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Latin causativization in typological perspective

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Abstract

Causativization has a position in an intricate network of lexical relations and valency operations, including deagentive and passive, whose general function it is to express a given predicate in construction with different constellations of central participants. The corresponding tasks can be solved by (1) coding the causative or non-causative relation of an actant to the rest of the clause, or (2) leaving it to inference.

In the first case, the relation may be coded (1.1) on the verb or (1.2) on the actants.

If the relation is coded on the verb, this may be done (1.1.1) at the lexical level, by a paradigm of converse verb stems, (1.1.2) at the derivational level by deriving a verb stem with a different valency, or (1.1.3) at the syntactic level by a construction involving another verb.

In the cases 1.1, the causative construction may be more marked compared with a base of lesser valency, or else the deagentive construction may be more marked compared with a base of higher valency.

In case 1.2, a given stem is converted into a different valency frame according to the syntactic environment. The causative constellation may then be coded by a special case either on the causer or on the causee.

Latin may be characterized as a language that makes very little use of the strategy that is cross-linguistically the most common one, viz. 1.1.2. Instead, it relies heavily on 1.1.1, 1.2 and 2. This is in consonance with its general aversion against derivational valency operations and with its dependent-marking type.

1 Introduction¹

1.1 General prerequisites

Causativization is a regular derivational process in many languages of the world. A good example is Turkish, which has a causative suffix *-dir* – with a number of allomorphs – as illustrated in E1.

- E1. a. Caesar haber-i bil-iyor
TURK Caesar news-ACC know-IMPFV
‘Caesar knows the news’
- b. Caesar-e haber-i bil-dir-di-k
Caesar-DAT news-ACC know-CAUS-PST-1.PL
‘we made the news known to Caesar’

¹ Thanks are due to Concepción Cabrillana for helpful comments on this paper.

E1.a represents the **base situation**, with an actor of its own. E1.b is a causative version of it, where the base verb is provided with a causative suffix. This augments its semantic valency by an agent, the **causer**, which occupies the subject slot. The subordinate subject, representing the **causee**, is demoted to the highest syntactic function available, which here is the indirect object. The process is very regular in Turkish, and many agentive verbal meanings represented by simple transitive verbs in languages such as Latin are represented by causatives of intransitive bases in Turkish, as shown by the single example of T1.

T1. *Transparency of agentive verbs in Turkish and Latin*

language verb	Turkish	Latin	English
intransitive	art-mak	cresc-ere	grow
agentive	art-ır-mak	aug-ere	make grow

While causativization is a prominent topic in any Turkish grammar, it does not figure in standard Latin grammars and has not been frequently treated in Latin linguistics. Examples like the above make us understand why: Latin does not have a productive morphological process for the formation of causative constructions. A translation of E1 into Latin yields E2.

E2. a. Caesar res gestas nouit.

LAT 'Caesar knows the news'

b. Caesarem de rebus gestis certiozem fecimus.

'we made the news known to Caesar'

While E2.b may be considered the agentive counterpart to E2.a, clearly the two sentences have no grammatical or derivational paradigmatic relationship.

The aim of this contribution is to characterize the formation of causative constructions in Classical Latin in general terms. The main questions to be asked are:

- Which are the preferred strategies to fulfill the relevant subfunctions of causativization?
- In this choice, how does Latin compare with other languages; in other words, in which respects is the Latin grammar of causativization like the grammar of causativization of most or even all languages, and in which respects is it peculiar?

This presupposes a functional theory of causativization and a theory of strategies that can be employed in this domain at the typological level. These will be provided in turn in section 2.

1.2 Participation

At the cognitive level, an elementary situation consists of a set of **participants** related to each other by a network of relations which cross-cut at an immaterial center called the **situation core**. At the semantic level, the situation core is represented by a predicate, participants are represented by terms that act as **arguments** of **predicates**. This is true regardless of whether the participant is coded as a naked NP, a cased NP or an NP governed by an adposition. In principle and disregarding governed cases for the moment, case relators – cases and adpositions – are predicates at the semantic level (cf. Lehmann 2006). This means that even a simple clause is represented semantically by a complex proposition comprising several predicates if it codes arguments that are not inherent in the predicate representing the situation core. E3 serves as a simple example (a corpus example of the same structure is in Hor. *Sat.* 1, 9, 30).

E3. serua domino canticum cecinit
 LAT 'the slave sang a song for the master'

At the cognitive level, E3 is a complex situation with three participants. At the semantic level, we have a central predicate coded by *cecinit*, which has two arguments, *serua* and *canticum*. The benefactive relation of the participant *dominus* to the situation – coded by the dative case – may be represented, at the semantic level, by a co-predicate GIVE (*serua, e, dominus*), where the object given is the proposition based on the central predicate, here represented by an event variable *e*, and *domino* is the recipient of the co-predicate (see Shibatani 1996 for such an analysis and E6.a below for an example).

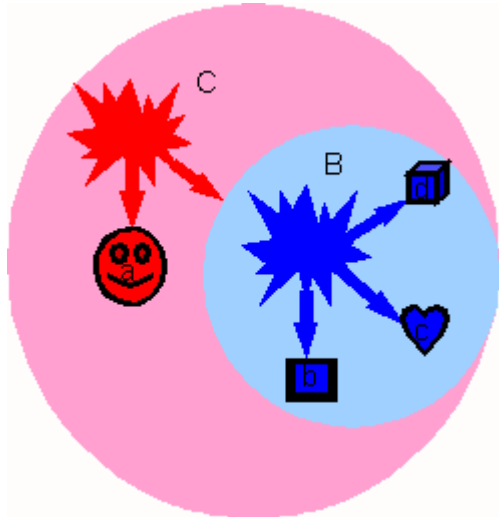
2 Typology of causativization

2.1 Functional basis

Causativity may be defined as in T2 and visualized as in S1:

T2. *Causativity*

- I.** A **situation C** is **causative** iff it is complex in the following way:
- there is a situation B such that C includes B,
 - there are at least two participants a, b ... n,
 - C includes a, b ...n,
 - B includes b ... n; a is not an element of B,
 - a controls C,
 - b is the participant that has most control in B,
 - C\B can be more or less autonomous with respect to B, in the limiting case an autonomous situation with participants (esp. a) of its own,
 - accordingly the participation of a in C can be more or less peripheral,
 - accordingly influence of a on B (und also on b) can be more or less mediate.
- a: causer
 b: causee
 B: base situation
 C\B: causing situation
 C: causative situation
- II.** Derivatively, a **construction** which expresses C and is derived from a construction expressing B is **causative**.

S1. *Causative situation*

The predicate of C\B is symbolized by the left-upper explosion. It will be called the **cause predicate** (and, if a verb, the **cause verb**). The predicate of B, symbolized by the right-lower explosion, will be called the **base predicate** (and, if a verb, the **base verb**). In E4, a illustrates the base situation, b illustrates the corresponding causative situation.

- E4. a. die Studenten schreiben morgen eine Klausur
 GERM 'the students will write a test tomorrow'
- b. ich lasse die Studenten morgen eine Klausur schreiben
 'I will have the students write a test tomorrow'

A verb that combines the meanings of the base predicate and the cause predicate in a transparent way, as do the above Turkish examples, is a **causative verb**. A verb whose meaning contains these two components, but is merely in a lexical paradigmatic relationship with the base predicate without bearing a structural relation to it, as does Latin *augeo* contrasted with *cresco* in T1, is just an agentive verb which may be called **semantically causative**.

The causer is constitutive of a causative situation. If it is removed from the conceptual level, as in E4.a, only the base situation remains, and the whole situation is no longer causative. The causee, on the other hand, is optional at the conceptual level (i.e. apart from its being optional in particular syntactic constructions). A situation lacking it is illustrated in E5.b.

- E5. a. ich schreibe morgen eine Klausur
 GERM 'I will write a test tomorrow'
- b. ich lasse morgen eine Klausur schreiben
 'I will have a test written tomorrow'

Here the causer is the only agent in C; but it is not the immediate agent of the base predicate. Such a causative sentence expresses **mediate agency** of the causer in B. If we compare, in this respect, E5.b with E4.b, mediate agency appears as omission of the causee. If, instead, we compare it with E5.a, where the same participant is an immediate agent, mediate agency appears as distantiation of the agent.

The parameters on which causative constructions vary follow from the definition in T2 (cf. Comrie 1985 and Dixon 2000:61-74). They may be grouped as follows:

- The **control** exerted on B by the causer may be stronger or weaker. With strongest control, it² forces B by direct participation. With weakest control, it just lets B happen. Thus, causativization oscillates between coercion and permission (see Talmy 1976 for relevant theoretical foundation).

The causer shares control of C with the causee. Its stronger or weaker control is therefore complemented by the weaker or stronger control of the causee. With least control, the causee is just the direct patient of the causer's action. With most control, it remains the agent in B, with the causer's permission.³

- The causer's **involvement** in B may be more or less central. With central involvement, the causer acts directly on the causee; with distant involvement, it does something that induces B.

This entails that the cores of the two situations B and C may remain disjoint or may merge. If they remain disjoint, the causer performs some activity appropriate to bring B about (**indirect causation**). If they merge, the causer engages actively in B (**direct causation**).

Central involvement of the causer entails its strong control; but indirect causation is compatible with both coercion and permission. T3 summarizes how control and affectedness of the causee depend on control and involvement on the part of the causer.

T3. *Interdependence of parameters of causation*

causer's involvement	causer's control	
	strong	weak
central	direct impingement causee controlled and affected	
marginal	coercion causee controlled	permission causee controlling, not affected

Seen in the perspective of T3 and E5.b, causativization marks the fact that, contrary to expectations and to the default case, the participant that has highest control in the situation is not centrally involved (is not the direct agent of the base predicate), but only marginally involved.

2.2 Strategies of causativization

As said before, participant relations are represented by predicates at the semantic level. These may be made explicit by full verbs, as when an instrumental relation is coded by the verb 'use', the benefactive relation is coded by a verb 'favor' and a causative relation by a verb meaning 'cause, effectuate'. We will see such cases in Latin causativization below. Such strategies of the lexical-syntactic level are always available and do not contribute to structuring the grammar of a language. What is of interest here is the grammaticalization of such participant relations. They are then represented at the structural level by relational grammatical or derivational formatives. The main alternative here is between the association of the formative with either the verb representing the situation core or with the NP

² Participants are treated grammatically as neutral entities.

³ See Biville 1995 for Latin.

representing the participant. These will be called the **verbal** and the **nominal strategy**, respectively.⁴ We will first illustrate them for the role of the **beneficiary**, taking up the introductory example of section 1.2. As with the causative situation, we may speak of a base situation typically containing an agent and a patient, and a benefactive situation distinguished from the former by an additional participant, the beneficiary, which, as it were, receives the base situation. Tamil may employ either a verbal or a nominal strategy to code this, as shown in E6.

- E6. a. naan avan-ukku ttuwisakaravanṭi-yai ttirutti kuṭu-tt-een
 TAM 1.SG 3.SG.M-DAT bike-ACC repair give-PST-1.SG
 ‘I repaired him the bike’ (Lehmann et al. 2004:78)
- b. naan avan-ukk-aaka ttuwisakaravanṭi-yai ttirutti-n-eeen
 1.SG 3.SG.M-DAT-BEN bike-ACC repair-PST-1.SG
 ‘I repaired the bike for him’ (Lehmann et al. 2004:76)

E6.a presents the benefactive situation as a donative situation, coding the benefactive relation by a verb meaning ‘give’, the beneficiary as its recipient and the benefactum, i.e. the agent’s deed, as the transferred object. Contrariwise, E6.b codes the beneficiary as depending from a specific case relator meaning something like ‘in favour of’. While some languages do admit of such variation, Hindi would only use the verbal strategy, Latin only the nominal strategy (as in E3) in benefactive constructions.

The causative situation allows for the same coding alternative as the benefactive situation. While the causer is coded as an NP, the cause predicate may be coded in two main ways. The first alternative is for it to be coded as a verbal formative, e.g. a kind of causative function verb or causative verb affix, or else as a nominal formative, e.g. a kind of agentive case on the causer. E7 from Turkish illustrates the first alternative, E8 from Lezgian the second one.

- E7. a. Orhan öl-dü
 TURK Orhan die-PST ‘Orhan died’
- b. Hasan Orhan-ı öl-dür-dü
 Hasan Orhan-ACC die-CAUS-PST ‘Hasan killed Orhan’
- E8. a. k^hic’ q’ena
 LEZG dog(ABS) died ‘the dog died’
- b. gada-di k^hic’ q’ena
 boy-ERG dog(ABS) died ‘the boy killed the dog’ (Kittilä 2002:159)

Both for the verbal and for the nominal strategy, there is a continuum of structural means which differ by their degree of explicitness or reduction.

A. For the **verbal strategy**, reduction means that the causative formative may either be grammaticalized to a causative function verb (“support verb”) or a morphological operator on the base predicate, or it may be lexicalized together with the base predicate. The following four main strategies are commonly distinguished on this bifurcating reduction continuum (see S2 below and cf. Comrie 1985, section 2):

⁴ In studies of valency operations, it is customary to restrict the attention to verbal strategies. Shibatani (2006:229) is among the few to argue explicitly for consideration of nominal strategies.

Complex causative sentence: The causative construction consists of a main clause containing the cause predicate and a finite subordinate clause depending on the latter. E9 is an example.

E9. sol efficit [ut omnia floreat]
LAT ‘the sun makes everything blossom’ (Cic.*n.d.* 2, 41)

Periphrastic (analytic) causative construction: The causative construction is in one clause which, however, is complex in that the cause predicate is coded by a function verb, while the base predicate is coded as a non-finite verb form depending on the latter. This construction is illustrated by E10 from French.

E10. le soleil fait tout fleurir (ditto)

Derivational (synthetic) causative construction: The main verb of the sentence is based on the stem of the base predicate which is modified by some morphological process – mostly a suffix – coding the cause predicate, from which a causative verb results. This was already illustrated by E1 and E7 above.

Lexical causative alternation: There is a lexical paradigmatic relationship between two verbs that are synonymous except that one appears in valency frame FC and the other in valency frame FB, where FC has one argument more than FB which carries the role of an agent in the subject/ergative function, while the argument corresponding to the subject/ergative of FB is demoted in FC. A Latin example was already provided in T1.

B. In the nominal strategies, the base predicate is left untouched, and instead the cause predicate is coded as a case relator. The reduction of the latter may be described by the grammaticalization path leading from some lexical base via an adposition to a concrete and finally a grammatical case. A relatively early stage of this path, the **coverb strategy**, is illustrated by the Mandarin *ba* construction as it appears in E11.b.

E11. a. chuán fān le
MAN boat capsize TEL
“the boat capsized”
b. Wáng bǎ chuán fān le
Wang ACC boat capsize TEL
“Wang capsized the boat” (I. Wild p.c.)

While other *ba* constructions have a simpler counterpart lacking *ba*, the main verb cannot be transitive in constructions such as E11.b, and consequently *ba* may not be omitted here (**Wang fan le chuan*). E11.b is, thus, a genuine causative construction. Structurally, the relator *ba* associates, like a preposition, with the causee NP. It is, however, grammaticalized from a verb meaning ‘take’ and still behaves as a coverb rather than a case marker in that it does not so much mark the case function of the undergoer NP as it codes the control cline between the actor and the undergoer, in general, and thus, between the causer and the causee in this construction.

With grammaticalization proceeding, the path of the nominal strategies bifurcates, and the case relator either marks the actor (causer) or the undergoer (causee) in the construction. The first alternative was illustrated by E8.b. Latin examples of both alternatives are in section 3.4.

The verbal and the nominal strategies become indistinguishable when there is no specific agentive or deagentive marker on either the predicate or its dependents. This is the case in the last strategy, **causative valency conversion:** A verb stem appears in two valency frames FC

and FB which differ in that FC has one argument more than FB which carries the role of an agent in the subject/ergative function, while the argument corresponding to the subject/ergative of FB is demoted in FC. For plurivalent bases, this strategy may be identified (as distinct from the nominal strategy) both in accusative and in ergative systems. For monovalent bases, as in English *break* (tr./intr. verb), it can be identified only in accusative systems, since in ergative systems it amounts to the addition of an ergative actant as illustrated in E8.

S2. *Scales of causativization strategies*

reduction → association	lexical- syntactic	analytic	synthetic	fusional	zero
verbal	complex sentence	periphrastic	derivational	alternation	valency conversion
nominal		adposition	case		

The verbal and nominal reduction continua may be united in the form of S2. This is a scale of decreasing sentential complexity and of increasing fusion of the two propositions, mirroring iconically the directness of the causer's involvement as defined in T3.

2.3 Complexity in causative constructions

Keeping control of a situation gets increasingly difficult in proportion to two factors: the number of participants it contains and the degree of control of the causee. Consequently, **semantic complexity** of a causative construction increases along these two parameters: An additional higher agent is both more expected and easier to accommodate in a situation the fewer participants this already contains and the less control these already have. **Structural complexity** of causative constructions increases along the same lines: the ensuing upheaval of the base verb valency is less radical, and the resulting valency has better chances to fit into an existent base-verb model, the lesser the valency of the base and the better the argument with the highest syntactic function fits an undergoer role. Therefore, we have the implicational hierarchy shown in S3.

S3. *Base predicate hierarchy for causativization*

inactive	active
adjective ← intransitive verb ← intransitive verb ← transitive verb ← multivalent verb	

The interpretation of S3 is as follows: If a strategy of S2⁵ forms causative constructions from bases at some point of S3, then it forms causative constructions from bases left to that point of S3.⁶ Here it should be noted that verbs formed by providing an adjectival base with an agent causing the base argument to be in the state or property designated by the adjective are traditionally called **factitive**, not causative. This distinction is justified because many languages, among them the Indo-European and the Mayan languages, make a structural

⁵ Strategies here have to be conceived at the level of abstraction of S2, i.e. without taking into consideration the particular formatives employed. There may be variation in these, as there is between the first two positions of S3 in the languages mentioned presently.

⁶ Some of the implicational relationships are already alluded to in Dixon 2000:31, 61f.

distinction between causativization of verbal bases and factitivization. From an onomasiological perspective, however, factitivization belongs into the first position of S3.

S3 may be briefly illustrated. Yucatec Maya has productive factitivization and causativization of inactive intransitive bases. German has productive factitivization and a dozen of synthetic causative verbs (of the type *sitzen* ‘sit’ – *setzen* ‘set’) only from intransitive bases, with one exception (*trinken* ‘drink’ – *tränken* ‘water’, which however confirms the rule, as the underlying direct object can practically not be accommodated in the valency of the causative verb. Turkish has derivational factitivization and causativization over the entire gamut of S3.

S2 and S3 correlate significantly, viz. inversely as regards their left-right orientation: the farther the base predicate is on the right of S3, the more likely a strategy near the start of S2 will be used (cf. Comrie 1985, section 2 and Hoffmann 2007, section 2.1).

2.4 Causativization and other valency-changing operations

Agentivization is an operation which adds a highest agent, the causer, to the base situation. The base situation is presupposed as a starting point; the situation that contains an added highest agent is arrived at as the result of the operation.

In language, complex constructions arising as the result of an operation presuppose the existence of simple constructions with the same functional (cognitive, communicative) properties, which may serve as a model of the target of the operation (cf. Dik 1985). For instance, agentivization aims at a constellation that may also be expressed, in an elementary way, by simple agentive (transformative or transport) transitive verbs, e.g. *parse*, *bring*. Such elementary situations, in their turn, may form the input to an operation which outputs that kind of situation which served as the input to the first operation. In the case at hand, the converse operation consists in suppressing the agent in a situation so that the resulting situation happens without the intervention of an agent, i.e. by itself, as in *this string parses easily*. This converse of **agentivization** is **deagentivization**. Their structural implementation in terms of deverbal verb derivation is known as **causative** and **anticausative**. The pair is mirrored by a pair of operations concerning the addition and the blocking of a patient argument (cf. Lehmann 2002, section 3).

It is important to note that the relationship between these operations is not only converse but also complementary. Whether my linguistic system provides me with intransitive ‘break’ plus an operation to derive causative ‘break’ from it, or it provides me with transitive ‘break’ plus an operation to derive anticausative ‘break’ from it, ultimately the same purpose is served. Languages do indeed differ in that some pair a large inventory of monovalent stems with a productive set of transitivity operations, while others pair a large inventory of polyvalent stems with a productive inventory of detransitivization operations. This point will be taken up in section 3.5.

3 Causativization in Latin

A large number of strategies for the linguistic manifestation of a causative situation are available in Latin, of which only the most important ones will be considered here.⁷ We will

⁷ Some of them are discussed in Simone & Cerbasi 2001, §3 and Hoffmann 2007. Among the strategies not discussed here is preverbation, as in *miser* ‘miserable’ – *immisero* ‘make miserable’.

first analyze a strategy that relies on pure inference and then review the coding strategies by passing through S2 from left to right. Particular attention will be paid to the nominal strategies.

3.1 Base verb strategy

The first strategy to be considered here does not figure in S2 because it does not involve any coding of causation. **Mediate agency** is mostly left unexpressed in Latin, i.e. not distinguished from direct agency, as in E12 (*facere*) and E13 (Kühner & Stegmann 1962:100).

E12. (Piso) cum uellet sibi anulum facere, aurificem iussit uocari (Cic. Verr. 4, 56)

LAT 'when Piso wanted to have a ring made, he had the goldsmith called'

E13. complures pauperes mortuos ... suo sumptu extulit (Nep. 5, 4, 3)

LAT 'he had several poor dead people bury at his own cost'

The base verb strategy does not code the specific cognitive constellation, but leaves it to inference. The resulting construction is thus, structurally, not a causative construction. Latin shares it with other ancient Indo-European languages, in particular Greek. In modern German, too, E5.a may mean E5.b. As we shall see in section 3.4, the nominal strategies are essentially based on the base verb strategy.

3.2 Complex causative sentence

The construction of a complex causative sentence is the maximally explicit coding strategy. It is at the lexical-syntactic level, thus universally available, not grammaticalized and therefore not specific to Latin. T4 shows a selection of cause verbs with the complex sentence constructions that they may be used in.

T4. *Lexical-syntactic causative constructions*

cause verb		subordinate clause			causee
form	meaning	finite: <i>ut + subj.</i>	accusativus <i>cum infinitivo</i>	(prep. +) <i>gerund</i>	= object
efficio	bring about	+			
curo	see to it	+		+	
compello	force	+			+
impello	move	+		+	+
induco	induce	+		+	+
suadeo	advise	+	+	+	+
iubeo	order	+	+		+
persuadeo	persuade	+	+		+
sino	let	(+)	+		(+)
facio	make	+	+		

As may be seen, the criteria chosen for the characterization of these constructions do not correlate. This wide variation of syntactic constructions for the caused subordinate clause proves that the construction is not at all grammaticalized in Latin. The following subsections provide some examples.

3.2.1 Finite subordinate clause

The matrix verb is a full verb one of whose semantic components is causation. They form a lexical field properly including the verbs of T4. As shown there, all of them may govern a complement clause in the subjunctive, optionally introduced by *ut*, as already illustrated by E9.

E14. *fac cogites [in quanta calamitate sis]* (Sall. Cat. 44, 5)

LAT 'consider in what a dangerous situation you are'

There is a semantic variant of this construction, illustrated by E14, which is remarkable in that it is formally a mediate agency construction, but semantically the agency cannot but be immediate. This is evidence for the incipient grammaticalization of *facio* as a function verb in causative constructions.⁸

3.2.2 Non-finite subordinate clause

Alternatively, the cause verb may govern a non-finite construction, mostly an accusativus cum infinitivo, but also a gerundive. E15f illustrate the a.c.i. construction.

E15. [*mel inferuere*] *facito* (Colum. 12, 38, 5)

LAT 'boil honey'

E16. *qui [nati coram me cernere letum] fecisti* (Verg. Aen. 2, 538f)

LAT 'you made me watch my son's death'

The a.c.i. governed by a cause predicate iconically represents the fact that the causee is not only the central participant of the base situation, but also directly controlled by the cause predicate. Some cause verbs, esp. *suadeo* and *iubeo*, alternatively take the causee as an indirect object of the cause verb, no matter whether the subordinate clause is finite. The fact that the causee becomes a direct dependent of the matrix cause verb may be viewed as **causee ascension**; but at the same time, it goes into an oblique case, which is a kind of demotion if compared with its status as the central participant of the base situation. This reflects its ambivalent status in a causative situation. The variation possible at the lexical-syntactic level allows for a finely tuned reflection of the constellation designated.

Whether the base situation is expressed by a finite or a non-finite subordinate clause, the base verb may be in the passive, thus rendering the suppression of its agent and, hence, of the causee possible. Such constructions of mediate agency are frequent, especially with a dependent infinitive. The accusativus cum infinitivo then reduces to a pure infinitival. E17 is an example.

E17. *puberes interfici iubet* (Curt. Alex. 7, 9, 22, 5)

LAT 'he has the young men killed'

Since none of the more strongly morphologized strategies is fully productive, Latin has to resort, in many cases, to the lexical-syntactic strategy. This is not particularly elegant, as becomes clear in sentences like E9, E15 and E16, where the causing situation (C\B) reduces

⁸ On this construction and its grammaticalization, cf. Bodelot 2007. It is, however, not restricted to *facio* as function verb; cf. *cura ut Romae sis* 'try to be in Rome' (Cic. Att. 1, 2, 2, 5).

to its constitutive components, but still a full matrix sentence is required.⁹ The periphrastic strategy emerging from the infinitival strategy is not yet grammaticalized in Classical Latin.

3.3 Causative verb

The next subset of constructions is based on a verb in which the cause predicate and the base predicate are combined in one verb stem, so that the two situations are merged in one clause, with one set of verbal dependents. The strategies differ in the way the cause predicate is coded.

3.3.1 Compound causative verb

A compound causative verb has the form X-Y, where X is the base and Y is some cause verb. In Latin, there are two basic variants of this formation (s. Brucale & Mocciaro 2013, §2). In the first, Y is simply the verb *facio* ‘do, make’ and X is an adverb, adjective or verb stem. The deadverbial formations may be foregone here, as they are not causative.¹⁰ The deadjectival formations are factitive verbs. An example would be *uacuefacio* ‘empty out’ (Cic. *Cat.* 1, 16, 12). These run into the competition with factitive verbs derived by transferring the stem into the *a*-conjugation, as *uacuo* ‘empty out’, which is highly productive and survives into Romance.

E18 illustrates the compounding pattern with a verbal base (cf. Fruyt 2001).

- E18. a. *fores patent*
LAT ‘the door is open’
- b. *patefeci fores* (Pl. *Most.* 1046)
‘I opened the door’

The lexicon contains a few dozens of verb stems that provide the base for this construction. With few exceptions (s. Brucale & Mocciaro 2013, §2.1.3), they are stative verbs of the *e*-conjugation. To the extent that the formal process does apply to dynamic bases, it does not causativize them. Thus, in terms of the hierarchy of S3, this process only renders elementary service.

The bases of the relatively productive variety of this process are consequently intransitive, although not all of them are monovalent. However, the ablative, dative or prepositional complement of such bivalent base verbs as *assuesco* ‘get used to’ remains totally unaffected by the derivation of *assuefacio* ‘accustom to’.

The alternative compounding strategy uses the bound variant *-fico* as a cause verb on adjectives as bases, as in *amplifico* ‘amplify’, *magnifico* ‘magnify’.¹¹ These formations therefore render the same service as the type *uacuefacio*, although they are overall more productive than the latter (Brucale & Mocciaro 2013, §2.2.2). The compounding strategy is, thus, constrained in every respect. As is well known, compounding is, in general, underdeveloped in Latin. This strategy is, thus, not in consonance with the linguistic type.¹²

⁹ Cf. the Turkish version of E9: *güneş her şehir geliş-tir-iyor* (sun every thing grow-CAUS-HAB).

¹⁰ There are only four such verbs, including the frequent verbs *benefacio* ‘do well’, *malefacio* ‘do evil’ and *satisfacio* ‘satisfy’.

¹¹ There are also desubstantival formations such as *significo* ‘signify’.

¹² It would be interesting to see whether the Romance derivational suffixes evolving from it, e.g. French *-fier* as in *fortifier* ‘fortify’, play a systematic role in the overall system of causativization of those languages.

3.3.2 Derived causative verb

T5 contains a rather comprehensive list of agentive verbs that share the thematic vowel *-e*:

T5. *Agentive verbs of the -e conjugation*

verb	meaning	base representative	meaning
compleo	fill	plenus	full
deleo	destroy	-	
moneo	admonish	memini	remember
noceo	damage	nex	killing
spondeo	vow	-	
terreo	frighten	terror	fear
tondeo	shear	-	
torreo	roast	terra	land

Diachronically, this thematic vowel is a causative suffix. The right hand side of T5 shows the closest Latin reflex of the erstwhile base. At the synchronic level, the formation is fossilized, its products are fully lexicalized. This means that *-e-* is not a causative suffix in Latin, and these Latin verbs are not causative verbs proper.

The *e*-conjugation class also includes a larger subset of verbs that are stative in meaning, like *taceo* ‘keep silent’, *habeo* ‘have’, and that provide the bases for the causative compounds seen in section 3.3.1. Even this stative formation is not fully productive in Latin; but its existence may contribute to blocking the causative function of the *-e-* suffix.

3.3.3 Lexical causative alternation

Latin has quite a number of pairs of verbs that are in a causative semantic relationship but are either in no derivational relationship at all or at least in no regular derivational relationship. T6 contains a selection of them.

T6. *Intransitive – agentive-transitive lexical pairs*

n°	intransitive meaning		agentive- transitive	meaning
1	fio	become	facio	make
2	accidit	happen	efficio	bring about
3	intereo	perish	interficio	kill
4	pereo	perish	perdo	mar
5	veneo	be sold	vendo	sell
6	transeo	cross	traduco	lead across
7	cado	fall	caedo	fell
8	occido	fall down	occido	make fall down
9	disco	learn	doceo	teach
10	vapulo	get a thrashing	verbero	thrash

A few fragmentary patterns are observable in this set. *Facio* again serves causativization in a few cases, as does *do* ‘put’ in two other cases. However, there is no regularity here, as a stem

based on *eo* ‘go’ may have both of the latter verbs as its causative counterpart and in addition *duco* ‘lead’, as in *traduco*.

The paradigmatic lexical relationship of these pairs is corroborated by regular paradigmatic syntactic relationships between variant causative constructions, for instance of the kind of S4 (cf. García-Hernández 1989).

S4. *Transformational relationships between semantically causative pairs*

	causer adjunct construction	↔	semantically causative construction
a	X _{NOM} (ab y _{ABL}) V _{intr}		Y _{NOM} X _{ACC} V _{tr}
b	X _{NOM} (ab y _{ABL}) Z _{ACC} V _{tr}		Y _{NOM} X _{ACC} Z _{ACC} V _{ditr}

S4.a holds at least for the pairs 1, 5, 7, 8, 10; S4.b holds for pairs 6 and 9. The relationship is exemplified for pair 10 in E19.

- E19. a. *rogatus an ab reo fustibus uapulasset* (Quintil. 9, 2, 12)
 LAT ‘asked whether he had been thrashed by the accused with clubs’
- b. *decemuiros Bruttiani uerberauere* (Cato *orat.* 58, 2)
 ‘the Bruttians thrashed the decemvirs’

As we shall see in section 3.4, the causer adjunct is indistinguishable from the agent phrase of a passive construction. In fact, this kind of transformational relationship is so tight that it can be a passive-active relationship just as well as a base-causative relationship.

In S4.b, it is clearly the valency of the semantically passive verb that is conserved in the semantically causative verb. This is so with *traduco* and *doceo*, which both take a double accusative, one for the subject and one for the object of the base. Still, the sheer existence of the double accusative and the fact that there are only two such cases is sufficient witness to the fact that the language system did not have a syntactic pattern for a causative construction.

At the end of this section, two results should be stressed: 1) During the entire documented history of Latin, there is no regular causative derivation. In this, Latin is probably in a minority among the world’s languages. 2) Lexical pairs that are in a syntactically regular paradigmatic relationship largely do the same service. However, the important difference from a derivation process is that the latter is oriented, while lexical pairs are in an equipollent opposition.

3.4 Nominal strategies

In the nominal strategies, the cause predicate is coded as a **specific case relator**. Starting from a base clause, either the causer or the causee may be added in an NP equipped with such a relator. In the former case, the base subject is interpreted as causee; in the latter case, it is interpreted as causer. The verb is not touched in either case.

A causative situation may be expressed by the combination of a clause based on an intransitive inactive predicate with a causer NP governed by the preposition *ab*,¹³ as in E20 – E23 (Kühner & Stegmann 1962, 1:99f). This will be called the **causer adjunct** strategy.

¹³ Because of the multifunctionality of the *ab*-phrase in Latin, this construction may be ambiguous. Thus, *a tanto cecidisse viro* (Ov. M. 5, 192) means ‘that he fell from the hands of such a man’, but *cecidere ... ab Romanis ducenti* (Liv. 42, 60, 1) means ‘200 of the Romans fell’.

- E20. pereat uitreo miles ab hoste tuus (Ov. *A.A.* 2, 208)
 LAT ‘your soldier may die from a canting enemy’
- E21. occidit a forti ... Achille (Ov. *Met.* 13, 597)
 LAT ‘he died from the hand of strong Achilles’
- E22. (mare) nunc qua a sole conlucet albescit (Cic. *Luc.* 105, 16)
 LAT ‘the sea now becomes white where the sun makes it glisten’

This strategy entails no rearrangement of the base situation. The locus of the causer adjunct strategy is in intransitive base verbs, as in E20 – E22. Observe, however, that it is not excluded from transitive base verbs, as in E23:

- E23. a Polyphemo plurimos sociorum amiserit (Dict. *Cretens.* 6, 5)
 LAT ‘he lost most of his companions through Polyphemos / Polyphemos made him loose most of his companions’

Again, the causee may be introduced into a clause based on an active verb by an appropriate preposition, normally *per*. This will be called the **causee adjunct** strategy, illustrated by E24 – E26:

- E24. (Caesar) suos per Antonium cohortatus (Caes. *BG* 3, 46, 4)
 LAT ‘Caesar had Anthony cheer his soldiers’
- E25. recede de medio; per alium transigam (Cic. *S. Rosc. Am.* 112)
 LAT ‘get out of the way; I will achieve it by somebody else / I will have somebody else achieve it’
- E26. Labienus ... Caesarem per nuntios facit certiore quid faciendum existimet (Caes. *BG* 7, 87)
 LAT ‘Labienus ... informs Caesar by messengers / has messengers inform Caesar of what he thinks should be done’

Structurally, the causee adjunct strategy is a variant of the base verb strategy seen in section 3.1, the difference being that mediate agency is here coded by making explicit the intervention of the direct agent, the causee.¹⁴

The sense of the verb in the causee adjunct constructions is causative, as has been brought out in the translations. The causee adjunct triggers the causative interpretation of the base verb which was merely due to (a knowledge-based) inference in the base-verb strategy of section 3.1. The causer adjunct triggers an interpretation of a verb as if it were a passive of its own causative. For instance, in E21 *occidit* ‘fell’ is interpreted as ‘was made fall’. This is probably facilitated if the lexicon does contain such a causative counterpart to the base verb (*occidit* ‘felled’ in this case). This would explain why the majority of the corpus examples of the causee adjunct construction contain a base verb that is in such a paradigmatic relationship. Cf. S4 in section 3.3.3.

Typological studies have not so far subsumed the nominal strategies under the notion of causativity because the causee adjunct does not take the form of a verb or a verbal operator. They are, however, functional equivalents to verbal causative constructions; and they do bear

¹⁴ As indicated before, the Mandarin construction illustrated by E11.b has commonalities with both the causer adjunct and the causee adjunct constructions: Just as in the former, the causer plus the relational formative is added to a base construction containing the causee. Just as in the latter, the relational formative governs the causee.

structural relations to the latter. If the preposition introducing the causer adjunct is compared to an ergative case marker, it may be seen that the causer adjunct itself is like the subject of an ergative construction as already exemplified in E8.¹⁵ If the preposition introducing the causee adjunct is compared with the instrumental relator marking the causee in the French causative sentence E27, it may be seen that the causee adjunct itself is like the demoted causee of a causative construction.

E27. je ferais réparer ces chaussures par un bon cordonnier
FR 'I will have these shoes repaired by a good shoe-maker'

In both cases, the essential difference boils down to the fact that the verb of those Latin constructions is not causativized. This fits well a dependent-marking type that relies very little on verb valency and much more on the coding of semantic functions by case relators.

3.5 Transitivity alternations

At the end of section 2.4, we saw that agentivization is converse to deagentivization, and consequently lack of causativization in a language system may be partly compensated by detransitivization operations such as reflexivization, passivization and the like. This idea has been pursued, for a number of languages, by starting from a list of thirty verbal concepts that involve an optional agent, translating them into a couple of target languages and analyzing the distribution of transitive and intransitive base verbs and of the kinds of derivational processes in the paradigmatic relations between the two versions.¹⁶ Responsible application of the method to Latin would require a study of its own. T7 only illustrates the procedure for some selected concepts, sorting them by their morphological relationship in Latin.

T7. *Transitivity alternations*

strategy	meaning	intransitive	transitive
1. transitivity alternations			
causative compounding	boil	<i>ferueo</i>	<i>feruefacio</i>
	open	<i>pateo</i>	<i>patefacio</i>
	preverbation	hang	<i>pendo</i>
2. detransitivization			
passivization	break	<i>frangor</i>	<i>frango</i>
	dry	<i>siccor</i>	<i>sicco</i>
	turn	<i>uertor</i>	<i>uerto</i>
	roll	<i>uoluo</i>	<i>uoluo</i>
	plunge	<i>mergor</i>	<i>mergo</i>
reflexivization	fill	<i>compleor</i>	<i>compleo</i>
	change	<i>me muto</i>	<i>muto</i>
	turn	<i>me uerto</i>	<i>uerto</i>
3. symmetric			
derivation/compounding	wake up	<i>expergisor</i>	<i>expergefacio</i>
lexical causative alternation	burn	<i>ardeo</i>	<i>uro</i>
valency conversion	turn	<i>uerto</i>	<i>uerto</i>
	begin	<i>incipio</i>	<i>incipio</i>

¹⁵ It may here be recalled that the ergative case was called 'causative case' up to the 20th century.

¹⁶ Cf. Nedjalkov 1990, Haspelmath 1993, Nichols et al. 2004 and Comrie 2005.

The quantitative proportion of the derivational processes in question in T7 is representative of the behavior of the 30 concepts in Latin. To what extent it may characterize the language system remains to be investigated. At any rate, it strikes the eye that while transitivization plays no great role, detransitivization and symmetric strategies prevail.

4 Conclusion

Like other Indo-European languages of the ancient type, Latin may be characterized, with respect to strategies of rearrangement of participant structure, by relying more on its obligatory case marking than on valency operations. This means that if a certain participant is needed, it is added in a suitable case, and when it is not needed, it is not expressed. None of this affects verbal valency in any way. Given that any verb may have as many dependents as makes sense, the essential remaining task is to mark that kind of constellation where a certain participant which would be compatible with the meaning of the verb is definitely absent. This is achieved to some extent by lexical causative alternations, but mostly by passivization. In this, these ancient Indo-European languages are quite unusual in cross-linguistic comparison (Nichols 1993).

In the written standard of the Latin language, there was no established grammaticalized causative construction. It was only in Proto-Romance that the complex sentence based on *facio* plus a.c.i. was grammaticalized as a dedicated causative construction.

Abbreviations in interlinear glosses

1, 2, 3	first, second, third person	IMPFV	imperfective
ABS	absolute	M	masculine
ACC	accusative	PL	plural
BEN	benefactive	PST	past
CAUS	causative	SG	singular
DAT	dative	TEL	telic
ERG	ergative		

References

- Biville, Frédérique 1995, 'Énoncés factitifs latin: syntaxe et sémantique.' Longrée, Dominique (ed.), *De usu. Études de syntaxe latine offertes en hommage à Marius Lavency*. Louvain-la-Neuve: Peeters (Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain, 70); 31-44.
- Bodelot, Colette 2007, 'Un exemple de grammaticalisation: Les aboutissants de *facere* + proposition subordonnée / juxtaposée.' Longrée, Dominique & Lenoble, Muriel (eds.), *Actes du 13 colloque international de linguistique latine. Bruxelles, 9 – 13 avril 2005*. Louvain & Paris: Peeters (Collection BEC); 000-000.
- Brucale, Luisa & Mocciaro, Egle 2013, "Verbal compounding in Latin: the case of -MAKE verbs. Contribution to the 17th International Colloquium on Latin Linguistics, Rome, May 20th - 25th, 2013".

- Comrie, Bernard 1985, 'Causative verb formation and other verb-deriving morphology.' Shopen, Timothy (ed.), *Language typology and syntactic description*. Vol. III: *Grammatical categories and the lexicon*. Cambridge etc.: Cambridge University Press; 309-348.
- Comrie, Bernard 2005, "Transitivity pairs, markedness, and diachronic stability." *Linguistics* 44(2):303-318.
- Dik, Simon C. 1985, 'Formal and semantic adjustment of derived constructions.' Bolkestein, A. Machtelt et al. (eds.), *Predicates and terms in functional grammar*. Dordrecht & Cinnaminson: Foris (Functional Grammar Series, 2); 1-28.
- Dixon, Robert M.W. 2000, 'A typology of causatives: form, syntax and meaning'. Dixon, Robert M.W. & Aikhenvald, Alexandra Y. (eds.), *Changing valency. Case studies in transitivity*. Cambridge: Cambridge University Press; 30-83.
- Fruyt, Michèle 2001, 'Réflexions sur la notion de mot en latin: les verbes du type *calefacio*.' Moussy, Claude (ed.), *De lingua Latina novae quaestiones. Actes du Xe Colloque International de Linguistique Latine, Paris-Sèvres, 19-23 avril 1999*. Louvain etc.: Peeters; 81-94.
- García-Hernández, Benjamin 1989, 'Complementarité lexicale et voix verbale'. Calboli, Gualtiero (ed.), *Subordination and other topics in Latin. Proceedings of the Third Colloquium on Latin Linguistics, Bologna 1-5 April 1985*. Amsterdam & Philadelphia: J. Benjamins (SLCS, 17); 289-309.
- Haspelmath, Martin 1993, 'More on the typology of inchoative/causative verb alternations.' Comrie, Bernard et al. (eds.), *Causatives and transitivity. Festschrift for Vladimir P. Nedyalkov on his 75th birthday*. Amsterdam: J. Benjamins; 87-120.
- Hoffmann, Roland 2007, 'On causativity in Latin.' Longrée, Dominique & Lenoble, Muriel (eds.), *Actes du 13 colloque international de linguistique latine. Bruxelles, 9 – 13 avril 2005*. Louvain & Paris: Peeters (Collection BEC); 000-000.
- Kittilä, Seppo 2002, *Transitivity: towards a comprehensive typology*. Turku: University of Turku (Publications in General Linguistics, 5).
- Kühner, Raphael & Stegmann, Carl 1962, *Ausführliche Grammatik der lateinischen Sprache. Teil 2: Satzlehre*; 2 Bde. Leverkusen: Gottschalk (4. Aufl.; reimpr. Darmstadt: WBG, 1971).
- Lehmann, Christian 2002, 'Latin valency in typological perspective.' Bolkestein, A. Machtelt & Kroon, Caroline H.M. & Pinkster, Harm & Remmelink, H. Wim & Risselada, Rodie (eds.), *Theory and description in Latin linguistics. Selected papers from the XIth International Colloquium on Latin Linguistics, Amsterdam June 24-29, 2001*. Amsterdam: J.C. Gieben; 183-203.
- Lehmann, Christian 2006, 'Les rôles sémantiques comme prédicats'. *BSL* 101/1:67-88.
- Lehmann, Christian & Shin, Yong-Min & Verhoeven, Elisabeth 2004, *Direkte und indirekte Partizipation. Zur Typologie der sprachlichen Repräsentation konzeptueller Relationen*. Erfurt: Seminar für Sprachwissenschaft der Universität (ASSidUE, 13). 2nd rev. ed.
- Nedjalkov, Vladimir P. 1990, *Das Verhältnis zwischen semantischen und formalen Oppositionen in verbaler Derivation*. [Handout]. Leningrad: ANSSSR.
- Nichols, Johanna 1993, "Transitive and causative in the Slavic lexicon: Evidence from Russian." Comrie, Bernard & Polinsky, Maria (eds.), *Causatives and transitivity*. Amsterdam & Philadelphia: J. Benjamins (Studies in Language Companion Series, 23); 69-86.
- Nichols, Johanna & Peterson, David A. & Barnes, Jonathan 2004, 'Transitivizing and detransitivizing languages.' *Linguistic Typology* 8:149-211.
- Shibatani, Masayoshi 1996, 'Applicatives and benefactives: A cognitive account.' Shibatani, Masayoshi & Thompson, Sandra A. (eds.), *Grammatical constructions. Their form and meaning*. Oxford: Clarendon Press; 157-194.
- Shibatani, Masayoshi 2006, "On the conceptual framework for voice phenomena." *Linguistics* 44(2):217-269.
- Simone, Raffaele & Cerbasi, Donato 2001, 'Types and diachronic evolution of Romance causative constructions.' *Romanische Forschungen* 113(3):441-473.

Talmy, Leonard 1976, "Semantic causative types." Shibatani, Masayoshi (ed.), *The grammar of causative constructions*. New York etc.: Academic Press (Syntax and Semantics, 6); 43-116.