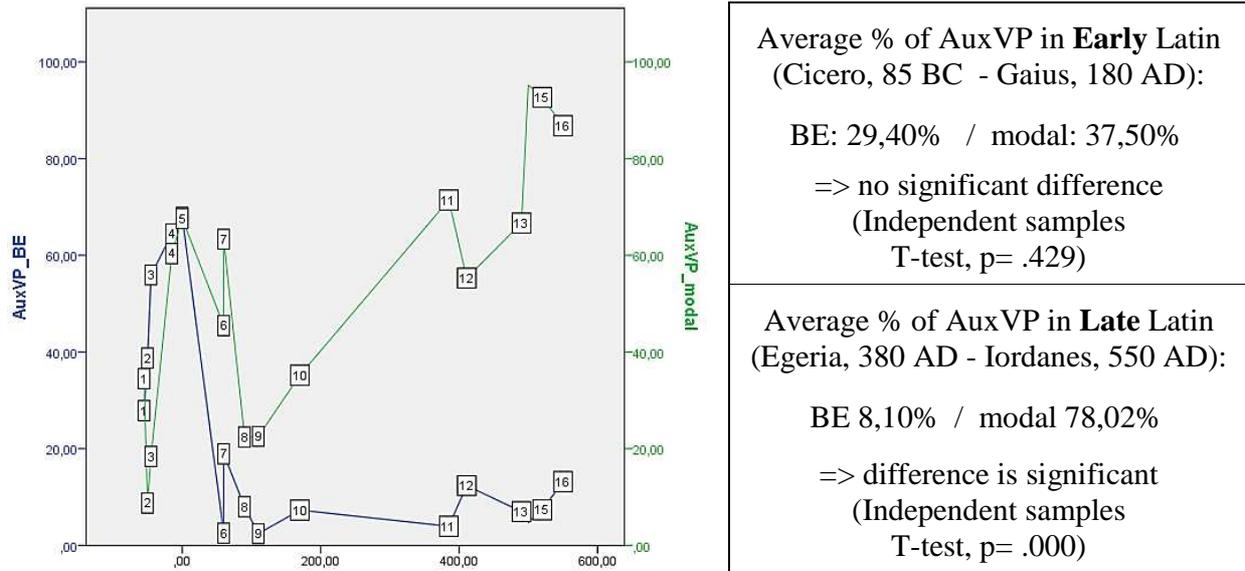**Latin BE-periphrases, incorporation,
and the genesis of Romance analytic BE-passives (presentation)**

1. A remarkable discrepancy   It is received wisdom that the evolution from Early to Late Latin witnessed a rise of head-initial syntax (Bauer 1995; Ledgeway 2012). My point of departure is that this is only partially correct: as shown in Graph 1, there is a significant rise of head-initial TP's in clauses with a modal auxiliary and an infinitival complement, but not in clauses with a BE-auxiliary and a (deponent) past participle, which display the opposite tendency:

Average % of AuxVP in **Early** Latin (Cicero, 85 BC - Gaius, 180 AD):
BE: 29,40%   / modal: 37,50%
=> no significant difference (Independent samples T-test, p= .429)
Average % of AuxVP in **Late** Latin (Egeria, 380 AD - Iordanes, 550 AD):
BE 8,10% / modal 78,02%
=> difference is significant (Independent samples T-test, p= .000)

Graph 1: Evolution of AuxVP-order in clauses with a modal (darker line, centre left to bottom right) and a BE-auxiliary (lighter line, bottom left to top right); 1 = Cicero, 2 = Caesar, 3 = Varro, 4 = Hyginus, 5 = Vitruvius, 6 = Seneca, 7 = Petronius, 8 = Frontinus, 9 = Tacitus, 10 = Gaius, 11 = *Itin. Egeriae*, 12 = *Gesta Conl. Carth*., 13 = Victor Vit., 14 = Pompeius M., 15 = Caesarius Ar., 16 = Iordanes.

The question now arises as to why BE-auxiliaries and modals pattern (more or less) alike in the earlier period (with respect to the position of their VP-complements), but not (at all) in the later.

2. Two types of BE-periphrases   In order to solve this puzzle, it is instructive to split up the class of BE-periphrases into (i) a class with an auxiliary in the present, imperfect or simple future tense (built on what is traditionally called the *infectum*-stem) (1a) and a class of (ii) periphrases with a perfective auxiliary (built on the *perfectum*-stem) (1b) (see a.o. de Melo 2012):

(1)   a. si   forte   aliquid   **laesum**   **erit**   E-periphrasis
            if   by.chance something.NOM damaged.NOM   be.PR.3.SG
        'if by chance something will be damaged.' (= Cass. Fel. Med. 29, ca. 450 AD)
        b. postquam eruptio   **fuerit**   **facta**   F-periphrasis
            after   outburst.NOM be.FUT.EX.3.SG made.NOM
        'after an outburst will have taken place.' (= Cass. Fel. Med. 21, ca. 450 AD)

I will call these two patterns E- and F-periphrases, based on the first letter of (most of) the forms of the BE-auxiliary involved. Both are available from the earliest records onwards, but it is discussed to what extent they were functionally differentiated from the start. In later authors however (from the 4th c. AD), they compete to express passive perfects (Haverling 2010; de Melo 2012). Interestingly, Late Latin F-periphrases pattern with modals in exhibiting more head-initial orders, and the surprising persistence of V(P)Aux can only be observed with the E-periphrases:

(2)

Period	Text/Author	E-periphrases		F-periphrases	
		AuxV	**VAux**	**AuxV**	**VAux**
Early	Hyginus, *Astronomia*	66,84	33,16	64,71	35,29
Early	Vitruvius	69,49	30,51	40,31	59,69
Late	Gesta Conlat. Carthag.	24,14	80,56	69,23	30,77
Late	Cassius Felix	17,65	82,35	82,14	17,86

Table 1: the AuxVP/VPAux-alternation in clauses with F/E BE-periphrases (passive and deponent participles).

I will explain the decline of the order VPAux in clauses with a modal and an F-periphrasis in terms of loss of VP-movement of the type discussed in Danckaert (2012). In addition, I will suggest that, despite appearances, the same evolution also affected clauses with an E-periphrasis, but that in these cases, non-application of VP-movement is masked due to incorporation of the participle into the auxiliary, with fossilization of the order 'VAux' as a result (cf. Danckaert 2013 for independent evidence for verb incorporation in Late Latin).

3. The genesis of the Romance synthetic BE-passive   An additional contention of this paper is that, contrary to what is often claimed in the literature (cf. among many others, Harris 1978: 188; Winters 1984: 451; Hewson & Bubeník 1997: 315), the analytic Latin passive perfect of the type *amatus est* 'he was loved' is not the ancestor of the Romance analytic passive present tenses with a BE-auxiliary, like French *il est aimé* 'he is loved'. Instead, the latter is proposed to be an innovation from early Romance. The main evidence in support of this claim comes from the word order facts discussed above: at the point where the new 'BE + participle' present passive is formed, the remaining passive perfect E-periphrases were (i) obsolete and (ii) predominantly 'participle + BE'. I propose the following evolutions, with relative (and tentative absolute) chronology:

i) E- and F-periphrases coexist (perhaps with functional differentiation, *non liquet*); incipient competition between E- and F-pattern to express passive perfects (ca. 100 BC - 150 AD).

ii) Incorporation of the participle into the auxiliary of the E- (but not the F-) periphrases, and 'fossilization' of the VAux-order (probably from the late second century AD onwards).

iii)Decline of the E-periphrases, which are replaced by F-periphrases, yielding a stable grammar with synthetic *infectum* passives, and analytic *perfectum* passives with an F-periphrasis (cf. Stotz 1989: 329, who suggests this paradigm for Mediaeval Latin).

iv)Later than, and independently of iii), decline of the synthetic *infectum* passives (on the persistence of these after 350 AD, see Muller 1924; Herman 2002; Van Heghe 2012).

v) New formation of combination BE + participle (in this order), by analogy with the perfect F-periphrases, to replace the obsolete synthetic passives.

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