

## 7. Alternating constructions with *mittō* 'send': the encoding of third arguments

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Some Latin ditransitive verbs of physical transfer (e.g. *dō* 'give', *mittō* 'send') feature construction alternation: animate third arguments (i.e. recipient-like arguments) can be expressed either by the dative case or by an allative prepositional phrase with *ad* and the accusative. This paper investigates argument structure and alternations of the Latin verb *mittō* 'send', focusing on the encodings of recipient-like arguments, with a corpus-based approach. My analysis of a sample of ditransitive constructions shows that construction alternation of *mittō* 'send' can be motivated by considering variables taken into account in typologically-oriented studies. I argue that the distribution of the encodings of recipient-like arguments can be related to: (i) animacy of theme arguments; (ii) semantic roles of third arguments (e.g. animate directions vs. concrete recipients); (iii) degree of affectedness of third arguments.

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### 1. Introduction

The issue of ditransitive constructions has been at the centre of linguistic research, in different theoretical frameworks (s. Haspelmath 2015 for a review of previous studies). Ditransitive verbs show high construction variability both cross-linguistically and intra-linguistically. Scholars have also devoted attention to Latin ditransitives (e.g. Baños 1998, 2000; Fedriani & Prandi 2014; Napoli 2018, among others). A group of Latin ditransitives has been acknowledged to alternate in the expression of the third argument (i.e. the recipient-like argument) since Early Latin (s. Bennett 1914; Baños 1996, 1998; Luraghi 2010; Adams 2013; Fedriani & Prandi 2014; Pinkster 2015; Adams & de Melo 2016; Napoli 2018). The third argument might be encoded by either the dative case or the allative prepositional phrase (PP) with *ad*

and the accusative (*ad* + ACC). Although several studies have looked at these verbs (e.g. among others Fedriani & Prandi 2014; Adams & de Melo 2016), the factors motivating this construction alternation have not yet been fully explored. To further investigate this topic, in this paper I examine the argument structure and the alternations of the Latin ditransitive verb *mittō* 'send' with a corpus-based approach. My analysis follows Goldberg's (1995, 2006) constructionist approach to argument structure within a usage-based perspective (s. Perek 2015). Argument structures are constructions «pairing an abstract event description containing an array of arguments, with a specification of the morphosyntactic encoding of these arguments» (Perek 2015: 24). Constructions exist independently of particular verbs, that is, they themselves carry meaning independently from the lexical items (i.e. verbs and their arguments) instantiating them (Goldberg 1995). Alternations arise when a verb is compatible with more than one construction and result in variations in number and coding patterns of the arguments (Goldberg 2006).<sup>95</sup> The main goal of this paper is to describe and propose motivation for construction alternation with *mittō* 'send' considering parameters taken into account in typologically-oriented studies, such as animacy, semantic roles and affectedness (see e.g. among others, Haspelmath 2007; Kittilä 2008; Malchukov *et al.* 2010).

The paper is structured as follows. Section 2 provides theoretical remarks concerning the definition of a ditransitive construction and the encodings of its arguments. Section 3 is focused on the ditransitive construction of the Latin verb *mittō* 'send' and on previous studies investigating its construction alternation. In Section 4 I discuss the methodology, describing the corpus, data extraction, and annotation. In Section 5 I show the results of my analysis, which are discussed in Section 6. Finally, in Section 7 I summarize my findings and suggest directions for future research.

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<sup>95</sup> See Ježek (*this volume*, Chapter 2, section 3) for a survey of approaches to the semantic classification of verbs based on verb alternations.

## 2. Ditransitive constructions: definition and types of alignment

In the typological framework, ditransitive constructions are regarded as constructions «consisting of a (ditransitive) verb, an agent argument (A), a recipient-like argument (R), and a theme argument (T)» (Malchukov *et al.* 2010: 2; see also Korn & Malchukov 2018). Such a definition, making reference to the semantics rather than to the syntactic properties of the construction, is cross-linguistically tenable.<sup>96</sup> According to Malchukov *et al.* (2010: 2) prototypically<sup>97</sup> ditransitive constructions «contain a verb of physical transfer (e.g. 'give', 'hand') and describe a scene in which A causes an object to pass into the possession of an animate receiver (= recipient)» (see also Goldberg 1995; Newman 1996; Kittilä 2006; Haspelmath 2015). An example of a prototypical ditransitive construction of the verb 'give' is shown in (1).

- (1) *Mary gave John a pen.*  
 A                      R            T

From a semantic perspective, participants of prototypically ditransitive events differ in terms of (i) animacy; (ii) volition/control properties. While the A and the R are animate, typically instantiated by human referents, the T is low in animacy. The A and the R are characterized by high control and volition over the verbal process: the A volitionally causes the transfer of the T, which the R is supposed to accept willingly. Denoting an inanimate entity, the T does not exert any control over the event: in this sense it is similar to a patient (P) of a monotransitive construction. However, the T is less affected than the P by the verbal process, as it undergoes a change of location rather than a change of state (on the scalar notion of transitivity

<sup>96</sup> As ditransitive verbs show high construction variability both cross-linguistically and intra-linguistically, syntactically-based definitions are not cross-linguistically applicable (Malchukov *et al.* 2010). However, some theoretical frameworks adopt definitions based upon formal properties. In traditional English studies (e.g. Goldberg 1995, 2006; Levin & Rappaport Hovav 2005) the term ditransitive refers to a double object construction (e.g. *John sent Mary a letter*), in contrast to a prepositional construction (e.g. *John sent a letter to Mary*).

<sup>97</sup> A prototypical view of categories is borrowed from Cognitive Linguistics and goes back to Rosch's (1975) experimental studies in Cognitive Psychology.

s. Hopper & Thompson 1980; Tsunoda 1981, 1985). Some verbs of physical transfer (e.g. 'bring' and 'send') can be constructed with non-prototypical T and R arguments. Consider examples (2)–(3).

(2) *Mary brought his son to the grandmother.*  
 A                      T            R

(3) *Mary sent a letter to Rome.*  
 A                      T            R

In example (2) containing 'bring', the T argument has a human referent. In example (3) instead, the verb 'send' expresses the transfer of the T towards a place, bearing the semantic role of direction, i.e. the endpoint of a trajectory (Luraghi 2010, 2011). The semantic roles of recipients and directions are distinguished based on (i) animacy and (ii) presence/absence of the feature of possession. A recipient is typically animate and, as a result of a transfer event, gains possession or control over the T. A direction, instead, is typically inanimate and is not characterized by the feature of possession (see Kittilä & Ylikoski 2011 for a comprehensive view).

A closely related type of construction is the benefactive construction. In many languages benefactive constructions are expressed as ditransitive constructions (Malchukov *et al.* 2010). Beneficiaries and/or maleficiaries are participants that are, advantageously or not, affected by an event without being its obligatory participants (Zúñiga & Kittilä 2010: 2). Recipients and beneficiaries have some properties in common, as recipients usually benefit from the transfer of the T. However, reception is not a necessary feature of beneficiaries (see Kittilä 2005 and Zúñiga & Kittilä 2010 for further details). The most salient difference between these two semantic roles is that only beneficiaries occur with intransitive verbs (Malchukov *et al.* 2010: 2).

Ditransitive constructions represent the core of three-argument constructions (Malchukov *et al.* 2010). The argumenthood of the third participant (R) of some ditransitives (e.g. 'send') is controversial. The argument/adjunct distinction, especially with spatial constituents, is not clear-cut and benefits from a scalar approach (s. Haspelmath 2014; Haspelmath & Hartmann 2015). According to Kittilä (2006) events expressed by the verbs 'give' and 'send', despite inherently involving three participants, differ in respect to the prominence accorded to these participants. An event of 'giving' is completed only if the R has accepted the transfer of the T. In contrast, an event of 'sending' can be considered completed even if the R

has not received the T. As highlighted by Kittilä (2006: 56), Rs «may even be completely unaware of the event, and (they) may refuse to accept the transfer». Whereas an event of giving is conceptualized as a whole, with the three participants activated simultaneously, an event of sending consists of two phases, which can be separated by a temporal interval. Moreover, the A and the R of an event of giving are physically implied, as the T is directly handed over to the R (Newman 1996; Kittilä 2006). Such a condition does not apply to an event of 'sending'. The lexical semantics of 'send' entails a motion component: the A and the R are not physically implied, and the transfer of the T requires a means of transportation.

Differences in the encodings of the three arguments of ditransitive events are captured by the notion of alignment (s. Malchukov *et al.* 2010; Haspelmath 2011; Haspelmath 2015). In ditransitive constructions whereas the A is always treated as the subject of prototypical monotransitive constructions, differences arise in terms of the alignment of the coding of T and R arguments, that is, «whether it is the R or the T of a ditransitive clause that is coded like the P of monotransitive clauses» (Haspelmath 2015: 22). The resulting basic alignment types are: (i) indirective alignment, if the R is treated differently from the P and the T ( $T = P \neq R$ ), (ii) secundative alignment, if the T is treated differently from the P and the R ( $T \neq P = R$ ), and (iii) neutral alignment: if the T, the R, and the P are encoded in the same way ( $T=P=R$ ). Besides the three basic alignment types mentioned, languages often show splits and alternations (Malchukov *et al.* 2010: 18-20). According to Malchukov *et al.* (2010: 18) «a lexical split is the situation where different verbs use different constructions, while an alternation is the situation where one and the same verb occur with different constructions with roughly the same meaning». The choice between alternating constructions can be conditioned by several factors, such as affectedness of R-like arguments and prominence (i.e. animacy/topicality) of T arguments (s. Haspelmath 2007: 83–85; Malchukov *et al.* 2010: 20–21).

### 3. The ditransitive construction of the Latin verb *mittō* ‘send’

#### 3.1. Argument structure and alternations of *mittō* ‘send’

Like other Latin verbs of physical transfer (e.g. *dō* ‘give’ and *ferō* ‘bring’), *mittō* ‘send’ features an indirective alignment (for a typological approach towards Latin ditransitives, see Napoli 2018). Whereas the A and the T are encoded as the A and the P of a prototypical monotransitive construction, marked with the nominative and accusative cases, respectively, the R is expressed differently, allowing for both case marking and prepositional constructions. The animacy of Rs implies a split in the coding patterns (Luraghi 2010; Pinkster 2015; see also Kittilä 2008, 2022 on differential marking of Rs more in general). Inanimate Rs are expressed with direction PPs: *ad* + ACC (s. (4)); *in* + accusative (*in* + ACC), (s. (5)).

- (4) *meretrices ... ad portum mittunt seruos ancillulas*  
 prostitute:NOM.PL to harbour:ACC.SG send:PRS.3PL slave:ACC.PL slave\_girl:ACC.PL  
 ‘Prostitutes ... send slaves and slave girls to the harbour.’ (Plaut. *Men.* 338–339)<sup>98</sup>
- (5) *nunc hinc parasitum in Cariam misi meum ...*  
 now hence parasite:ACC.SG in Caria:ACC.SG send:PRF.1SG POSS.ACC.SG  
 ‘Now I sent off my parasite to Caria ...’ (Plaut. *Curc.* 67)

The preposition *in* implies containment: the T moves towards a destination, and eventually it will occupy a portion of the space of the landmark (s. Luraghi 2011). However, the allative PP: *ad* + ACC instead, does not entail the spatial coincidence of the T with its final destination. The latter also expresses directions with animate referents, as in example (6) containing the two-place verb of motion *eō* ‘go’ (s. Luraghi 2011: 218; see also example (7) and the discussion in section 6.2).

<sup>98</sup> Glosses follow the Leipzig Glossing Rules (Bickel *et al.* 2015) with some adjustments. On verbs mood is specified only if not indicative, and voice is indicated if not active; on nouns gender is not indicated unless it is relevant to the discussion. Abbreviations for authors and works quoted follow the *Thesaurus Linguae Latinae* (TLL; <https://thesaurus.badw.de/en/tll-digital/index/a.html>). The full list of abbreviations is shown in Appendix. Examples provide the Loeb translations with some adjustments made by the author.

- (6) *ego ibo ad fratrem*  
 1SG.NOM go:FUT.1SG to brother:ACC.SG  
 'I will go to (my) brother...' (Plaut. *Capt.* 126)

Prototypical landmarks (city names, names of small islands, and the word *domus* 'home') require less morphological coding and occur in plain accusative (see Luraghi 2011 on Latin; Haspelmath 2019 more in general).

Animate Rs are encoded either with the allative PP: *ad* + ACC (example (7)) or with the dative case (example (8)).

- (7) ... [*ad Pistoclerum meum sodalem*]<sub>R</sub> [*litteras*]<sub>T</sub> *misi*  
 to Pistoclerus:ACC.SG POSS.ACC.SG friend:ACC.SG letter:ACC.PL send:PRF.1SG  
 'I sent letters to my friend Pistoclerus.' (Plaut. *Bacch.* 389-390)

- (8) [*epistulam*]<sub>T</sub> [*Lucceio*]<sub>R</sub> *quam misi*  
 letter:ACC.SG Lucceius:DAT.SG REL.ACC.SG send:PRF.1SG  
 'The letter that I sent to Lucceius ...' (Cic. *Att.* 4.6.4)

In many Indo-European languages the prepositionless dative consistently encodes animate participants encompassing different semantic roles. In Latin the dative marks the third argument of transfer verbs such as *dō* 'give' (i.e. a recipient) and the third argument of communication verbs such as *dicō* 'say' (i.e. an addressee). As an adverbial, the dative case most frequently expresses the roles of beneficiaries and/or maleficiaries (Blake 1994; Luraghi 2010; see also Fedriani & Prandi 2014: 574-578 for a comprehensive account of the Dative role complex).

Passivization in ditransitive constructions often follows the same alignment of encoding (Malchukov *et al.* 2010: 28). Latin ditransitives with indirective alignment display indirective passivization (s. Napoli 2018). As stated by Napoli (2018: 78) «the argument which is passivized invariably corresponds to the direct object, i.e. to the T, whereas the R, if expressed, is retained as a dative». The alternation between dative and *ad* + ACC in the encoding of Rs is also attested in the passive voice. Take as an example the sentence in (9) containing a passive form of *mittō* 'send' and an R argument in the dative case.

- (9) *liber tibi mittetur*  
 book:NOM.SG 2SG.DAT send:FUT.PASS.3SG  
 'The book will be sent to you ...' (Cic. *Att.* 1.13.5)

It is debated whether the third participant of *mittō* 'send' should be considered part of the argument structure or whether it should be better viewed as an adjunct (e.g. Pinkster 2015). This issue raises interesting questions, which, however, will not be addressed in detail in this paper.

### 3.2. Previous proposals for accounting for the alternation in the encoding of Rs

Latin ditransitive verbs have been studied from a synchronic perspective (see Baños 1998, 2000 on Classical Latin; Sznajder 2012 on the Vulgate; Fedriani 2020 on Merovingian Latin) and within a typologically-oriented approach (s. Napoli 2018). A smaller number of studies have investigated Latin ditransitives in diachrony (s. Fedriani & Prandi 2014; Adams & de Melo 2016; for a comprehensive account on previous studies see also Fedriani & Napoli 2020). The alternation between dative and *ad* + ACC in the encoding of Rs has been attested with transfer verbs (e.g. *dō* 'give', *ferō* 'bring') and communication verbs (e.g. *dicō* 'say', *nuntiō* 'announce') since Early Latin (s. Bennett 1914; Palmer 1988; Baños 1996, 1998; Luraghi 2010; Adams 2013; Fedriani & Prandi 2014; Pinkster 2015; Adams & de Melo 2016; Napoli 2018). According to Lindsay (1907: 20), the constructions with dative Rs and with *ad* + ACC Rs of the verb *dō* 'give' are equivalent. In Plautus, the use of *ad* + ACC instead of the standard dative case is seen as a colloquial trait foreshadowing Romance development. In fact, modern Romance languages continue the prepositional construction (s. Fedriani & Prandi 2014; Adams & de Melo 2016). In Late Latin, *ad* + ACC was increasingly used to express Rs of transfer and communication verbs. The prepositional construction gradually replaces the dative, «taking over all of its uses in Romance languages» (Fedriani & Prandi 2014: 567; see also e.g. Maiden 1996; Zamboni 2000; Napoli 2020). Other scholars acknowledge that transfer verbs have different meanings if used in different constructions (Adams 2013; Fedriani & Prandi 2014; Adams & de Melo 2016). The dative case is used when recipients are in the presence of the sender, whereas *ad* + ACC implies motion over a distance (Adams 2013; Fedriani & Prandi 2014; Adams & de Melo 2016). Pinkster (1990) argues that the PP: *ad* + ACC have been extended to the expression of the third argument (the addressee) of communication events, according to the conduit metaphor (see Reddy 1979 and 'information transfer' in Luraghi 2016), which conceives of words and messages as objects moving during an act of communication. Similarly, Fedriani & Prandi (2014: 596) suggest

that the «gradual spread of the prepositional strategy is diachronically motivated by a metaphorical projection of the Goal onto the Recipient and the Addressee». Luraghi (2010) examined construction alternation of *mittō* 'send' considering referential properties (e.g. animacy) and semantic roles of arguments. She observed that in Caesar's and Cicero's corpora Rs are more often encoded with *ad* + ACC when Ts have human referents. The alternation is related to a difference in the semantic roles of Rs: recipients are marked by the dative, while directions are expressed with *ad* + ACC. Finally, Pinkster (1990) explains construction alternation with *mittō* 'send' making reference to the argumenthood of Rs. He argues that when *mittō* 'send' is constructed as a three-place verb, Rs are marked with the dative. Instead, when it is constructed as a two-place verb, Rs are optional adjuncts taking the PP: *ad* + ACC.

#### 4. Data and methodology

As previously mentioned, the main goal of this work is to describe the construction alternation of *mittō* 'send' with a corpus-based approach. With this purpose, I selected a sample of texts that ranges from Plautus (3rd century BCE) to the Vulgate (5th century CE). The corpus comprises the Latin texts in the PROIEL treebank (Haug & Jøhndal 2008) and in the Ancient Greek and Latin Dependency Treebank (AGLDT; Bamman & Crane 2006), available in the Universal Dependencies (UD) version (de Marneffe *et al.* 2021), as well as the Plautus' corpus. The Latin data in the PROIEL treebank and in the AGLDT include texts from Classical Latin (ca. 90 BCE – 14 CE), and Late Latin (ca. 200 CE – ca. 600 CE). The Plautus' corpus is one of the chief sources of Early Latin (ca. 240 BCE – ca. 90 BCE).<sup>99</sup>

The sample includes different textual genres showing aspects of diastratic and diaphasic variation (s. Palmer 1988; Poccetti *et al.* 1999; Cuzzolin & Haverling 2009; Clackson 2011). In regard to the former, Plautus' comedies have features of Latin spoken at around 200 BCE, which seem to represent a low linguistic variety (Cuzzolin & Haverling 2009: 31). Regarding the latter, Cicero's letters provide evidence of «the language of everyday conversation of the educated élite in Rome» (Cuzzolin & Haverling 2009: 33). Scholars

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<sup>99</sup> See e.g. Cuzzolin & Haverling (2009) on the periodization of the Latin language.

have pointed out differences between the Latin Cicero uses in his letters and that in his more formal writings, assuming that «some such features in his letters represent the informal variety» (Cuzzolin & Haverling 2009: 33). Late Latin is mostly represented by Jerome's Vulgate. Regarding the Latin language of the Vulgate, it is worth mentioning the contact with Greek and Hebrew sources (see Luraghi & Cuzzolin 2007 on contact-induced phenomena in the early translations of the Gospels and Sznajder 2012 on verbs of saying in the Vulgate).

Considering a diachronic sample comprising different textual genres allows to test Luraghi's (2010) predictions on construction alternation of *mittō* 'send' (see section 3.2), against a larger and more diversified corpus. Moreover, this study could give some insights on the evolution of the ditransitive construction of *mittō* 'send' over the different stages of Latin. Even though I will provide some data regarding the distribution of the two constructions (ad + ACC vs. dative), a systematic diachronic account of the constructional variation of *mittō* 'send' falls beyond the scope of this work.

First, I collected all the occurrences of the lemma *mittō* 'send' in the sample of texts. The occurrences of *mittō* 'send' in Plautus' corpus were extracted with the online resource *Perseus*.<sup>100</sup> As to the texts in the treebanks, I automatically extracted the occurrences of *mittō* 'send' constructed with an object argument in the accusative and an argument expressed either by the dative or by the PP: ad + ACC, using *Udeasy*, a tool for querying treebanks in CoNLL-U format (Brigada Villa 2022). Secondly, after having revised the sample, I manually extracted all the ditransitive constructions of *mittō* 'send' with animate third arguments (Rs). I considered finite and non-finite verb forms (i.e. participles and infinitives in predicative function) taking R arguments expressed either by the dative or by ad + ACC. The final sample resulted in 157 instances of *mittō* 'send' constructed ditransitively with animate Rs, in the following texts: Plautus' comedies (53x), Caesar's *Commentarii belli Gallici* (42x), Cicero's *Epistulae ad Atticum* (32x), Sallust's *In Catilinam* (1x), and Jerome's Vulgate (29x). This sample comprises texts of Early Latin (the Plautus' comedies), Classical Latin (Caesar's *Commentarii belli Gallici*, Cicero's *Epistulae ad Atticum* and Sallust's *In Catilinam*), and Late Latin (Jerome's Vulgate) stages.

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<sup>100</sup> The Perseus resource (Crane 2022) is available at <http://www.perseus.tufts.edu/hopper/>.

The ditransitive constructions, together with their contexts of occurrence, have been examined qualitatively. For each construction I focused on the morphosyntactic encoding of Rs (i.e. dative vs. *ad* + ACC) and on the animacy of the T arguments. Regarding the latter, I considered whether each T argument denotes an animate or an inanimate entity. Some quantitative data are provided to give a picture of (i) the distribution of the two constructions in the corpus and (ii) the distribution of the two constructions according to the animacy of T arguments.

## 5. Results

In this Section I show the results of my analysis, which are extensively discussed in Section 6. Consider first the overall distribution of the coding patterns of animate R arguments in my sample.

Table 1. Distribution of the encodings of R arguments in different stages of Latin.

	Dative	<i>ad</i> + ACC	Total
Early Latin	19 (35.8%)	34 (64.2%)	53 (100%)
Classical Latin	15 (20%)	60 (80%)	75 (100%)
Late Latin	6 (20.7%)	23 (79.3%)	29 (100%)
<i>Overall</i>	40 (25.5%)	117 (74.5%)	157 (100%)

As seen in Table 1, R arguments are more frequently encoded with the PP: *ad* + ACC, rather than with the dative case. Out of 157 total occurrences, 117 (74.5%) of Rs are expressed with the PP and 40 (25.5%) of Rs are marked datively. Let us now compare the distributions of the encodings of Rs in the different periods of Latin.

The distributions of encodings in Early Latin, Classical Latin and Late Latin (s. Table 1), show that the prepositional construction is always preferred. In Early Latin, Rs encoded with *ad* + ACC represent 64.2% of the occurrences (34 out of 53), while the dative Rs represent 38.5% of the occurrences (19 out of 53). In Classical and Late Latin, the percentage of dative Rs is still lower: 20% in Classical Latin (15x out of 75) and 20.7% in Late Latin (6x out of 29). Rs with *ad* + ACC, instead, represent 80% of the

occurrences (60 out of 76) in the Classical Latin corpus and 79.3% of the occurrences in the Late Latin corpus (23 out of 29).

It can be pointed out that the percentage of dative Rs decreases from Early to Late Latin. However, dative Rs do not disappear in Late Latin: they occur in similar percentages in Classical Latin and Late Latin. I argue that the survival of the dative pattern is not surprising. Literary texts from late periods do not show much evidence of syntactic changes, as «the written form remained strongly influenced by the language in the literary classics from the Late Republic and the Early Empire» (Cuzzolin & Haverling 2009: 34). As already mentioned, the influences of Hebrew and Greek passages (s. Luraghi & Cuzzolin 2007) should also be taken into account when dealing with the Vulgate's language. These aspects have not been investigated in the present study and should be addressed in future research.

Secondly, consider the overall distribution of the coding patterns of R arguments according to the animacy of T arguments.

Table 2. Encodings of Rs co-occurring with animate/inanimate Ts.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	12 (7.6%)	90 (57.3%)	102 (65%)
<i>Inanimate Ts</i>	28 (17.83%)	27 (17.2%)	55 (35%)
	40 (25.5%)	117 (74.5%)	157 (100%)

As we can see from Table 2, animate Ts more frequently co-occur with Rs encoded by the PP: *ad* + ACC, rather than with dative Rs. Out of 102 instances containing an animate T, Rs are marked with the dative only 12 times (7.6%), while they are expressed with *ad* + ACC 90 times (57.3%). Inanimate Ts instead, co-occur with Rs encoded either by the dative or by *ad* + ACC in similar percentages. Out of 55 instances containing an inanimate T, Rs are marked with the dative 28 times (17.83%), while they are expressed with *ad* + ACC 27 times (17.2%). Let us now compare the distributions of the encodings of Rs according to the animacy of Ts in Early Latin, Classical Latin, and Late Latin.

Table 3. Encodings of Rs co-occurring with animate/inanimate Ts in Early Latin.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	1 (1.9%)	27 (50.9%)	28 (52.8%)
<i>Inanimate Ts</i>	18 (34%)	7 (13.2%)	25 (47.2%)
	19 (35.9%)	34 (64.1%)	53 (100%)

Table 4. Encodings of Rs co-occurring with animate/inanimate Ts in Classical Latin.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	8 (10.7%)	40 (53.3%)	48 (64%)
<i>Inanimate Ts</i>	7 (9.3%)	20 (26.7%)	27 (36%)
	15 (20%)	60 (80%)	75 (100%)

Table 5. Encodings of Rs co-occurring with animate/inanimate Ts in Late Latin.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	3 (10.3%)	23 (79.4%)	26 (89.7%)
<i>Inanimate Ts</i>	3 (10.3%)	0 (0%)	3 (10.3%)
	6 (20.6%)	23 (79.4%)	29 (100%)

As we can see from Table 3, Table 4, and Table 5, in Early, Classical, and Late Latin, the pattern regarding Rs occurring with animate Ts reflects the general tendency: animate Ts are more frequently found with Rs encoded with *ad* + ACC: 50.9% (27 out of 28 occurrences) in Early Latin, 53.3% (40 out of 48x) in Classical Latin and 89.7% (23 out of 26x) in Late Latin. More interesting is the figure concerning inanimate Ts. Whereas in Early and Late Latin inanimate Ts combine more frequently with dative Rs, in Classical Latin inanimate Ts combine more frequently with Rs prepositionally constructed. In Early Latin, out of a total of 25 occurrences, 18 (34%) of inanimate Ts are marked with the dative, whereas only 7 (13.2%) are encoded with the PP: *ad* + ACC. Moreover, inanimate Ts with *ad* + ACC Rs are not found in the Vulgate (s. Table 5). In contrast, in Classical Latin, out of a total of 27 occurrences, 20 (26.7%) of inanimate Ts are encoded with *ad* + ACC, whereas 7 (9.3%) are marked with the dative.

## 6. Discussion

In this section I discuss the results displayed in section 5, focusing on three parameters: (i) animacy of T arguments, (ii) semantic roles of R arguments, and (iii) affectedness of R arguments. To further elaborate on these issues, I provide examples of ditransitive constructions of *mittō* 'send' from my corpus.

### 6.1. Animacy of T arguments

Matching previous findings in the literature (e.g. Luraghi 2010; see also Napoli 2018: 79–84), my sample of occurrences has confirmed that animate Ts tend to co-occur with Rs encoded by the PP: *ad* + ACC. This figure is clear in all the stages of Latin. Consider the sentence in example (10).

- (10) *legatos*            *ad Dumnorigem*    *Haeduum*            *mittunt*  
 deputy.ACC.PL   to Dumnorix:ACC.SG   Aeduan:ACC.SG   send.PRS.3PL  
 '(The Helvetii) send deputies to Dumnorix the Aeduan.' (Caes. *Gall.* 1.9.2)

In (10) the T is expressed by a noun with an indefinite specific human referent. Deputies, messengers, and servants are typical examples of animate Ts co-occurring with Rs encoded with *ad* + ACC. Different animate Ts are found with *ad* + ACC Rs: first- and second-person pronouns (i.e. speech act participants), third-person pronouns, proper nouns, and common (human) nouns (on animacy-hierarchies see e.g. Comrie 1989 and Croft 1990).<sup>101</sup> In my sample, first- and second-person pronouns in the T function never co-occur with Rs marked with the dative. If the T is a first- or second-person pronoun, the R is always expressed by *ad* + ACC (s. (11)).

- (11) *meus*            *gnatus*            *[me]<sub>T</sub>*            *[ad te]<sub>R</sub>*            *misit*  
 POSS.NOM.SG   son:NOM.SG   1SG.ACC   to   2SG.ACC   send:PRF.3SG  
 'My son sent me to you.' (Plaut. *Trin.* 442)

<sup>101</sup> Different types of animacy-hierarchies have been proposed in the literature. I quote here the extended animacy hierarchy: first/second-person pronouns < third-person pronoun < proper names < human common noun < nonhuman animate common noun < inanimate common noun (s. Silverstein 1976; Dixon 1979: 85; Croft 1990: 30).

This pattern has cross-linguistic parallels in modern Romance languages (e.g. French and Italian). In such languages, combinations of bound pronouns are disfavoured when T is a first- or second-person pronoun (see Haspelmath 2004, 2007 on the ditransitive person-role constraint). Consider examples in (12) from French.

French (Haspelmath 2004: 2)

- (12) a. *Agnès me la présentera*  
 Agnès 1SG.DAT 3SG.ACC.F introduce:FUT.3SG  
 'Agnès will introduce her to me.'
- b. \**Agnès me lui présentera*  
 Agnès 1SG.ACC 3SG.DAT.F introduce:FUT.3SG  
 'Agnès will introduce me to her.'
- c. *Agnès me présentera à elle.*  
 Agnès 1SG.ACC introduce:FUT.3SG to 3SG.F  
 'Agnès will introduce me to her.'

In French, a construction with two bound pronouns is possible if the T is a third-person pronoun and the R is a first- or second-person pronoun (example 12a). Different combinations of pronouns (e.g. T as a first-person pronoun and R as a third-person pronoun) result in the ungrammaticality of the sentence (example 12b). When the T referentially outranks the R, the latter is prepositionally constructed (example 12c). In my sample, when the T is a pronoun (including third-person pronouns) and the R is a nominal expression (proper or common nouns), the latter is most often encoded by *ad* + ACC. Out of 21 combinations of pronouns, Rs are expressed with *ad* + ACC 18 times. This finding suggests that the higher the T is in animacy, the more likely the R is to be prepositionally constructed. These predictions are interesting, but need to be pursued further with additional data.

In my sample inanimate nominal themes occur in similar percentages with Rs encoded either with the dative or with *ad* + ACC. However, these percentages differ if we consider Early Latin or Classical and Late Latin. While in Early and Late Latin, inanimate nouns are more frequently found with dative R arguments, in Classical Latin, the pattern is reversed. Regarding Classical Latin, we can consider in Table 6 and Table 7 the encodings of Rs co-occurring with animate/inanimate Ts in Caesar's and Cicero's corpora respectively.

Table 6. Encodings of Rs co-occurring with animate/inanimate Ts in Caesar.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	7 (16.7%)	34 (81%)	41 (97.6%)
<i>Inanimate Ts</i>	0 (0%)	1 (2.4%)	1 (2.4%)
	7 (16.7%)	35 (83.3%)	42 (100%)

Table 7. Encodings of Rs co-occurring with animate/inanimate Ts in Cicero.

	Dative	<i>ad</i> + ACC	Total
<i>Animate Ts</i>	1 (3.1%)	5 (15.6%)	6 (18.7%)
<i>Inanimate Ts</i>	7 (21.9%)	19 (59.4%)	26 (81.3%)
	8 (25%)	24 (75%)	32 (100%)

As we can see from Table 6, in Cesar's corpus, the verb *mittō* 'send' is always found with animate Ts (except for one occurrence of an inanimate T). In fact, in Caesar's *Commentarii belli Gallici* *mittō* 'send' is used in contexts where human beings (mostly deputies and delegations) are sent to other human beings (mostly generals; s. (10)). The Rs of animate Ts are encoded by the PP: *ad* + ACC (regarding the occurrences of animate Ts with dative Rs see later, this section). What is interesting is that in Cicero's corpus (i.e. *Epistulae ad Atticum*), inanimate Ts are more frequently found with Rs prepositionally constructed (s. Table 7). Out of 26 occurrences, 19 (59.4%) of inanimate Ts are encoded by the PP, *ad* + ACC, whereas only 7 (21.9%) are marked with the dative.<sup>102</sup>

Moreover, to better understand the figure of inanimate Ts in Latin stages, it is worth to examine more closely the referents from a semantic point of view, together with the contexts of occurrences. Inanimate nominal themes denoting entities generally considered beneficial, such as gifts or sums of money (see *munus* 'gift' in Plaut. *Pseud.* 781, *anulus* 'ring' in Plaut. *Curc.* 656 and *pecunia* 'money' in Vulg. *Matth.* 25.27) occur only with dative

<sup>102</sup> As an anonymous reviewer pointed out, it might be interesting to compare the distribution of the two constructions (*ad* + ACC vs. dative) in Cicero's letters with the distribution of the two constructions in more formal writings (e.g. orations). This comparison could help to assess if the preference for the prepositional construction is a feature of Cicero's informal texts, such as the letters.

R arguments (s. Baños 1996; Fedriani & Prandi 2014: 582). Also consider example (13):

- (13) ... *qui*            ***mihi***            *munera*            *mittunt*  
 REL.NOM.PL    1SG.DAT        gift:ACC.PL    send:PRS.3PL  
 'Those who send me gifts...' (Plaut. *Mil Gl.* 710)

Only in one case is a T denoting a gift found with a prepositional R (s. Plaut. *Truc* 589). Abstract entities are attested only with dative Rs (s. Fedriani & Prandi 2014: 582). Consider, for instance, the passage in (14) taken from the Vulgate, where the verb *mittō* 'send' is used with a non-literal meaning and it is combined with an abstract noun.

- (14) *ideo*            *mittit*            ***illis***            *Deus*            *operationem erroris* ...  
 therefore send:PRS.3SG DEM.DAT.PL God:NOM.SG work:ACC.SG mistake:GEN.SG  
 'And for this reason, God shall send them strong delusion.'  
 (Vulg. *II Thess.* 2.11)<sup>103</sup>

The dative is consistently found in collocations or *formulae*, such as in the expression *mittere salutem alicui* 'to send greetings to someone' (see (15), and also Plaut. *Pseud.* 41–43).<sup>104</sup>

- (15) *manu*            *salutem*            *mittunt*            *bene*            ***volentibus***  
 hand:ABL.SG greeting:ACC.SG send:PRS.3PL well wish:PTCP.PRS.DAT.PL  
 'With their hand they send greetings to their well-wishers.' (Plaut. *Pseud.* 1005)

Fedriani (2020: 74) found the analogous greeting formula with a dative R, *alicui salutem mittere (in Domino)* 'to send greetings to someone (in the name of God)', in Merovingian Latin, and regards it as an «archaizing crystallized pattern». Dative Rs are also found in collocations with specific Ts such as *auxilia* 'auxiliary troops' and *copia* 'troops' (see *auxilia* in Caes.

<sup>103</sup> It can be noted that the correspondent Greek passage has the dative of the third-person pronoun *αὐτός*. Regarding the Greek and Semitic influences on the encoding of the addressee of verbs of saying, see Sznajder (2012).

<sup>104</sup> According to reference dictionaries (e.g. the Lewis-Short Dictionary available at the *Perseus Digital Library*; <http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.04.0059>), the noun *salus* 'health' is attested in various *formulae* of greetings in combinations with different verbs (e.g. *dicō* 'say'). Moreover, these *formulae* are often found at the beginning of letters (e.g. in the headings of Cicero's letters).

*Gall.* 6.32.1 and *copia* in *Caes. Gall.* 7.5.3). In military contexts (e.g. in the passages of Caesar's *Commentarii belli Gallici*) the expression *mittere auxilia alicui* 'to send auxiliary troops to someone' occurs very frequently. Also consider example (16):

- (16) *quod auxilia ...Treveris miserant*  
 that auxiliary:ACC.PL Treveri:DAT.PL send:PPF.3PL  
 'That (the Germans) had sent auxiliaries to (or: for) the Treveri...'  
 (*Caes. Gall.* 6.9.1)

Finally, inanimate nouns denoting objects of communication events, such as letters, poems, writings, and messages (e.g. *littera*, *epistula* 'letter', *scriptum* 'writing', *nuntius* 'message') show the high construction variation, as they occur with Rs expressed either in the dative or with *ad* + ACC in similar proportions (see Fedriani & Prandi 2014, and section 6.2.)

## 6.2. Semantic roles of R arguments

Rs are encoded with *ad* + ACC when they are not in the presence of the sender and Ts are transported across space (Adams 2013: 279, Fedriani & Prandi 2014; see also the caused-motion construction in Goldberg 2006). Rs expressed with *ad* + ACC can be conceived as (animate) directions, since they can be «metonymically viewed as places where animate participants reside» (Kittilä 2014: 171; see also Fedriani & Prandi 2014: 580). In example (10), deputies are sent to the headquarters of Dumnorix, the Aeduan general. In some contexts, a direction reading of Rs is corroborated by the co-occurrence with spatial constituents, such as direction or source constituents. In Latin the source is encoded with prepositions *ex*, *ab*, and *de* and the ablative. With city names, names of small islands, and sometimes names of countries, the source can be expressed with the plain ablative (s. Luraghi 2010: 32; Pinkster 2015). Consider examples (17) and (18):

- (17) *...te in Alidem mittam ad patrem*  
 2SG.ACC in Elis:ACC.SG send:SBJV.PRS.1SG to father:ACC.SG  
 '(It was arranged that) I send you to Elis, to (my) father.' (Plaut. *Capt.* 379)

- (18) *quas ad te Thessalonica misit*  
 REL.ACC.PL to 2SG.ACC Thessalonica:ABL.SG send:PRF.3SG  
 '(In regard to the letters) that he sent you from Thessalonica.' (Cic. *Att.* 1.17.4)

The R is combined with a direction constituent expressed by *ad* + ACC in example (17) and with a source constituent marked by a prepositionless ablative in example (18). The dative marks Rs conceived as (concretely) receiving the theme after a dispatchment, i.e. prototypical recipients. In contexts such as example (19), the verb *mittō* 'send' expresses a prototypical event of transfer: (i) the T is an inanimate concrete entity, (ii) the dispatching of the T implies a transfer of its possession/control properties towards a R, and (iii) the R is high in animacy and control/volition.

- (19) *quae mihi antea signa misisti ...*  
 REL.ACC.PL 1SG.DAT earlier statue:ACC.PL send.PRF.2SG  
 'The statues that you sent me earlier ...' (Cic. *Att.* 1.4.3)

In sentence (19), *mittō* 'send' is used in a sense similar to 'give': the initiation of the event and its completion are construed as a single event with the three participants activated at the same time (Kittilä 2006).

In some contexts, the two constructions might be used to disambiguate between semantic roles.

- (20) *Cato ad me litteras misit*  
 Cato:NOM.SG to 1SG.ACC letter:ACC.PL send:PRF.3SG  
 'Cato sent me the letters.' (Cic. *Att.* 7.1.17)

- (21) *litteras quas ad Pompeium scripsi tibi misi*  
 letter:ACC.PL REL.ACC.PL to Pompey:ACC.SG  
 write:PRF.1SG 2SG.DAT send:PRF.1SG  
 'I sent you the letters that I wrote to Pompey'. (Cic. *Att.* 3.8.3)

In (20) *ad* + ACC marks the endpoint of the event of dispatching. In (21) the dative encodes the argument to whom the T will be handed over, whereas *ad* + ACC encodes the addressee of the event of writing (s. Martín Rodríguez 1991: 97; Adams 2013: 280; Fedriani & Prandi 2014: 583–584). In other languages, direction markers are also used to express targets of communication events, i.e. addressees (on which see the metaphor of the transfer of information in Reddy 1979, Luraghi 2016).

Ts similar from a semantic point of view (especially in writings and letters) are found with Rs marked differently. Compare examples (22) and (23).

- (22) *poemata ... ad me mittas*  
 poem:ACC.PL to 1SG.ACC send:SBJV.PRS.2SG  
 '(I wish) you would send me (any) poems ...' (Cic. *Att.* 1.16.18)
- (23) *... illa scripta mittebam tibi*  
 DEM.ACC.PL writing:ACC.PL send:IMPF.1SG 2SG.DAT  
 '...(When) I sent you those writings.' (Plaut. *Epid.* 138)

When the third argument is both the endpoint and the recipient of the event, the two constructions are considered interchangeable (Adams & de Melo 2016: 94). The choice of one construction rather than the other might depend on the intention to highlight one facet of the meaning of the verb: the *ad* + ACC construction highlights the movement of T whereas the dative construction highlights the reception of the T. The use of *ad* + ACC to express true recipients is motivated by a «metaphorical mapping featuring the recipient as if it was a metaphorical goal» (Fedriani & Prandi 2014: 590).

### 6.3. Other parameters: affectedness of R arguments

Another parameter that might contribute to the alternation between dative and *ad* + ACC is the affectedness of the R. As already mentioned, dative Rs are found in contexts of prototypical transfer events. These Rs are highly affected by the events as they become possessors of the received T (see examples (13) and (19), for instance). Dative recipients also make some use of the T, so that the transfer event positively (or negatively) affects them. In contrast, Rs encoded with *ad* + ACC are less affected by a transfer event because they do not gain possession/control of the T. They are not supposed to make use of the T either, as they might be unaware of the transfer and even refuse to accept it (Kittilä 2006). The affectedness of Rs might be related to the inherent temporal nature of the transfer. Prototypical transfer events with dative recipients are (generally) permanent as they are conceived as more resultative and as more focused on the completion of the event (the phase of reception of the T) rather than on its initiation (the phase of movement of the T; cf. Kittilä 2007). The permanent nature of the event is particularly evident when the T transferred is a gift. Transfer events with *ad* + ACC Rs are often temporary, instead, because they are conceived less as resultative and more as focused on the initiation of the event (the movement of T) rather than on its completion (Kittilä 2007). In a related fashion, Daniel

(2014: 225-226) argues that in some East Caucasian languages temporary Rs feature an allative marking, while permanent Rs are datively-marked.

The affectedness of Rs can also be considered in non-prototypically transfer events. Consider example (24). (24)

- (24) *tempestatem* *Neptunus ...* *nobis* *misit ...*  
 storm:ACC.SG Neptune:NOM.SG 1PL.DAT send:PRF.3SG  
 '(Immortal gods), what a storm Neptune sent us (last night)!' (Plaut. *Rud.* 83-84)

Despite not being the recipient of a prototypical transfer event, the R in (24) is marked with the dative case. This R is characterized by a high degree of affectedness, as it can be conceived of as the maleficiary of the event. Nevertheless, the presence of the dative in (24) is not surprising, as the T is an inanimate entity.

I suggest that the affectedness of the R could explain instances contradicting the tendencies observed. Consider example (25):

- (25) *et* *tibi* *ego* *misit* *mulierem*  
 and 2SG.DAT 1SG.NOM send:PRF.1SG girl:ACC.SG  
 'And I sent you the girl...' (Plaut. *Asin.* 171)

Differently from what was observed in most cases, in (25) a human T occurs with a R in the dative. In this passage taken from the *Asinaria*, Clereeta is speaking with Diabolus, who is infatuated with her daughter. Clereeta claims that she has sent her daughter to Diabolus, to fulfil his sexual desires, in exchange for money.<sup>105</sup> I argue that, in such contexts, the dative might be used to stress the high involvement of the R in the event. The transfer event is focused on its final phase (the reception of the T) and the R "benefits from the T received". In brief, in my sample the dative marks Rs which make use of the T transferred, or that are affected in some way by a transfer event (physical or more figurative as in examples (24) and (25)).

<sup>105</sup> The rest of the passage is quoted here. Plaut. *Asin.* 172: *pari datum hostimentum est, opera pro pecunia*. 'A fair return has been given for a fair price, service for money.'

## 7. Conclusion

In this paper I have examined argument structures and alternations of the Latin ditransitive verb of physical transfer *mittō* 'send'. I have focused on the alternation between the dative and the PP: *ad* + ACC in the encoding of animate Rs. I tried to describe and explain this alternation by considering variables taken into account in the typological literature (e.g. Haspelmath 2007; Kittilä 2008; Malchukov *et al.* 2010), and in previous studies concerned with argument alternations of Latin ditransitives (Fedriani & Prandi 2014; Napoli 2018). I have also based my predictions on corpus data. This preliminary analysis led to promising results regarding three dimensions: (i) animacy of T arguments; (ii) semantic roles of R arguments, and (iii) affectedness of R arguments.

- i. Whereas animate Ts consistently co-occur with Rs encoded by the PP: *ad* + ACC (s. Luraghi 2010), inanimate Ts are constructed either with dative or *ad* + ACC Rs in similar percentages. In Early Latin, however, inanimate Ts are more frequently attested with dative Rs. Moreover, in Late Latin inanimate Ts are never found with Rs prepositionally constructed. To better understand this pattern, I looked at inanimate Ts to see if some types of referents were related to construction alternations. I argue that the animacy of the T plays a role in the construction alternation of R arguments. I suggest that the default encoding of Rs occurring with animate Ts is the PP: *ad* + ACC and that the default marking of inanimate Ts is the dative case. However, inanimate Ts allow for a prepositional construction of Rs under some circumstances. For instance, the Rs of objects of communication of events (e.g. letters and writings), being both the endpoint and the concrete recipient of the transfer, are frequently encoded with *ad* + ACC. Nevertheless, the hypothesis that a differential marking of R arguments is based upon the animacy of the T should be tested with other ditransitives, to determine whether it is independent of the lexical semantics of the verb (i.e. the motion component entailed by a verb such as *mittō* 'send').
- ii. Differences in the semantic roles of R-like arguments are mirrored in the alternating use of the plain dative and of *ad* + ACC: the former marks (true) recipients; the latter marks (animate) directions (Adams & de Melo 2016).
- iii. Whereas the dative marks highly affected R arguments, the PP: *ad* + ACC encodes less affected R arguments. The dative is frequently attested with Rs that make use of the Ts transferred (e.g. in combinations with nouns denoting gifts).

Further corpus-based investigations are needed to deepen our understanding of construction alternation with Latin transfer verbs. In regard to referential properties, it would be interesting to more closely examine construction alternation with Ts that are high in animacy (e.g. first- and second-person pronouns). As animacy, affectedness, and semantic roles are closely interrelated, it would be important to consider the interplay of these three factors to better account for the construction alternation of the transfer verb *mittō* 'send'. Parameters not addressed here, such as the pragmatic properties of T and R arguments and constituent order, should be investigated as well. Besides typologically-related variables, aspects concerning the genre(s) and the chronological period(s) of the texts included in the sample, should also be taken into account. Considering a sample with different textual types might help to understand whether one variant is tied to a particular genre. For instance, the high presence of Rs prepositionally constructed might be a colloquial feature typical of Cicero's letters that is avoided in more formal texts. Enlarging the sample with Cicero's more formal texts, such as the orations, could shed light on this aspect. Finally, the diachronic dimension should be further investigated in order to increase our understanding of the evolution of the two constructions from Early Latin to Romance (s. Fedriani & Prandi 2014; Fedriani & Napoli 2020).

## Appendix

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### Abbreviations

1	first person
2	second person
3	third person
A	agent argument
ABL	ablative
ACC	accusative
DAT	dative
DEM	demonstrative
F	feminine

FUT	future
GEN	genitive
IMPF	imperfect
NOM	nominative
P	patient argument
PASS	passive
PL	plural
POSS	possessive
PP	prepositional phrase
PPF	pluperfect
PRF	perfect
PRS	present
PTCP	participle
R	recipient-like argument
REL	relative pronoun
SBJV	subjunctive
SG	singular
T	theme argument

### **Authors and works quoted in the examples**

Asin.	Asinaria
Att.	Epistulae ad Atticum
Bacch.	Bacchides
Caes.	Caesar
Capt.	Captivi
Cic.	Cicero
Curc.	Curculio
Gall.	Commentarii belli Gallici
Epid.	Epidicus
Matth.	Evangelium sec. Matth(a)eum
Men.	Menaechmi
Mil. Gl.	Miles Gloriosus
Plaut.	Plautus
Pseud.	Pseudolus
Rud.	Rudens
Trin.	Trinummus
Truc.	Truculentus
Vulg.	biblia sacra iuxta vulgatam versionem
I. II Thess.	Pauli epistulae ad Thessalonicenses

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