

LATIN COMPARATIVE CORRELATIVES AND SCALARITY

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1. *Introduction*

The Latin construction investigated in this paper is exemplified in (1):

- (1) a. uideamus animi partes, quarum est conspectus illustrior; quae *quo* sunt excelsiores, *eo* dant clariora indicia naturae (Cic. fin. 5,48)¹
'let us consider the parts of the mind, which are of nobler aspect. The loftier these are, the more unmistakable indications of nature do they afford'
- b. ut recte praecipere uideantur qui monent ut *quanto* superiores simus *tanto* nos geramus summissius (Cic. off. 1,90)
'there seems to be sound advice in this word of warning: "The higher we are placed, the more humbly should we walk"'.²

It corresponds to the English construction which is usually called 'comparative conditional'² or 'comparative correlative'³:

- (2) The *more* you eat, the *fatter* you get.

Latin comparative correlatives are expressed by means of a correlative construction, where the former clause is introduced by the relative adverb *quo* correlated with the demonstrative *eo* in the second clause, or by the adverb *quanto* with *tanto* as its correlative particle. Traditionally the ablative case of these items is seen as an ablative of measure; this is normally required when a degree modifier accompanies a comparative word.

¹ The English translations are taken from Loeb Class. Library. Slight modifications are introduced in some cases to obtain a more literal meaning.

² Cf. Fillmore 1986, McCawley 1988, Michaelis 1992, 1994, Beck 1997, Declerck-Reed 2001.

³ Cf. Culicover-Jackendoff 1999, Den Dikken 2003, 2005, Borsley 2004, Leung 2003, 2004, Taylor 2006, Citko (forthcoming), Abeillé-Borsley-Espinal 2006, Abeillé-Borsley 2006.

The correlations *quo...eo*, *quanto...tanto* are the most common ones in Classical Latin. Sometimes other correlations can be found, such as *quo...hoc*, *quantum...eo*, *quanto...eo*, or *quo...tanto*:

- (3) a. *quo* minus certa est hominum ac minus diuturna uita, *hoc* magis res publica... frui debet summi uiri uita atque uirtute (Cic. *Manil.* 59)
 ‘the more uncertain and the more ephemeral human life is, the greater is the obligation upon the State to take advantage of the ability of a great man during his lifetime’
- b. et *quantum* procederet longius a Thessalia, *eo* maiorem rerum omnium inopiam sentiens (Liv. 44,7,6)
 ‘the further he advanced from Thessaly, the more strongly he felt the want of every sort of supplies’
- c. *quanto* maior aestus erit, *eo* saepius conuenit unum nutriri refrigerarique et uentilari (Colum. 12,30)
 ‘the greater the heat, the more often should the wine be attended to and cooled and ventilated’
- d. *quo* maius est animal, *tanto* diutius formatur in utero (Plin. *nat.* 10,175)
 ‘the larger the animal, the longer it takes to be shaped in the womb’

In Early Latin, for example in Plautus and Terence, the correlation *quam...tam* with a comparative can also be found, while the correlation *quo...eo* is not attested:

- (4) *quam* magis aspecto *tam* magis est nimbata et nugae merae (Plaut. *Poen.* 348)
 ‘the more I inspect her, the more frivolous and flighty she seems’

In two previous papers⁴ on this construction we have analyzed its syntactic properties in detail; here we limit ourselves to a brief survey of the most peculiar syntactic features and instead investigate the semantic aspects that have more to do with scalarity.

2. *A syntactic survey*

In many languages, one of the most debated questions concerning the syntactic peculiarities of comparative correlatives is the relation between the two parts of the construction, whether it should be considered a case of

⁴ Cf. Bertocchi-Maraldi 2008 and Bertocchi-Maraldi (forthcoming).

coordination (i.e., juxtaposition of two clauses with identical structure) or subordination (i.e., the combination of a subordinate clause and a head clause, in that order). Each of the two possibilities seems to be only partially valid, and this makes the choice between the two analyses very difficult. This holds for English, French, and German⁵, while in Italian comparative correlatives may be expressed in two different ways, as in (5)⁶:

- (5) a. *Più leggo (e) più capisco*
 b. *Quanto più leggo (?e) tanto più capisco.*

The construction without *quanto* permits *e*-insertion and requires syntactic similarities between the two clauses, such as the same mood, while the construction with *quanto* disallows *e*-insertion and displays asymmetries, for example in mood⁷.

In Latin there is clear evidence in support of a subordination relation between the two clauses. This evidence comprises word order, the possibility of omitting one marker only (*eo/tanto*), and the different behavior of the two clauses with regard to mood in dependency contexts.

- ⁵ In English, for example, there are more syntactic arguments in favor of subordination, but there are also some against. In German (e.g., ‘Je besser Otto vorbereitet ist, desto besser wird sein Referat werden’), a relationship of subordination is evidenced by word order (the *je*-clause has the same word order as a subordinate clause, while the *desto*-clause has the order of a main clause). An analysis based on coordination seems instead to be more suitable for the French construction *Plus... plus*, since it is possible to insert the conjunction *et* between the two parts (e.g. ‘Plus je lis, (et) plus je comprends’). On German, see Roehrs-Sprouse-Wermter 2002 and on English see Thiersch 1982. Brill-Rebuschi 2006 suggest that English and French comparative correlatives should be regarded as cases of co-subordination, i.e. of the type of clause linkage which is characterized by the features [-embedded, +dependent].
- ⁶ According to Abeillé-Borsley-Espinal 2006 also in Spanish two patterns are possible, a symmetric and an asymmetric one: *Más leo (y) más entiendo / Cuanto más leo (*y) tanto más entiendo*. However Sánchez López (this volume) notes that the symmetric type is not productive in Spanish and that the correlation where the difference between the two clauses is formally marked is largely preferred.
- ⁷ Cases with a conjunction can also be found; for example: «Quanto più si entra tanto più si esce, quanto più si è fermi e tanto più si ha influenza, quanto più si sta nel presente e tanto più si ha successo...» (E. Spaltro, «Avere ed essere il lavoro: la doppia contraddizione della libertà», in P.L. Eletti (ed.), *Incontro con Erich Fromm. Atti del Simposio Internazionale su E.F.*, Firenze, Edizioni Medicea, 1988). In this instance, however, the use of the conjunction ‘e’ seems to bind a series of correlations rather than binding the clauses introduced by ‘quanto’ to those introduced by ‘tanto’, as shown also by the absence of conjunctions in the first correlation.

2.1 Word order

The non-ambiguity of the syntactic status of the two clauses is strictly related to the clause word order. In this respect Latin comparative correlatives are different from their equivalent in other languages. In languages where comparative correlatives have a symmetrical structure, the order of the two constituent clauses is fixed (for a given meaning), as in French, where (6a) is not equivalent in meaning to (6b):

- (6) a. *Plus je lis, plus je comprends*
 b. *Plus je comprends, plus je lis.*

In languages where comparative correlatives may also have an asymmetric construction, the order seems to be freer, as is evident from the semantic equivalence between (7a) and (7b):

- (7) a. *Quanto più leggo, tanto più capisco*
 b. *Tanto più capisco, quanto più leggo.*

In English the order of the two clauses can be reversed, but in order to preserve the meaning, when the main clause precedes, the comparative has to lose *the* and cannot be fronted⁸:

- (8) a. *The more I read, the more I understand*
 b. *I understand more, the more I read.*

In Latin, the reversed order of the two constituent clauses is commonly found, even though the more usual order is where the clause introduced by *quo* or *quanto* precedes the clause introduced by *eo* or *tanto*. The reversed order does not result in any syntactic or semantic difference, since it is always the clause introduced by the relative *quo/quanto* that is subordinate and determines the directionality of the sentence⁹, both when it precedes and when it follows the *eo/tanto* clause. Compare:

- (9) a. *quo melior est saturiorque, eo altius oportet teneas* (Sen. *nat.* 1,5,12)
 ‘the better and more richly dyed a cloth is, the higher you ought to hold it up’

⁸ The term ‘reversed comparative conditional construction’ is suggested by McCawley 1988. As suggested by Borsley 2004, in English this term does not seem to be very appropriate, (8b) being more properly a construction related to (8a) rather than its reversed construction. According to his analysis, (8a) has the syntactic properties of a correlative construction, similar to *if-then* or *as-so* constructions, while (8b) is a construction in which a main clause combines with an adjunct clause.

⁹ We take up this matter later.

- a'. *eo* enim crassior est aer, *quo* terris propior (Sen. *nat.* 7,22,2)
 'for the thicker the atmosphere is, the closer it is to the earth'
- b. nam *quanto* uita illorum praeclarior, *tanto* horum socordia flagitiosior (Sall. *Iug.* 85,22)
 'the more glorious was the life of their ancestors, the more shameful is their own baseness'
- b'. nam *tanto* breuius omne *quanto* felicius tempus (Plin. *epist.* 8,14,10)
 'the shorter each period is, the happier it is'.

It is probable that emphasis plays an important role in determining the reversed order of some examples¹⁰, as in (9a'), where the comparative correlative is a parenthetical sentence. This does not seem, however, to be the only reason. There are examples where the reversed order seems to be determined by reasons of 'textual cohesion', that is, when the main clause of the correlation is more strictly tied to the context which precedes, as in (10):

- (10) a. arationes absolui, quae *eo* fructuosiores fiunt, *quo* caldiore terra aratur (Varro *rust.* 1,32,1)
 'ploughing should be completed, and the warmer the ground where it is done the more valuable it will be'
- b. quarum rerum *eo* grauior est dolor *quo* culpa maior (Cic. *Att.* 11,11,2)
 'for this state of affairs I feel the greater sorrow, the greater my fault'.

In (10a), the comparative correlative is within a relative clause introduced by the relative pronoun *quae* whose antecedent is given in the context that immediately precedes. In (10b), *quarum rerum* is a so-called relative nexus. As such it takes up anaphorically what has just been said. The relative elements in (10a) and (10b) have a syntactic function only within the main clause of the correlation, and this might explain why this clause is ordered before the other.

With the correlation *tanto... quanto* similar examples can be found, as in (11), where the implicit predicate of *tanto magis* is *foendum est*, the same as in the coordinate main clause:

- (11) a tertio die foendum id aqua calida est *tantoque* magis, *quanto* propius esse sanitati debet (Cels. 8,5,4)
 'from the third day the nose is to be treated with hot water, the more frequently the nearer the recovery is'.

¹⁰ According to Hand (s.v. *eo*), the order of the two clauses largely depends on emphasis (*plerumque a grauitate et pondere sententiae regitur*).

2.2. *The omission of the marker*

The two clauses can also exhibit some dissimilarities in their form, particularly as regards the occurrence of the degree markers. The only degree markers that can be omitted are *eo/tanto*. As expected, *quo/quanto* cannot be, since they relate to a variable degree on one scale which determines the variation of the degree on the other scale¹¹:

- (12) *quanto* ego plus propero, procedit minus (Plaut. *Cas.* 805)
 ‘the more I hurry, the less headway we make’

The omission of *eo* is possible both when the main clause follows and when it precedes the subordinate clause, as in:

- (13) a. Laeti et audiere ab nouo duce nouum consilium, et, *quo* audacius erat, magis placebat (Liv. 25,38,23)
 ‘With joy they heard of the new plan from their new commander, and the bolder it was, the more it pleased them’
 b. uetustate et haec nigrescit, melior *quo* candidior (Plin. *nat.* 24,128)
 ‘it too grows black with age, and the whiter it is, the better its quality’
 c. nam amicorum eius *quanto* quis clarior, minus fidus (Tac. *hist.* 3,58)
 ‘for the more distinguished his friends were, the less he trusted them’.

2.3. *Dependency contexts*

In Latin there is no example of a comparative correlative with a coordinate structure; every example has a structure of subordination¹². The different syntactic behavior shown by the two constituent clauses in particular situations confirms that the two clauses are not on the same syntactic level and that only one is considered to be the main clause. Strong evidence for syntactic asymmetry between the two clauses is found in cases where the comparative correlative is not an independent sentence but depends on a predicate governing an infinitive clause (verbs of saying or thinking, or impersonal predicates). In fact, when this circumstance is met, the second clause of the correlation (i.e., the *eo (tanto)*-clause) is

¹¹ According to Kühner-Stegmann (1962: II 484), *eo/tanto* can be omitted when they do not carry any special emphasis.

¹² According to Abeillé-Borsley (2006: 29 fn.12), from the lack of coordinated structures of this type in Latin, it may be supposed that the coordinate construction of Italian and Spanish is a more recent development.

always expressed in the infinitive mood, while the first (the *quo (quanto)*-clause) retains its finite form and appears in the subjunctive¹³, as in:

- (14) a. solet idem Roscius dicere se, *quo* plus sibi aetatis accederet, *eo* tardiores tibicinis modos et cantus remissiores esse facturum (Cic. *de orat.* 1,254)
 ‘that same Roscius is fond of saying that the older he grows, the slower he will make the flute-player’s rhythms and the lighter the music’
- b. *quo* successerit magis in arduum *eo* pelli posse per procliue facilius rati (Liv. 5,43,2)
 ‘persuaded that the higher they mounted up the steep slope, the easier it would be to drive them down’
- c. conpertum (magnetes) *tanto* meliores esse, *quanto* sint magis caerulei (Plin. *nat.* 36,128)
 ‘it has been ascertained that the bluer a magnet is, the better it is’
- d. necesse est *tanto* operosiora esse munimenta, *quanto* uehementiora sunt, quibus petimur (Sen. *epist.* 95,14)
 ‘the stronger the powers by which we are attacked, the greater the care with which defenses must be erected’.

A similar situation is found in indirect speech (*oratio obliqua*), which is used to report speeches in narrative contexts and is particularly frequent in the historical genre. An instance is (15), where the author reports the speech delivered by *Verginius* to the crowd:

- (15) nec cum filia sua libidinem Ap. Claudii extinctam esse, sed *quo* impunitior sit, *eo* effrenatiorem fore (Liv. 3,50,7)
 ‘the lust of Appius Claudius had not been extinguished with the life of Verginia, but the more it remained unpunished, the looser it would get’.

The mood of the main clause can also be subjunctive, when required by the context or by a particular introductory element, while, asymmetrically, the mood of the other clause is not subjunctive (usually it is indicative). For example:

- (16) a. pudeat ab exiguis animalibus non trahere mores, cum *tanto* hominum moderatior esse animus debeat, *quanto* uehementius nocet (Sen. *clem.* 1,19,4)

¹³ Comparative correlatives behave like other complex sentences constituted by a main plus a subordinate clause. For example, when conditional sentences depend on predicates governing an accusative plus infinitive, as a rule their apodoses take the infinitive form, while the protases appear in the subjunctive.

‘it would be shameful not to draw a lesson from the ways of the tiny creatures, since, the greater the power to do harm the mind of man has, the greater the self-control should be’

- b. et haud facile dixerim, num illa *tanto* expeditiora sint discentibus artificia, *quanto* minus ampla sunt (Colum. 11,1,9)
 ‘I could not readily state whether these trades are the more quickly learnt, the narrower the scope they have’.

As shown by such examples, of the two clauses of the comparative correlative, it is always the one introduced by *eo/tanto* (i.e., the main clause) that is linked to the rest of the period and may be governed by an element external to the correlation (in (16a.) by *cum*, introducing a subordinate with a causal reading; in (16b.) by *num*, introducing an indirect question).

3. *Scalarity*

The construction exemplified in (1) has the semantic property of expressing co-variation between two scalar values: changes in the degree of the adjective of the former clause yield corresponding changes in the degree of the adjective of the latter. That this construction implies the existence of paired scales, where a change of position of the value on the one scale triggers the corresponding or opposite change of position of the value on the other, determines the directionality of the sentence¹⁴.

As we have seen, in Latin the scale evoked by the *quo/quanto*-clause specifies the independent variable while the scale evoked by the *eo/tanto*-clause specifies the dependent variable. This means that the directionality of the sentence is always determined by the *quo/quanto*-clause.

Normally, each clause contains a morphologically comparative element (adjective, adverb, or quantity noun) and a degree marker in the ablative case. The type exemplified in (1) is the most common and widespread. Latin, however, which is free in word order, is also free in degree expression. There are instances of the relevant correlation where a superlative is found in place of a comparative, and also cases where in one of the two clauses the comparative degree is lacking. We consider the superlative later. Now we consider instances where the comparative is absent and try to explain them.

¹⁴ Cf. Declerck-Reed 2001, Cappelle (forthcoming). It is because of this implicational directionality that some analyses consider comparative correlatives a kind of conditional construction, where the two major constituents would relate one another like the protasis and apodosis of an ordinary conditional. It cannot be said, however, that in every comparative correlative the directionality involves a cause-effect relation. On the fact that the directionality of the scales cannot be reversed see de Cornulier 1988.

Some instances occur in Livy, Pliny the Younger, Tacitus¹⁵, and other late authors¹⁶. While some examples can easily be interpreted as comparative correlatives, others raise no small problems of interpretation. In sentences like (17), for example, the reading as a comparative correlative is quite natural:

- (17) a. *quo* minus consules uelle credunt, crescit ardor pugnandi (Liv. 2,45,9)
 ‘the less inclination the soldiers discovered in the consuls, the greater became their own eagerness for the fray’
 b. *quo* saepius arsit, proficit ad bonitatem (Plin. nat. 33,59)
 ‘it (gold) improves in quality the more often it is fired’
 c. nam barbaris, *quanto* quis audacia promptus, *tanto* magis fidus habetur (Tac. ann. 1,57,1)
 ‘for with barbarians, the readier a man is to take a risk so much, the more is he the man to trust’
 d. nimbus autem *quanto* repentinus est, *tanto* uehementior (Apul. mund. 9)
 ‘but the more sudden a shower is, the more violent it is’.

In both (17a) and (17b), the main clause contains a scalar predicate (*crescere* ‘to become greater’ and *proficere ad bonitatem* ‘to improve in quality’) with an inherent comparative meaning which permits the assignment of the usual interpretation of comparative correlatives. In both examples, each degree of variation on the scale denoted by the *quo*-clause implies the same degree of variation on the scale denoted by the main clause. As for (17c) and (17d), the reading as a comparative correlative is also induced by the general or gnomic sense of the statements expressed.

Instances that are more difficult to interpret are given in (18):

- (18) a. Romani ouantes et gratulantes Horatium accipiunt *eo* maiore cum gaudio, *quo* prope metum res fuerat (Liv. 1,25,13)

¹⁵ Tacitus is the author who most frequently omits comparative forms not only in this construction, but also in other cases which normally require a comparative. For example, when the comparison is between two qualities that coexist, though in different degrees, in Latin the two qualities are both expressed by a comparative form (e.g. *minacior quam perniciosior* ‘more threatening than ruinous’. But in Tacitus it is possible to find e.g. *uehementius quam caute* (Tac. Agr:4) instead of the expected *uehementius quam cautius* (‘more eagerly than cautiously’).

¹⁶ These forms are frequent in postclassical Latin. According to Wölfflin (1879:72), the acceptability is not without problems in some cases: «Alles Sprachgefühl fehlt vollendes dem Jordanes, wenn er *Get.23* schreibt *gens quantum uelox, eo amplius superbissima* (= *quanto uelocior, eo superbior*)». Positive, comparative and superlative degrees appear to be mixed together, as if they were indistinguishable.

- ‘The Romans welcomed their hero with jubilations and thanksgivings, and their joy was all the greater that they had come near despairing’
- b. Milies sestertium in munificentia ea conlocatum, *tanto* acceptius in uulgum, *quanto* modicus priuatis aedificationibus ne publice quidem nisi duo opera struxit (Tac. *ann.* 6,45,1)
 ‘One hundred million sesterces were invested in this act of munificence, which came the more acceptably to the multitude that he was far from extravagant in building on his own behalf’.

As regards (18a), Hand (1969: 416) says that the right interpretation is not «*mit desto grösserer Freude, je näher man der Furcht*» but «*und insofern mit grösserer Freude, als man der Furcht nahe stand*». This suggests that the *quo* clause must not be interpreted as the subordinate clause of a comparative correlative, but as a causal clause. This interpretation of the *quo* clause does not appear unusual. It is in fact supported by an analogous causal meaning in the formulaic correlation *eo magis, eo minus* (‘so much the worse, the less’) followed by *quo*:

- (19) nunc uero *eo magis, quo* tanta penuria est in omni honoris gradu (Cic. *fam.* 3,11,2)
 ‘but all the more at the present time, because so great is the dearth of such men in every official rank’.

In place of *quo*, *quod* is also found, which is the most usual conjunction introducing a causal subordinate clause¹⁷:

- (20) a. *eo* minus ueritus nauibus, *quod* in litore molli atque aperto deligatas ad ancoram relinquebat (Caes. *Gall.* 5,9,1)
 ‘having the less fear for the fleet because he was leaving it at anchor on a sandy, open shore’
- b. *eoque* mihi iucundius est *quod* tu *eo* laetaris, certiusque *eo* est *quod* a te dicitur (Cic. *Att.* 13, 35-36, 3)
 ‘and I find it all the more agreeable because it gives you pleasure and believe it the more implicitly because it is you who say it’.

The correlation *eo...quo* also has a causal meaning in environments not involving a comparative, as for example *non eo...quo*, where *eo* has the usual proleptic function (that of *is* in correlation to *qui*):

¹⁷ In (19), some editions have *quod*. On the alternation of *quo/quod* see Calboli (2003: 277). Calboli considers cases where *quo/quod* introduce a conclusive coordinate clause. *Quod* is the more frequent, but also *quo* can be found, as for example Ter. *Andr.* 429 *quo aequior sum Pamphilo* (‘and that makes me less against Pamphilus’); Nep. *Milt.* 7,4 *quo factum est ut...* (‘the result was that...’)

- (21) non *eo* dico, Aquili, *quo* mihi ueniat in dubium tua fides et constantia (Cic. *Quinct.*5)
 ‘I speak so, Aquilius, not for the reason that I may have doubts about your firmness and integrity’.

The interpretation of instances where the comparative is replaced by the positive degree, as in (18) above, distinguishes our analysis from that of Michaelis. While we assign a causal meaning, Michaelis (1994: 58f.) considers (18) a case of comparative conditional with a *constant* reading, under which there would be no semantic motivation for the comparative. We will briefly examine the semantic description given by Michaelis.

3.1. *The semantic interpretation of the comparative*

The semantic interpretation proposed by Michaelis distinguishes a variable reading and a constant reading. The two types are illustrated by (22):

- (22) a. *quanto* uos adtentius ea agetis, *tanto* illis animus infirmior erit (Sall. *Catil.* 52, 18)
 ‘the more vigorous your action, the less will be their courage’
 b. *quanto* altius elatus erat, *eo* foedius corruit (Liv. 30,30,23)
 ‘the higher he had climbed, the more terribly did he fall’.

That (22a) has a variable interpretation means that the sentence does not equate two fixed values, but the whole range of values that can be assumed on the two paired scales. The relation between the properties of the two scales is implicational, since any change in the properties of one scale causes a corresponding change in the other. The constant interpretation of (22b) is due to the aspectual properties of the predicate *corruit*, which is perfective and designates a unique and episodic event, one not seen developing over time. According to Michaelis (1994: 56ff.), it is precisely development over time that characterizes the interpretation as variable. And it is only a variable interpretation that involves correlated scales and a relation of entailment between them. For this reason, under the constant interpretation the sentence expresses an equivalence between two fixed degrees on two scales, which appear to be neither correlated nor linked by a relation of entailment.

Another example to which Michaelis assigns a constant reading is (23):

- (23) Quantum ego dolui in Caesaris suauissimis litteris! Sed *quo* erant suauiores litterae, *eo* maiorem dolorem illius ille casus adferebat (Cic. *ad Q.fr.* 3,1,17)
 ‘And how I grieved over Caesar’s most charming letter! But the more charming it was, the greater the grief it caused me for his affliction’.

The example concerns a letter containing news of the death of Caesar's daughter. According to Michaelis, the sentence can only have a constant interpretation, since it is unlikely that the letter became more moving in the course of its reading¹⁸.

In our opinion, instead, the sentence has a variable interpretation. Cicero presents the letter, consisting of various words and sentences, as moving in different degrees. This variation of the emotional content, however, does not follow a linear increase from the beginning to the end. Rather, the more moving moments arise from the sweeter words, and such moving moments can occur at any point in the reading, not necessarily at the end. The variable intensity of the emotion is in relation not to a progression in time, but to a variety of peaks of emotion which correspond to the sweeter words in the letter¹⁹.

Likewise, the interpretation of the two examples in (22) is in our view very similar. It is true that the two clauses in (22b) present two actions as already actualized. But the fact that (22b) has a constant interpretation means that we cannot perceive the co-variation as taking place: it does not mean that there is neither co-variation nor an implicational link between the scales. It simply means that the co-variation is implicit, or virtual, as shown by the fact that the sentence 'The higher he had climbed the more terribly did he fall' implies that if he had climbed less high, he would have fallen less terribly.

With a slight modification, we agree with Michaelis about her distinction between a variable and a constant reading. In a more extended sense of the semantic properties of comparative correlatives, which, in addition to times, include possible worlds and individuals (on the basis

¹⁸ More precisely, in Michaelis' view, a perfective aspect characterizes events seen as involving a set terminal point. Since Michaelis assigns to the perfect *dolui* a perfective aspect, it seems far fetched to her to interpret the letter as becoming more moving in the course of its reading. Accordingly, the two imperfect verbs of the comparative correlative (*erant / adferebat*), imperfective for the aspect, are explained as providing a background to the main event (*dolui*). Therefore, according to Michaelis, this comparative correlative should have a constant reading. In our opinion, the fact that *dolui* is a perfect tense does not necessarily mean that it has a perfective aspectual value. The action of grieving (*dolui*) can be seen in its duration and the two imperfect forms (*erant / adferebat*) simply describe and comment a grief. Such a grief can well vary in its intensity, echoing the variably touching passages of the letter. For this reason, we think that this comparative correlative has a variable interpretation.

¹⁹ This interpretation corresponds to that proposed by Taylor (2006: 4) for the sentence 'The more money Saul spends, the more frustrated Alice gets'. According to Taylor, the best paraphrase of its meaning is 'there are events in which Saul spends money, and for each of these events, the level of frustration that Alice experiences is correlated positively with the amount of money Saul spends'.

of the analysis of Beck (1997), we agree that the two examples in (22) are seen as variable and constant, respectively, where ‘variable’, in our opinion, means that the co-variation is explicit, while ‘constant’ means that the co-variation is only implicit or virtual. Consider some other examples of the constant type:

- (24) a. dictator praedam militi dedit, *quo* minus speratam minime largi-
tore duce, *eo* militi gratiorem (Liv. 6,2,12)
‘the dictator gave the booty to his soldiers, an act which was the
more acceptable to the men, the more unexpected it was, coming
from a less than generous commander’
- b. Rhodii, *quo* magis cessatum priore aestate erat, *eo* maturius
aequinotio uerno eundem Pausistratum... miserunt (Liv. 37,9,5)
‘The Rhodians, the greater their delay the preceding summer, the
earlier now, namely at the spring equinox, did they despatch the
same Pausistratus’
- c. et Polyxenidam *quo* minus prospere gesta res erat, *eo* enixius et
eas quae erant reficere et alias parare naues iussit (Liv. 37,8,3)
‘and he ordered Polyxenidas to equip the ships that remained
and to assemble new ones the more strenuously, the less suc-
cessful the affair had been’.

In (24a), the occurrence of the perfect tense *dedit* suggests a constant reading: to an act of giving by the commander an attitude by the soldiers corresponds, which is the more grateful, the more unexpected the commander’s munificence. But this correspondence can be seen either as a unique event or as a set of events which vary according to the variable degree of expectation of the soldiers. In this case, the reading would be variable. It must be noted, however, that the use of the singular *militi* has a collective sense and must be intended as meaning ‘the whole army’: this seems to favour the interpretation of a unique event and hence the constant reading.

All these examples have the same temporal distribution: in the *quo* (*quanto*) clause, a pluperfect tense expresses anteriority in relation to the tense of the *eo* (*tanto*) clause. The tense of this latter clause is either a perfect directly expressing a perfective, accomplished aspectual sense; or it is placed in the past by the perfect tense of the main clause. A perfect tense is found also in the following example:

- (25) *quo* longius iter in castra erat, *eo* plures fessos consectandi hostibus
copia fuit (Liv. 43,10,7)
‘the longer the way to the camp was, the more numerous were the
weary men that the enemy had the opportunity to overtake’.

Here the *quo* clause contains an imperfect tense which has a stative value. The scheme of the tenses is perfect in the *eo* clause and pluperfect or imperfect in the *quo* clause. What is important is that it is the *quo* clause that determines the *eo* clause or, in different terms, the degree on the scale of the predicate of the *eo* clause depends on the degree on the scale of the predicate of the *quo* clause. While in the cases with a variable interpretation the co-variation of the two degrees on the two scales is explicitly expressed, in the cases with a constant interpretation the co-variation remains implicit and only the obtained degree is explicitly expressed.

3.2. *The semantic interpretation of the superlative*

Cappeau-Savelli (1995: 181f.) have noted the frequent use of the comparative correlative as a maxim or proverb. In Latin too the comparative correlative is frequently used with gnomic sense. When it has such a property, the clause often contains a nominal element with generic reference, such as *aleator* and *res* in (26a,b) or an impersonal verb such as *peccatur* in (26c):

- (26) a. *aleator quanto in arte est melior, tanto est nequior* (Publil. *sent.*A 33) (cf. Ribbeck)
 ‘The better a dice-player is, the more wretched he is’
 b. *res quanto est maior, tanto est insidiosior* (Publil. *sent.*R 10)
 ‘the bigger a thing is, the more deceptive it is’
 c. *quanto serius peccatur, tanto incipitur turpius* (Publil. *sent.*Q 61)
 ‘the later one begins to sin, the more shamefully he begins’.

The most frequent way to express a generic reference is by means of an indefinite pronoun. The indefinite pronoun most commonly used in this environment is *quisque*:

- (27) a. *iam quo quisque est sollertior et ingeniosior, hoc docet iracundius et laboriosius* (Cic. *Q.Rosc.*31)
 ‘in fact, the cleverer and more talented someone is, the more ill-tempered and worried he is as a teacher’
 b. *Quo quisque honestior genere, fama, patrimonio est, hoc se fortius gerat* (Sen. *dial.* 2,19,3)
 ‘the more honorable someone is by birth, reputation, and patrimony, the more heroically he should bear himself’.

Quisque has a distributive meaning (‘every’), and in the comparative correlative construction it may cover two different referential values. Either it has a generic reference, as in the examples above, or it is found in ref-

erence to specific nouns, as in (28), where (in a.) the set of reference is a number of specific ladders, while in (b.) it is a set of specific men, the members of the council held by Antiochus:

- (28) a. *rarae enim scalae altitudini aequari poterant, et quo quaeque altiores, eo infirmiores erant* (Liv. 26,45,2)
 ‘for few ladders could reach to their height, and the higher these were, the weaker’
 b. *quia quo quisque asperius aduersus Romanos locutus esset, eo spes gratiae maior erat* (Liv. 35,17,3)
 ‘since everybody thought that the more severe his attitude toward the Romans, the greater the favor he would win’.

Quisque is occasionally found in comparative correlatives with the comparative, but it becomes a rule with a superlative. Surprisingly, in fact, Latin has the possibility of expressing, through the superlative, a meaning very close to that of the comparative correlative. This distinguishes Latin from most languages, where superlatives are generally excluded:

- (29) *The *most* hardworking you are, the *highest* score you get.

With superlatives the correlation is introduced by *ut... ita*:

- (30) *Vt quisque sibi plurimum confidit, ita maxime excellit* (Cic. *Lael.*30)
 ‘for to the extent that a man relies upon himself, to that degree is he most conspicuous for seeking out friendships’.

While the markers of correlation with the comparative (*quo... eo* and *quanto... tanto*) are ablatives of measure typically co-occurring with comparative morphology, *ut... ita* are typical markers of equation and introduce a comparative clause of manner (‘in the same way as’). Some examples of equation comparatives are given in (31):

- (31) a. *ut frumenta nata sunt, ita decumae ueneunt* (Cic. *Verr.*II 3,147)
 ‘the amount of the tithe sold corresponds to the yield of the harvest’
 b. *non ut iniustus in pace rex ita dux belli prauus fuit* (Liv. 1,53,1)
 ‘but as he was not an unjust king in peace, so he was not a bad general in war’.

As we have seen, the correlation *ut... ita* plus the superlative always contains *quisque*, the universal distributive quantifier²⁰. Unlike certain

²⁰ The sense of the universal distributive quantifier *quisque* followed by a superlative is clear: *doctissimus quisque* means ‘every learned man’, i.e., ‘all the learned’. *Vt quisque*

occurrences of *quisque* with specific reference in correlative comparatives (as in (27) above), in the correlation *ut...ita* plus the superlative, *quisque* always has a generic value:

- (32) a. *ut quisque* maxime cognatione, affinitate, necessitudine aliqua attingebat, *ita* maxime manus tua putabatur (Cic. *Verr.* II 2,27)
 ‘the more closely a man was connected with you by any tie of blood, marriage, or friendship, the more he was reckoned one of your hands’
 b. in morbis corporis *ut quisque* est difficillimus *ita* medicus nobilissimus atque optimus quaeritur (Cic. *Cluent.* 57)
 ‘in a case of physical disease, the worse it is, the more distinguished and superior is the doctor who is called in’.

Usually, grammars do not treat cases with a superlative as separate from cases with the comparative; nor do translations normally differentiate (see for example the translations of (32)). But, however subtle the difference might be, nevertheless we think there is one. It seems that the correlation *ut quisque* + superlative... *ita* + superlative is used to express an equivalency meaning between the two maximal degrees of the respective scales. Differently from the comparative type, which equates the whole range of values of the two paired scales, the superlative type only equates the two highest fixed values. Because of the occurrence of *quisque*, this equation assumes a distributive reading. A plausible paraphrase of (32b) could be: ‘in physical diseases, every time it happens that as the disease is the worst, so the doctor called in is the best’. An equation interpretation between two maximal values with a distributive sense seems to be even more appropriate in those examples where the correlation expressed by the superlative occurs in a concise form, with omission of the verb *be* and of the introductory markers:

- (33) a. in omni enim arte uel studio uel quauis scientia uel in ipsa uirtute optimum quidque rarissimum est (Cic. *fin.* 2,81)
 ‘for as in every art or study, or science of any kind, so in right conduct itself, supreme excellence is most rare’
 b. quia prudentissimus quisque maxime negotiosus erat (Sall. *Catil.* 8,5)
 ‘since their ablest men were always most engaged with affairs’.

not followed by a superlative is also frequent. It means ‘according as’. Cf. Liv. 3,18,10 *de captiuis, ut quisque liber aut seruus esset, suae fortunae a quoque sumptum supplicium est* (‘the captives, according as everyone was free or slave, paid the penalty appropriate in each case to their condition’).

With superlatives, the proportion between the two scales only concerns the highest degree of the respective qualities²¹. In this way the proportion has a static value. On the contrary, with comparatives the proportion is not seen as fixed, but it is considered in *fieri*, in its gradual increase, with a co-varying advancement of the degree of the two terms of the correlation. In this way the proportion has a dynamic value²².

From a different point of view, if we apply to our constructions the analysis of scales suggested by Horn 1976, 1989 we can explain the difference between the two readings (variable and constant) within the type with the comparative and also find the features that distinguish this latter from the type with the superlative. As is well known, a scale is a set of expressions of the same category which can be arranged in a linear order according to their semantic (or pragmatic) strength. Scales usually have a terminal point at the top or bottom. For example, the utterance of a weak-scalar predicate is a terminal point and implicates that a stronger term could not have been employed: this is an upper-bound conversational implicature. Conversely, a terminal point at the bottom of the scale implicates that a weaker term could not have been employed: this is a lower-bound conversational implicature. In our case, which contemplates a scale of degrees with stronger and stronger values, when the correlative type has the comparative and its reading is variable, the implicature is not upper bounded; while when its reading is constant, it is upper bounded (by the perfective aspect). Neither reading is lower bounded: the variable reading explicitly so, because the degree on the scale is fixed neither up nor down; and the constant reading implicitly so, because its corresponding degree on the scale is fixed as reached in the upper size, but it evokes free co-variation along the scale. Differently, the static value of the correlation with the superlative, as described by Ferrarino, in terms of scalarity can be seen as the simple equivalence of two maximal degrees of two predicates on related scales. The correlations with a superlative appear to be both upper and lower bounded, since they do not evoke any co-variation along either scale.

²¹ The highest degree may be interpreted as the 'cut-off point', which determines the subset of individuals with the relevant qualities at the highest degree, in relation to a comparison set. The interpretation of *quisque* with a superlative involves a reading of the superlative which is similar to the distributive reading of plural superlatives. On this subject see Fitzgibbons-Sharvit-Gajewski (forthcoming).

²² Cf. Ferrarino (1942: 142). According to Ferrarino, there is another difference between the two: in the superlative correlation, an individual is considered in relation to other (external) individuals, while in the comparative correlation an individual is considered in relation to his/her internal qualities.

The difference between the two constructions is also reflected in the markers that introduce correlations with a comparative and correlations with a superlative. The ablative of measure *quo... eo* signals the degree or quantity of a property²³, while the correlation *ut... ita* puts into relation two qualities both at the highest degree, in accordance with its meaning ‘as... so’²⁴. On this basis, Ferrarino 1942 distinguishes between ‘qualitative’ particles introducing superlative correlations (*ut... ita*) and ‘quantitative’ particles introducing comparative correlations (*quo... eo*).

What we have described is the typical situation in Classical Latin. Latin, however, shows distinct properties according to the different diachronic stages. In the early stages of Latin the comparative correlative is different from that of the Classical period and even though our investigation is not detailed, yet we can conclude that in Early Latin the comparative is not frequent in this construction and the correlation *quo... eo*, which is quite common in Classical Latin, is not attested. The other correlation with the comparative, *quanto... tanto*, rather frequent in authors like Cicero and Livy, has only few instances in Early Latin, two in the fragments of Accius, two in Plautus²⁵, and two in Terence:

- (34) Perii, *quanto* minus spei est, *tanto* magis amo (Ter. *Eun.* 1052)
‘death! the less my hopes, the hotter my love’.

As we have shown in (4) above, the most common correlation in Early Latin is *quam... tam*. When it is found with a comparative form, the comparative is only *magis* or *minus* – that is, the comparative form that modifies a verb:

- (35) *Quam magis* specto, *minus* placet mihi haec hominis facies (Plaut. *Trin.* 861)
‘the more I observe him, the less I like his looks’.

²³ According to Hand (1969: s.v. *eo*, 413) ‘*eo... quo* idem esse quod *quanto... tanto*, nam utroque uocabulo ratio magnitudinis exprimitur’ (‘*eo... quo* is the same as *quanto... tanto*, because they both express the measure of a quantity’).

²⁴ On *ut* see Panchon 1992, according to whom the correlation *ut... ita* is equivalent to ‘*como... así*’.

²⁵ In Plautus there is a further example that we consider a true case of comparison, because the correlation contains a standard of comparison: Plaut. *Amph.* 548 *Atque quanto, nox, fuisti longior hac proxuma, tanto breuior dies ut fiat faciam* (‘and, night, as you were longer than the last, in the same measure I will make the day shorter’). Unlike most languages, Latin may express a standard of comparison in this construction. But, since the standard of comparison is usually fixed and predefined, it prevents co-variation from taking place. For this reason, the meaning of correlations containing a standard of comparison is not the same as that of comparative correlatives, in our opinion. It seems rather to be similar to that of a usual comparison of equality. On this matter, see Bertocchi-Maraldi (2008: 26-30).

But the most frequent use of *quam... tam* is not with a comparative but with a superlative form:

- (36) a. *quam* citissime conficies, *tam* maxime expediet (Cato *agr.* 64,2)
 ‘the more quickly you work them up, the better the results will be’
 b. nam oleum *quam* diutissime in amurca et in fracibus erit, *tam* deterrimum erit (Cato *agr.* 64,2)
 ‘for the longer the oil remains on the amurca and the dregs, the worse the quality will be’.

Tam... quam with a superlative may have a generic sense, like the correlation *ut quisque... ita* in Classical Latin. In the examples above, the generic reference is given by the second person of the verb, which is one of the ways by which Latin expresses impersonal reference (as (36a)) and by the generic subject *oleum* in (36b). Nonetheless, *tam... quam* with a superlative is not found with *quisque* in Early Latin. There is only one example in Classical Latin, in the archaizing author Sallust, who apparently combines a structure proper to Early Latin with forms more typical of later periods:

- (37) *ita quam quisque* pessime fecit, *tam* maxime tutus est (Sall. *Iug.* 31,14)
 ‘thus the more atrocious the conduct, the greater the safety’.

Furthermore, not every instance of the correlation has a generic reference. There are cases where a maxim of general validity is expressed, but it is addressed not to a generic ‘you’, but to a precise interlocutor:

- (38) a. *Quam* ad probos propinquitate proxime te adiunxeris, *tam* optimum est (Plaut. *Aul.* 236)
 ‘the more closely connected you are with honorable human beings, the better’
 b. *quam* uos facillime agitis, *quam* estis maxime potentes dites fortunati nobiles, *tam* maxime uos aequa aequo animo noscere oportet, si uos uoltis perhiberi probos (Ter. *Ad.* 501)
 ‘the more easy your life and your brother’s, the greater your influence, riches, prosperity, rank, the more are you bound in the spirit of justice to recognize what is just, if you wish to have a reputation for probity’.

In Plautus (38a), the person to whom wise advice is given is an old man who is urged to concede his daughter’s hand, while in Terence (38b), ‘you’ corresponds to two persons, the brothers Demea and Micio.

There are also examples where not only is reference not generic, but also the content of the sentence does not represent a general principle.

Consider (39), which refers to a very specific case, as indicated also by the use of the deictics *huic* and *haec*:

- (39) *nam quam maxume huic uana haec suspitios, tam facillime pacem patris in leges conficiet suas* (Ter. *Heaut.* 996)
 ‘the more groundless my young man’s suspicion, the more easily he’ll win over his father to his own terms’.

If we compare Classical with Early Latin, we can draw up the following summary:

- in Classical Latin, comparative correlatives are expressed by comparatives introduced by the correlative markers *quo... eo*, *quanto... tanto*. They can also be expressed by a superlative: in that case they are introduced by different correlative markers (*ut... ita*), the indefinite distributive pronoun *quisque* is obligatorily present, and the sentence always has a generic sense. The concomitant occurrence of such elements assigns to the correlations with a superlative a slightly different meaning from that of correlations with a comparative.
- in Early Latin, correlations with a comparative are seldom found. The correlative particles *quo... eo* are not attested, and there are very few cases of *quanto... tanto* with a comparative. The most frequent correlative particles are *quam... tam*. They can be found with a comparative form, but limited to *magis*, the comparative adverb modifying a verb. Their most common use is with a superlative: in that case they do not contain *quisque* and do not always have a generic meaning. For such reasons the construction *quam... tam* with a superlative appears to be one of the devices through which the semantic value of the comparative correlative is expressed in Early Latin.
- As usual, as regards comparative correlations too, Classical Latin tends to normalize an original more fluid situation and to innovate more specialized forms.

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