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#### Abstract

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# Psychological Verbs as a vulnerable syntactic domain. A comparative study of Latin and Italian 

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## Psychological Verbs as a vulnerable syntactic domain. A comparative study of Latin and Italian


#### Abstract

So-called psychological verbs such as temere 'fear', preoccupare 'worry', and piacere 'like' denote a particular state that involves an experiencer and a second role taker that causes, initiates or is related to the psychological state. They present an extremely varied argument structure across languages, that arranges these two roles in apparently inverted hierarchies and assigns them different grammatical functions (subject, direct, indirect and prepositional objects). This paper aims to provide a descriptively adequate taxonomy of psych-verbs in Latin in a comparative perspective with Italian. We individuate seven classes of psych-verbs and show that they distribute across the transitive, unergative, unaccusative pattern with the possibility of externalizing either argument, therefore creating three "direct" and three "inverted" classes. The seventh class is impersonal, with no external argument. We show that the diachronic variation and apparent idiosyncrasies displayed by some verbs can be explained by the proposal that the seven classes are potentially available to all psych-roots. For this reason, psych-verbs present a high degree of vulnerability in language contact and change which results in intra-language optionality and diachronic variation.


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## 1. Introduction

Psychological verbs denote a particular state that involves an Experiencer and a second argument that causes, initiates or is related to the psychological state. This has been defined either as Theme (Belletti and Rizzi 1988, Grimshaw 1990), or Stimulus (Talmy 1985), or Target (Dowty 1991, Pesetsky 1995), capturing different properties that characterise it. Both Experiencer and Stimulus present complex semantic features. On the one hand, Experiencer is the semantic role of an entity which experiences or undergoes the effect of an action (or an event) and for this reason, it is more similar to a Patient than to an Agent although it is prototipically [+ human], on the other hand, Stimulus elicits or accelerates a psychological state or condition so it is more similar to an Agent than to a Patient although it is prototipically [-human] (a.o. Lehmann 1991, Croft 1993, Smith 1993, Pustet 2015, Dik 1997. Cf. Dahl and Fedriani 2012 for an overview).

The particular semantic status of the two roles has consequences on their syntactic configurations. As a matter of fact, Experiential predicates are less transitive than agentive predicates (a.o. Hopper and Thompson 1980, Dixon and Aikhenvald 2009, Shibatani 2009).

Furthermore, they present an extremely varied argument structure that arranges these two roles in different, in some cases apparently inverted orders and assigns them different grammatical functions (subject, direct object, indirect and prepositional objects).

The literature of the last three decades (a.o. Perlmutter and Postal 1984, Rosen 1984, Grimshaw 1990, Pustejovsky 1991, Pesetsky 1995, White 2003, Levin and Rappaport Hovav 2005, Borer 2005, Ramchand 2008) has aimed to capture the alignment of thematic roles and syntactic structure. In so doing, it has focused on the fear/frighten-dichotomy exemplified in (1) where the two transitive verbs display apparently opposite alignments crosslinguistically: fear has a subject Experiencer (henceforth SE) and an object Stimulus (OS); frighten has an 'inverted' structure in the sense of Bossong (1998) with a subject Stimulus (SS) and an object Experiencer (OE). The symbol " "" indicates the relative order of the two arguments:

| (1)a. Mary fears conflicts | $\mathrm{SE}>\mathrm{OS}$ |
| ---: | :--- |
| b. Conflicts frighten Mary | $\mathrm{SS}>\mathrm{OE}$ |

Belletti and Rizzi (1988) introduce a third class of psych-verbs in Italian, which coexists with the transitive dichotomy (2) and does not appear to have an English equivalent: the piacere class (3), with a SS and a prepositional object Experiencer (henceforth POE). They note that unlike the transitive verbs in (2), the piacere class allows for the dative POE to appear in preverbal position, which they claim to be the sentential subject position, parallel to quirky subjects in Icelandic (also cf. Cardinaletti 1997, 2004):
(2)a. Maria teme i conflitti

$$
\mathrm{SE}>\mathrm{OS}
$$

'Maria fears conflicts'
b. I conflitti preoccupano Maria $\mathrm{SS}>\mathrm{OE}$
'Conflicts worry Maria'
(3)a. A Maria piace la tranquillità $\operatorname{POE}>\mathrm{SS}$
to Maria likes the peacefulness
b. La tranquillità piace a Maria $\quad \mathrm{SS}>\mathrm{POE}$ the peacefulness likes to Maria
'Maria likes peacefulness'

Belletti and Rizzi (1988) show that the SS of preoccupare does not behave as an external argument as regards extraction and binding and is more similar to the internal subject of unaccusative verbs,
despite the fact that preoccupare combines with auxiliary avere in compound tenses. For this reason preoccupare cannot be considered as truly unaccusative. They also show that the accusative OE does not behave like an internal argument and propose preoccupare is specified in the lexicon for inherent accusative assignment to the OE, which is structurally parallel to the POE of the piacere class. They therefore claim that the hierarchical alignment of Experiencer > Stimulus is universal, complying with the Uniformity of Theta Assignment Hypothesis (UTAH, cf. Baker 1988:46) according to which "Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure". The proposed structure for preoccupare and piacere is (4), which is set in a pre-X-bar-theoretic form:

preoccupano i conflitti Maria (cf. (2b))

The inverted constructions of (2b) and (3) are derived by independently motivated movement of the Stimulus to subject position across the Experiencer. This is achieved by different lexical specifications of the three classes. Temere externalises the Experiencer and has no Case specification; the two arguments therefore get structural Case (Nominative on the SE and Accusative on the OS). The other two classes assign inherent Case to the Experiencer: prepositional dative in the case of piacere and inherent accusative in the case of preoccupare. The Stimulus (or Theme in Belletti and Rizzi's terms) is therefore the only argument to be externalised.

Belletti and Rizzi's system predicts the non-existence of a genuine transitive with a SS. This is supported by the non-canonical behaviors of the SS and of the OE of the preoccupare class. The SE of a transitive psych-verb can bind a reflexive, as in (5a), while SS of an inverted transitive cannot, as in (5b). The OS of a direct transitive can be the subject of a passive clause, as in (6a), while the OE of an inverted transitive cannot. The passive auxiliary venire (lit. 'come') in (6b) ensures that the past participle is not reinterpreted as an adjective (6c):
(5) a. Gianni teme se stesso
'Gianni fears himself'
b. *?Gianni preoccupa se stesso
'Gianni worries himself'
(6) a. Maria veniva temuta dai suoi allievi
'Maria was feared by her pupils'
b. *?Maria veniva preoccupata dai suoi allievi
'Maria was worried by her pupils'
c. Maria era preoccupata (per i suoi allievi)
'Maria was worried for her pupils'

We refer the interested reader to Belletti and Rizzi (1988) for the innumerable diagnostics to attribute transitivity, unergativity, and unaccusativity in Italian and the abundant literature that questions them, cf. Arad (1998) for subject Experiencers, Landau (2002) for object Experiencers, Pesetsky (1995) and Bouchard (1995) for both. We simply note that at least for Italian, there seems to be great variation among individual speakers, as regards such contrasts as those in (5)-(6), suggesting that that we are not dealing with clear-cut classes, but with a continuum, as argued for by Cennamo (1999) and Bentley (2006). ${ }^{1}$ This is captured by our proposal substantiated in section 3 that the same psych-root may have more than one argument structure at one and the same stage of a language.

Belletti and Rizzi (1998) predict the existence of unergative verbs that externalize the Experiencer and assign inherent case to the Stimulus, as is the case of gioire in (7a) and impersonal verbs that do not externalize any role because they assign inherent case to both arguments, as is the case of importa in (7b):

## (7)a. Gianni gioisce solo di questo

'Gianni rejoices only of this'
b. A me importa solo di questo
'To me matters only of this'

Belletti and Rizzi (1998) also argue that the reflexive clitic si which appears with many verbs of the preoccupare class, as in (8a) is an unaccusative marker and not a genuine reflexive, as shown by the ungrammaticality of a strong reflexive in (5b). This is confirmed by the fact the Stimulus is realized

[^0]by a PP introduced by $d i$, which cannot be projected in the case of the inverse transitive preoccupare, only compatible with instrumental con:
(8)a. Gianni si preoccupa di questo

Gianni CL.REFL worries of this
'Gianni worries about this’
b. Gianni preoccupa Maria (*di questo / con il suo comportamento).

Gianni worries Maria of this / with his behavior

Folli (2002) argues that the preoccupare I preoccuparsi alternation cannot be fully derived in syntax, as there are inverted transitives, e.g. affascinare 'fascinate' that do not have a reflexive counterpart, e.g. *affascinarsi, and vice versa, there are unaccusative reflexives like fidarsi 'trust' or pentirsi 'regret' that do not have a transitive counterpart *fidare, *pentire. We therefore take preoccuparsi as a sixth class that is characterised as being formed by direct unaccusative psychverbs.

In a recent paper, Belletti and Rizzi (2012) revisit their proposal in the spirit of Antisymmetry (Kayne 1994) which only allows for left-branching specifiers. In this perspective the higher position of the Experiencer implies that the first-merge configuration of the arguments of the six classes must be as in (9). The temere class maintains this configuration with the Experiencer naturally taking the function of clausal subject, where it receives nominative Case, and the Stimulus, which Belletti and Rizzi label as Theme, receiving structural accusative Case:


In the case of the preoccupare and piacere class, the Stimulus crosses over the Experiencer through smuggling, in the sense of Collins (2005), namely with movement of the whole VP to the specifier, of a higher projection, call it SpecXP. From that position, the Theme/Stimulus moves to the Specifier of a higher vP, which contributes a causative feature to the verb (also cf. Arad (1998), Bentley (2006), Folli and Harley (2007)):



To summarize so far, Belletti and Rizzi (1988) point out six classes of psych-verbs in Italian, two of which with "inverted" Stimulus > Experiencer order. The six classes distribute across the transitive / unergative / unaccusative spectrum, according to many tests. In (11), we provide the test of auxiliary selection for each verb class: transitives (11a), inverted transitives (11b) and unergatives (11c) select avere; unaccusatives (11c), inverted (anti-causative) unaccusatives (11d), and impersonal importa (11f) select essere:
(11) a. Mario ha sempre temuto la professoressa di matematica
'Mario has always feared his Math teacher'
b. Gli esami di matematica hanno sempre preoccupato Mario
'Math tests have always worried Mario'
c. Maria ha gioito della buona notizia
'Maria has rejoiced of the good news'
'Maria was happy about the good news'
d. Maria si è sempre preoccupata della qualità della vita Maria CL.REFL is always worried of the quality of life
'Maria has always cared about the quality of her lifestyle'
e. A Maria sono sempre piaciute le mele to Maria are always liked the apples
'Maria has always liked apples'
f. A Maria non è mai importato dei soldi to Maria not is never cared of the money
'Maria never cared about money'

Table (12) provides a taxonomy of argument structures with the case specification for the internal argument:

| (12) | verb class | externalised argument | internal argument |
| :---: | :---: | :---: | :---: |
| a. | transitive temere 'fear' | Experiencer | Stimulus (structural accusative) |
| b. | inverted transitive preoccupare 'worry' | Stimulus | Experiencer (inherent accusative) |
| c. | unaccusative <br> preoccuparsi 'worry' | Experiencer | Stimulus PP (di/per) |
| d. | inverted unaccusative piacere 'like’ | Stimulus | Experiencer PP (a) |
| e. | unergative gioire 'be glad' | Experiencer | Stimulus PP (di) |
| f. | unaccusative impersonal importa 'matters' | 0 | Experiencer PP(a) <br> Stimulus PP (di) |

Our classification confirms and complies with Dahl and Fedriani's (2012) study of the variation in the argument structure of experiential constructions in early Indo-European languages (early Vedic, Homeric Greek and early Latin). Starting from Verhoeven's (2007) study of experiential structures in Yucatec Maya, in which the author identifies five classes of experiencer verbs (bodily sensation, emotion, cognition, volition and perception verbs), Dahl and Fedriani (2012) individuate five possible syntactic configurations. First, they distinguish between a direct construction with an Experiential subject and an inverted construction with a Stimulus subject, following Bossong (1998); then they individuate three syntactic arrangements for the former (one-place experiential predicates; nominative Experiencer combined with an accusative Stimulus; nominative Experiencer combined with an oblique (genitive or dative) Stimulus); and two for the latter (subject Stimulus combined with an accusative Experiencer; subject Stimulus combined with a dative Experiencer). They find these constructions with a large variety of verb types in the three languages they investigate confirming the extremely syntactic varieties of psych-verbs

Dahl and Fedriani do not address genuine transitive and impersonal constructions; the latter are not represented in early Indo-European languages except for Latin (also cf. Cuzzolin and Napoli 2008). This fact suggests that their presence in Latin is not a conservative feature and its loss in Italian, as we will show in section 3, cannot be related to an on-going change towards personification and / or transitivization (pace Cavallo 2014 and other literature reported in Fedriani 2012).
Belletti and Rizzi $(1988,2012)$ do not really deal with the three classes in (12c-d). These classes are also disregarded by more recent neo-constructionist approaches, which concentrate on the
fear/worry dichotomy (cf. such as Ramchand (2008), Lohndal (2014), Acéto-Matellàn (2016)). In this paper, we want to fill this gap, treating all possible classes in a comparative approach and aiming to provide a sound taxonomy that can be useful to future work, independent of the different theoretical persuasions inside and outside the generative approach.
The paper is structured as follows. Section 2 sets out the selectional properties of the six classes in Latin and argues for a seventh logically possible class, namely inverted unergative verbs. It also shows that none of the diagnostics presented for Italian can apply successfully, due to independent properties of Latin, and suggests four diagnostics for Latin. Section 3 briefly presents the diachronic changes between Latin and Italian directly or indirectly impacting on the syntax of psych-verbs and on diagnosing transitivity / unaccusativity / unergativity. It also presents intra-language variation, discussing psych-verbs that belong to more than one class at the same stage of the same language and argues that variation is due to the instability of the argument structure of psych-verbs, which is present at all stages of any language.

## 2. Seven classes of psych-verbs in Latin

In this section, we apply to Latin the taxonomy exemplified in (12) for Italian, to discover that Latin displays a further class of impersonal psych-verbs, which we claim to be inverted unergative. In so doing, we present some diagnostics applicable to Latin, which substantiate our classification; namely, the possibility of passives with $a b / a+$ ablative diagnoses transitive verbs, the lack of a past participle in the paradigm diagnoses unergative verbs, the deponent or semi-deponent Voice and the past participial adjective with active meaning diagnoses unaccusative verbs. These diagnostics work only in one direction; namely, the presence of the diagnostics is evidence for the given classification. Lack of the diagnostics is however not direct evidence for exclusion in the given class.

Due to lack of native informants, we can only search for the application of the diagnostics in the corpus, with obviously uncertain results. The other difficulty to diagnose psych-verbs in a corpus is the fact, to be substantiated in section 3 below, that the argument structure of psych-verbs is typically unstable at every stage of a language due to the semantic characteristics of both Experiencers and Stimuli, as we argued in section 1. For this reason, apparent inconsistencies in the diagnostics may be related to the independent possibility for the same verb to have more than one argument structure.
2.1 Transitive and inverted transitive psych-verbs

Let us start with the temere / preoccupare dichotomy. In (13), transitive timeo has an active and a passive form, parallel to Italian temere in (2a) and (6a). Note that the circumstantial Experiencer is realised as $a / a b+$ ablative parallel to the circumstantial Agent in passive constructions:

| a. Timeo | Danaos | et | dona | ferentis |
| :--- | :--- | :--- | :--- | :--- |
| fear.1P.SG.PRES | Danaos.PL.ACC | and | present.PL.ACC | bringing.PL.ACC |
|  | 'I fear the Greeks even if they bring presents' (Verg. Aen. 2,49) |  |  |  |

b. Sic ira [...] timetur a pluribus thus anger.F.SG.NOM fear.3P.SG.PRES.PASS by most.PL.ABL sicut deformis persona ab infantibus like deformed mask.F.SG.NOM by children.M/F.PL.ABL (Sen. Dial. 2,11,2) ‘Thus anger is feared by most people just as a deformed mask is by children’

In (14) the inverted transitive perturbo apparently presents a passive form, opposite to what is expected for inverted transitives in Belletti and Rizzi (1988). But the Stimulus in (14b) is as $d e+$ ablative, parallel to what we find with the unaccusative / deponent quaeror 'lament' in (14c):


It is therefore plausible to suggest that $(14 a, b)$ is evidence for the presence in Latin of the indirect transitive / unaccusative alternation parallel to Italian preoccupare / preoccuparsi, as we show in the following section.

### 2.2 Unaccusative psych-verbs

A certain number of Latin psych-verbs display deponent or semi-deponent morphology (e.g. vereor 'fear', or gaudeo 'rejoice' and (con/dif)fido 'trust, mistrust', respectively). As Dahl and Fedriani (2012) note, the (semi)deponent morphology is a crosslinguistic valid "strategy for distinguishing experiential predicates from agentive ones" (p. 346-347), the latter mostly presenting active forms (or both active and middle forms).

We suggest that (semi)deponent psych-verbs are the counterpart of Italian unaccusative psychverbs, ${ }^{2}$ which all display the pronominal clitic si unassociated to a thematic role (cf. the pair quaeror / lamentarsi 'lament' gaudeo / rallegrarsi 'rejoice'). This hypothesis is in line with much research that associates deponent and semi-deponent morphology to non-agentive subjects (cf. a.o. Ježek 2003, Gianollo 2010, Cennamo 2012). It is also corroborated by Cennamo’s (1999, 2012) work showing that insertion of an expletive reflexive as a marker of anti-causativity was already available in early Latin and came to gradually replace the eroded deponent $R$-inflection, as further discussed in section 3 . ${ }^{3}$

Other (semi)deponent unaccusative psych-verbs realize the Stimulus mostly with bare ablative (15a) and (16b), but also with genitive (15b), dative (16a), and even (inherent) accusative (15c):

| a. Ipsa liberatione | et $\quad$ vacuitate | omnis molestiae |  |
| :--- | :--- | :--- | :--- |
| this freedom.F.SG.ABL | and | absence.F.SG.ABL | all.F.SG.GEN distress.F.SG.GEN |
| gaudemus |  |  |  |
| enjoy.1P.PL.IND.PRES | (Cic. fin. 1,11,37) |  |  |
| 'We enjoy this freedom and absence of all distress' |  |  |  |

b. Voti
gaudeo

[^1]request.N.SG.GEN rejoice.1P.SG.IND.PRES
'I am glad of the request' (Apul. Met. 1,24)
c. Nunc furit
tam gavisos
homines
now infuriate.3P.SG.IND.PRES so rejoiced.PAST-PART.M.PL.ACC man.M.PL.ACC suum dolorem
his.M.SG.ACC pain.M.SG.ACC
'Now he is so furious over the general rejoicing for his discomforture (Cic. fam. 8,14,1)
a. arcae nostrae confidito
money.F.SG.DAT our.F.SG.DAT trust.IMPERAT.FUT.2.SG
'Trust in our money' (Cic. Att. 1,9,2)
b. alio duce plus confidere
another.M.SG.ABL leader.M.SG.ABL more trust.INF.PRES
'to trust more in another leader' (Liv. 21,4,3)
As far as we can tell, the inherent case seems to be rather idiosyncratic with respect to possible nuances of interpretation. Note that it is not related to animacy, as ablative (realizing inanimate causes in genuine passives) appears on both inanimate (15a) and animate (16b) referents, and dative (usually taken to express a (human) Benefactive) appears on an inanimate referent in (16a). The accusative found with gaudeo in (15c) cannot be structural, if we take deponent morphology to be a marker of unaccusativity, but must be inherent as in the case of the object Experiencer of perturbo. Note that circumstantial accusative is present in Latin in common periphrases such as magnam partem (great.F.SG.ACC part.F.SG.ACC, 'in great part') or id temporis (that.NT.SG.ACC time.NT.SG.ACC, 'at that time'), as noted by Traina and Bertotti (1985: 57), who also notes that the many neuter pronouns used adverbially are to be considered as being accusative, as is the case of quid, which means 'what' but also 'why', or of many neuter adjectives functioning as adverbs, such as multum 'very / very much', ceterum 'moreover'. In these cases, accusative is certainly not structural. The assumption of inherent accusative in Latin is therefore independently motivated.
Latin placeo has the same inverted unaccusative structure as piacere, namely a subject Stimulus and an indirect object Experiencer expressed with dative case, as in (17). Parallel to what has been observed for piacere in (3) above, the order of the arguments is rather free. In (17a) we find a clause with Verb-first, preceding the dative Experiencer, which in turn precedes the subject Stimulus. In (17b) the dative Experiencer is preverbal and the subject Stimulus is postverbal. In (17c) the subject Stimulus is preverbal and the dative Experiencer is postverbal:
(17) a. Placent
vobis
hominum
mores?
like.3P.PL.IND.PRES 2P.PL.DAT man.M.PL.GEN behaviour.M.PL.NOM 'Do you like these mens' behaviour?' (Cic. Verr. II 3,208)
b. Quam multis placet illa [...] auctoritas! how many.M.PL.DAT like.3P.SG.IND.PRES that.F.SG.NOM authority.F.SG.NOM 'How many like that kind of prestige?' (Ps. Quint. decl. 17,8)
c. atque Afrae volucres placent palato and African.F.PLNOM fowlsF.PL.NOM like.3P.PL.IND.PRES palate.N.SG.DAT 'Fowls from Africa are sweet to taste (lit. the palate likes fowls from Africa)' (Petron. 93)

Unfortunately, Latin is well known to have a generalized free order. The free order of arguments cannot be a diagnostics in Latin, unlike Italian. In Latin, an inverted order of arguments is found with all verb classes including direct (18) and inverted (19) transitive psych-verbs. The examples in (18)-(19) show the wide variation in the position of the arguments with respect to the verb: in (18a) and (19a), the verb is clause-final, in (18b) it is between the two arguments, and in (19b), it is clause-initial:


Given that Latin does not display left dislocation with pronominal clitics, it is a rather difficult to decide whether an inverted order is triggered by discourse features or whether it targets a clausal subject position as proposed by Belletti and Rizzi (1988) and Cardinaletti (1997, 2004) for the prepositional Experiencer of the piacere class. More accurate quantitative and qualitative corpus search is needed to confirm whether this is also the case of Latin.

### 2.3 Unergative psych-verbs

Unergative psych-verbs with an external Experiencer and an oblique Stimulus are verbs such as ardeo ('love passionately') and ferveo ('rage') in (20), which display a subject Experiencer and another argument in Ablative case. Note that in (20a) the ablative is assigned to the Stimulus, while in (20b) no Stimulus is present and ablative appears on the result of the rage ('an uncommon slaughter'):
(20)a. donec non alia magis arsisti
whilst not another.F.SG.ABL more burn.2P.SG.IND.PRAET
'Whilst (Horace) loved no mistress more' (Hor. Carm. 3,9,5-6)

| b. perfertur $\quad$ nuntius | hostem | fervere |
| :--- | :--- | :--- | :--- |
| bring.3P.SG.IND.PRES.PASS news.M.SG.NOM | enemy.M.SG.ACC | rage.INF.PRES |
| caede $\quad$ noua |  |  |
| slaughter.ABL.F.SG | new.ABL.F.SG (Verg. Aen. 9, 692-3) |  |
| 'Intelligence is brought that the enemy raged with uncommon slaughter' |  |  |

The well known diagnostics to distinguish unergatives from unaccusatives in Italian are not applicable in Latin. For example, ne-extraction and auxiliary selection do not apply, given the fact that Latin does not have clitics and does not have auxiliaries in the active voice. Furthermore, any argument or circumstancial can be non-overt in Latin, which can be characterized as a generalised pro-drop language (cf. Luraghi (1997: 239), Spevak (2010: 66), Author et al. (2016) a.o.). For this reason, lack of the Stimulus with fervo in (20b) cannot diagnose unergativity or unaccusativity. A suggestive, even if not completely dependable diagnostics is the behaviour of participial adnominal adjectives. We expect to find only present, no past participles with unergatives. We also expect past participles to take the internal argument of unaccusatives and of direct transitives. This is in fact the case. In dictionaries, ardeo and ferveo are reported to miss the past participle tout court. The present participle of ardeo used as an adnominal predicate in (21a) contrasts with the past participle of placeo in (21b), of amo in (21b), and of vereor in (21d):
(21) a. animus audax, subdolus, [...]
character.M.SG.NOM audaciuous.M.SG.NOM underhanded.M.SG.NOM ardens in cupiditatibus
burn.PRES-PART.M.SG.NOM in desires.F.PL.ABL
'an audacious, underhanded character, burning in desires’ (Sall. Catil. 5)
b. locus ambobus placitus place.M.SG.NOM both.DAT.PL liked.PAST-PART.M.SG.NOM 'a place loved by both of them' (Sall. Iug. 81,1)
c. Lesbis amata Lesbian.F.SG.NOM loved.PAST-PART.F.SG.NOM 'Beloved woman of Lesbos' (Ov. Am. 2,18,27)
d. minus veritus navibus less worried.PAST-PART.M.SG.NOM ships.F.PL.ABL 'less worried about the ships’ (Caes. Gall. 5,9,1)

From the discussion so far, it seems that unergative psych-verbs do not have an inverted counterpart. We will fill this gap in the next subsection showing that the traditional label of 'impersonal verbs’ include heterogeneous verbal classes among which inverted unergatives.

### 2.4 Revisiting so-called impersonals

Latin displays two classes of impersonal psych-verbs: a well-studied group of five verbs (paenitet 'regret/repent', miseret 'pity', piget 'bother', pudet 'be ashamed', taedet 'be weary of') selecting an accusative Experiencer and a genitive Stimulus (Traina and Bertotti 1985:58-60, Fedriani 2014, Cavallo 2014), exemplified in (22), and a second class which is treated separately in traditional grammars (cf. Traina and Bertotti 1985:92-94) and includes interest (a compound with esse 'be') and refert (a compound with fero 'bring'), both meaning 'care / interest'. The argument structure of this latter class presents an inverted pattern with respect to the previous one, selecting a genitive Experiencer, while the Stimulus is a clause and does not display case (23), but is mostly realised as a sentence (or it is not realised at all):
a. pudet
me non tui ... sed Chrysippi
shame.3P.SG.IND.PRES 1P.SG.ACC not 2P.SG.GEN ... but Chrysippus.GEN
'I am ashamed not of you but of Chrysippus' (Cic. Div. 2,35)
b. quodsi talium civium vos iudices taedet
if such citizen.M.PL.GEN 2P.PL.ACC judges.M.PL.ACC disgust.3P.SG.IND.PRES
'if such citizens disgust you judges' (Cic. Flacc. 105)
(23)
a. quantum interesset
P. Clodii se
how-much interest.3P.SG.SUBJ.PLUPERF P.Clodius.GEN REFL.ACC.SG
perire [...] cogitabat
die.INF.PRES thought.3P.SG.IND.IMP
'[Milo] always thought how much it was Clodius' interest to get rid of him'(Cic. Mil. 55)
b. parvi refert ab te ipso little matter.3P.SG.IND.PRES by 2P.SG.ABL self.M.SG.ABL ius dici aequabiliter et diligenter law.NT.SG.ACC say.INF.PRES.PASS equitably and diligently. ${ }^{4}$ (Cic. ad.Q.fr. 1,1,20) 'It matters little whether you judge yourself impartially’

As regards the former class in (22), Devine and Stephens (2013:123) claim that these verbs enter a sort of existential construction, the subject being a covert locative parallel to there in English. This makes these verbs similar to the Italian impersonal class represented by importa, (12f), which displays auxiliary be. This observation is corroborated by Woodcock's (1959: 167) observation that Cicero prefers a (semi-)deponent form for these verbs evidenced in the simple past: puditum est vs puduit, miseritum est vs museruit and pertaesum est vs taeduit.

As regards the second class of alleged impersonal verbs (23), Traina and Bertotti (1985:59) note that the clausal argument may pronominaliz as a neuter pronoun (24), which in this case is analysed as being assigned nominative case. In this case, it is not plausible to analyze it as an overt expletive (say, parallel to English $i t$ ). First of all, Latin is a generalised null argument language and is not expected to display overt expletives. Second, the subject Stimulus can be a pronominal demonstrative, such as hoc in (24b):

| a. Quid id refert | tua? |
| :--- | :--- | :--- |
| what it matter.3P.SG.IND.PRES | your.F.SG.ABL |
| 'What matters that to you?' (Plaut. Cas. 330) |  |

b. vestra [...] hoc maxime interest your.F.PL.ABL this.NT.SG.ACC mostly interest.3P.SG.IND.PRES 'you care most about that' (Cic. Sull. 79)

The nominative case on the pronoun resuming the clausal Stimulus fills a gap in our taxonomy which has direct and indirect argument structure for both transitives and unergatives. We propose that refert and interest are not impersonal but inverted unergatives, with the Experiencer assigned inherent case (oblique in this case) and the Stimulus remaining in the VP internal position, if it is

[^2]realised by a clause (and this explains the classification as impersonal), or moving to the clausal subject position if it needs to be realized as an overt pronoun, which expectedly receives nominative case. This is shown in the following example, where the content of the clausal argument is anticipated in the main clause and the pronoun referring to it is focused: ${ }^{5}$
(25) nulla enim fere potest res in dicendi disceptationem aut no in-fact almost can matter.F.SG.NOM in say.GEN.GERUND discussion or controversiam vocari, quae non habeat utrumque, dispute bring.INF.PRES.PASS which not have.3P.SG.SUBJ.PRES both.PL.GEN sed quantum habeat, id refert
but how-much have.3P.SG.SUBJ.PRES it.NT.SG.NOM matters.3P.SG.IND.PRES.
'It is almost impossible for any matter to be brought under discussion or dispute which does not contain both (scil. good and bad points); the thing that matters is how much of them it contains' (Cic. Orat. 2,291)

When the Experiencer is a person pronoun, as in (24), the genitive is replaced by a possessive adjective inflected for ablative singular. This suggests that even in the other cases, we have an ablative elliptic feminine nominal expression with a genitive Experiencer possessor, something like "from the Experiencer's part".

### 2.4 Interim conclusions

To summarize the discussion so far, Latin displays the six classes found in Italian and one more, also predicted by (our implementation of) Belletti and Rizzi's (1988) system; namely, an inverted unergative structure. Compare table (26) with table (12) above:

| (26) | verb class | externalised argument | second argument |
| :---: | :--- | :--- | :--- |
| a. | transitive timeo 'fear' | Experiencer | Stimulus (structural <br> accusative) |
| b. | inverted transitive perturbo 'worry' | Stimulus | Experiencer (inherent |

[^3]|  |  |  | accusative) |
| :--- | :--- | :--- | :--- |
| c. | unaccusative vereor 'repent', <br> gaudeo 'rejoice' confido 'trust', <br> diffido'mistrust' | Experiencer | Stimulus (ablative, <br> dative, inherent <br> accusative) |
| d. | inverted unaccusative placeo 'like' | Stimulus | Experiencer (dative) |
| e. | unergative ardeo, 'love <br> passionately', ferveo'rage' | Experiencer | optional Stimulus <br> (ablative) |
| f. | inverted unergative interest |  |  |
| 'interest', refert 'matter' |  |  |  |$\quad$ Stimulus (clausal/pronominal) | Experiencer |
| :--- |
| (genitive/ablative) |

## Section 3. Variation

Table (26) presents a taxonomy for Latin that is very similar to the one presented by table (12) for Italian. The comparative overview has shown a substantial correspondence among the verbal system of the considered languages except for the class of inverted unergatives which is found in Latin but not in Italian where verbs like importare 'matter' are classified as impersonal. Such a degree of variation is expected if we consider the diachronic instability of impersonal verbs note crosslinguistically by Rosén (1992), Bickel (2004) and Malchukov (2008) and Fedriani (2014). In other words, in time, few verbs have remained in the same class, some have shifted from one class to another, others have gone lost, others have emerged. This section provides a brief overview of the diachronic variation from Latin into Italian, which can shed some light on the nature of the parameters affecting the syntax of psych-verbs. We also note that variation is found inside the same stage of a language, often setting the premises for diachronic change.

Previous literature explains the change in verb classes with an alleged general tendency of modern European languages to re-align biargumental verbs as transitives due to change from a mixed ergative/transitive system to a fully transitive system (cf. Lightfoot 1979, Lehmann 1991, Allen 1995, Haspelmath 2001, Trousdale 2008, Haig 2008, 2010, Fedriani 2014). Such observation correlates with Harris and Campbell’s (1995) 'Complementarity Principle’ which, with the words of Haig (2010: 266), claim that "changes in a language with an alignment split will generally occur in the direction of leveling out the split in the direction of the unmarked construction".

According to this line of reasoning, what becomes the subject of the transitive verb is the more "agentive / active" participant, and this may vary in psych-verbs, as either Experiencer or the Stimulus can be interpreted as the initiator/cause of the psychological state. The argument risks to be circular in that it does not tell whether the change in argument structure is the trigger of the semantic shift or is itself triggered by it. Furthermore, if the unmarked alignment is the transitive structure, we would expect that any change in argument structure produce a direct or inverted transitive; that a transitive could never change into an unaccusative; that unaccusatives should in gradually disappear, as they do not comply with the transitive alignment. In this section, we show that none of these predictions is borne out.
As our approach wants to be descriptive but informed by current theoretical advances, in analyzing diachronic variation we assume a four-level parameter hierarchy recently proposed by Roberts (2012), Biberauer and Roberts (2012). According to these scholars, macro-parameters regard all heads of the relevant type, meso-parameters regard all functional heads of a given category, microparameters regard a small subclass of functional heads, and nano-parameters regard one or more idiosyncratic lexical items. The lower is the parameter in the hierarchy, the more complex is its description, the later is its acquisition, the easier does it display variation and change. In this perspective, the diachronic variation of psych-verbs in the development of Latin into Italian can be distributed in the parametric hierarchy as follows.

Changes in verbal and nominal inflection, notably, loss of deponent morphology and development of an auxiliary system on verbs, loss of case morphology on nouns, the development of articles and clitic pronouns, are to be identified as changes in the value of two meso-parameters with the relevant functional heads of the C-T phase (the portion of structure that regards the verbal inflection, propositional content and its relation to the discourse) and of the D-N phase (the portion of structure that regards nominal expressions and referential indexes), respectively.
These changes have had a major impact on the diagnostics. The innovations developed in Italian, allow for a number of diagnostics for transitivity / unaccusativity / unergativity that Latin does not provide; namely, free unmarked word order for the piacere class, auxiliary alternation and ne extraction from the subject of direct and indirect unaccusatives, passive voice form with auxiliary venire which discriminates between direct and inverted transitives). We have already pointed this out in section 2.

### 3.1 Interlinguistic variation

Deponent and semi-deponent psych-verbs have been affected by micro-parametric change regarding the realization of a single functional head, namely Voice. In Latin, passive and middle voice are
realized inflectionally. In Italian, passive voice is realized with an independent auxiliary (essere) even in the simple tenses, while middle Voice is realized as an independent anti-causative morpheme homophonous to the reflexive pronoun si. Cennamo (2012) shows that psych-verbs may not be central to this change, but provides many examples, as in (27) with deponent laetor corresponding to Italian allietarsi/rallegrarsi:

| a. Laetatur | ille | adulterio |
| :---: | :--- | :--- |
| rejoices | that.M.SG.NOM | adultery.N.SG.ABL (Sen. epist. 97, 11) |

b. Egli si allieta / rallegra del misfatto he CL.REFL rejoices of the misdeed 'He is happy about his misdeed'
Latin deponent and semi-deponent verbs, which we have taken to be direct unaccusatives, may but do not necessarily shift to unaccusatives with si in Italian. The case of fido / diffido 'trust / mistrust' is rather telling; in Latin they are both semi-deponent, as shown by the past participial form of the absolute construction in (28):
(28) a. Mithridates [..] in regnum remeavit

Mithridates.NOM to kingdom.N.SG.ACC come-back.3P.SG.IND.PRAET
$\begin{array}{lll}\text { fisus } & \text { Pharasmanis } & \text { opibus } \\ \text { confide.PAST-PART.M.SG.NOM } & \text { Pharasmanes.GEN } & \text { deeds.F.PL.ABL }\end{array}$
'Mithridates [...] made his way back to his kingdom in reliance on the help of Pharasmanes' (Tac. Ann. 11,8,1)
b. Diffisus municipii voluntati
untrusting.PAST-PART.M.SG.NOM town.M.SG.GEN intension.F.SG.DAT
Thermus cohortes ex urbe reducit (Caes.civ.1,12,2)
Thermus.NOM cohorts.F.PL.ACC from city retire.3P.SG.IND.PRES
'Thermus, who could not confide in the townsmen, retired his cohorts from the town.'

Parallel to Latin fido, Italian fidarsi is unaccusative; but unlike Latin diffido, Italian diffidare is unergative, as shown by the different auxiliary selection: ${ }^{6}$
(29) a. Mitridate si è fidato degli aiuti di Farasmane

[^4]Mithridates CL.REFL AUX trust.PAST-PART of the help of Pharasmanes 'Mitridates trusted the help of Pharasmanes'
b. Termo ha diffidato delle loro promesse Thermus has mistrusted of-the their promises. 'Thermus mistrusted their promises.'

Latin deponent commisereor 'to pity' is impersonal, as in (30a), where the participle in the perfect infinitive is in the neuter singular and does not agree with the accusative plural subject, as would be the case in a personal construction. In (30b), commiseror is unnacusative with an externalised Experiencer and an (inherent) accusative Stimulus:

| a. | Navitas precum eius commiseritum esse |  |
| :--- | :--- | :--- | :--- |
|  | sailor.M.PL.ACC prayer.F.PL.GEN | 3P.SG.GEN pity.PAST-PART.NT.SG be.AUX.INF |

Note that commiseror turns into the Italian direct transitive commiserare (we thank XX for the observation). The transitive nature of commiserare is shown by the possibility of a strong reflexive Stimulus in object position in (31a) and of the true passive with auxiliary venire and the overt $d a$ - PP expressing the circumstantial Experiencer in (31b):
(31) a. Maria commisera se stessa 'Mary pities herself'
b. Maria viene commiserata da tutti
'Maria is pitied by everybody'

Out of the changes we have observed so far, only fido > fidarsi can be directly captured by the meso-parametric change affecting the functional head Voice. The other changes laetor > allietarsi, diffido $>$ diffidare, commiseror $>$ commiserare cannot be directly captured by the loss of (semi)deponent morphology, which would generate *lietarsi, *diffidarsi, \#commiserarsi (which is
grammatical but with true reflexive interpretation). Shift in verb form (as for prefixed allietare) and verb class (as in the other two cases) must regard some specification of a property of the individual lexical root. This kind of variation regards parameters of the lower kind, namely nano-parameters in Roberts' (2012) terminology.

In what follows, we show that in some cases, the change in verb class is grounded on coexisting structures at the same stage of the language, supporting the hypothesis that psych-verb are particularly vulnerable in this respect.

### 3.2 Intralinguistic variation

Psychverbs may vary inside one and the same language. A noted above, Latin inverted unergatives have not survived in Italian. Latin refert (23) has gone lost and has been substituted with importare which can be inverse unaccusative (33a) or unaccusative impersonal (33b), also cf. (7b) above:

| a. Ai giovani | non | importano | queste cose. |
| :--- | :--- | :--- | :--- |
| to-the young | not | matter.3P.PL | these things |
| b. Ai giovani | non | importa | di queste cose |
| to-the young | not | matter3P.SG | of these things |
| 'Young people don't care about these issues' |  |  |  |

The other Latin inverted unergative interest (24) has turned into Italian interessare 'interest', which presents four coexisting structures: the inverted transitive / (anti-causative) unaccusative alternation (33a-b); the inverted unaccusative, as witnessed by auxiliary essere and the inverted word order in (33c); and the (unaccusative) impersonal, with dative Experiencer and genitive Stimulus (33d), also (11f):
(33) a. La linguistica interessa Maria e Gianni
'Linguistics interests Maria and Gianni'
b. Maria e Gianni si interessano di linguistica/alla linguistica

Maria and Gianni CL.REFL interest of Linguistics /to-the Linguistics
c. A Maria non sei mai interessato tu

To Mary not are.2P.SG.IND.PRES never interested you.2P.SG.NOM
'Mary has never been interested in you'
d. A te non è mai interessato di noi due.

To you not is.3P.SG.IND.PRES never interested of us two
'You never cared about the two of us'

The case of (33d) shows the productivity of the inverted unaccusative that would be expected to be recessive in the view that Italian is typologically more transitive / less ergative than Latin. As a matter of fact, this class of verbs is living a new life, as already noted by Berretta (1989), who shows that for many psych-verbs it is quite common to realize a fronted pronominal object as a prepositional accusative with $a$, not resumed by an accusative clitic in the clause. Note that the order in (34a) with preverbal prepositional Experiencer and postverbal subject Stimulus is less marked than the SVO order in (34b), parallel to what is found with the inverted unaccusative piacere class:
(34) a. A me preoccupa / affascina / attrae / stupisce / colpisce il suo comportamento

To me worries / fascinates / attracts / astonishes / strikes her behavior
b. Il suo comportamento preoccupa / affascina / attrae / stupisce / colpisce (*a) me Her behavior worries / fascinates / attracts / astonishes / strikes (*to) me 'It worries / fascinates / attracts / astonishes / strikes me that ...'

This only occurs with inverted transitives and not with direct transitives, as shown by the contrast between (34a) and (35a). In (35a) the direct transitives temere / amare require that the accusative pronoun is resumed by an accusative clitic:
(35) a. A me non $*(\mathrm{mi})$ temono / amano.

To me [they] not CL.1P.SG fear / love
b. Non temono (*a) me.
[they] not fear / love (*to) me
'They don't fear / love me'

The contrast between (34a) and (35a) supports the claim that the accusative assigned by inverted transitives is inherent, therefore more easily shifting to a prepositional accusative and ultimately an oblique prepositional case.

Interestingly, it is more advanced with preoccupare which marginally allows for ne-extraction from a postverbal subject (36a) and less advanced with the other verbs. Note that neither auxiliary is possible in the present perfect (36b):
(36) a. ?Me ne preoccupano molti /*? Me ne affascinano molti. CL.1P.SG.DAT. NE worry.3P.PL many/ CL.1P.SG.DAT. NE fascinate.3P.PL many 'Many worry/fascinate me'
b. *A me sono preoccupati molti. / *A me hanno preoccupato molti.

To me are worried many / to me have worried many.
'Many worried me'

This inconsistent behavior with respect to the diagnostics supports the proposal that the class shift from inverted transitive to inverted unaccusative is on-going an by no means complete.
Intralinguistic variation is also well documented in Latin. Impersonal pudet, (22a) coexists in Latin with inverted transitive pudeo, as in (37a), which is probably the structure of (37b), with a neuter interrogative pronoun as subject Stimulus. In (37c) we observe a clausal stimulus, which reminds us of inverted unergative refert:


Neither verb survived in Italian, where the unaccusative vergognarsi 'be ashamed' does not alternate with inverted transitive *vergognare, thereby supporting Folli's (2012) hypothesis that unaccusatives with si have a life of their own and are not derived in syntax. Note that (37b) may have an alternative analysis, as impersonal structure with a covert genitive Stimulus and a interrogative circumstancial quid 'why', being interpreted as 'Why should I be ashamed?'. If our hypothesis of coexisting argument structures is on the right track, (37b) is to be analyzed as structurally ambiguous.

Impersonal miseret exemplified in (38a) coexisted with unergative misero displaying a second person (null) subject in (38b):

| a. | miseret | te | aliorum |
| :--- | :--- | :--- | :--- |
| pity.3P.SG.PRES.IND | 2P.SG.ACC | other.M.PL.GEN |  |
|  | 'You have pity of the others' | (Plaut. Trinumn. 431) |  |

b. miserere domus labentis pity.2P.SG.IMPERAT.PRES house.GEN.F.SG collapse.PRES-PART.PRES.F.GEN.SG
'Have pity of the collapsing house' (Verg. Aen. 4,318) (from Fedriani 2014:270)

Both argument structures are attested in early Latin, according to Fedriani (2014) but neither survived in Italian with the bare root *miserare.

To conclude, in this section we have classified some changes observable in a comparison of Latin with Italian in three different typologies: changes in meso-parameters, affecting sets of related verbal and nominal functional heads created the diagnostics generally assumed for Italian (auxiliary selection, clitic ne extraction, more rigid word order), which are not available in Latin. Change in the value of a micro-parameter affecting the functional head Voice and the realization of [passive] and [middle] had the consequence of creating the anti-causative marker si, which is found in direct unaccusative psych-verbs in Italian. All other differences noted between Latin and Italian should be reduced to changes in nano-parameters, namely specifications on individual lexical roots.

Psych-verbs are particularly unstable as regards their classification, as generally pointed out by literature of every theoretical persuasion, due to possible shifts in the interpretation of either role as the initiator of the situation. Different theoretical approaches can give their view on what impact this fact can have in synchronic systems, and in the synchronic and diachronic variation this can trigger.

## 4. Conclusions

The goal of this paper was to provide a sound comparative description of psych-verbs in Latin and Italian which could serve for future research grounded on any theoretical persuasion. We started from Belletti and Rizzi's $(1988,2012)$ theoretical analysis of psych-verbs that provided us with the diagnostics for Italian and have proposed some diagnostics for Latin provided by Dahl and Fedriani 2012.

Throughout the paper, we have developed a taxonomy of psych-verbs which captures all possible verb classes in the languages under consideration. The transitive / unergative / unaccusative
structures can be instantiated either externalizing the Experiencer or externalizing the Stimulus. We have called the later cases "inverted" following Bossong's (1988) terminology, which well represents the idea that there is an underlying hierarchy in which the Experiencer is higher than the Stimulus. We also found, for both Latin and Italian, the possibility that neither argument is externalised, giving rise to an impersonal construction. The only impersonal construction we found in Italian is unaccusative. It may well be the case that the extension of our taxonomy to other languages will include an eighth class of unergative impersonals.

In section 3 we have shown that the verb classes are not clear-cut but must be treated as a continuum (parallel to what has been put forth by functional linguists for the unaccusative / unergative distinction). We have also shown that in one and the same stage of a language the same root can belong to more than one class. This may be the ground of language change (with one class prevailing on the other at some point).

Our overview of possible class shifts does not at the moment display any privileged tendency. In particular, our analysis of Italian has disproved the hypothesis that bi-argumental verbs in European languages tend to realign into a transitive structure.

## References

1. Acedo-Matellàn, Vìctor. 2016. The Syntax of Transitions. A Case Study of Latin and Other Languages. Oxford: Oxford University Press.
2. Allen Cynthia, 1995, Case Marking and Reanalysis. Grammatical Relations from Old to Early Modern English, Oxford, Oxford University Press.
3. Arad, Maya. 1998. "Psych-Notes." UCL Working Papers in Linguistics 10:1-22.
4. Author et al. 2016.
5. Baker, Mark. 1988. Incorporation: A Theory of Grammatical Function Changing. The University of Chicago Press.
6. Belletti, Adriana and Luigi Rizzi. 1988. "Psych-Verbs and Theta Theory." Natural Language and Linguistic Theory 6: 291-352.
7. Belletti, Adriana and Luigi Rizzi. 2012. "Moving Verbal Chunks in the Low Functional Field." In Functional heads, The Cartography of Syntactic Structures Volume 7, ed. by Laura Brugé, et al, 129-137. Oxford: Oxford Studies in Comparative Syntax, Oxford University Press.
8. Bentley, Delia. 2006. Split Intransitivity in Italian. Berlin: Mouton de Gruyter.
9. Berretta, Monica. 1989. "Sulla presenza dell'accuativo preposizionale in italiano settentrionale: note tipologiche." Vox Romanica 48:13-37.
10. Bickel, Balthasar, 2004, "The syntax of experiencers in the Himalayas", in Peri Bhaskararao and Kamuri Venkata Subbarao (eds), Non-nominative subjects, Amsterdam, John Benjamins, 77-111.
11. Biberauer, Theresa and Ian Roberts. 2012. "Towards a Parameter Hierarchy for Auxiliaries: Diachronic Considerations" Cambridge Occasional Papers in Linguistics 6.9: 267-294.
12. Borer, Hagit. 2005. Structuring Sense: An Exo-Skeletal Trilogy. New York: Oxford University Press.
13. Bossong, Georg. 1998. "Le marquage de l'ésperient dans le langues de l'Europe". In Actance et Valence dans les langues de l'Europe, ed. By Jack Feuillet, 259-94. Berlin: Mouton de Gruyter. 14. Bouchard, Denis. 1995. The Semantics of Syntax. A Minimalist Approach to Grammar. Chicago: The University of Chicago Press.
14. Cardinaletti, Anna. 1997. "Subjects and Clause Structure." In The New Comparative Syntax ed. By Liliane Haegeman, 33-63. Longman: London.
15. Cardinaletti, Anna. 2004. "Toward a Cartography of Subject Position." In The Structure of CP and IP. The Cartography of Syntactic Structure vol. 2 ed. by Luigi Rizzi 115-165. Oxford: Oxford University Press.
16. Cavallo, Guido. 2014. The Latin psych verbs of the è-clas: (de)transitivization and syntactic allignment. PhD diss. University of Padua.
17. Cennamo, Michela. 1999. "Late Latin pleonastic reflexives and the unaccusative hypothesis" Transactions of the Philological Society 97:1, 103-150.
18. Cennamo, Michela. 2012. "Aspectual Constraints on the (Anti)Causative Alternation in Old Italian" Transactions of the Philological Society 110.3:394-421.
19. Collins, Christopher T. 2005. "A Smuggling Approach to the Passive in English." Syntax 8.2: 81-120.
20. Croft, William, 1993. 'Case marking and the semantics of mental verbs', in James Pustejovsky (ed.), Semantics and the Lexicon, Boston \& London: Kluwer Academic Publishers, 55-72.
21. Cuzzolin, Pierluigi and Maria Napoli. 2008. "An overview of impersonal verbs in IndoEuropean." In Protolanguage and Prehistory. Proceedings of the Twelfth Congress of the Indogermanische Gesellschaft in Krakow ed. by Rosemarie Lühr and Sabine Ziegler, 75-81. Wiesbaden: Reichert Verlag.
22. Dahl, Eystein and Chiara Fedriani. 2012. "The Argument Structure of Experience: Experiential Constructions in Early Vedic, Homeric Greek and Early Latin." Transactions of the Philological Society 110.3:342-362.
23. Dixon, Robert M. W. and Aikhenvald, Alexandra Y., 2000. 'Introduction', in Robert M.W. Dixon \& Alexandra Y. Aikhenvald (eds), Changing Valency: Case Studies in Transitivity, Cambridge: Cambridge University Press, 1-29.
24. Dik, Simon C., 1997. The Theory of Functional Grammar, Part 1: The Structure of the Clause, 2nd edn, Berlin: Mouton de Gruyter.
25. Dowty, David R. 1991. "Thematic proto-roles and argument selection" Language 67:547-619.
26. Embick, David. 2000. "Features, Syntax, and Categories in the Latin Perfect" Linguistic Inquiry 31.2: 185-230.
27. Fedriani, Chiara. 2014. "Peniteo errorem (Hier. Tract. in Ps. II, 84, 37). Un caso di mutamento sistattico semanticamente motivato." In Latin Vulgaire Latin Tardif X. Actes du Xe colloque international sur le latin vulgaire et tardif, ed. by Piera Molinelli, Pierluigi Cuzzolin and Chiara Fedriani, 263-286. Bergamo: Bergamo University Press/Sestante Edizioni.
28. Folli, Raffaella. 2002.Constructing telicity in English and Italian. PhD diss. University of Oxford.
29. Folli, Raffaella and Heidi Harley. 2007. "Causation, Obligation and Argument Structure: on the Nature of little v." Linguistic Inquiry 38.2: 197-238.
30. Gianollo, Chiara. 2010. "I verbi deponenti latini e l'unità della flessione in -r." Incontri triestini di filologia classica 8: 23-49.
31. Grimshaw, Jane. 1990. Argument Structure. Cambridge Mass: MIT Press.
32. Haspelmath, Martin. 2001. "Non-canonical marked subjects and objects: Parameters and Properties. In Non-Canonical Marking of Subjects and Objects, ed. by. Alexandra Y. Aikhenvald, Robert M.W. Dixon, Masayuki Onishi, 53-84. Amsterdam: John Benjamins.
33. Haig, Geoffrey, 2008, 'Alignment Change in Iranian languages’, Linguistic typology 13, 195.
34. Haig, Geoffrey, 2010, "Alignment" in Silvia Luraghi and Vit Bubenik (eds), Bloomsbury Companion to Historical Linguistics, London, Bloomsbury, 250-270.
35. Harris, Alice C. and Campbell, Lyle, 1995, Historical Syntax in Cross-linguistic Perspective, Cambridge, Cambridge University Press.
36. Hopper, Paul and Sandra, Thompson, 1980. 'Transitivity in grammar and discourse', Language 56, 251-99.
37. Ježek, Elisabetta, 2003, Classi di verbi tra semantica e sintassi, Pisa, ETS Edizioni.
38. Kayne, Richard S. 1994. The Antisymmetry of Syntax. MIT Press.
39. Landau, Idan. 2002. The Locative Syntax of Experiencers. Cambridge Mass: The MIT Press.
40. Lehmann, Christian, 1991. 'Predicate classes and PARTICIPATION', in Hansjakob Seiler \& Waldfried Premper (eds), Partizipation: Das Sprachliche Erfassen von Sachverhalten, Tübingen: Gunter Narr Verlag, 183-239.
41. Lightfoot, David, 1979, Principles of Diachronic Syntax, Cambridge, Cambridge University Press.
42. Levin, Beth and Malka Rappaport Hovav. 2005. Argument realization. Cambridge Mass: The MIT Press.
43. Lohndal, Terje. 2014. Phrase structure and argument structure: A case study of the syntaxsemantics interface. Oxford: Oxford University Press.
44. Luraghi, Silvia. 1997. "Omission of the direct object in Classical Latin." Indogermanische Forschungen 102:239-257.
45. Malchukow, Andrej, 2008, "Split intransitives, Experiencer Objects, and "Transimpersonal" Constructions: (re-)establishing the connection", in Donohue, Mark and Wichmann, Søren (eds), The Typology of Semantic Alignment, Oxford, Oxford University Press, 76-101.
46. Pesetsky, David. 1995. Zero Syntax: Experiencers and Cascades. Cambridge Mass: The MIT Press.
47. Perlmutter, David M. and Paul Postal. 1984. "The 1-Advancement Exclusiveness Law." In Studies in Relational Grammar vol II, ed. by David M. Perlmutter and Carol Rosen, 81-126. University of Chicago Press.
48. Pustejovsky, James. 1991. "The Syntax of Event Structure" Cognition 41:47-81.
49. Pustet, Regina, 2015. 'The syntax of temperature predications', in Maria Koptjevskaja Tamm (ed.), Linguistics of Temperature, Amsterdam: Benjamins.
50. Ramchand, Gillian. 2008. Verb Meaning and the Lexicon. A first Phase Syntax. Cambridge: Cambridge University Press.
51. Roberts, Ian. 2012. "On the nature of syntactic parameters: a programme for research." In Parameter Theory and Linguistic Change, ed. by Charlotte Galves, Sonia Cyrino, Ruth Lopes, Filomena Sandalo, and Juanito Avelar, 319-334, Oxford: Oxford University Press.
52. Rosen, Carol. 1984. "The Interface between Semantic Roles and Initial Grammatical Relations." In Studies in Relational Grammar vol II, ed. by David M. Perlmutter and Carol Rosen, 38-77. University of Chicago Press.
53. Rosén, Haiim B., 1992, "On some typed of so-called "impersonality" and verbal valency in Indo-European", in Beekes, Robert, Weitenberg, Jost (eds), Rekonstruktion un relative Chronologie: Akten der 8. Fachtagung der Indogermanischen Gesellschaft, Leiden 31 August-4

Septemper 1987, Innsbruck, Institüt für Sprachwissenschaft der Universität Innsbruck: 383390.
55. Shibatani, Masayoshi, 2009. 'Case and voice. Case in derived constructions', in Andrej Malchukov \& Andrew Spencer (eds), The Oxford Handbook of Case, Oxford: Oxford University Press, 322-38.
56. Smith, Michael B., 1993. 'Cases as conceptual categories: evidence from German', in Richard A. Geiger \& Brygida Rudzka-Ostyn (eds), Concpetualization and Mental Processes in Language, Berlin: Mouton de Gruyter, 531-66.
57. Spevak, Olga. 2010. Constituent Order in Classical Latin Prose. Amsterdam: John Benjamins. 58. Talmy, Leonard. 1985. "Lexicalization Patterns: Semantic Structure in Lexical Forms." In Language Typology and Syntactic Description 3: Grammatical Categories and the Lexicon, ed. by Tim Shopen, 57-149. Cambridge: Cambridge University Press.
59. Traina, Alfonso and Bertotti, Tullio. 1985. Sintassi normativa della lingua latina. Bologna, Cappelli.
60. Trousdale, Greame, 2008, "Words and constructions in grammaticalization: The end of the English impersonal construction", in Fitzmaurice, Susan M. Minkova, Donka (eds), Studies in the History of the English language IV. Empirical and Analytical Advances in the Study of English Language Change, Berlin, Mouton de Gruyter, 301-326.
61. Verhoeven, Elisabeth, 2007. Experiential Constructions in Yucatec Maya: A Typologically Based Analysis of a Functional Domain in a Mayan Language, Amsterdam: Benjamins.
62. White, Lydia. 2003. Second Language Acquisition and Universal Grammar. Cambridge University Press.
63. Woodcock, Eric C. 1959. A New Latin Syntax. Mundelein, Bochazy-Carducci Publishers.


[^0]:    ${ }^{1}$ We find the contrasts in (5)-(6) quite solid, while we do not find many counterexamples reported by Pesetsky $(1995,1990)$ and Bouchard (1995, quoting Pesetsky 1990) as grammatical. In (i) we repot a single example, where the star in parentheses indicates our divergent judgment:
    (i) (*)Gianni venne spaventato/terrificato da questa prospettiva alle cinque.

    Gianni came scared/terrified by this perspective at five

[^1]:    ${ }^{2}$ This is not to say that that there is a one-to-one correspondence between individual Italian unaccusative verbs (with si) and Latin (semi)deponent verbs. In fact, queror does not survive in the Italian lexicon as a root, while gaudeo has turned into intrasitive godere ('enjoy'). What is meant here is that direct unaccusativity in psych-verbs (which regards the presyntactic interface with the lexicon) has undergone a change in how it is expressed by inflectional morphology (which regards the postsyntactic interface with morphology).
    ${ }^{3}$ It is generally true the accusative object of deponent and semideponent verbs cannot be turned into a nominative subject and that generally deponent and semideponent verbs do not provide the base for a -tor/trix agentive nominalization, as predicted if the accusative is inherent, parallel to the accusative assigned by inverted transitives, according to Belletti and Rizzi (1988). Despite this fact, Embick (2000) argues against the inherent accusative hypothesis on the basis of sporadic passive forms with an overt prepositional agent: e.g. ab amicis hortaretur '[He] is exhorted by [his] friends' (Varro in Pisc GL II 8,387,2) and on some agentive nominalizations of deponent verbs: e.g. sequor 'follow' > secutor 'follower', aggredior 'assail' > aggressor 'assailer', consector 'follow' > consectatrix 'follower'. Gianollo p.c. notes that these participles are not directly formed from the deponent verb but from a frequentative root formed on its past participle. Frequentative roots are not deponent, and the very existence of these participles may not be relevant to the point at all.

[^2]:    ${ }^{4}$ Note that in (23b) the Experiencer is null and is interpreted as human generic.

[^3]:    ${ }^{5}$ An alternative solution, is that the pronoun is an inherent accusative, as neuter has exactly the same form for nominative and accusative. In this case, we would have an inverted impersonal, with the pronoun resuming the clausal argument being entrapped in the VP and never reaching vP. There is no reason to prefer this classification over the proposed one and to contradict the traditional literature that takes the neuter pronoun as nominative.

[^4]:    ${ }^{6}$ Italian diffidare can be transitive, but in this case it is a verb of saying ('warn'), with a very different thematic structure.

