# Michela Cennamo,* Thórhallur Eythórsson, and Jóhanna Barðdal Semantic and (morpho)syntactic constraints on anticausativization: Evidence from Latin and Old Norse-Icelandic 


#### Abstract

The diachrony of valency patterns is generally an understudied phenomenon. The present article investigates anticausativization from a diachronic perspective, highlighting the parameters determining the morphosyntactic encoding of this type of intransitivization in two early Western Indo-European languages, Latin and Old NorseIcelandic. It is shown that the structural and lexical aspects of a verb meaning and their interplay with the inherent and relational characteristics of verbal arguments affect the synchronic distribution and the diachronic development of the anticausativation strategies in the languages investigated. These features interact, in the course of time, with changes in the encoding of voice and grammatical relations, such as the demise of the synthetic mediopassive and the recasting of the case system.


Keywords: Latin, Old Norse-Icelandic, anticausativization, middle, mediopassive, reflexive, active intransitive, oblique intransitive, aspect, control, case marking

## 1 Introduction

In this article we discuss the synchronic encoding and diachronic development of anticausativization in two early Western Indo-European languages, Latin and Old NorseIcelandic. Our focus is on the interplay between the aspectual template of verbs, the verb's inherent meaning, i.e., the lexical root, and the nature of the (P-)subject, animacy and control, in determining the different morphosyntactic realizations of this type of intransitivization. With the label P we refer to the Patient-like participant of a transitive verb, following the well-established terminology of S, A, P for marking the core arguments of a clause (Comrie 1989, Mithun and Chafe 1999, Haspelmath 2011, among others). A comparison of Latin and Old Norse-Icelandic reveals similarities and differences in the development of the anticausative alternation. In Early and Classical Latin three strategies alternate in order to mark anticausativization: the synthetic mediopassive $-r$ form (occurring only in the tenses of the infectum, present, imperfect, future), the reflexive morpheme with the verb in the active voice, and the active intransitive (i.e., lability). In Old Norse-Icelandic there occur three main strategies: first, the reflexive morpheme with so-called 'middle' sk- verbs, and second, the active intransitive, most typically found with the verbal argument, S , in an oblique case (retaining the oblique case of the original object/P argument of the transitive pattern). The third strategy, P-lability proper, i.e., patient-preserving lability, with identity of the derived intransitive verb form with the corresponding transitive one, instead, is only marginally attested.

In Early and Classical Latin the PIE middle/mediopassive form, realized by the -r ending in imperfective tenses, occurs as a general anticausativization device, attested with all verb

[^0]classes allowing the alternation (Feltenius 1977, among others). In the earliest attestations of both North and West Germanic, instead, this form - realized by the ending $-a$ (historically ai) and its variants - was already on the verge of disappearing. In Gothic it was confined to passive forms of the present indicative and optative, while it is unattested in Old NorseIcelandic (Braune and Heidermanns 2004: 141, 148, 156-157), where other strategies occur in anticausative function.
(1) Imperfective (Latin)
amatur
love.MPASS.PRS.IND.3SG
'He is loved'
(2) Passive (Gothic)
nimada
take.PRS.IND.3SG
'He is taken'

In both Latin and Old Norse-Icelandic the Reflexive gains ground as an anticausativization strategy, although with a different chronology, reflecting the different time span of the written records in the two languages. The earliest Latin documentation is from the 6th century BC (albeit the first literary texts date back to the 3rd century BC), while the earliest Old Norse vernacular manuscripts are dated ca. 1150, with earlier records from runic inscriptions (2nd century AD) (Barnes 2008: 2, among others). In the course of time, the Reflexive ousts the $-r$ ending in Latin (also in its passive domain), interacting with more general changes in the encoding of voice and grammatical relations.

The discussion is organized as follows: Section 2 gives the definition of the notions of anticausativization and P-lability assumed in this work, with an overview of their semantic constraints across languages. Sections 3 and 4, respectively, describe anticausativization in Latin and Old Norse-Icelandic, the strategies encoding it, their synchronic distribution, and their diachronic paths of evolution. Section 5 discusses the similarities and differences in the anticausativization constraints in the two languages. Finally, Section 6 summarizes the main arguments and provides the conclusions.

## 2 The Anticausative Alternation and Lability

The term anticausativization refers to the intransitive use of a transitive verb where the original inanimate object/P argument, the Undergoer, occurs as a subject. Languages may vary in the morphological devices used to encode this pattern. They may show no change in the verbal form of the intransitive member of the alternation, as in English (3a), or they may exhibit a dedicated morpheme on the verb, the non-active morphology in Greek (3b) (Alexiadou and Anagnostopolou 2004: 116-117) or the reflexive morpheme with some verb classes in Italian (3c) (Folli 2002; Schäfer 2008; Cennamo and Jezek 2011, among others):
a. The vase broke. $<\quad$ Mark broke the vase.
b. $\quad$ kegete $<$
the supa soup.NOM burn.NACT.3SG
'The soup is burning.'

| $O$ | Fanis | ekapse | $t i$ | supa |
| :--- | :--- | :--- | :--- | :--- |
| the | John.NOM | burn.PST.ACT.3SG | the | soup.ACC |

'John burnt the soup.'

| c. Il vaso si | ruppe. | $<$ | Mario ruppe | il vaso. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| the vase REFL | break.PST.3SG |  |  |  |
| 'The vase broke. |  |  |  |  |

When there is formal identity between the transitive-intransitive use of a verbal form, the structure is referred to as lability, P-lability in the case of identity between the transitive and intransitive use of a verb, with the original object/P argument of the transitive pattern occurring as subject of the corresponding derived intransitive pattern (Dixon 1994: 6; Kulikov 2001: 887-888, Kulikov 2003 and further references therein). Therefore the English example in (1a), the vase broke, instantiates the labile strategy used for anticausativization. In some languages, like Italian, both (P-)lability and a dedicated form, i.e., the reflexive morpheme, are employed (see further discussion in Haspelmath 1987; Kulikov 2003; Schäfer 2008; Koontz-Garboden 2009).

In this article we do not discuss intransitive forms with a derived animate $P$ subject, socalled endoreflexives (Haspelmath 1987: 27-29) or autocausatives (Geniušiene 1987: 86101), very frequent with motion verbs, e. g., move, turn, which in some languages, like Latin, Italian and other Romance languages, German, Turkish, Lithuanian, Latvian, among others, show the same marker as anticausatives, since they involve different parameters and transitivity domains.

Two general semantic constraints on anticausativization have been recognized in the literature:
(i) The spontaneous manifestation of an eventuality (Siewierska 1984: 77)
(ii) The absence of agent-oriented meaning components or other 'highly specific meaning components' that debar the spontaneous interpretation of the verbal process (Haspelmath 1987: 15, Haspelmath 1993: 94; Kulikov 1998)

Thus only transitive causative verbs denoting events that may come about spontaneously, without the intervention of a willful animate external causer, may occur in the anticausative alternation (Siewierska 1984: 77; Haspelmath 1987: 15; Levin and Rappaport Hovav 1995: 102; Kulikov 2001; Lazzeroni 2004).

In addition, verbs occurring in this pattern must denote a nonspecific change of state (cf. Haspelmath 1987: 15; Koontz-Garboden 2009: 84 and references therein). Haspelmath (1993: 39) points out that actions implying specific instruments or methods are excluded, as, for instance, bite, cut, dig, paint, etc. in English. Therefore, verbs that lexicalize a manner component seem to be excluded from the anticausative alternation (Rappaport Hovav and Levin 2010).

The lack of specification of the manner in which a change takes place has also been related to possible restrictions on the subject of change of state verbs. For instance, the subject of an achievement verb like break - consisting of two subevents, a causing eventuality and a resulting change of state - , can be an agent (4a), an instrument ( 4 b ), a natural force (4c), a stative eventuality (4d), as well as an event (4e) (cf., among others, Levin and Rappaport Hovav 1995: 85 and the recent discussion and references in Koontz-Garboden 2009: 84-85, from whom the examples below are adapted):
(4) a. Mary broke the window.
b. The hammer broke the window.
c. The hurricane broke the window.
d. The weight of the ball broke the window.
e. The blow broke the window.

We follow the Vendler/Dowty Aktionsart taxonomy comprising states, achievements, accomplishments, activities, as adopted in most current predicate decomposition approaches (Levin and Rappaport Hovav 2005: 68-75, and further references therein). Achievements denote an inherently telic punctual (i.e., instantaneous) situation, whilst accomplishments instantiate dynamic, durative, inherently telic situations. They are aspectually nonhomogeneous, and comprise different subtypes, reflecting the type and degree of change lexicalized (Bertinetto and Squartini 1995; Hay et al. 1999; Rappaport Hovav 2008).

Returning to example (4), with nonspecific change of state verbs such as break the participant in the causing subevent is thematically underspecified, i.e., it need not be an agent, bearing instead the role of Effector (Van Valin and Wilkins 1996; Koontz-Garboden 2009: 85). This property differentiates verbs like break from other change of state verbs like assassinate, murder, and kill, which, although characterizable as achievements and accomplishments, respectively, do not allow the anticausative alternation in various languages, including English. This morphosyntactic behavior, in fact, appears to reflect both the relational and the inherent nature of the participants of the event, with the subject of these non-alternating change of state verbs always bearing the thematic role of Agent (Koontz-Garboden 2009: 87), and the object being necessarily human (cf. Cennamo 1995: 91-92 for Italian).

Recently, it has been suggested that the possibility for some verbs to participate in the anticausative alternation stems also from the semantic components lexicalized in the verb, rather than from its event structure template only (Levin and Rappaport Hovav 2005: 1718). Verbs which lexicalize a manner component rather than a final/result or target state, i.e., a reversible state (cf. Parsons 1990: 234-235), in fact, do not participate in the anticausative alternation, as illustrated in (3)-(4) for English (from Hale and Keyser 1997: 53, here cited from Levin and Rappaport Hovav 2005: 73):
(5) a. We splashed mud on the wall.
b. Mud splashed on the wall.
(6) a. We smeared mud on the wall.
b. *Mud smeared on the wall.

The non-alternating verb smear shares the event structure template with the alternating verb splash, since both instantiate accomplishments. However, smear lexicalizes the means or manner in which the change of state comes about, rather than the result state, unlike splash, whose core meaning refers to the result state only (Levin and Rappaport Hovav 2005: 73, cf. also the discussion in Hale and Keyser 1997: 54).

Some current research on anticausativization and P-lability, therefore, has been focusing on the contribution of the idiosyncratic, i.e., the lexical root, and the structural, i.e., the event structure template, components of the verb meaning in determining the nature of the anticausative alternation (see also Schäfer 2008).

It has also been pointed out that, although most typically anticausativization denotes the spontaneous manifestation of a situation, as in (7a) below, it may also be found in contexts where such an interpretation is not available, as in its uses with activity/continuation of activity verbs and states, illustrated in (7b) and (7c) for Latin and Italian (Cennamo 1995; Cennamo and Jezek 2011), and well attested across languages (Letuchiy 2009):

[^1]```
vulnus clauditur
wound.N.SG close.MPASS.PRS.IND.3SG
'The wound heals'
b. Latin
luctus continuatur
mourning.NOM continue.MPASS.PRS.IND.3SG
'The mourning continues'
c. Italian
\begin{tabular}{lcllll} 
una & comunità & omogenea & si & basa \\
a & community & homogeneous & REFL & base.PRS.IND.3SG \\
anche & su & una & mediocrità & di & fondo \\
also & on & a & mediocrity & of & background
\end{tabular}
'A homogeneous community is based also on some sort of mediocrity'
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Therefore, the widely accepted constraint of spontaneous manifestation of an eventuality without the willful intervention of an external causer only applies to the uses of the anticausative alternation with verbs denoting change of state and, marginally, change of location in some languages. In fact, these constraints only apply to verbs that lexicalize a final/result or target state, i.e., achievements and accomplishments, which instantiate the core of the anticausative category in several languages (Cennamo and Jezek 2011; see also Koontz-Garboden 2009 for a criticism of the alleged suppression of the causer in the anticausative alternation).

In our discussion in the following sections, we address the issue of which factors determine the different morphosyntactic realization of the anticausative alternation in Latin (Section 3) and Old Norse-Icelandic (Section 4). In particular, we investigate the different contribution of the structural and idiosyncratic aspects of verb meaning in determining the distribution of the various strategies in the two languages investigated, both synchronically and diachronically. We confine our discussion to intransitive patterns derived from originally transitive ones, where the original transitive (inanimate) object occurs as an intransitive subject, this being optionally registered through different verb morphology and/or the case marking of the derived subject.

## 3 Anticausatives in Latin

The following three strategies are employed for anticausativization in Latin, each exemplified in (8) below: ${ }^{1}$
(i) The mediopassive $-r$ form in imperfective tenses, so-called infectum
(ii) The Reflexive pattern, i.e., the reflexive morpheme se together with the verb in the active voice
(iii) The active intransitive (i.e., P-lability)

[^2](8) a. mediopassive
aperitur foris
open.MPASS.PRS.IND.3SG door.NOM
'The door opens/is opened'
b. reflexive
foris se aperit
door.NOM REFL open.PRS.IND.3SG
'The door opens'
c. active intransitive
foris aperit
door.NOM open.PRS.IND.3SG
'The door opens'
(Plaut. Persa 300)
Observe that the ending $-r$, whose original impersonal/(medio)passive function is a longstanding matter of contention (Kurzová 1993: 157-171; Beeks 1995: 240-242 and references therein), covers the (reflexive-) middle/anticausative/passive/impersonal domains, and has primarily a "passive" function in the synchronic grammar of Latin (Flobert 1975; Baldi 1977). It may be regarded as the marker of the 'non-active voice', marking different points along a continuum of detransitivization, instantiated by patterns which depart from the prototypical transitive encoding of a situation whereby a highly agentive, topical subject acts upon a patient participant, determining some change in it (Cennamo 1998: 78-81).

The three patterns exemplified in (8) above are usually regarded as interchangeable in the literature, and differences in their distribution are viewed as reflecting different time spans in the history of Latin with the active intransitive as the uncommon pattern, often used for conciseness. This increased in Late Latin, owing to the gradual falling out of use of the $-r$ ending in the vulgar language and the confusion among voice forms (Feltenius 1977: 23; Gianollo 2014, among others).

The mediopassive $-r$ form is the most commonly used anticausativization device in Early Latin, whilst the Active Intransitive increases at later stages, alongside the Reflexive pattern, to the detriment of the $-r$ form, which is, however, still widely attested in late texts, in alternation with the other two strategies. This is in line with the gradual demise of the $-r$ form, which in turn reflects the more general recasting of the voice system (Cennamo 1998, 2006, 2008 and Section 3.2).

Contrary to current views, we argue that the distribution of the three strategies reflects aspectual and thematic differences, interacting, in turn, with changes in the encoding of voice and argument structure in the transition to Romance (Cennamo 1998, 2001a, 2005, 2006 and Section 3.2).

### 3.1 Synchronic Aspects

A careful analysis of the morphological devices for marking anticausatives in Latin reveals that the use of the three strategies, the mediopassive $-r$ form, the reflexive pattern, and the active intransitive, is not equivalent. Rather, we have uncovered a complex interplay between the aspectual template of predicates, the meaning components lexicalized in the verb, and the inherent and relational properties of the subject, such as its degree of individuation (a cluster of properties comprising animacy, concreteness, definiteness and referentiality of the argument's referent) and thematic (under)specification, i.e., control (see Timberlake 1977: 162; Hopper and Thompson 1980: 253).

Our term "control" refers to the semantic spectrum reflecting the degree of primary responsibility of a core argument of the clause in the verbal process, involving various transitivity features such as agency, volitionality, and the aspectual nature of the predicate (Lehmann 1988: 57; Comrie 1989: 61-62; and Cennamo 1998, 2001a, 2001b, 2010 for its relevance for the encoding of (in)transitivity in Latin).

We will now discuss each of the three Latin strategies in turn.

### 3.1.1 The mediopassive form

The mediopassive $-r$ form is found at all stages in the history of Latin, with all verb classes that allow the anticausative alternation: achievements like frangere 'break' (9a), accomplishments like mutare 'change', as in (9b), gradual completion verbs like minuere 'decrease', illustrated in (9c), denoting the gradual approximation to a telos that may not be attained (Bertinetto and Squartini 1995) - also referred to as degree achievements (Hay et al. 1999). The mediopassive also occurs with activities, as shown in (9d) for the verb volvere 'roll, flow':
a. frangitur
breaks.MPASS.PRS.IND.3SG
'The rolling tide breaks' (Lucr. De Rer. Nat. 6,121)

| b. | Lhumanae res | quae | fluxae | et |
| :--- | :--- | :--- | :--- | :--- |
| human.NOM.PL | affair.NOM.PL | which.NOM.PL | unstable.NOM.PL. | and |
| mobiles | semper | advorsa |  |  | mobiles semper in advorsa mutantur mobile.NOM.PL always in opposite. N.PL change.MPASS.PRS.IND.3PL '[human affairs,] which, unstable and fluctuating, are always changing to opposite extremes'

(Sall. Iug. 104,2)
c. memoria minuitur
memory.NOM decrease.MPASS.PRS.IND.3SG
'Memory is impaired'
(Cic. Sen. 7,21)
d. Lacrimae volvuntur inanes
tear.NOM.PL flow.MPASS.PRS.IND.3PL vain.NOM.PL
'Tears gush forth in vain' (lit. tears flow vain)
(Verg. $A 4,449$ )
At times there may be ambiguity between an anticausative and a passive interpretation, as in (10), which is resolved only by the context.
(10) animi $[\ldots]$ corporibus elapsi circum terram soul.NOM.PL body.ABL.PL slip.from.PTPTCP.M.NOM.PL around earth.ACC k ipsam volutantur itself.AGC whirl.MPASS.PRS.IND.3PL
Souls [...] once liberated from the body, whirl/are whirled around this world.' (Cic. Rep. 6, 29)

The same ambiguity obtains with other activity verbs like quassare 'shake', as in (11), with which, however, the $-r$ pattern is not attested in Early Latin (Feltenius 1977: 35):
(11) membra quassantur metu
limb.N.PL shake.MPASS.PRS.IND.3PL fear.ABL.SG
'Limbs are shaken by fear/shake with fear'
(Sen. Phoen. 530)

### 3.1.2 The reflexive pattern

The Reflexive strategy in truly anticausative function is rare in Early and Classical Latin, compared with the $-r$ form, and is found mainly in technical works, where it is attested at all times (e.g., Cato, Varro, Celsus, Plinius, Apicius, Chiron, Oribasius, etc.), unlike in Late Latin, where this pattern is very widespread, in all types of texts (Wistrand 1942: 61; Hofmann and Szantyr 1965: Section 164, among others). It is found mainly with achievements (e.g., scindere 'crack') (12a) and accomplishments (e.g., mutare 'change', aperire 'open', etc.) (12b)-(12d):
a. lutamenta scindunt se
plaster.N.PL crack.PRS.IND.3PL REFL
'Plaster cracks'
(Cat. Agr. 128)
b. commutat que sese sempre cum calore (sc.brassica) change.PRS.IND.3SG. and REFL always with heat.ABL cabbage.NOM 'Cabbage constantly changes its nature with heat'
(Cat. Agr. 157,1)
c. neque se Luna quoquam mutat neither REFL moon at.all change.PRS.IND.3SG
'And the moon does not change at all.'
(Pl. Amph. 273)
d. [motus] qui in XXIIII
motion.NOM.M.PL which.NOM.M.PL in twenty.four
horis lunaribus cotidie quater se mutant
hour.ABL.M.PL. lunar.ABL.M.PL daily four-times REFL change.PRS.IND.3PL 'The motions which in twenty-four lunar-hours change themselves four times a day'
(Varr. LL 9, 26)
In some texts the Reflexive may alternate with the $r$-form in the same sentence, with no apparent difference in meaning, as in (13) from the classical age, where the verb form converturtur instantiates the $r$-form, while se vertit exemplifies the reflexive strategy:

occurs when earth turns to water'
(Cic. ND 3,31)
However, the Reflexive is not attested with verbs of variable/reduced telicity, such as gradual completion verbs, as shown in (14). Such examples, in fact, are only found from the 1st century AD onwards (Ronconi 1968: 22; Feltenius 1977: 62, also Section 3.2):
(14) *memoria se minuit
memory.NOM REFL decrease.PRS.IND.3SG
Intended meaning: 'Memory decreases.'
Examples of this type are only seldom found, depending on period, authors, and verbs, also with activity/continuation of activity verbs. Thus, whereas in Early and Classical Latin the Reflexive in anticausative function does not occur with verbs like volutare 'roll, flow' (15a), quassare 'shake violently' ( 15 b ) or continuare 'continue' ( 15 c ), it is attested instead with the verb volvere 'flow, roll' in Lucretius (Classical age), albeit in a seemingly isolated example (see (16) Francesco Rovai p.c.). However, this could be accounted for as being due to personification:


| Res | multas | esse | necessest |  | unde |
| :--- | :--- | :--- | :--- | :--- | :--- |
| thing.ACC.F.PL many.ACC.F.PL | be.INF | necessary.be.PRS.IND.3SG | whence |  |  |
| fluens | volvat | varius | se | fluctus |  |
| flow.PR.PTCP | roll.PRS.SBJV.3SG | varied.NOM | REFL | flow.NOM |  |

odorum
odor.GEN.PL
'It is needful there be many things from whence the streaming flow of varied odors may roll along'
(Lucr. $R \mathcal{N} 4,674 / 5$ )
With these verb classes, in fact, only the mediopassive $-r$ form and the Active Intransitive occur (see also Cennamo 1998, 2001a and discussion in 3.2). The Reflexive pattern is unattested, instead, with states (17a). With activities, the use of the Reflexive with inanimate subjects is generally due to personifications, as in (17b), thereby instantiating a truly reflexive pattern, with the reflexive marking coreference with an agentive subject:

```
a. *campusse extendit
    field.NOM REFL extend.PRS.IND.3SG
    Intended meaning: 'The field extends itself, spreads out.'
b. patria vobis se commendat
    mother.country.NOM you.DAT REFL entrust.PRS.IND.3SG
    'Your mother country entrusts you (lit. recommends itself to you)
```

(Cic. Catil. 4,18)
A provisional generalization that seems to emerge is that in Early and Classical Latin the Reflexive morpheme occurs as an anticausativization strategy with inherently telic predicates, i.e., with verbs lexically encoding a final/result or target state, such as achievements and different types of accomplishments, as further exemplified in (18a)-(18b):


As mentioned above, the Reflexive also seems to be preferred over the mediopassive $-r$ form when the subject, although inanimate, is personified, therefore showing some degree of control, as in (18a), which can be contrasted with (18b), where no personification is involved and the presence of se simply marks the intransitive (anticausative) variant (see further discussion in Wistrand 1942: 53-65, Ronconi 1968: 21-22; Hofmann and Szantyr 1965: 293; Adams 2013: 690). In the literature the anticausative function of the Reflexive is regarded as characteristic of the technical language, occurring at all stages of the language, while in early and classical prose and poetry it was apparently confined to personified contexts, occurring mainly with abstract nouns (Hatcher 1942: 71-74; Wistrand 1942: 64, Hofmann and Szantyr 1965: 293 and further discussion in Reichenkron 1933: 17-18; Ronconi 1968: 21-22; see also Cennamo 1998; Adams 2013: 686-692 and Section 3.2). Personification indeed accounts for the use of the reflexive with inanimate subjects with activity verbs (16), that are otherwise excluded from this pattern in Early and Classical Latin, but are well attested during the Imperial age and become very widespread in Late Latin (Pirson 1906: 400-403; Reichenkron 1933: 29-31; Svennung 1935: 461-463; Norberg 1943: 166-170; Flobert 1975: 388-389, and Section 3.2).

### 3.1.3 The Active Intransitive

In Early and Classical Latin the Active Intransitive, i.e., P-lability, mainly occurs with gradual completion verbs (e.g., lenire, 'soothe', ampliare 'enlarge', sedare 'calm', augere 'increase'), as shown in (19a)-(19b). The Active Intransitive also occurs with indefinite change verbs, i.e., verbs which do not lexically encode a final point/state, like mutare change' (19c), and activities, like quassare 'shake' and, volutare roll', as illustrated in (19d)-(19e) (see also Bennett 1910: 4, Feltenius 1977):
(19) a. irae leniunt
anger.NOM.PL soothe.PRS.IND.3PL
'Anger soothes.' (Plaut. Mil. 583)
b. postquam tempestas sedavit
after storm.NOM calm.down.PRF.IND.3SG
'Once the storm quieted.'
(Gell. NA18,12,6)


This form does not occur in anticausative function with verbs lexically encoding a final/result state, i.e., achievements such as rumpere 'break' and scindere 'crackle' (20a)-(20d), which may be regarded as the core of the category in Latin and in other languages which show this type of transitive-intransitive alternation (see also Section 2).

An exception to this tendency of the Active Intransitive not occurring with verbs encoding final/result state is instantiated by rare examples of verbs like aperire 'open' in Early Latin, e.g., Plautus, shown in (21), while its opposite claudere 'close' behaves as expected. The verb aperire 'open', however, denotes a reversible change of state, i.e., a target state, unlike scindere and rumpere, which denote a non-reversible change, i.e., a result state, and which therefore lexicalize a higher degree of telicity.
a. *foris rumpit
door.NOM break.PRS.IND.3SG
Intended meaning: 'The door breaks'
b. *vulnus claudit
wound.N.SG close.PRS.IND.3SG
Intended meaning: 'The wound heals'
c. *lutamenta scindunt (scindunt se)
plaster.N.PL crack.PRS.IND.3PL (crack.PRS.IND.3PL REFL)
Intended meaning: 'Plaster cracks'
(Cat. Agr. 128)
d. *corrumpit iam cena (corrumpitur ...)
spoil.PRS.IND.3SG already dinner.NOM (spoil.MPASS.PRS.IND.3SG)
Intended meaning: 'Dinner is spoiling already'
(Plaut. Pseud. 890)

| (21) foris | aperit |
| :--- | :--- | :--- |
|  | door.NOM open.PRS.IND.3SG |
|  | 'The door opens' |
|  | (Plaut. Persa 300) |

The Active Intransitive in an anticausative function really thrives in Late Latin, especially in 4th century technical works, such as veterinary texts like the Mulomedichina Chironis of the second half of the 4th century AD. By this age, accomplishments and achievements alternate freely between the three strategies available in Latin to mark anticausativization, as illustrated in (22) for the verb rumpere 'break' (Pirson 1906: 392-403; Feltenius 1977: 121 and further discussion in Section 3.2).

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a. Active Intransitive
    postea rumpunt dentes
    afterwards break.PRS.IND.3PL tooth.NOM.PL
    'Afterwards teeth break'
    (Chiron 775)
b. Reflexive
    vitium ... ambulationibus lenibus
    fault.N ambulation.DAT.PL smooth.DAT.PL
    cum etiam ruperit se
    when also break.SBJV.PRF.3SG REFL
    'When also a difficulty in the ease of/ambulation impairment arises'
    (lit. difficulty to smooth ambulations broke itself)
    (Chiron 384)
c. Mediopassive
    quotiens ergo in matrice 
    rumpitur (sc. collectio)
    break.MPASS.PRS.IND.3SG abscess
    'Then every time an abscess bursts/breaks'
    (Soran. 99.13)
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We believe that, initially, the Active Intransitive must have been stylistically marked, as shown by the following passage by Aulus Gellius, a second century AD author, who views the active pattern mutant '(they) change' as more elegant than the corresponding mediopassive form mutantur: ${ }^{2}$

| Mutant$\quad$ inquit | elegantissime pro |
| :--- | :--- |
| change.PRS.IND.3PL | say.PRS.IND.3SG |
| mutantur | very.elegantly for |

### 3.1.4 Interim summary

A closer inspection of the distribution of the three anticausative strategies in Latin reveals that the alternation among the different voice forms realizing them reflects both the idiosyncratic (i.e., the lexical root, for instance the type of change lexically encoded) and the structural aspect (i.e., the event structure template) of a verb meaning.

The Reflexive pattern, in fact, mainly occurs with telic verbs of different types, achievements like scindere 'crack' and rumpere 'break', accomplishments like claudere 'close',

[^3]aperive 'open' and mutare 'change', and gradual completion verbs/degree achievements like minuere 'decrease', among others.

The Active Intransitive, instead, most typically occurs in anticausative function with verbs that do not lexicalize the attainment of a final state, i.e., the endpoint of the process, as well as with atelic verbs, not encoding the notion of change. The Active Intransitive is found, in fact (in alternation with the $-r$ form), with indefinite change verbs such as mutare 'change', gradual completion verbs/degree achievements like lenire 'soothe', minuere 'decrease' and sedare 'calm down', and activities like quassare 'shake' and volutare 'roll', with possible ambiguity between an intransitive active (anticausative) and passive reading, resolved by the context. The Active Intransitive is also marginally attested with accomplishment verbs denoting a target state such as aperire 'open'. These lexical aspectual factors together with the inherent (e.g., animacy) and relational properties of arguments (e.g., control), as testified by so-called personified uses of the reflexive pattern, interact, in the course of time, with changes in the voice system and the encoding of argument structure, partially illustrated in Section 3.2. (see Cennamo 1998, 2009 and references therein)

### 3.2 Anticausatives, P-lability and Transitivity in Late Latin

In Late Latin the distribution of the anticausative strategies changes: the $-r$ form, in fact, although still widely attested, often co-occurs with the Reflexive and the Active Intransitive patterns with the same verb. These strategies, in turn, come to be used with different aspectual classes of verbs, with which they are not found in Early and Classical Latin. Therefore, the morphological realization of anticausatives and P-lability is no longer determined by the semantics of the predicate and the inherent and relational nature of the subject.

In particular, the Reflexive occurs also with verbs of reduced telicity, comprising gradual completion verbs like minuere 'decrease', as in (24a)-(24b), and other verbs of different types and degrees of telicity. The Reflexive is often used in technical terms in technical works, like with coquere 'cook', spissare 'thicken' (Apicius, 4th century AD), assare 'roast', elixare 'boil, stew' (Anthimus, 6th century AD), cicatricare 'heal' (24c) (Oribasius, 6th century AD), claudere 'close' and glutinare 'close up, join' (Chiron, second half of 4th century AD). At times the Reflexive alternates with the $-r$ form in the same text, as in (24c)-(24d), from the 6th century AD (Pirson 1906; Feltenius 1977: 20).
a.
a. minuente se morbo
decreasing.PR.PTCP.ABL REFL disease.ABL
'When the disease is on the decline'
(Plin. Nat. 23, 25)
b. memoriaminuitur
memory.NOM decrease.MPASS.PRS.IND.3SG
'Memory is impaired'
(Cic. Sen. 7, 21) (Classical Latin)
c. vulnera cum se cicatricaverint
wound.N.PL when REFL heal.FUT.PRF.3PL
'When the wounds will have healed'
(Orib. Syn. 7,10 Aa)
d. vulnera cicatricantur
wound.N.PL heal.MPASS.PRS.IND.3PL
'The wounds heal'

> (Orib. Syn. 7, 3)

The use of the $-r$ form in anticausative function in Late Latin, illustrated in (24d) (from a 6th century text), however, might also reflect so-called Deponentization (Flobert 1975; Gianollo 2014), the widespread use of the passive morphology in active function with all verbs (Cennamo 1998, 2009, and further references therein), both in the tenses of the infectum (25a)-(25b) and of the perfectum, instantiated by a form of esse 'be' together with a past participle (25c). This appears to be a part of the reorganization of voice distinctions and the consequent functional opacity of the voice morphology conveying them (Cennamo 1998, 2005, 2006; Herman 2002). In fact the $-r$ form and the sequence esse plus past participle may occur in active function, replacing the active morphology, with both intransitive and transitive verbs. This occurs already in 4th century texts, as exemplified in (25a), (25c), from the 6th century AD , and even more so at later stages, as in (25b), from the 9th century AD (see also Gianollo 2014):

| a. et sabbato non ieiunantur |  |
| :--- | :--- | :--- | :--- | :--- |
|  | and Saturday.ABL not fast.PRS.IND.MPASS.3PL |
| 'And they do not fast on Saturdays' |  |

Towards the end of the Imperial age, with attestations from the second half of the 4th century AD, as in the Mulomedichina Chironis, and even more so in later texts, the Reflexive pattern also occurs with non-inherently telic verbs (e.g., gradual completion verbs), as well as with activities (Cennamo 2001a, 2006: 333, fn. 8). This pattern, therefore, is also found with accomplishments like citare, provocare 'cause', denoting the coming into being of an entity, and activities like vexare 'oppress, injure', servare 'keep', and excusare 'justify/excuse' (Cennamo 1998, $2001 \mathrm{~b}: 238$ ). The reflexive pattern at times is ambiguous between an anticausative and a passive interpretation, i.e., between a spontaneous vs. an induced process reading, as illustrated in (26a) (Cennamo 1998, 2001b, 2006):
a mala ... toto anno servare se possunt
apple.N.PL whole.ABL year.ABL keep.INF REFL can.PRS.IND.3PL
'Apples ... can keep/be kept for the whole year'
(Pall. de agr. 3,25,18; Ronconi 1968: 24)
b stercora si se ... provocaverint
excrement.N.PL if REFL caus.FUT.PRF.3PL
'Excrement, if ... it is induced'
(Chiron 230)

The verb provocare 'call forth, cause, provoke' in the Reflexive pattern, instead, can only denote an induced process, i.e., the so-called passive reading, as in (26b).

With activity verbs, the reflexive with an active verb can only have a passive interpretation as in (27):

| qui | se vocat | padule |
| :--- | :--- | :--- |
| that.NOM.SG REFL call.PRS.IND.3SG | marsh.ACG.SG |  |
| '(A place) that is called marsh' |  |  |
| (Cod. Dipl. Bar. 5.9; Bassols de Climent 1948: 67 ) |  |  |

In addition, the Active Intransitive increasingly occurs in anticausative function, alternating with the reflexive, as in (28a)-(28b), from the second half of the 4th century veterinary text Mulomedichina Chironis (Feltenius 1977: 82; Cennamo 2006: 317):


In the same texts, illustrating the expansion of the Reflexive and the Active Intransitive patterns to include verbs with different aspectual templates, oblique anticausatives are also found, as in (29a)-(29b). In these structures the subject of the anticausative pattern, i.e., the S-argument maturum 'soft', occurs in the accusative, rather than the canonical nominative case (cf. Cennamo 2009 and references therein):


This non-canonical encoding of the subject reflects more general changes in the encoding of the argument structure of the clause in Late Latin, leading to the use of the accusative in subject function, as a part of the loss of the case system and of the general rise of headmarked patterns of active syntax in the transition to Romance (see full discussion of this issue in Cennamo 2009 and Section 4.3.1 below on oblique subject patterns in other early IndoEuropean languages). ${ }^{3}$

[^4]In Late Latin, therefore, the Reflexive strategy spreads from inherently telic verbs denoting change of state and location, i.e., situations that can be brought about spontaneously, instantiated by achievements and accomplishments like scindere 'crack', frangere 'break', and mutare 'change', to non-inherently telic and atelic verbs such as citare, provocare 'cause', minuere 'decrease', servare 'keep' and vocare 'call', i.e., accomplishments of variable/reduced telicity and activities (Cennamo 2001a).

With these aspectual classes either only the mediopassive $-r$ form occurred in passive function, as shown in (30a) - which is to be contrasted with (31b), the corresponding ungrammatical anticausative reflexive form in early and Classical Latin - or the active intransitive/the $-r$ form, in anticausative function, as in (30a)-(30b). If, on the other hand, the pattern clearly marked an induced process (passive interpretation) only the $-r$ form occurred, as shown in (30a)-(30b) (see further discussion in Cennamo 1998, 2006):
a. stercora provocantur excrement.N.PL cause.MPASS.PRS.IND.3PL
'Excrement is induced'
b. *stercora se provocant excrement. N.PL REFL cause.PRS.IND.3PL Intended meaning: 'Excrement causes itself'

| a. | memoria | minuitur | /minuit |
| :--- | :--- | :--- | :--- |
|  | memory.NOM | decrease.MPASS.PRS.IND.3SG |  |
|  | /decrease.PRS.IND.3SG |  |  |
| 'Memory is impaired' (lit.memory decreases) |  |  |  |

Following Haspelmath (1993: 93), verbs such as facere 'do/make', vexare 'oppress', provocare 'cause, provoke' might be defined as having an Agent-oriented meaning component, since they denote situations that most typically involve a human causer, a feature that, in turn, makes the spontaneous interpretation highly unlikely (Cennamo 1998: 96). We believe that Haspelmath's intuition can be made more precise if we restate it in aspectual terms, i.e., in terms of the aspectual template of verbs, as proposed above.

Interestingly, in late texts, the reflexive pronoun and the $-r$ form may co-occur in anticausative function, at times with ambiguity between an anticausative and a passive interpretation (as shown in (32a)), depending on the verb and on the syntactic context (see further discussion in Cennamo 1998, with examples of the early co-occurrence of the two forms in other domains).

| a. | si autem minutetur | se medicamen |
| :--- | :--- | :--- | :--- |
|  | if then pulverize.MPASS.PRS.SBJV.3SG | REFL drug.N.SG |
|  | 'If then the drug pulverizes/gets pulverized' |  |

this issue in Michaelis (1993: 322) for Latin and Barðdal (2011a) for Icelandic, where a criticism of the traditional generative dichotomy between inherent and structural case is found:

| (i)tibi nocetur a$\quad$ Marco $<$ Marcus tibi nocet |  |  |
| :--- | :--- | :--- |
| you.DAT harm.MPASS.IMPERS | by | Mark.ABL Mark.NOM you.DAT harm.PRS.IND.3SG.ACT <br>  <br> 'You are harmed' |

REFL festivity.GEN will.have.MPASS.3SG day.NOM
'It will be a day of festivity/The day of festivity will take place'
(Papyr. Mar. 8; Norberg 1943: 166) (VIII AD)
The co-occurrence of the two morphological devices, the $-r$ form and the reflexive pronoun, suggests a total functional equivalence of the two constructions, and is a clear sign of the restructuring of the voice system taking place in Late Latin, with the mediopassive $-r$ form gradually demising in the spoken language and being replaced by the Reflexive, that spreads to all verb classes in Late Latin, with both animate and inanimate subjects.

In particular, the Reflexive pattern is no longer confined to the three functional domains in which it occurred in early and Classical Latin, namely (i) reflexives, marking coreference between the A and P arguments as in (33a), (ii) endoreflexives/autocausatives, a pattern that is very frequent with body motion verbs, as illustrated in (33b), and (iii) core anticausatives, i.e., verbs of telic change, as in (33c) (Cennamo 1998, 2005, 2006):
a. pueri se unctitant
boy.NOM.PL REFL smear.PRS.IND.3PL
'The boys smear themselves'
b. quo me vortam nescio where REFL turn.PRS.SBJV.lSG know.not.PRS.IND.1SG
'I don't know where to turn (myself).'
(Plaut. Curc. 69)
c. dum calor se frangat
till heat.NOM REFL break.PRS.SBJV.3SG
'When the rolling tide breaks'
(Cic. de orat. 1, 265)
The distinction between these three categories, however, is to be viewed as a gradient, with overlapping boundaries (Cennamo 1993, 1998).

With endoreflexives/autocausatives, i.e., with derived intransitive patterns with an original animate P argument occurring as subject, as in (33b), in Early and Classical Latin there often occur fluctuations among voice forms, reflecting the degree of control of the subject over the verbal process, as illustrated in (34) (cf. Ronconi 1968: 20-22; Cennamo 1998: 86):
a. quo applicem?
where lean.PRS.SBJV.1SG
'Where shall I go?'
(Enn. Trag. 77)
b. $\quad+$ Control
ad eas (sc. arbores) se applicant
to they.ACG.F.PL. tree.ACG.F.PL REFL lean.PRS.IND.3PL
'They lean themselves against them (sc. the trees)
(Caes. B.G. 6, 27; Hatcher 1942: 62)
c. - Control
adplicor ignotis (sc. terris)
lean.MPASS.PRS.IND.1SG unknown.ABL.PL land.ABL.PL.
'I land on unknown shores' (lit. 'I happen to land')
(Ov.Met. 3,598)

The $-r$ form in (34c) marks the affectedness/inactive nature of the subject, whilst in (34b) the use of the reflexive signals volitionality of the subject. The active intransitive in (34a) instead, is neutral as to the realization of this parameter.

Thus, although these alternations are usually explained in the literature as due to stylistic reasons or personal choices on the part of the author, in many cases they convey a difference in control, as also illustrated in (35):
a. - Control et enim si delectamur cum scribimus and in.fact if enjoy.MPASS.PRS.IND.1PL when write.PRS.IND.1PL 'Indeed, if we like writing (lit. we find enjoyment in writing) (Cic. fin. I, 3)
b. + Control
interea ... nos delectabimus
meanwhile REFL enjoy.FUT.1PL
'Meantime we shall organize our own pleasure'
(Cic. Att. II, 4.2)
Control indeed plays an important role in the marking of transitivity in Latin, determining voice fluctuations with animate subjects (Cennamo 1998 and discussion above) and the "impersonal" encoding of situations, as shown in (36), attested with activities, like delectare 'please', and states, like poenitere 'repent' and libere 'like', etc. Forms such as me fallit 'I am wrong', me delectat 'I am delighted', and me libet 'I am pleased', labeled "impersonal" in traditional Latin grammars, may be regarded instead as the crystallization of a usage that must have been very common in earlier stages of the language: An oblique subject and an impersonal verb form were used to denote lack of control of the subject over the verbal process, as illustrated in (36d) for the verb fallere 'deceive' (see Cennamo 2010; Cennamo and Fabrizio 2012, Fedriani 2014: 121-128). Interestingly, (quod) me non fefellit is morphosyntactically identical with analogous Old Norse-Icelandic oblique subject patterns discussed in Section 4.1.5 below):
a. fallo:
active transitive use: 'I deceive (somebody)'
nisi memoria me fallit
if.not memory.NOM I.ACG deceive.PRS.IND.3SG
'If memory does not deceive me'
b. reflexive: me fallo:
nisi me forte fallo
if.not I.AGC strongly deceive/be.in.error.PRS.IND.1SG
'If I am not completely wrong'
c. mediopassive-r form: fallor ('I am deceived' (passive) or 'I am wrong' (middle)) nisi fallor
if.not deceive/be.in.error.MPASS.PRS.IND.1SG
'If I am not wrong'
d. impersonal: me fallit 'I am wrong (I happen to be wrong)'( lit. me deceives)
quod me non fefellit
as.far.as.this I.ACC not deceive/be.in.error.PRF.3SG
'I was not (I did not happen to be) wrong as far as this is concerned'
(Cic. Ver. 2,1,19)

In Late Latin, however, the concepts of control and aspect no longer play a role in determining voice realizations and alternations in the reflexive-middle continuum and anticausatives, respectively. Thus, uncertainties and fluctuations in the use of voice forms come to affect all areas of transitivity, being no longer confined, as in early and Classical Latin, to peripheral, low transitivity domains and informal registers (Cennamo 1998, 2001b). Thus one also finds, albeit rarely, the active in passive function, initially with inanimate (37a) and subsequently with animate subjects (37b), sometimes with overt expression of the cause, as in (37a) (Cennamo 1998: 92, 2006: 318; Gianollo 2014: 982 for the anticausative interpretation of the pattern):


In addition, the Reflexive pattern is attested in syntactic domains where only the $-r$ form would have occurred in early and Classical Latin, such as the non-canonical middle function, where the subject, [+animate], is inactive, as in (38a) vs. (38b), at times alternating with the mediopassive $-r$ form in the same sentence, as in (38c) (Cennamo 1998: 88):
a. si... iumentum caudam parietibus fricat
if beast.of.burden.N tail.AGG wall.ABL.PL rub.PRS.IND.3SG
et exculcerat se, sic curato
and ulcerate.PRS.IND.3SG REFL thus cure.IMPER
'If some beast of burden rubs its tail against the walls, and ulcerates,
then cure it'
(Chiron 717)
b. quacumque parte procubuerit (sc. iumentum),
whichever.ABL place.ABL turn.FUT.3SG beast.of.burden
exulceratur
ulcerate.MPASS.PRS.IND.3SG
'Wherever it turns, it ulcerates'
(Chiron 344)
c. ustulant se foco in stomacho quomodo
burn.PRS.IND.3PL REFL fire.ABL in stomach.ABL like
caballi furiosi ustulantur
horse.NOM.PL mad.NOM.PL burn.MPASS.PRS.IND.3PL
'When they fall ill, they burn with fire in their stomach like mad horses'
(Anthim. 3, 6-8)
Whilst the active in passive function is just a reflex of the loss of the grammatical dimension of voice, and of the fact that voice morphology had become functionally opaque, the use of the Reflexive pattern in passive function is a true development, anticipating the Romance reflexive passives (Cennamo 1993, 1998, 2001a).

By the end of the 4th century AD , therefore, and even more so in later centuries, the whole coding of transitivity gets restructured, ultimately leading, in some late texts, to the replacement of the $-r$ form (i.e., the synthetic passive and deponents) with the active, sometimes with overt expression of the agent as in (39a), also when it is lacking in the original passage reproduced in a text, as shown in (39b), both from the $L$ (iber) $H$ (istoria) $F$ (rancorum) (an anonymous Merovingian Latin chronicle dating back to the end of the 7th, beginning of the 8th century AD, finished in 727). In this text in fact, the author at times inserts snippets from an earlier text by Gregory of Tours ( 6 th c. AD). The elimination of the synthetic passive in favor of the active clearly reflects the author's awareness of the non-intelligibility of the -r form by the end of the 7th c. AD (Herman 2002; Cennamo 2006: 319; recently Adams 2013: 718 , Note 6 for a critical discussion of the issue).

$$
\begin{array}{lll}
\text { a. } \begin{array}{ll}
\text { dum } & \text { missarum sacrificia ... celebraret }
\end{array}  \tag{39}\\
\text { while } & \text { Mass.GEN.PL } & \text { sacrifice.N.PL } \\
\text { (sc.elebrate.IMPF.SBJV.3SG } & \text { sanctus } \quad \text { Mamertus) }
\end{array}
$$

Changes in the distribution of the strategies for anticausatives, therefore, are just a reflex of deep and wide-ranging changes taking place in the domains of voice and grammatical relations, partially illustrated above (see Cennamo 1998, 2001b, 2006, 2009). Only occasionally, however, the 'new' tools that had become available, such as the reflexive passive, and various passive verbal periphrases, like e.g., fieri 'become' together with a past participle, venire 'come' together with a past participle, are employed, even at a very late stage, since they are not organized yet in coherent paradigms (Herman 2002; Cennamo 2005, 2006).

### 3.3 Summary

In Late Latin the Reflexive pattern and the Active Intransitive come to occur in anticausative function with different aspectual classes. The reflexive expands to verbs of variable/reduced telicity, as well as activities, whilst the Active Intransitive spreads to accomplishments and achievements. In late texts, therefore, all verbs may freely alternate the three voice forms, regardless of their structural and inherent features.

This development is part and parcel of wider and pervasive changes in the encoding of argument structure in the passage to Romance, a result of which is also the emergence of oblique anticausatives, where the subject is in the accusative case rather than in the canonical nominative case (so-called Extended Accusative).

Both the event structure template of verbs and the meaning components lexicalized in the verb, in particular the type of change encoded as well as the degree of individuation and control of the P-subject, appear to affect the choice of construction, interacting, in the course of time, with changes in the encoding of transitivity.

Although the progression of the change seems to be mainly aspectually driven, further investigation is needed on a larger corpus, in order to give a more fine-grained description of
the path of development and to detect, for instance, whether the Anticausative Reflexive occurs earlier with gradual completion verbs (as seems to be the case with verbs such as minuere 'decrease'), than with other types of non-inherently telic predicates (e.g., accomplishments like confirmare 'heal), and with atelic verbs (e.g., activities such as vocare 'to call'). It also remains to be further explored the interplay of the inherent lexical properties of the verb with the nature of the verbal argument, i.e., its animacy and control, in determining the spontaneous interpretation of the construction, i.e., its anticausative use, in cases where the pattern is ambiguous between a spontaneous (anticausative) and induced process (passive) reading.

We can conclude, however, that in Late Latin the Anticausative Reflexive is no longer confined to verbs of inherent telicity, i.e., verbs lexically encoding a final/result or target state. Conversely, the lack of a final/result or target state and/or the presence of a manner/processual component - so-called "specific change" in Haspelmath's terms - in the verb's inherent meaning, no longer appear to be a requirement for the occurrence of the Active Intransitive in anticausative function, unlike in Early and Classical Latin.

## 4 Anticausatives in Old Norse-Icelandic

Because of its status as the best-attested representative of North Germanic, we now investigate the forms that are available in Old Norse-Icelandic for expressing anticausatives, their relationship with their transitive counterpart, and the interplay between the structural and lexical aspects of verb meaning in determining the selection of a particular construction. The main anticausativization strategies are the following (cf. Ottósson 2013):4
(i) The Reflexive suffix -sk (as in so-called 'middle' sk-verbs), originating from a cliticized reflexive pronoun
(ii) The Oblique Active Intransitive
(iii) The Nominative Active Intransitive

Ottósson (2013) also includes the derivation of $n a$-verbs as an anticausative device. However, $n a$-verbs are not derived from transitives, but from adjectives, participles and intransitives (West 1980; Suzuki 1989; Schwerdt 2001; Ringe 2006; Lazzeroni 2009) and are more rightfully regarded as inchoative. We will therefore not include the $n a$-derivation in our presentation below, where we discuss the three anticausativization strategies found in Old Norse-Icelandic.

### 4.1 Synchronic Aspects

### 4.1.1 The Reflexive

The Old Norse-Icelandic Reflexive with sk-verbs originates in cliticization of the reflexive pronoun to the verb (Ottósson 1992, 2008). The reflexive clitic pronoun became an affix,

[^5]which is realized as -sk in all persons except for the first person singular, where it is $-m k$. In East Scandinavian it is realized as $-s$ in all persons, while in Modern Icelandic, Modern Faroese and New Norwegian it is realized as -st (Ottosson 2008: 185).

The $s k$-form comprises a wide range of functions, notably reflexive, reciprocal, middle, anticausative, and in rare cases in Old Norse-Icelandic, passive (Ottósson 2013), a function that becomes dominant in Mainland Scandinavian by the 12th century (cf. Barðdal and Molnár 2003). This development is very similar to the one displayed by the Latin se, which is cognate with the reflexive pronoun sik 'self', and hence also the $s k$-suffix.

The reflexive and reciprocal functions of the $s k$-construction are shown in (40) below (cf. also Anderson 1990 and Barðdal and Molnar 2003: 253-254 for Modern Icelandic):

| a. | en pó | lag才isk | hann | niður |
| :---: | :---: | :---: | :---: | :---: |
|  | but yet | laid.REFL.PST.3SG | he.NOM | down and |
|  | sofna才i |  |  |  |
|  | fell.asleep.Ps | 3SG |  |  |
|  | 'But yet, he (Grænlendin | down and fell as <br> páttur, Ch. 6) |  |  |
| b. | Dags | friendr of | drepask | kvádu |
|  | Dag.gen | relatives.ACC abo | kill.REFL.INF | said.PST.3PL |
|  | '(They) spok <br> (Ynglingatal | of Dag's relatives k Ch. 11) | g each other' |  |

The anticausative function of the reflexive is shown in (41) below. Verbs occurring in this construction are generally achievements (41a), like eyða 'destroy', and accomplishments (41b)-(41c) like opna 'open' and skera 'cut, although some activities, like hrista 'shake', bifa 'move', mala 'grind' and pvá 'wash' are also found, as in (41d)-(41g):
a. eydisk
land ok lád? ?
destroys.REFL.PRS.3SG earth.NOM and land.NOM
'Land and people perish'
(Saga Hákonar góða, Ch. 32)
b. opnask haugrinn
opens.REFL.PRS.3SG mound.the.NOM
'The mound opens'
(Porleifs páttur jarlaskálds, Ch. 8)
c. hann gnýr bar við bakinu,
he.NOM nudges.PRS.3SG there with back.the.ACG
par til er bogastrengrinn skarsk
there to when bowstring.the.NOM cut.REFL.PST.3SG
'He nudges his back at it, until the bow-string tore'
(Örvar Odds Saga, Ch. 29)
d.



Finally, the sk-construction is frequent with psychological verbs, usually states, as in (42) below (cf. Barðdal 2001a, 2004; Barðdal and Eythórsson 2009).
(42) hefi ek nökkut minnsk pin
have.PRS.1SG I.NOM at.all remembered.REFL.PTCP you.GEN
'Have I remembered you at all'
(Fornmannasögur, Ch. 6)
The main property of the anticausative Reflexive seems to be to signal lack of external agency. It is found with verbs denoting achievements, accomplishments, and activity verbs. It is also worth noticing that $s k$-verbs in Old Norse-Icelandic are to a high degree lexicalized. This means that the causative and its anticausative variant are not necessarily examples of the 'same' verb, but have lexicalized in different ways.

### 4.1.2 The Oblique Active Intransitive

A widely used strategy in Old Norse-Icelandic involves verbs taking oblique subjects ("impersonal detransitives" in Ottósson's terminology). The nominative agentive subject of the transitive construction is "suppressed" in this anticausative variant, and the original object appears as a subject, preserving its original object case, accusative, dative, or more rarely genitive. With this pattern the verb reverts to the impersonal active form, i.e., the default third singular. The predicates occurring in this pattern most typically denote a telic change of state, i.e., they comprise achievements and accomplishments, as illustrated in (43)(46), where the a-examples give the transitive pattern and the b-examples the intransitive one (see further discussion in Sandal 2011; Ottósson 2013; Barðdal 2014).

$$
\begin{array}{lll}
\text { a. } & \text { lét } & \text { hann }  \tag{43}\\
& \text { let.PST.3SG } & \text { he.NOM }
\end{array}
$$

blása hid mikla
blow.INF the.ACG great.ACC

| merki | sitt | fyrir | vindinum |
| :--- | :--- | :--- | :--- |
| banner.ACC | his.ACC | for | wind.the.DAT |

'Then he let his banner blow in the wind'
(Karlamagnús saga, Ch. 335)
b. ok var pá á hvassviðri mikit og
and was.PST.3SG then on storm.NOM much.NOM and hafoi blásit hauginn ok lá
had.PST.3SG blown.PTCT mound.the.ACC and lay.PST.3SG
silfrid bert
silver.NOM openly
'And there was a great storm, the mound had eroded and the silver was lying in the open'
(Fornmannasögur, Ch. 4)
a. nú er sá kominn sem ykkur
now is.PST.3SG the.one.NOM come.PCTC who you.ACC
mun kyrra
will.PRS.3SG still.INF
'Now the one has arrived who will calm you'
(Fornmannasögur, Ch. 108)
b. samdagris ... rýfr bokuna og kyrrir
same.day clears.PRS.3SG fog.the.ACC and stills.PRS.3SG
sjáinn
sea.the.ACC
'The same day the fog clears and the sea becomes calm'
(Örvar Odds saga, Ch. 20)
a. beir brutu skip sitt síd dags
they.NOM broke.PST.3PL ship.ACC their.AGC late day.GEN
undir Grenlandsjöklum
under Greenlands.glaciers.DAT.PL
'They broke their ship late in the day at the glaciers of Greenland'
(Flóamanna saga, Ch 22)
b.

| ger才i | pá | suá | djúpt at | strauminn |
| :--- | :--- | :--- | :--- | :--- | :--- |
| did.PST.3SG | then | so | deeply that | current.the.ACC |

braut á oxlinni
broke.PST.3SG on shoulder.the.DAT.SG
'It then became so deep that the stream broke against his shoulder'
(Grettis saga, Ch. 64)
a. hóf
hann fer才ina um haustit or
started.PST.3SG he.NOM trip.the.AGC of fall.the.ACC from
Borg
Borg.DAT
'He started the trip from Borg in the fall'
(Saga af Ólafi hinom helga, Ch. 73)
b. hér hefr kristni
here begins.PRS.3SG Christianity history.ACC
'Here begins the history of Christianity'
(Biskupasögur, Ch. 1)

The nature of the subject is relevant as well: as with other verbs taking oblique subjects, it is never an agent (cf. Barðdal 2001a, 2001b: 103, 2004).

Ottósson (2013) regards the Oblique Active Intransitive as a special Old Norse-Icelandic development. However, we have come across equivalent examples in Bavarian German, Modern Russian, and Lithuanian, as illustrated in (47)-(49):
(47) Bavarian

(48) Lithuanian

| Soda $\quad$ prinešé | sniego. |  |
| :--- | :--- | :--- |
| garden.ACG | brought.PST.3SG | snow.GEN |
| ‘The garden was filled with snow.' |  |  |

(49) Modern Russian

| Lodku | uneslo | uniz | po |
| :--- | :--- | :--- | :--- |
| boat.ACG | tečenij̈u. ${ }^{5}$ |  |  |
| drifted.away.PST.3SG | down | on | stream.DAT |

'The boat drifted down the stream.'
In the German example in (47), which is discussed in the literature as being specific for Bavarian, there is an expletive es 'it' in initial position. This es is a secondary development in German; an expletive es has been gradually inserted into all argument structures without a nominative as well as into existential clauses where the subject is right dislocated. The development started with weather verbs already in Old High German and gradually extended to other verb classes and clause types (Lenerz 1997; Abraham 1993). This means that the inherited structure of verbs like treiben 'drive, drift' in (47) is with only one argument, i.e., a subject-like accusative.

[^6]| (i)Lodka byla | unesena. <br> boat.NOM |
| :--- | :--- |
| was.PST.3SG | drifted |

'The boat was drifted'
In Modern Icelandic similar examples exist, in which the verb reka 'drive, drift', is found in the Oblique Active construction, where the oblique behaves syntactically like a subject (ii). Passives may also be formed of this verb, as shown in iii):

| (ii) | Batinn | rak | a才 |  | landi. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | boat.the.ACC | drove.PST.3SG | to |  | land.DAT |
|  | 'The boat drifted ashore.' |  |  |  |  |
| (iii) | Báturinn <br> boat.the.NOM | var rer |  | a才 | landi. |
|  |  | was,PST.3SG driven |  | to land.DAT |  |
|  | he boat |  |  |  |  |

Notice that the Icelandic passive in iii) is not derived from the anticausative in ii), but from a corresponding active construction with a nominative subject and an accusative object. In the same way, the Russian passive in i) above is presumably not formed to the anticausative in (40) but to a corresponding active sentence.

Clearly there is a need to explore the relationship between the anticausative patterns illustrated in (38)-(41) in Old Norse-Icelandic and in (47)-(49) for some modern IndoEuropean languages, and other constructions with oblique subject-like arguments (and the verb in the default third person singular), denoting lack of control of the S-argument over the verbal process. Observe that within the Dixonian typology, the concept of S-argument is understood as the subject of an intransitive predicate. This concept of S-argument has been extended in the literature also to include the non-canonically case-marked subject of twoplace predicates (Onishi 2001; Andrews 2001; Donohue 2008). Examples of this type are attested in Old Norse Icelandic and presented in (50)-(52) below. In all these structures, in fact, the situation expressed by the verb is encoded as affecting the nuclear argument, with no causer involved:


Equivalent examples showing reduction from a more transitive variant to a less transitive one are also found in more early Indo-European languages, like Old Russian:
a. Tuto, brate, staru pomolodětb, a
So brother old.DAT becomes.young.PST.3SG but
molodomu česti dobytb
young.DAT honor.GEN creates.3PS.SG
'So, brother, the old becomes young, but the young acquire honor'
(-Sl. O Zadon.)
b. Jako g'nasta pout' m’nog', ti
so chased.PST.3SG paths many thee.DAT
tako pristig'̌̌a
such overtook.PST.3SG
'You have followed many paths, so you have been overwhelmed'
(Nest.Zhit.Theod.3, here cited from Smitherman 2010)
These examples, although partially different, since the verbs in (50)-(52) and (53) are ditransitive, and the S/A argument is animate, are semantically similar to the oblique anticausatives discussed in (45)-(48): they denote an event taking place spontaneously, with no external causer. Syntactically, they are derived from corresponding causatives where the causer is the A-argument. They only differ from prototypical anticausatives in that they involve an animate subject and are derived from causative ditransitives and not causative transitives.

The existence of Oblique Active Intransitive anticausatives and of other analogous patterns with an oblique subject and the verb in the default third person singular in other Germanic languages, as well as in Baltic and Slavic, suggests an inheritance, although perhaps only a West-Indo-European inheritance (see also discussion of similar lack of control patterns in Latin in Section 3.2 above).

### 4.1.3 The Nominative Active Intransitive (lability proper)

The Active Intransitive strategy, i.e., P-lability, is quite rare in Old Norse-Icelandic (Ottósson 2013) and appears to be confined to gradual completion verbs and activities, as illustrated in (54) for the verb minnka 'reduce, diminish' and in (55) for the verb velta 'roll'. In this pattern the subject occurs in the nominative case, agreeing with the verb, as shown in (54)-(55) below, where (a) contains the intransitive variant and (b) the transitive one:

| a. |  | kraptr <br> power.NOM | ok | máttr |  | minnkar |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{ll} \text { en } & \text { hans }  \tag{54}\\ \text { but } & \text { his.GEN } \end{array}$ |  | and | mig | NOM |  | he |
|  | nú hversdagslega |  |  |  |  |  |  |
|  | now every.day |  |  |  |  |  |  |
|  | 'And his power and might reduced with every day that goes by' (Barlaams ok Josaphats saga, Ch. 34) |  |  |  |  |  |  |
| b. | höfum ekki |  |  | poí | hér | til | ad |
|  | have.PST.1PL not gotten.used.to.PTCT |  |  | it |  | for | to |
|  | minnka | vorn | hlut |  |  |  |  |
|  | diminished.INF | our.ACC |  |  |  |  |  |
|  | '(We) have not been | sed to this he | e to r | uce ou | share |  |  |
|  | (Grænlendinga pát | , Ch. 5) |  |  |  |  |  |

a. bá gekk hann heldur en valt

| then walked.Pst.3sG |  | rather than rold |  | rolled.Pst.3sG |
| :---: | :---: | :---: | :---: | :---: |
| 'Then he walked rather than rolled' |  |  |  |  |
| (Sturlunga saga, Ch. 3) |  |  |  |  |
| ek hefi | velta | látio | slika | sem |
| I.NOM have.PST.1SG | roll.INF | let.ptct | such.ACG | as |
| pú ert |  |  |  |  |
| you.NOM are.Pst.2SG |  |  |  |  |
| 'I have had people like you thrown over' |  |  |  |  |
| (Egils saga, Ch. 57) |  |  |  |  |

The pattern is not found with verbs which lexicalize a final/result or target state, such as brjóta 'break', rifa 'tear' or opna 'open', i.e., the core of the anticausative type.

It needs to be further investigated, however, whether the rarity of attestation of this structure reflects a change in progress, the gradual emerging of a new strategy for marking anticausatives and how it relates to so-called Nominative Substitution, i.e., the regularization of subject case marking and a change to the nominative canon (Eythórsson 2000a, 2000b, 2002; Barðdal and Eythórsson 2003; Barðdal 2011b). There is no doubt that there are considerably more predicates in Modern Icelandic than in Old Norse-Icelandic that employ the Nominative Active strategy. The opposite is true for predicates that employ the Oblique Active strategy; there are considerably fewer such anticausatives in Modern Icelandic than in Old Norse-Icelandic (Barðdal 2014). There is no doubt that many of the Oblique Subject anticausatives in Old Norse-Icelandic have changed to nominative in the course of the Icelandic language history, so the question arises whether such a change has been ongoing in the Germanic language area for even longer, from before the historical records. We are inclined to answer such a question in the positive.

### 4.1.4 Summary

Old Norse-Icelandic presents a varied picture with respect to anticausative constructions. The Reflexive is the general strategy for forming anticausatives. In addition, a common anticausative strategy involves active intransitive verbs taking oblique subjects, exhibiting the same object case as their transitive counterparts, and the lexical verb in the default third person singular. P-lability proper, i.e., the strategy where the same verb form occurs both as a transitive and as an anticausative with a nominative subject, is also documented but seems to be confined to gradual completion verbs.

### 4.2 Conjecturing the Diachronic Development of Anticausative Strategies in North Germanic

To summarize, there are three strategies found to derive intransitive anticausatives from transitive causatives in Old Norse-Icelandic: the Reflexive sk-construction, the Oblique Active intransitive and the Nominative Active intransitive. The Reflexive is a descendent of a Proto-Indo-European reflexive construction, involving a reflexive pronoun, found occurring in anticausative function in several early Indo-European languages, like Old Indo-Iranian, Ancient Greek, Latin, Hittite, Slavic, Baltic, and Germanic (Brugman 1916; Strunk 1980).

The Ingvaeonic branch of Germanic had already lost its reflexive pronouns in its earliest attestations, developing instead an anticausativization strategy involving formal identity between transitive and intransitive uses of a verb, i.e., P-lability (Kitazume 1996; van Gelderen 2011). It is a theoretical possibility that the Nominative Active Intransitive variant got so robust, not only because of lack of reflexive pronouns, but also through the
canonization of subject marking. Or in other words, the Oblique Active Intransitive may have changed into the Nominative Active Intransitive through Nominative Substitution, a process that has been found in languages irrespective of loss of morphological case (von Seefranz-Montag 1983; 1984; Smith 1994; 1996; Barðdal and Eythórsson 2003; Eythórsson and Barðdal 2005). There is, for instance, a sporadic tendency in the history of Icelandic for the oblique subjects of such verbs to be replaced by nominative subjects (Eythórsson 2000a, 2000b, 2002; Barðdal and Eythórsson 2003; Barðdal 201 lb), even though the case system of Icelandic has remained intact throughout the Icelandic period, and no loss of case marking is detectable (Barðdal 2001b, 2008, 2009).

The labile "proper" alternation seems to be confined to gradual completion verbs and activity verbs in Old Norse-Icelandic, while an oblique subject intransitive construction is more pervasive. Equivalent structures are also found in Bavarian German, in Old and Modern Russian, and in Lithuanian, and may have been inherited from an earlier stage of the Indo-European languages. Thus, contra Ottósson, we find it quite likely that Oblique Active Intransitives, which are robust in Old Norse-Icelandic, existed at the earliest stage of Germanic, suggesting that they are the result of a systematic earlier development.

Ottósson (2013) speculates that an important factor triggering these developments is the demise of the synthetic mediopassive of Proto-Germanic (in *-al), which would partly have had an anticausative function, the equivalent of the Proto-Indo-European $r$-form. It is only in Gothic that this passive category has survived, and only in the present tense. According to Ottósson, the loss of this passive would have contributed to the emergence of new, alternative anticausative formations, like $s k$-verbs. However, there is no evidence for the demise of the synthetic mediopassive being a possible trigger of the different anticausative strategies and their distribution in early West Germanic in general or Old Norse-Icelandic in particular.

## 5 Constraints on anticausativization in Latin and Old Norse-Icelandic: similarities and differences

The analysis of the morphosyntactic patterns encoding anticausatives in Latin and Old Norse-Icelandic has shown that they involve an interaction between the aspectual templates of predicates, the meaning components lexicalized in the verb, and, marginally, the animacy and degree of control of the subject, albeit to a different extent and at different stages.

The relevant constructions in the two languages are generally of the same or similar kind, although the details differ according to language-specific possibilities. In particular, both languages make use of the reflexive pattern and the active intransitive. Latin employs a mediopassive $r$-form that functions as a general detransitivizer, marking the affectedness/inactive nature of the subject and occurring as an anticausativization device. The $r$-form is the most general anticausativization strategy in Early Latin, like the Reflexive in Old Norse-Icelandic, which comprises a substantially wider range of verb classes and functions. A comparison of the strategies for anticausativization in Latin and Old NorseIcelandic is presented in Table 1.

Table 1: Early/Classical Latin and Old Norse-Icelandic compared.

|  | Achievements | Accomplishments | Activities | States |
| :---: | :---: | :---: | :---: | :---: |
| Early/Classical Latin |  |  |  |  |
| Mediopassive $R$-form | + | + | + | + |
| Reflexive (se+active) | + | +a | - | - |
| Active Intransitive | - | +/? | + | -/? |
| Old Norse-Icelandic |  |  |  |  |


| Reflexive (sk-verbs) |  | + | + | + | + |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Act. Intr. + Nom | - | $-/{ }^{\mathrm{b}}$ | + | - |  |
| Act. Intr. + Obl. | + | + | + | + |  |

${ }^{\text {a }}$ Accomplishments comprise verbs with different degrees of telicity. The reflexive pattern does not occur with gradual completion verbs.
${ }^{\text {b }}$ Active intransitives with Nominative subjects are mainly attested with gradual completion verbs and activities.

As to the semantic development, in Early and Classical Latin the Active Intransitive mainly occurs with gradual completion and activity verbs, and is only marginally attested with accomplishments encoding a target (i.e., reversible) state. It does not occur, instead, with verbs lexically encoding a final/result state (i.e., achievements). The Reflexive pattern, instead, occurs in Early and Classical Latin as a strategy for anticausativization mainly with inherently telic predicates, i.e., with verbs lexically encoding a final/result or target state (achievements and accomplishments). It is also preferred when the subject, although inanimate, is personified, involving some degree of control. Finally, the mediopassive $-r$ form is the most general device of the three, occurring at all stages of Latin with all verb classes that allow the anticausative alternation: achievements, accomplishments, and activities. With the last two aspectual classes, however, ambiguity may occur between an anticausative and a passive interpretation, resolved by the context.

In Old Norse-Icelandic the main anticausativization strategies are the Reflexive, i.e., $s k$-verbs originating from reflexives, and the Active Intransitive with Oblique subjects. The Reflexive is the most general anticausativization device, compatible with all aspectual classes. In the Oblique Active Intransitive the subject retains the accusative, dative, or genitive case of the object of the original transitive construction, whilst the verb reverts to the third person singular impersonal form. This pattern is attested with achievements and accomplishments and is much more common than the Nominative Active Intransitive form, the labile strategy in Old Norse-Icelandic, which seems to be mainly attested with non-inherently telic verbs, e.g., gradual completion verbs, but also some activity verbs. The nature of the subject is relevant as well: it is never an agent, both in the Nominative and Oblique Intransitive anticausative pattern. An Oblique Active Intransitive form emerges in Late Latin, but the verb never occurs in the impersonal form and the oblique subject is always in the accusative case, clearly a different pattern than the inherited oblique active anticausative. More research is needed, however, in order to uncover the relationship between the oblique case preserving anticausative strategy attested in Old Norse-Icelandic and in other early Indo-European languages, including the other types of oblique subject constructions attested in Bavarian German, Lithuanian, Old Russian, and Latin, mentioned in Sections 3.2 and 4.1.2.

To conclude, a close inspection of the distribution of the different anticausative strategies in Latin and Old Norse-Icelandic reveals that their occurrence reflects the interplay (and degree of integration) between both components of a verb meaning, the structural aspect, i.e., its event structure template, and the meaning components it lexicalizes, i.e., the root, as well as the inherent and relational properties of the (derived, P-)subject.

## 6 Summary and conclusions

A comparison between Latin and Old Norse-Icelandic has uncovered interesting similarities and differences in the evolution of anticausative strategies, pointing to the existence of common paths of development from an original mediopassive construction covering, initially, the reflexive-middle-anticausative-passive-impersonal space.

Three different voice forms in Latin serve as anticausative: the mediopassive, the Reflexive and the Active Intransitive. It is generally claimed in the literature on Latin that the three constructions are interchangeable. However, we have shown here that there is, instead, a clear division of labor between the three patterns, based on the semantics of the predicates, and reflecting mainly, albeit not exclusively, aspectual properties.

The mediopassive strategy is most common in Early and Classical Latin and it can be instantiated by all verbs that qualify for the anticausative construal. The Active Intransitive, in contrast, occurs mainly with verbs of variable/reduced telicity and with activities, whilst the Reflexive pattern is only found with inherently telic predicates. Gradually, through the course of history, the Reflexive and the Active Intransitive patterns spread to aspectual classes with which they did not occur in early and Classical Latin. Hence, the Reflexive starts occurring with predicates of variable/reduced telicity and with atelic ones, and the Active Intransitive is extended to telic predicates, occurring also with oblique subjects at a late stage.

Also in Old Norse-Icelandic anticausativity may be manifested in three main ways, two of which are in common with Latin. These three are the reflexive -sk suffix (in so-called Middle -sk verbs), the Oblique Active Intransitive and proper (P-)lability. The most common device for marking anticausatives is the Reflexive, which like the oblique subject active intransitive, is not aspectually constrained. The active intransitive with nominative subjects, instead, is confined to non-inherently telic predicates. All three strategies can be argued to be of Proto-Germanic origin.

The diachrony of anticausativization in the languages investigated clearly illustrates an interplay between the strategies employed for the anticausative alternation with more general changes taking place in the domain of transitivity, leading to the temporary loss of the grammatical dimension of voice and of the marking of grammatical relations in Late Latin, resulting in the rise of the Reflexive Passive and of oblique anticausatives. A comparable change takes place in the history of Mainland Scandinavian, but is only marginally attested in Old Norse-Icelandic. Further phenomena involving the reorganization of voice and grammatical relations may be seen in the sporadic emergence of nominative subjects (Nominative Substitution) with oblique subject predicates in Old Norse-Icelandic. Whether the Nominative Active Intransitive has developed out of the Oblique Active Intransitive pattern, through Nominative Substitution, or whether the two structures coexisted side by side, needs further investigation. Also the relationship between these structures and the synthetic mediopassive construction needs to be explored: a comparative analysis, in fact, might throw new light on the issue of the origin, function and spread of oblique subjects in early Indo-European, confirming their inherited nature (cf. also Barðdal et al. 2012; Barðdal and Eythórsson 2012; Barðdal et al. 2013; and Barðdal and Smitherman 2013).

Whereas the diachrony of the change can be well followed and described for Latin, it can only be inferred for Old Norse-Icelandic, since the data at our disposal give us a synchronic picture of one of the last stages of the change. The mediopassive, in fact, had already almost disappeared in Gothic, since it only occurred in imperfective passive function, whilst its other domains, in particular its reflexive, middle, anticausative and passive functions, had been taken up by different strategies: the reflexive and the active intransitive, each covering different aspects of the original domains of the lost mediopassive form, only partially overlapping in the case of -sk verbs. The data, however, clearly show that Old Norse-Icelandic represents a later point on this evolutionary path than Latin.

Finally, this investigation has also shown that the aspectual template of verbs and the meaning components lexicalized in the verb, e.g. the notion of reversible and non reversible change in Latin, as well as the nature of the subject, e.g., its degree of control, affect the choice of anticausative strategy in the languages examined, both synchronically and diachronically. These parameters, indeed, appear to have played an important role in the
changes leading to the demise of the Indo-European mediopassive form and its gradual replacement by other tools that we have discussed in relation to the anticausative domain and its morphosyntactic realizations.

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## Appendix A: Abbreviations:

$1=$ first person
$2=$ second person
$3=$ third person
$\mathrm{ABL}=$ ablative case
ACC $=$ accusative case
$\mathrm{ACT}=$ active
AGR = agreement
AN = animate
DAT $=$ dative case
$\mathrm{F}=$ feminine
FUT = future
FUTPRF = future perfect (tense marker)
GEN = genitive
GER = gerundive
HUM = human
IMPF = imperfect (tense)
IMPER = imperative
IMPERS = impersonal
IND = indicative
INF = Infinitive

INTR = intransitive
$\mathrm{M}=$ masculine
MPASS $=($ medio $)$ passive marker $-r$ (in
middle, anticausative, passive or
impersonal function)
NACT = non-active voice
$\mathrm{N}=$ neuter
NOM = nominative case
PASS = passive
PRF = perfect (tense marker)
PL = plural
PRS = present (tense marker)
PRPTCP = present participle
PTPTCP $=$ past participle
PLUP = pluperfect (tense marker)
PST = past (tense marker)
REFL $=$ reflexive morpheme (se/sese in Latin, -sk in Old Norse-Icelandic)
$\mathrm{SBJV}=$ subjunctive
SG = singular

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[^1]:    (7)
    a. Latin

[^2]:    ${ }^{1}$ The corpus investigated consists of literary and non-literary texts from the 3rd c. BC to the 9th c. AD, listed under Primary Sources. The examples have been collected from Pirson (1906), Svennung (1935), Wistrand (1942), Feltenius (1977), as well as the PHI-5 CD-ROM (the Packard Humanities Institute's collection of digital Latin texts), comprising literary texts from the earliest attestations to 200 AD and selected texts from later antiquity (Justinian's Digest, Servius' Commentaries on Virgil, and Porphyry's Commentary on Horace), for a total amount of over 350 Latin authors. We follow the traditional periodization of Latin, discussed in Feltenius (1977) in relation to intransitivizations: Early/Pre-classical Latin (250-81 BC), Classical Latin (81 BC-14 AD), Postclassical/Imperial Latin (14-180 AD), Late Latin (180-600 AD); see also Gianollo 2014: 949, Note 3).

[^3]:    ${ }^{2}$ We thank Francesco Rovai for bringing this example to our attention.

[^4]:    ${ }^{3}$ The accusative for the derived S argument in Late Latin does not realize a "structural" case but an "inherent" case in an oblique argument constructions where the original object of the transitive verb retains its object case, e.g., the dative for the verb nocere 'harm' in (i) below, and the verb reverts to the default 3rd singular impersonal (passive) form, with the Agent being optionally expressed as a prepositional phrase. This pattern is fairly common in Latin with activities and states taking dative, genitive and ablative objects. (See further discussion of

[^5]:    ${ }^{4}$ The corpus of Old Norse-Icelandic investigated comprises texts from the 12th-14th centuries, listed under Primary Sources. These are generally transcripts of orginals that are approximately one century older. The verb forms are listed in the standard dictionaries of Fritzner (1883-1896) and Cleasby-Vigfússon (1874), both of which are available online. We have also greatly benefited from the relevant material collected by Ottósson (1992), Ottosson (2008, 2013) and Sandal (2011).

[^6]:    ${ }^{5}$ An anonymous reviewer argues that in this Russian example the accusative lodku 'boat' cannot be a subject because it can be passivized, as shown in i) below, and hence it is an object.

