisation has been left out of the following discussion. This is because there is considerable variation across the languages under examination as to what types of passivisation/valency-reducing strategies that are used and it therefore seems likely that this is a language-specific subject property in Latin.



Drawing on the analysis suggested by Jøhndal (2012) for Latin, a case could be made for distinguishing between control and raising predicates on the basis of selectional restrictions in Homeric Greek as well. However, unlike in Latin, where control predicates presuppose that the controlled argument is animate and select the present infinitive, predicates of this type are only subject to the first of these constraints in Homeric Greek. Raising predicates, on the other hand, are not subject to any of these constraints in either of the languages. The examples in (25ab) illustrate that subject control predicates have an animate first argument which is co-referent with the controlled argument of the infinitive. The examples in (25cd) show that object control predicates also presuppose that the controlled argument is animate. Note also the alternate use of present and aorist infinitive forms with control predicates.

- (25) a. *houínek' egō kourēs Xruseídos aglá' ápoína*  
 CNJ 1SG.NOM girl:GEN.SG Chryseis:GEN splendid:ACC.PL price:ACC.PL  
*ouk éthelon déxasthai epei polù*  
 NEG want:IPF.1SG accept:AOR.INF CNJ much:ADV  
*bouílomai autèn oíkoi ékhein*  
 want:PRS.1SG 3SG.F.ACC at.home:ADV have:PRS.INF  
 'Therefore, I did not want to accept the splendid ransom for the girl Chryseis, since I much want to have her at homer' (Hom. *Il.* 1.112–113)
- b. *polláki gàr methieî te kai ouk ethélei ponéesthai*  
 often:ADV CNJ be.slack:PRS.3SG CNJ CNJ NEG want:PRS.3SG work.hard:PRS.INF  
 'For he is often slack and does not want to work hard' (Hom. *Il.* 10.121)
- c. *kéleai dé me ténd' apodoûnai*  
 command:PRS.2SG CNJ 1SG.ACC 3SG.F.ACC give.up:AOR.INF  
 'And you command me to give her back' (Hom. *Il.* 1.134)
- d. *oudé s' égōge líssomai heínek' emeío ménein*  
 NEG.CNJ 2SG.ACC 1SG.NOM ask:PRS.1SG because 1SG.GEN stay:PRS.INF  
 'And I don't ask you to stay for my sake' (Hom. *Il.* 1.173–174)

Examples of what may be regarded as raising constructions are given in (26). Subject raising is illustrated with the verb *méllō* 'be destined to, be likely to' in (26ab). Again, I assume that the accusative with infinitive may be analysed in terms of object raising, illustrated in (26cd).

- (26) a. *mínuntha dé kai toû Akhaioî méllon*  
 short.time:ADV CNJ CNJ DEM.GEN.SG Achaean:NOM.PL be.likely:IPF.3PL  
*apéssesthai*  
 be.absent:FUT.INF  
 'For a short time, the Achaeans were likely to be absent from there' (Hom. *Il.* 17.277–278)
- b. *mélleis gàr aphairēsesthai áethlon*  
 be.likely:PRS.2SG CNJ take.away:FUT.INF price:ACC.SG  
 'You are likely to take away the price (from me)' (Hom. *Il.* 23.544)
- c. *oukét' épeit' oíō oud' ággelon aponéesthai*  
 NEG.ADV ADV think:PRS.1SG NEG.CNJ envoy:ACC.SG depart:PRS.INF  
*ápsorron protì ástu helikthéntōn húp' Akhaiōn*  
 going.back:ACC.SG PRV city:ACC.SG rally:AOR.PTCP.GEN.PL PRP Achaean:GEN.PL  
 'I believe not even an envoi will depart going back to the city before the Achaeans when they are rallying' (Hom. *Il.* 12.73–74)
- d. *oút' émeg' Atreídēn Agamémnona peisēmen oíō*  
 NEG.CNJ 1SG.ACC son.of.Atreus:ACC Agamemnon:ACC persuade:FUT.INF think:PRS.1SG  
*oút' állois Danaoús*  
 NEG.CNJ other:ACC.PL Danaean:ACC.PL  
 'And I don't think the son of Atreus, Agamemnon, will persuade me or the other Danceans' (Hom. *Il.* 9.315–316)

The data in (25) and (26) illustrate that both control and raising constructions pick out the monovalent argument and the bivalent first argument in Homeric Greek, excluding the bivalent second argument. This fact indicates that these two classes of constructions qualify as subject properties, just as was shown to be the case in Latin.

The next construction we shall deal with in this section is omission of co-referent arguments in coordination. Here, Homeric Greek seemingly also patterns in the same manner as Latin, as illustrated by the examples in (27). Specifically, examples (27a) and (27b) show that argument omission is possible with two (or more) co-referent monovalent and/or bivalent first arguments, while example (27c) illustrates that bivalent second arguments also tend to be omitted under co-reference with another argument of the same type. The examples in (27de) indicate that the bivalent second argument may but need not be expressed when being co-referent with a monovalent argument or a bivalent first argument.

- (27) a. *órnut' ár' ex eunēiphin Odussēos philos hiòs*  
 rise:IPF.3SG ADV PRP bed:OBL.SG Odysseus:GEN beloved:NOM.SG son:NOM.SG  
*heimata hessámenos, perì dè xiphos oxù*  
 clothes:ACC.PL clothe:AOR.PTCP.NOM.SG PRP CNJ sword:ACC.SG sharp:ACC.SG  
*thét' ómōi*  
 put:AOR.MID.3SG shoulder:DAT.SG  
 'Odysseus' beloved son arose from (his) bed, having taken on his clothes he hung the sharp sword around his shoulder' (Hom. *Od.* 2.2–4)
- b. *Aías dè prōtos Telamōnios hérkos Akhaiōn*  
 Aias:NOM CNJ first:NOM.SG son.of.Telamon:NOM.SG bulwark:NOM.SG Achaeans:GEN.PL  
*Trōōn rēxe phálagga, fóōs d' hetáiroisin*  
 Troian:GEN.PL break:AOR.3SG rank:ACC.SG light:ACC.SG CNJ comrade:DAT.PL  
*étheken*  
 put:AOR.3SG  
 'Aias, son of Telamon, bulwark of the Achaeans, broke through the rank of the Trojans, and gave a light (of hope) to (his) comrades' (Hom. *Il.* 6.5–6)
- c. *all' áge diogenēs Patrōklees éxage kourēn*  
 CNJ PTCL son.of.Zeus:VOC.SG Patrocles:VOC bring.out:PRS.IMP.2SG girl:ACC.SG  
*kai sphōin dōs ágein*  
 CNJ DEM.DAT.DU give:AOR.IMP.2SG bring:PRS.IMP  
 'So come on, Patrocles, son of Zeus, bring out the girl and give her to these two to take with them' (Hom. *Il.* 1.337–338)
- d. *pàr dé hoi hestékei Sthénelos Kapanéios huiós*  
 PRV PTCL DEM.DAT.SG stand:PRF.3SG Sthenelos:NOM Kapaneus:GEN son:NOM.SG  
*kai tòn mèn neikessen idōn kreíōn*  
 CNJ DEM.ACC.SG PTCL scold:AOR.3SG see:AOR.PTCP.NOM.SG lord:NOM.SG  
*Agamémnōn*  
 Agamemnon:NOM  
 'Beside him stood Sthenelos, son of Kapaneus. When he saw him, Agamemnon scolded him' (Hom. *Il.* 4.368–369)
- e. *oudè mèn oud' hoi ánarkhoi ésan,*  
 NEG.CNJ PTCL NEG.CNJ REL.NOM.PL without.leader:NOM.PL be:IPF.3PL  
*pótheón ge mèn arkhon*  
 long.for:IPF.3PL PTCL PTCL leader:ACC.SG  
*allà Médōn kósmēsen Oilēos nótos huiós*  
 CNJ Medon:NOM marshal:AOR.3SG Oileus:GEN baseborn:NOM.SG son:NOM.SG  
*tón hr' éteken Hrégē hup' Oilēi ptolipóρθōi*  
 DEM.ACC.SG PTCL bear:AOR.3SG Hrege:NOM PRP Oileus:DAT city.sacker:NOM.SG

‘They were not without a leader, they longed for a leader. Then Medon marshalled (them), the baseborn son of Oileus. Him had Hrege born to Oileus, the sacker of cities’ (Hom. *Il.* 2.727–728)

Example (27e) is intriguing, since it seemingly demonstrates that the bivalent second argument is optionally left out when co-referent with a preceding first bivalent argument. Specifically, the context indicates that the second argument of verb *kósmēsen* ‘marshalled’ is co-referent with *hoi* ‘they’ in the immediately preceding sentence, which is the only argument of *ánarkhoi ésan* ‘were leaderless’ and the first argument of the bivalent verb *pótheon* ‘long for’. On the other hand, *tón* ‘him’ in the last sentence shows that the bivalent second argument may be explicit in the syntax in such cases. From the perspective of the present paper, the fact that the bivalent second argument may be omitted when it is co-referent with a bivalent first argument or a monovalent argument implies that it shows unrestricted neutralisation of core argument functions. Therefore, it does not qualify as a subject property in Homeric Greek.

Finally, attention should be drawn to the fact that meteorological verbs allow for an expressed argument in Homeric Greek, as illustrated in (28). As argued in the previous section, this is considered evidence of obligatoriness of subjects, following from the general observation that at least in some languages all clauses must have subjects in order to be interpretable and that clauses without subjects are defective.

(28) *húe d’ ára Zeùs sunekhés*  
 rain:IPF.3SG PTCL CNJ Zeus:NOM continuously:ADV  
 ‘And then Zeus rained continuously’ (Hom. *Il.* 12.25–26)

Thus, Homeric Greek has the following subject properties in common with Latin:

- Verb agreement
- Being the most agentive argument
- Imperative addressee
- Control constructions
- Raising constructions
- Obligatory argument

The next section examines comparative data from Early Vedic Sanskrit.

#### 4.2 Early Vedic Sanskrit

Turning now to Early Vedic Sanskrit, the language of the Rigveda, we may first note that verb agreement and highest relative agentivity seem to represent clear-cut subject properties here as well. This is illustrated by the examples in (29).

- (29) a. *ágacchad u vípratamaḥ sakhīyánn*  
 come:IPF.3SG PTCL inspired.poet:SUP.NOM.SG be.companion:PRS.PTCP.NOM.SG  
 ‘The most prominent inspired poet came, being a companion (of the Aṅgirasas)’ (RV III 31.7)
- b. *tám u tvám māyáyā avadhīr*  
 3SG.ACC PTCL 2SG.NOM sorcery:INS.SG strike:AOR.2SG  
 ‘Him you struck with (your) sorcery’ (RV I 80.7)
- c. *\*tám u tvám māyáyā avadhīt*  
 3SG.ACC PTCL 2SG.NOM sorcery:INS.SG strike:AOR.3SG

Moreover, only the monovalent argument and the bivalent first argument can serve as addressees of imperatives, as illustrated in (30).

- (30) a. *ihā gahi*  
 here come:AOR.IMP.2SG  
 ‘Come here!’ (RV V 5.9)
- b. *prā mṛñīhi śātrūn*  
 PRV crush:PRS.IMP.2SG rival:ACC.SG  
 ‘Crush the rivals’ (RV IV 4.5)

As regards control and raising constructions, they are less frequent and appear to be less grammaticalised in Early Vedic than in Early/Classical Latin and Homeric Greek. This is reflected in the fact that Early Vedic does not have a unitary infinitive category but employs various case forms from different verbal nouns in infinitival function (cf. e.g., Macdonell 1910: 407–412, Keydana 2013 for discussion). Moreover, unlike in Latin and Greek, the ‘infinitives’ in Early Vedic are indifferent to aspect and voice distinctions. Assuming that the animate controllee constraint provides a means for distinguishing control predicates from raising predicates, there seem to be some relatively clear-cut examples of control constructions in Early Vedic but few examples of raising predicates. Some examples of control constructions are given in (31), and (32) provides a probable case of raising to object.

- (31) a. *śakēma tvā samīdham*  
 be.able:AOR.OPT.1PL 2SG.ACC kindle:INF  
 ‘Might we be able to kindle you’ (RV I 94.3 after Jamison and Brereton 2014: 230)
- b. *nā asyā vaśmi vimūcam nā āvṛtam pūnar*  
 NEG DEM.ABL.SG wish:PRS.1SG release:INF NEG return:INF again  
 ‘I do not desire to be released from it[her], nor to turn back here again’ (RV V 46.1 after Jamison and Brereton 2014: 721)
- (32) *kāsya brāhmāṇi ranyatho*  
 INTERR.GEN.SG formulation:ACC.PL delight:PRS.2DU  
*vayām vām uśmasi iṣṭāye*  
 1PL.NOM 2DU.ACC wish:PRS.1PL seek:INF  
 ‘In whose formulations do you delight? We wish you to seek (ours)’ (RV V 74.3 after Jamison and Brereton 2014: 756)

Importantly, the examples in (31) indicate that control constructions show unrestricted neutralisation of core argument functions in Early Vedic. In (31a), the first argument of *śakēma* ‘we might be able’ controls the first bivalent argument of the infinitive/verbal noun *samīdham* ‘kindle’. In (31b), on the other hand, the first argument of *vaśmi* ‘wish’ controls the second argument of the infinitive/verbal nouns *vimūcam* ‘release’ and the monovalent argument of *āvṛtam* ‘return’. These facts demonstrate that control constructions do not represent a subject property in Early Vedic, at least not in the sense intended here. On the other hand, the apparent scarcity of (object) raising constructions like the one cited in (32) suggests that this did not represent a firmly established construction type in Early Vedic, a fact rendering an assessment of its role in the syntax difficult. There seem to be no examples of constructions of the raising-to-subject type.

Another subject property type under consideration is omission in coordination. This construction type essentially seems to follow the same pattern as that seen in Early/Classical Latin and Homeric Greek. The example in (33ab) illustrates that co-referent monovalent arguments and bivalent first arguments can be shared across coordinated clauses. The passage in (33c) shows that this is not the case when a monovalent or bivalent first argument is co-referent with a bivalent second argument. Example (33d) illustrates that the bivalent second argument is omissible when co-referent with another bivalent second argument.

- (33) a. *vísvo hy ànyó arír ājagāma*  
 every:NOM.SG PTCL other:NOM.SG guest:NOM.SG come:PRF.3SG  
*māma id āha śváśuro ná ā jagāma*  
 1SG.GEN PTCL PTCL father.in.law:NOM.SG NEG PRV come:PRF.3SG  
*jakṣīyād dhānā utá sómaṃ papīyāt*  
 eat:PRF.OPT.3SG roasted.grains:ACC.PL CNJ soma:ACC.SG drink:PRF.OPT.3SG  
*svāśitaḥ púnar āstaṃ jagāyāt*  
 well.fed:NOM.SG back:ADV home:ACC go:PRF.OPT.3SG  
 ‘While every other stranger has come here, only my father-in-law has not come here. He should eat the roasted grains and he should drink the soma. Well-fed he should then go home again’ (RV X 28.1 after Jamison and Brereton 2014: 1419)
- b. *sukhām rāthaṃ yuyuje śindhur aśvīnaṃ*  
 swift:ACC.SG chariot:ACC.SG yoke:PRF.MID.3SG Sindhu:NOM with.horses:ACC.SG  
*téna vājam sanīśad asmīnn ājau*  
 DEM.INS.SG prize:ACC.SG win:AOR.SBJ.3SG DEM.LOC.SG contest:LOC.SG  
 ‘Sindhu has yoked her own well-naved, horsed chariot; with it she will gain the prize in this contest here’ (RV X 75.9 after Jamison and Brereton 2014: 1505)
- d. *tām pṛcchatā śá jagāmā śá veda*  
 DEM.ACC.SG ask:PRS.IMP.2PL DEM.NOM.SG come:PRF.3SG DEM.NOM.SG know:PRF.3SG  
 ‘Ask him, he has come, he knows’ (RV I 145.1 after Jamison and Brereton 2014: 322)
- d. *pībā sómaṃ rarimā te mādāya*  
 drink:PRS.IMP.2SG soma:ACC.SG give:PRF.1PL 2sg.dat exhilaration:DAT.SG  
 ‘Drink the soma. We have given it to you for your exhilaration’ (RV III 32.2 after Jamison and Brereton 2014: 512)

Finally, we note that there is evidence that obligatoriness also is a subject property in Early Vedic, as indicated by examples like (34).

- (34) *yát te abhrāśya vidyúto divó vārṣanti vṛṣṭáyaḥ*  
 CNJ 2SG.DAT darkness:GEN.SG lightning:NOM.PL heaven:GEN.SG rain:PRS.3PL rain:NOM.PL  
 ‘When the lightning bolts of the dark and the rains of heaven rain for you’ (RV V 84.3)

The data presented in this section show that Early Vedic only shows a subset of the subjecthood properties found in Latin which overlaps with the properties seen in Homeric Greek. Specifically, the following features are attested:

- Verb agreement
- Being the most agentive argument
- Imperative addressee
- Shared argument in coordinated clauses
- Obligatoriness

These facts raise intriguing problems regarding which, if any, subject properties in these languages may be regarded as inherited and how the different language-specific systems have come into being. However, before turning to a discussion of these and related issues, I shall briefly review comparative data from Hittite.

### 4.3 Hittite

In Hittite, finite verb agreement, highest relative agentivity, and being the addressee of imperatives are constructions picking out the monovalent and bivalent first arguments, excluding the bivalent second argument. Consider, by way of illustration, the examples in (35) and (36).

- (35) a. *ūk anda paimi*  
 1SG.NOM ADV go:PRS.1SG  
 ‘I go inside’ (KBo 17.2 i 9, CTH 416)
- b. *išgarandan ūk kuin harmi*  
 attached:ACC.SG 1SG.NOM REL.ACC.SG hold:PRS.1SG  
 ‘The attached that I hold’ (KBo 17.1 iii 28, CTH 416)
- c. *\*išgarandan ūk kuin harzi*  
 attached:ACC.SG 1SG.NOM REL.ACC.SG hold:PRS.3SG
- (36) a. *INA KUR<sup>HUR.SAG</sup> Zippaslā ēš*  
 PRP land Zippaslā.mountains sit:IMP.2SG  
 ‘Settle down in the land of the Zippaslā-mountains’ (KUB 14.1 vs. 16, CTH 147)
- b. *ammukk=a=za=pa anda ēp lē=mu*  
 1SG.ACC=CONN=REFL=PTCL ADV take:IMP.2SG PROH=1SG.ACC  
*genzuwaiši*  
 spare:PRS.2SG  
 ‘Take me for yourself! Do not spare me!’ (KBo 3.7 iii 29, CTH 321.A)

Hittite has a well-established infinitive category, which, among other things, is employed in constructions involving control and/or raising.<sup>8</sup> Consider the examples in (37) and (38), representing control and raising, respectively.<sup>9</sup>

- (37) a. *UR.MAH-aš=za tarwauwanzi UL memmai*  
 lion-NOM.SG=RFL dance:INF NEG refuse:PRS.3SG  
 ‘The lion does not refuse to dance’ (KUB 12.62 Vs. 12–13, CTH 338)
- b. <sup>1</sup>*Madduwattaš=a=z KUR<sup>HUR.SAG</sup> Hāriyati ašānna mimmaš*  
 Maduwatta:NOM=PTCL=RFL land mountain.Hāriyati sit:INF refuse:PRT.3SG  
 ‘Maduwatta refused to settle in the mountain land of Hāriyati’ (KUB 14.1 Vs. 18, CTH 147)
- c. *hāriyaš=za appānna memmai*  
 valley:NOM.SG=RFL seize:INF refuse:PRS.3SG  
 ‘The valley refuses to be seized’ (KUB 12.62 Rs. 4–5, CTH 338)
- (38) a. *nu mahḥan memiyauwanzi zinnai*  
 CONN ADV speak:INF finish:PRS.3SG  
 ‘When he finishes speaking’ (KUB 33.106 ii 10–11)
- b. *mahḥan=ma=za halkueššar ḥandāuwanzi zinnāi*  
 ADV=CONN=REFL material:NOM/ACC.SG prepare:INF finish:PRS.3SG  
 ‘When he finishes preparing the materials (for the festival) (...)’ (KUB 27.59 i 23–24, CTH 691.1 after Hoffner and Melchert 2008: 335)
- c. *nu māḥḥan ŠA GAL<sup>HIA</sup> waršiyaš memiyanieš*  
 CONN when of cups soothing:GEN.SG word:NOM.PL  
*ḥurlili memiyawanzi zinnandari*  
 Hurrian speak:INF finish:PRS.3PL

<sup>8</sup> At present, available evidence for a principled delimitation of control and raising constructions in Hittite is too scarce to allow for distinguishing between object control and raising-to-object constructions. The following discussion is therefore limited to subject control and subject raising constructions.

<sup>9</sup> Since *memmai* ‘refuse’ presupposes an animate argument, while *zinnai* ‘finish’ does not, a case could be made for the claim that the former represents a control predicate and the latter represents a raising predicate, given what has been said earlier in this paper. However, since we have only considered a limited amount of data, the evidence for drawing a principled distinction between control and raising predicates in Hittite is admittedly rather limited but Lyutikova and Sidelstev (2021) provide an insightful analysis of pertinent data. More detailed research is a desideratum here but will have to be undertaken elsewhere.

‘When they finish speaking in Hurrian the words of soothing the cups’, lit. ‘when the words of soothing the cups are finished to be spoken’ (KUB 29.8 obv. i 1–2, CTH 777. Tf10.2A after Lyutikova and Sideltsev 2021: 3)

These data are intriguing because they appear to reveal an important difference between control and raising predicates in Hittite. As demonstrated in (37), the control predicate *memmai* ‘deny’ may select any of the core argument functions as the controlled argument of the infinitive, either the monovalent argument (37a), the bivalent first argument (37b) or the bivalent second argument (37c). In other words, so-called subject control constructions show unrestricted neutralisation of core arguments and, consequently, do not qualify as a subject property. The data in (38), on the other hand, indicate that raising constructions make a formal distinction, in selecting a matrix predicate in the default active voice when the controlled argument of the infinitive is a monovalent (38a) or bivalent first argument (38b), and a matrix predicate in the mediopassive voice when the controlled argument is a bivalent second argument (38c) (cf. also Lyutikova and Sideltsev 2021). Thus, raising constructions clearly represent an environment where the cluster comprising the monovalent and the first bivalent arguments is singled out *vis-à-vis* the second bivalent argument, representing a clear-cut subject property in Hittite.

The next construction type under consideration here is argument omission under coordination. The examples in (39ab) illustrate that Hittite follows the same pattern as Early/Classical Latin and Vedic Sanskrit regarding monovalent and bivalent first arguments. Examples (39cd) illustrate that a bivalent second argument that is co-referent with a bivalent first argument or a monovalent argument cannot be omitted in the syntax.

- (39) a. *nu=mu*                      <sup>m</sup>*Nuwanzaš*                      GAL.GEŠTIN                      EN.MEŠ-*ya*  
 CONN=1SG.ACC Nuwaranza:NOM chief.of.wine:NOM.SG lord:NOM.PL-and  
*hūmanteš*    *INA*<sup>URU</sup>*Tegaramma*    *mēnaḥḥanda uēr*  
 all:NOM.PL    in city.of.Tegaramma to                      come:PRT.3PL  
*nu=mu*                      *anda*                      *wemiēr*  
 CONN=1SG.ACC PRV                      find:PRT.3PL  
 ‘N. the Chief of the Wine and all the lords came to (meet) me in T. and found me there’  
 (KBo 4.4 iii 20–22, CTH 61.II.5.B)
- b. *n=at=za=kan išši=šši*    *dāi*  
 CONN=3SG.ACC=PTCL mouth:DAT.SG=3SG.DAT                      put:PRS.3SG  
*ekuzi=ya*                      *3-ŠU*  
 drink:PRS.3SG=CNJ                      thrice  
 ‘He puts it in his mouth and drinks thrice’ (KUB 7.5 ii 12–13)
- c. *nu*    *mān*    *kūš*                      *lingāuš*                      *paḥḥašduma*  
 CONN PTCL                      DEM.ACC.PL                      oath:ACC.PL                      protect:PRS.2PL  
*šumāš=a*                      DINGIR.MEŠ-eš                      *paḥšandaru*  
 2PL.ACC=CNJ                      god:NOM.PL                      protect:IMP.3PL  
 ‘If you keep these oaths, the gods will protect you’ (KBo 8.35 ii 14–15)
- d. *namma=aš*    *maḥḥan*    EGIR-*pa*    *paizzi*                      *n=an=mu=kan*  
 ADV=3SG.NOM    when                      back                      come:PRS.3SG    CONN=3SG.ACC=1SG.ACC=PTCL  
*duḡān*    *parā*    *nai*  
 ADV                      ADV                      send:IMP.2SG  
 ‘When he comes back, send him to me’ (Mšt. 75/63/HKM 66: 31–32)

These data show that omission under coreference distinguishes the monovalent argument and the bivalent first argument, which adhere to one pattern, from the bivalent second argument, which follows a different pattern. Thus, I conclude that this represents a clear-cut subject property in Hittite.

Finally, we note that Hittite also shows clear evidence for a subject slot with meteorological verbs, which in the present context is taken to provide evidence in favour of the assumption that subjects are obligatory. Consider the example in (40).

- (40)  $\text{<sup>D</sup>IM-š=a}$  *titha*  
Storm.god-NOM=CNJ thunder:PRS.3SG  
'The storm god thunders' (KBo 17.11 i 25, *dupl.* KBo 30.25, CTH 631)

The evidence reviewed in this section allows for concluding that Hittite shares the following subject properties with Latin:

- Verb agreement
- Being the most agentive argument
- Imperative addressee
- Raising constructions
- Shared argument in coordinated clauses
- Obligatory argument

The next section explores how the data presented in this and previous sections can be interpreted diachronically.

### 5. Aspects of the Diachrony of Subjecthood in Indo-European

In the previous sections we have seen that the following constructions represent clear-cut subject properties in all the languages considered here.

- Verb agreement
- Being the most agentive argument
- Imperative addressee
- Obligatory argument

The fact that these constructions are ubiquitous in our material allows for regarding them as inherited across the board and thus reconstructible for the common proto-language from which Latin, Homeric Greek, Vedic Sanskrit, and Hittite descend. According to a recent model outlined by Melchert (2014) and adopted by Dahl (2022), three prehistoric stages can be reconstructed for the Indo-European linguistic family, Core Indo-European (Core IE), Proto-Indo-European (PIE) and pre-Proto-Indo-European (pre-PIE). This model is based on the relatively uncontroversial assumption that the Anatolian branch, to which Hittite belongs, originates from the variety spoken by a group of speakers that left the Indo-European speech community at an early stage. Furthermore, it presupposes that at least some of the features found in the other branches but not in Anatolian represent innovations that took place after the latter branched off. PIE is defined as the common prestage of all branches of Indo-European including Anatolian, whereas Core IE represents the common prestage of all the branches except Anatolian. Pre-PIE, on the other hand, is the oldest reconstructible prestage of Indo-European, being accessible via internal reconstruction. A schematic representation of the various stages of Indo-European is given in Figure 2, where the branches to which the languages under discussion belong are given in boldface. This model allows for some further hypotheses, for instance that verb agreement, being the most agentive argument, being the addressee of imperatives and obligatoriness were subjecthood properties already in PIE and were inherited as such in Core IE. These findings are in themselves neither surprising nor very exciting. For one thing, the formal agreement patterns of verbs show considerable correspondence across the Indo-European languages, a fact that was recognised very early and lies at the heart of Indo-European comparative philology. Moreover, relative agentivity and being the addressee of imperatives are extremely common across languages to the extent that they may be regarded as universal or quasi-universal features of subjects. Similar observations probably apply to obligatoriness but this needs further investigation. So, the positive findings are only moderately impressive. What is far more interesting, is the fact that only these four features can be reconstructed for PIE with certainty, which implies that the other subject properties under consideration have devel-



oped secondarily, possibly on branch- or language-specific level. Let us now explore this problem in somewhat more detail, examining the different subjecthood features that have been the subject of our investigation one by one.

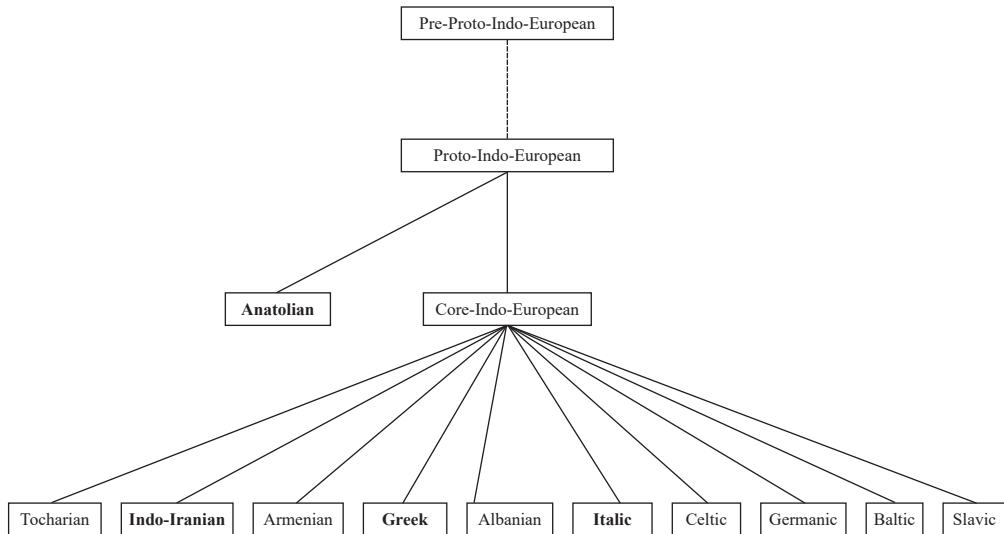


Figure 2. Chronological Stages of Indo-European

Control constructions represent subjecthood properties in Early/Classical Latin (Italic) and Homeric Greek (Greek) but neither in Vedic (Indo-Iranian) nor in Hittite (Anatolian). As we have seen, control constructions show unrestricted neutralisation of core argument functions in the latter two languages, suggesting that such constructions did not represent subject properties in PIE or Core IE. This, in turn, implies that the restriction of the controlled argument of the infinitive to the monovalent argument and the bivalent first argument is a secondary development on language-specific level in Latin and Greek. Several considerations speak in favour of this conclusion. First, no unitary infinitive category can be reconstructed for Core IE or PIE. According to traditional lore, the various ‘infinitives’ found across the Indo-European branches derive from various case forms of different types of deverbal nouns, a process which, as already noted, was still ongoing in Early Vedic Sanskrit. Second, although this does not seem to have been explored in detail, analogous observations apply to the reconstruction of control predicates, which seem to have developed on branch- or language-specific level. These considerations render the existence of control constructions with infinitives at Core IE or PIE level most unlikely. Third, it seems reasonable to connect the restricted neutralisation of the controlled argument of the infinitive seen in Latin and Greek to the existence of mediopassive infinitives in these languages, a feature reflecting the rather advanced development of infinitive morphosyntax seen in these branches. Thus, one may hypothesise that the rise of specialised infinitive forms with a salient passive reading made the inherited unrestricted neutralisation of the controlled argument of the infinitive obsolete, enhancing the grammaticalisation of control constructions as subject features in these languages. This applies to subject and object control constructions alike.

Raising constructions, on the other hand, present us with an intriguingly different picture. We have seen that constructions of this kind represent subject properties in Early/Classical Latin, Homeric Greek, and Hittite but seemingly not in Early Vedic Sanskrit. *Prima facie*, a likely hypothesis would be that raising constructions were part of the PIE inventory of subjecthood properties and that this construction type was somehow lost in Indo-Iranian as reflected in Early Vedic Sanskrit. Under this

hypothesis, the few attested examples of raising constructions found in the Rigveda would seem to represent archaic relics on a par with other archaisms in its poetic language. However, there are several reasons that a hypothesis along such lines is dubious. First, as just mentioned, the reconstruction of an infinitive category for PIE and even Core IE is problematic, a fact apparently precluding the possibility of reconstructing a raising construction for any prehistoric stage. It is not clear that this counterargument is conclusive, however, since it is not given that the development or existence of raising constructions is as dependent upon the availability of infinitive constructions as control constructions are. For instance, assuming that raising constructions represent a subtype of predicative constructions, it would hardly be surprising if raising constructions in some cases involved verbal adjectives rather than verbal nouns/infinitives and one might hypothesise that this was the case in PIE and that this morphosyntactic strategy was substituted by infinitival constructions secondarily at branch- or language-specific level. Under this hypothesis, the scarce evidence for (object) raising constructions found in Early Vedic might be interpreted as emerging constructions that never made it to full grammaticalisation, thus representing a failed change, that is, a change petering out before reaching its full potential. This is in sharp contrast to the extremely prolific fate of the accusative with infinitive construction in Latin and Greek. Another, perhaps more detrimental counterargument against the proposed scenario concerns the fact that there is a non-negligible difference between the construction type found in Hittite and the type found in Latin and Greek. In both cases, voice marking plays a pivotal role, being the key morphological feature ensuring the status of the constructions as subject features. However, in the Hittite construction, voice marking appears on the matrix verb, whereas the locus of voice marking in Latin and Greek is the embedded infinitive. These facts imply that the raising constructions in Hittite, Latin and Greek cannot derive from a common prehistorical source. Since raising constructions are, at best, marginal in Early Vedic Sanskrit, and arguably result from secondary developments in Latin and Greek, it is highly questionable whether this construction type was established in Core IE. This fact has important repercussions for the reconstruction of this construction, since it precludes the possibility that raising constructions of the type found in Latin and Greek are inherited. Presumably, then, we are dealing with secondary, language-specific developments.

Omission under coreference in coordination seemingly qualifies as a subject property in Early/Classical Latin, Vedic Sanskrit and Hittite but not in Homeric Greek. In this case, the simplest hypothesis is that this feature was a subject property in PIE and Core IE and that it developed unrestricted neutralisation of core argument functions in Homeric Greek. Here, I wish to emphasize that the present account is based on a rather limited amount of data and that a more detailed corpus study is needed to establish whether omission under coreference consistently follows the restrictions outlined in this paper in the languages where it seems to be a subject property. Therefore, these findings are rather preliminary, and the problem will have to be explored in more details elsewhere.

## 6. Concluding remarks

In this paper, we have explored the morphosyntax of subjecthood in Old/Classical Latin and attempted to establish to what extent the inventory of subject properties found there represents inheritance or results from language-internal developments. Drawing on the discussion in Falk (2006), we examined the behaviour of several constructions that are characteristic of subjects across languages. The central criterion for being classified as a subject property is that a construction singles out the single argument of monovalent verbs and the first argument of bivalent verbs. This delimitation allowed for defining the following constructions as subject properties in Latin:

- Verb agreement
- Passivisation
- Being the most agentive argument
- Imperative addressee
- Control constructions

- Raising constructions
- Shared argument in coordinated clauses
- Obligatory argument

Focusing on a subset of these properties, we examined comparative data from Homeric Greek, Early Vedic Sanskrit, and Hittite and found that only four of them can be reconstructed for Core IE and PIE, namely verb agreement, being the most agentive argument, being the addressee of imperatives and obligatoriness. The other properties show different distribution patterns, but arguments were provided in favour of assuming that control and raising constructions developed into subject properties at language-specific level. As regards the feature of sharing arguments across coordinated clauses, data presented here suggest that this may be an inherited subjecthood feature which has changed to a more general construction in Homeric Greek. Since the present discussion of omission under coordination was based on a limited amount of evidence, more detailed and systematic corpus research is a desideratum. Although some of these findings are preliminary, I hope to have shown that the present framework represents a fruitful approach to comparative-historical syntax in the spirit of Berthold Delbrück.

### Abbreviations

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- Hom. Od.: Homerus, *Odyssea*. Recognovit P. von der Mühl, München, Saur, 2005 [1945]
- Luc. Civ. M. Annaeus Lucanus *De Bello Civili libri decem*, ed. C. H. Weise, Lipsiae, Quedlinburg. 1835.
- Pl. Amph.: T. Maccius Plautus, *Amphitruo*, in *T. Macci Plauti Comoediae. Tomus I*, ed. W. M. Lindsay, Oxford, Clarendon, 1904.
- Pl. As.: T. Maccius Plautus, *Asinaria*, in *T. Macci Plauti Comoediae. Tomus I*, ed. W. M. Lindsay, Oxford, Clarendon, 1904.
- Pl. Aul.: T. Maccius Plautus, *Aulularia*, in *T. Macci Plauti Comoediae. Tomus I*, ed. W. M. Lindsay, Oxford, Clarendon, 1904.
- Pl. Bacch.: T. Maccius Plautus, *Bacchides*, in *T. Macci Plauti Comoediae. Tomus I*, ed. W. M. Lindsay, Oxford, Clarendon, 1904.
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- Pl. Most.: T. Maccius Plautus, *Mostellaria*, in *T. Macci Plauti Comoediae. Tomus II*, ed. W. M. Lindsay, Oxford, Clarendon, 1905.

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