Word order variation in Latin verb clusters: a diachronic perspective

1. Word order variation in the (extended) verb phrase   This paper deals with word order variation in Latin clauses with a transitive predicate and an auxiliary. More specifically, I will concentrate on the relative order of the lexical verb (V, a past participle or an infinitive), the internal argument (O) and the auxiliary (Aux). In classical Latin, the (statistically) predominant order in which these three elements appear is as in (1a), with the internal argument preceding the non-finite verb, and both of these appearing to the left of the clause-final tensed auxiliary, yielding the order 'OVAux'. This order is the mirror image of the most typical order found in the later Romance language, which typically exhibit the pattern 'AuxVO', as in the example in (1b):

(1)   a.   *si quem aditum reperire possint*.   **OVAux**
            'if they could find an access.' (= Caes. B. Gall. 6.37)
      b.   *un cavaler, que el pare de Corrali avia fet gran be*.   **AuxVO**
            'a knight, to whom the father of Corrali had done great good.'
            (Old Catalan, ex. from de Dardel 1996: 94)

The main goal of this talk is to reconstruct (part of) the evolution that has led to the establishment of the order 'AuxVO' as the predominant one in the Romance languages. More specifically, I will look at the diachronic frequencies of the above two patterns as well as of the four other logically possible orders in which the elements V, O and Aux can appear. All of these four additional orders are attested in (Classical) Latin:

(2)   a.   *nemo illi dare beneficium potest*.   **VOAux**
            'Nobody can do him a favour.' (= Cic. Ben. 5.12)
      b.   *quae ... habere potest uirtutem*.   **VAuxO**
            'which can have virtue.' (= Vitr. 10.14.3)
      c.   *si totius mundi naturam posset conprendere*.   **OAuxV**
            'if he could understand the nature of the entire world.' (= Sen. Ep. 88.28)
      d.   *... et caute possit castra munire*.   **AuxOV**
            '... and he could carefully fortify the camp.' (= Veg. Ep. rei mil. 1.25.3)

The patterns in (2) are interesting because they can be considered to be intermediate stages in the evolution from predominant OVAux (with 2 head-final sequences) to predominant AuxVO (with 2 head-initial sequences): they all have either VO (but not AuxV) or AuxV (but not VO), i.e. one head-final and one head-initial sequence. The Latin data will involve clusters with (i) a form of the modal auxiliary *possum*, (ii) a transitive infinitive and (iii) the complement of the latter. Time permitting, a comparison will be drawn between the patterns observed in the case of the *possum*-clusters and word order in clusters involving (i) another modal auxiliary (*uolo*, *debeo*, *coepi*, *soleo*,...) and (ii) an analytic form of a transitive deponent verb.

2. Description of the corpus   My corpus consists of prose texts from the period from classical (ca. 80 BC) to Late Latin (ca. 500 AD) (texts taken from the annotated LASLA corpus and the (non-annotated) online databasis www.brepolis.net): Cicero (*Pro Quinctio*; *Pro Roscio Amerino*; *Pro Roscio Comoedo*; *In Verrem* I,II.1-2); Caesar (*De bello Gallico*; *Bellum ciuile*); Seneca (*Epistulae morales ad Lucilium*; *De beneficiis*; *De tranquillitate animi*; *De constantia*; *Apocolocyntosis*; *De constantia*; *De uita beata*; *De otio*; *De ira*; *De breuitate uitae*); Quintus Curtius (Historiae III-X) Gaius (*Institutiones*); Palladius (*De ueterinaria medicina liber*; *De*

agricultura); Vegetius (*Epitoma rei militaris*; *Mulomedicina*); *Gesta Conlationis Carthaginiensis*; Pompeius Maurus (*Commentum Artis Donati*).

3. Theoretical framework The analysis is couched in the theoretical framework of generative grammar, and more specifically the so-called 'cartographic' variant thereof, which assumes a richly articulated universal structure to underlie all clauses (see Cinque 1999; Cinque & Rizzi 2010; Shlonsky 2010). It will be assumed that contrary to head-initial sequences, head-final projections are not primitives but created through syntactic movement. I will adopt the typology of possible movement operations that was proposed by Biberauer, Holmberg & Roberts (2010).

4. A first look at the data A pilot study reveals the following rought tendencies: as expected, the pattern prevalent in classical Latin (OVAux) gradually declines, whereas the frequency of the harmonically head-initial order (AuxVO) increases through time:

Author	Period	AuxVO	AuxOV	VAuxO	OAuxV	VOAux	OVAux
Cicero	ca. 81-70 BC	5,6%	12,31%	10,07%	13,06%	7,84%	51,12%
Caesar	ca. 45-50 BC	0,44%	3,1%	4,87%	2,65%	3,1%	85,84%
Quintus Curtius	ca. 60 AD	3,2%	2,74%	7,76%	15,07%	15,53%	55,71%
Seneca	ca. 60 AD	13,75%	18,21%	5,33%	11%	17,87%	33,85%
Tacitus	ca. 110 AD	7,83%	21,74%	9,57%	5,22%	22,61%	33,04%
Gaius	ca. 170 AD	7,59%	20,98%	3,57%	4,91%	3,57%	59,38%
Palladius	ca. 350 AD	7,32%	13,01%	2,44%	34,15%	9,76%	33,33%
Gesta Conlat. Carth.	ca. 411 AD	14,81%	16,3%	8,15%	33,33%	2,22%	25,19%
Vegetius	ca. 420 AD	10,91%	9,09%	3,64%	36,36%	4,55%	35,45%
Pompeius Maurus	ca. 500 AD	60,24%	15,43%	1,48%	17,8%	0%	5,04%

Special attention will be paid to the pattern VOAux, which has been claimed to be cross-linguistically very rare (Biberauer, Holmberg & Roberts 2010). As can be seen in the table, both the rise and the fall of this order are documented in the historical period: I will suggest that the syntactic analysis of this particular pattern (with (i) movement of the verb phrase past negation but without (ii) 'roll-up movement' inside the verb phrase) can give us important insights about the overall structure of the Latin clause, as well as about its diachronic evolution.

5. References ● Biberauer, T., A. Holmberg & I. Roberts. 2010. A syntactic universal and its consequences. Ms. University of Cambridge/University of Newcastle ● Cinque, G. 1999. *Adverbs and functional heads*. Oxford: U.P. ● Cinque, G. & L. Rizzi. 2010. The cartography of syntactic structures. In: Heine, B. & H. Narrog (eds.), *The Oxford handbook of linguistic analysis*. Oxford: U.P., 51-65 ● de Dardel, R. 1996. A la recherche du protoroman. Tübingen: Niemeyer ● Shlonsky, U. 2010. The cartographic enterprise in syntax, *Language and Linguistics Compass* 4, 417-429