

# Correlation between the gradability of Latin adjectives and the ability to form qualitative abstract nouns

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## Abstract

Comparison is distinctly limited in scope among grammatical categories in that it is unable, for semantic reasons, to produce comparative and superlative forms for many representatives of the word class to which it applies as a category (adjectives and their derived adverbs). In Latin and other dead languages, it is non-trivial to decide with certainty whether an adjective is gradable or not: being non-native speakers, we cannot rely on linguistic intuition; nor can a definitive answer be reached by consulting the corpus of Latin texts (the fact that an item is not attested in the surviving corpus obviously does not mean that it did not exist in Latin). What needs to be found are properties of adjectives correlated with gradability/ non-gradability that are directly discernible at the level of written language. The present contribution gives one such property, showing that there is a strong correlation between gradability and the ability of an adjective to form abstract nouns.

## 1 Comparison: conceptual vs grammatical category

Comparison is a grammatical category that has for a long time practically escaped the attention of linguists studying Latin. Only relatively recently were detailed studies published on the phenomenon of comparison on a cognitive and functional basis,<sup>1</sup> investigating how two or more entities could be compared in a language, what patterns are used in these various ways of comparison in Latin, and what different meanings comparatives and superlatives may have. These studies clearly demonstrate – which is true in other languages as well – that it does not hold that comparison in Latin is always carried out using the forms of comparative and superlative, nor does it hold that comparatives and superlatives always perform the basic function of simple comparison of two or more entities. It follows that it is useful, even necessary, as with other grammatical categories, to differentiate between comparison on the one hand as a conceptual category that is expressed at the level of the whole proposition (“Paul is higher than John” = “John is not as high as Paul”), and on the other hand comparison as a grammatical/morphological category (“the formal modification of some predicative word – most often an adjective – representing a parameter of gradation or comparison”<sup>2</sup>). The present author is currently working on a monograph that examines the morphological category of Latin comparison. Put simply, she does not ask which means may be employed in Latin to express comparison, but how the forms of comparative and superlative are used. The present contribution deals with one question falling within the scope of this work.

## 2 Specific nature of category of comparison

The grammatical category of comparison is distinctly limited, not being able to produce the forms of comparative and superlative from all the representatives of the word class to which it applies as a category (i.e. adjectives and their derived adverbs). A certain degree of limitation is not exceptional in itself (e.g. in the category of number there are singularia tantum and pluralia tantum; in the category of verb voice, intransitive verbs, for instance, cannot form personal passive forms; etc.); however, comparison is restricted to an exceptional degree. For example, according to the *Czech National Corpus*,

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<sup>1</sup> Bertocchi & Orlandini, 1996; Espinilla, Quetglas & Torrego, 2002; Cuzzolin, 2011.

<sup>2</sup> Cuzzolin & Lehmann, 2004: 1212.

in Czech – a language very similar to Classical Latin in its range of inflections – just 6% (!) of adjectives have degree forms, and only 3% have both degrees of comparison.<sup>3</sup>

A defining property of gradability is whether the adjective denotes a quality that can be measured, or, in other words, that can be expressed on a **scale**. Such adjectives are called **scalar** and only these (or, more precisely, only the scalar meanings of the individual adjectives – as a given adjective can have both a scalar and non-scalar meaning) are gradable.<sup>4</sup> In the modern classification of adjectives, scalarity is a fundamental property.

The fact that gradation may be relevant only for a small minority of adjectives raises the question of whether the term of grammatical category is still applicable. Where the borderline lies between being “already” a grammatical phenomenon or “still” a lexical/word-formative one is always a subjective matter to a certain extent, depending on the choice of criteria, or, better, on the weight ascribed to individual criteria.<sup>5</sup> Mere counting of the gradable elements of the class of adjectives suggests that comparison cannot be regarded as grammatical category. On the other hand, linguistic use (and common sense) sees comparison (it would probably be more correct to use the term gradability) as a basic adjectival grammatical category.<sup>6</sup> To address this seeming discrepancy, the concept of **centre** and **periphery** developed by members of the Prague Linguistic Circle<sup>7</sup> may be used, according to which no class is continuous: a class contains central elements, which exhibit all its characteristic features, and peripheral elements, which may lack some of these features. In this sense gradability is thus a defining characteristic of the class of adjectives: gradable adjectives stand at its centre, while the size of the periphery varies across languages. For example, Czech has an extremely large periphery, as it has, for instance, a very extensive derivation of adjectives of appurtenance (also from proper names), and even grammaticalized possessive adjectives of the type *otcův* ‘father’s’/ *matčín* ‘mother’s’. By contrast, English has a considerably smaller periphery compared to the centre: where Czech uses non-gradable adjectives, English prefers a noun in the genitive or a prepositional phrase. The fact that English is – for better or worse – the main language of reference in general linguistics may lead to formulations within the category of comparison that might be perceived as inaccurate by researchers interested primarily in other languages.<sup>8</sup>

### 3 Category of comparison in Latin

As concerns Latin, the periphery within the category of adjectives is presumed on theoretical grounds not to be as wide as in Czech (unlike Czech, Latin does not have grammaticalized possessive adjectives), but, on the other hand, this periphery is certainly more extensive than in English. Work with Latin linguistic material supports this view. Based on extensive excerption (described in more detail below in 3.1), estimates give that degree forms are attested in less than 14% of Latin adjectives while both degrees, comparative and superlative, are found in less than 7% of adjectives. Naturally, these figures obtained purely from literary texts, which moreover originate from an extremely large time span over a vast territory, cannot be taken as similarly statistically significant as figures obtained from modern corpora, immeasurably more extensive and containing both written and spoken texts; nevertheless, for Latin, this is as good as it gets, and even these figures, especially when looking at individual adjectives or adjectival types in more detail, clearly confirm the highly limited scope of this grammatical category in Latin.

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<sup>3</sup> Cvrček et al., 2015: 249; www.korpus.cz.

<sup>4</sup> The scale may be of various types – see in particular Kennedy & Mc Nally, 2005.

<sup>5</sup> Another complication in our specific situation, however, is the problematic definition of the word class of adjectives itself, which – if at all defined in a language – is most often defined syntactically (as “modifiers of nouns”); thus there are practically always significant overlaps with other word classes (substantives, verbs, numerals, pronouns).

<sup>6</sup> E.g. Karlsson, 2000: 650: “One of the defining characteristics of adjectives in languages with appropriate inflection is the propensity to be gradable, in particular to have comparative and superlative forms.”

<sup>7</sup> Especially Daneš, 1966; Neustupný, 1966.

<sup>8</sup> The quote given above in note 6 continues: “However, there are **several** stative or absolute adjectives normally lacking these forms...”

### 3.1 Employed Latin language corpus and its limitations

The linguistic material was gathered as follows: All the forms labelled as adjectives were excerpted from the *Oxford Latin Dictionary*, in total numbering almost exactly 10,000. For each of these adjectives (and adverbs derived therefrom, plus some isolated adverbs), an individual search was carried out in the database *Bibliotheca Teubneriana Latina III*<sup>9</sup> to find out whether the adjective is attested in synthetic comparative and/or superlative form, and also whether it is attested in periphrastic comparative and/or superlative form (in combination with the adverbs *magis* and *maxime*).

Despite the extensive scope of the excerpted material, its informative value is limited as it draws only on literary texts. On the other hand, such language material when dealing with the issue of comparison of adjectives carries a certain advantage when compared to modern languages, where it is basically always possible to “create” a form of comparative and superlative; this is, however, often at a price, as in modern languages a native speaker is able to invent an artificial context in which to use such a derivation. The Latin corpus is very comprehensive and varied in genre, and as such reflects authentic vocabulary on a large scale, while at the same time excludes similarly artificial derivations – it is thus in fact a relatively good source for this type of research.

Another significant limitation of statistics based on this corpus lies in the fact that the aggregate figures reported do not differentiate between a primary text and its citation – so e.g. Vergil’s (*Aen.* I,199) *o passi graviores* occurs twelve times in the researched corpus due to its appearance in the texts of later commentators. Such cases were encountered relatively frequently, although rarely are the secondary citations so numerous.

### 3.2 Problems with defining scalarity in a dead language

In living languages, whether a given adjective (or rather its concrete meaning) is scalar may be determined by tests based on the ability of adjectives with a certain type of scale to be modified by only certain types of modifier.<sup>10</sup> Such tests draw on language data and always require the experience of a native speaker – whether this is the researcher him or herself, who introspectively poses a question as to the acceptability of a particular phrase, or another native speaker to whom the same question is posed. The native speaker then answers whether he or she considers grammatical, or at least acceptable, the comparative or superlative form of the given adjective in a particular context, and likewise for the connection of the given adjective with a particular modifier; the answers are used to determine if the adjective is scalar. Based on these results drawing on the assessment of primary data, the classification of scalar adjectives may be attempted.

Naturally, this procedure cannot be used when dealing with dead languages due to the absence of its key element – a native speaker. The method of a corpus probe is also problematic: despite its enormous scope when compared with other dead languages, the corpus of Latin texts has fundamental limitations (see 3.1 above) and the information that could be drawn therefrom is by no means comparable to that obtainable from modern corpora. This holds in particular for negatively formulated questions: put simply, the fact that an item is not attested in the surviving corpus does not mean that it did not exist in Latin when it was a living language. The fact that an adjective is not attested in the corpus in either degree form does not mean that the adjective is non-gradable. Moreover, not being native Latin speakers ourselves, to rely on our own language intuition in our understanding of the concrete meaning of an adjective can be very deceptive.

Work with extant Latin language material alone cannot by itself yield a cogent classification of scalar adjectives in Latin: such a classification needs to be based on already existing scalar classifications for modern languages, which can then be applied to concrete Latin adjectival types. In my work I have been using the adjective classification of Lehečková (2011) for Czech, a language very similar to Latin in its range of inflection and derivation. This classification is given schematically in the following table (explanatory notes and examples are drawn from those given by Lehečková):

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<sup>9</sup> The search concerned only texts dating from the earliest records through to the 5<sup>th</sup> century AD, including Priscianus.

<sup>10</sup> E.g. proportional adverbs such as *half*, *completely* can be connected only with adjectives with a “closed scale”, while common degree adverbs such as *very* only with the adjectives with an “open scale” (*completely full* – *very long*, but not *??very full* – *??completely long*); see Kennedy & Mc Nally, 2005: 352; Kennedy, 2007; Rotstein & Winter, 2004; Yoon, 1996.

Adjectives					
<b>non-restrictive</b> = adjectives that do not add to the intension (defining properties) of the noun they modify, having rather a deictic function, relating to a referential point given by or in the text, e.g. <i>today's, following, above-mentioned</i>	<b>restrictive</b> = adjectives that add to the intension (defining properties) of the noun they modify				
	<b>absolute</b>			<b>relative<sup>11</sup></b>	
	<b>relational</b> = adjectives that ascribe a property of a certain type to an object that distinguishes it from other objects having a different property of this type, e.g. for 'material' properties, <i>wooden/concrete floor, or wooden/metal table</i>	<b>scalar – complementary<sup>12</sup></b>		<b>neutral<sup>13</sup></b> e.g. <i>a 5-km-long way</i>	<b>scalar – polar</b> e.g. <i>long – short</i>
		<b>maximal</b> e.g. <i>full, empty, clean</i>	<b>minimal</b> e.g. <i>dangerous, dirty</i>		

The various subtypes of adjective are not clearly demarcated. Non-restrictive and absolute relational adjectives are non-scalar; the other subtypes are scalar, with various specificities.

The present work with Latin material thus does not aim to develop its own classification but has an entirely practical objective: to offer guidelines to Latin users as to which adjective can be graded and which cannot (as personal linguistic intuition cannot be relied on in a second, non-native language). The main goal therefore (and that of the monograph in preparation mentioned in Section 1 above) is to **find elements that correlate with gradability/non-gradability** and that are **directly discernible at the level of written text** (e.g. specific suffixes or prefixes). The present contribution introduces one partial result: the correlation discovered between gradability and the ability of an adjective to form abstract nouns.

### 3.3 Correlation between gradability and the ability to form abstract nouns

In the language corpus described in Subsection 3.1 above, a correlation was identified between occurrence of gradable forms of adjectives and the existence of abstract nouns derived from these adjectives. Substantives with the following suffixes were excerpted:

- tudo* (type *magnitudo* < *magnus*)
- tas* (type *caritas* < *carus*)
- ia* (type *clementia* < *clemens*)
- itia* (type *iustitia* < *iustus*)

<sup>11</sup> A defining characteristic of relative adjectives is that they are – in contrast with absolute adjectives – context-dependent (*long hair* has a different length than *long nails*).

<sup>12</sup> Complementary scalar adjectives have a “closed scale”, i.e. the quality they denote can reach an extreme point (“absolutely [of a kind]”). On the other hand, polar scalar adjectives have an “open scale”: the quality they denote has no extreme point (nothing can be *??completely long* – always only *very long*); cf. note 10 above.

<sup>13</sup> The term “neutral” is not considered ideal even by Lehečková herself (2011: 91); the difference between “neutral” and “scalar-polar” adjectives lies in that the former, unlike the latter, are not evaluative.

The results are summarized in the following table:

suffix	number of abstract nouns with the given suffix that also have their base adjectives attested in the corpus	number of the corresponding base adjectives with an attested form of comparative and/or superlative	percentage
<b>-itia</b>	31	31	<b>100%</b>
<b>-tudo</b>	87	82	<b>94%</b>
<b>-ia</b>	168 (63 <i>-ia</i> , 105 <i>-ntia</i> )	136 (55 <i>-ia</i> , 81 <i>-ntia</i> )	<b>81%</b> (87% <i>-ia</i> , 77% <i>-ntia</i> )
<b>-tas</b>	434	334	<b>77%</b>

Compared with the proportion of adjectives in the whole corpus that have attested degree forms (less than 14% – see the introduction to Section 3 above), the proportion of adjectives able to form abstract nouns that have attested comparison is very high. The individual word-formative types will be discussed in more detail in the following subsections.

### 3.3.1 Suffix *-itia*

As can be seen from the table, abstract nouns derived by the suffix *-itia* are formed with no exception from adjectives that are attested to be gradable. In general, they are frequent adjectives, denoting psychological or physical qualities of people or things: *amicus*, *avarus*, *blandus*, *durus*, *ignotus*, *immundus*, *impudicus*, *impurus*, *inimicus*, *iniustus*, *iustus*, *laetus*, *lautus*, *lentus*, *maestus*, *mollis*, *mundus*, *nequam*, *niger*, *notus*, *piger*, *planus*, *pubicus*, *purus*, *saevus*, *scaber*, *segnis*, *spurcus*, *stultus*, *tristis*, *vafer*.

### 3.3.2 Suffix *-tudo*

In the researched corpus, there are in total 87 abstract nouns derived by the suffix *-tudo*. The correlation between the derivation of qualitative abstracts by the suffix *-tudo* and gradability of corresponding adjectives<sup>14</sup> is again quite considerable. Here also the adjectives are in general relatively frequent. Included among the abstract nouns in *-tudo* are nouns that are attested only once in a fragment from an Archaic author, e.g. *geminitudo*, *squalitudo*, *desertitudo* and others. Almost two thirds of abstract nouns in *-tudo* (56 in total) have competing counterparts in Classical Latin in the form of abstract nouns with other suffixes, the vast majority being those with suffix *-tas*; apparently, the suffix *-tudo* had lost its productivity in favour of the suffix *-tas*.

The five adjectives that form abstract nouns by the suffix *-tudo* while not having attested forms of comparison are the following:

*perperus* ‘perverse’: this adjective is attested only once in the whole corpus, and unreliably (Acc. *carm. frg.* 23), so no judgement as to its gradability or non-gradability may be reached;

*canus* ‘white, whitened’: in its basic meaning this is a restrictive absolute relational adjective, but in a transformed sense it has the meaning of ‘old’ (< ‘white- or grey-haired’), i.e. relative/ scalar – polar; it

<sup>14</sup> I intentionally do not write “adjectives from which the abstract nouns are derived”: from the formal point of view, it sometimes appears that the immediate founding word is not the adjective itself but a verb with the meaning of change of state (e.g. *consuetudo* < *consuesco*; *aritudo* < *aresco* [x *aridus*] etc.); the meaning of the abstract noun could then be understood as a result of this change of state.

is from this sense that the abstract noun is formed (*canitudo* ‘greyness of hair’); presumably the adjective is gradable in this sense as well, but the number of occurrences of the adjective with this meaning is too low to be certain;

*tabidus* ‘wasting away, melting away, decaying’ and its abstract noun *tabitudo* ‘emaciation’ differ semantically from other members of the group: *tabitudo* does not denote a property but the result of an action, and, primarily, *tabidus* has, given the meaning of its root, an evidently “actual” character: it does not denote a permanent property; rather, it is synonymous with the participle *tabens* (cf. Subsection 3.3.3 below); as such, it cannot be graded;

*lippus* ‘having watery or inflamed eyes’ and the abstract noun *lippitudo* ‘inflammation or watering of the eyes’ have a semantically non-standard mutual relation: the meaning of the abstract noun corresponds better to another meaning of the adjective, ‘watery or inflamed (of the eyes themselves)’, which is also attested, but with extremely few occurrences; the latter meaning of the given adjective is presumably gradable (whereas the more frequent, transferred possessive meaning is not);

*lassus* ‘mentally tired’ is an adjective with no instances of comparison in over 300 occurrences in the employed corpus. It must be confessed that why this adjective should be non-gradable, given its meaning, remains obscure.

### 3.3.3 Suffix *-ia*

This derivational type has two subtypes: abstract nouns derived from adjectives (participles) with the suffix *-nt-*, i.e. with the complex suffix *-ntia*, and abstract nouns from other types of adjectives.

#### *-ntia*

Adjectives with the suffix *-nt-* have the function of active imperfective participles, so functionally they are closer to verbs. Indeed, it is questionable whether they should be classed as adjectives in Latin at all, but if so then they must be non-restrictive adjectives. Nevertheless, many of these adjectives in certain contexts and depending on the type of the verb lose their verbal characteristics and may denote a permanent property.<sup>15</sup> For example, besides the basic participial meaning of ‘that produces something’ *efficiens* also has the (much less frequent in the corpus) adjectival (non-actual) meaning of ‘capable of acting’. It is often very difficult to distinguish whether the *nt*-form functions as a participle or as a common adjective in a given sentence. This fact had two significant implications for our work with this type of adjective. First, in building the corpus for analysis it was found that in the *Oxford Latin Dictionary* (see 3.1 above) only some forms in *-nt-* have their own entry as an adjective, the others being only implicitly classed with the corresponding verbs. The criteria for deciding whether to give an independent entry are, to my knowledge, nowhere described, but it seems that an important reason for creating such an entry (that is, evidence of adjectival use of the given form) was the existence of attested graded forms. Only the adjectives in *-nt-* that have their own entry in the dictionary were excerpted into the basic file for our analysis; consequently, a considerable number of non-gradable adjectives were actually not included.<sup>16</sup> The second problem, pertaining directly to the research question addressed in this study, is that even the abstract nouns as such may accordingly have two meanings: one derived from an *nt*-form with a verbal meaning (participle), that is – depending on the meaning of the verb – “the act of -ing” or “being in a state of ...”; the other derived from the same form with an adjectival meaning, that is, with the meaning of “the quality of being [of a kind]”. The former example is thus not one of a qualitative abstract noun, but of an action noun.

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<sup>15</sup> Cf. Pinkster, 2005: 61.

<sup>16</sup> As a result, the proportion of attested comparison for the group of adjectives in *-nt-* in the analysed corpus is 38.1%, which significantly exceeds the average proportion of 14% – see the introduction to Section 3 above. This is indeed a high proportion considering that many of the excerpted forms in *-nt-* have extremely low total frequency. (This also applies to various compounds created *ad hoc* such as *suaveolens* ‘sweet-smelling’, *semisonans* ‘half-vocalized’, etc.)

Of the total number of 105 substantives with the suffix *-ntia*, 24 corresponding adjectives<sup>17</sup> do not have attested comparison. However, 10 of these occur in the researched corpus with such low frequency that the fact that there are no attested instances of comparative or superlative does not amount to evidence of their non-gradability:<sup>18</sup> *blandiloquens* (1), *breviloquens* (1), *displicens* (6), *fragrans* (10), *graveolens* (7), *incogitans* (3), *inconsequens* (10), *suaviloquens* (6), *irreverens* (11), *desipiens* (15). In another adjective, *despiciens* ‘contemptuous’, we in fact have attested evidence of gradability thanks to a phrase containing the adverb *tam* ‘to such a degree’: *nemo umquam tam sui despiciens fuit* (Cic. *de orat.* 2,364).

Frequency is, however, also a significant factor for the majority of the 13 remaining adjectives; despite the fact that they occur relatively frequently, a significant proportion of these occurrences are with verbal/participial meaning, while the number of occurrences with adjectival meaning, that is, those that might potentially attest gradability, is as low as in the adjectives listed in the previous paragraph. This applies to the adjectives *consequens*, *efficiens*, *intellegens* (*-lig-*),<sup>19</sup> *invidens*, *loquens*, *repugnans*, *resonans*. The adjectives *absens* and *volens* and the nouns derived therefrom have only verbal meanings.

For the remaining four adjectives we can find various – more or less convincing – reasons why gradability is not attested:

*indifferens* is in its basic sense of ‘neither good nor bad’ evidently a non-gradable adjective; the substantive *indifferentia* is not a standard abstract noun, being used in specific linguistic contexts as a technical term, meaning either ‘synonymity’ or ‘variableness of the quantity of a syllable’;

*praepotens* ‘superior to others in power’: gradability is prevented by the prefix *prae-*, which itself carries the meaning of higher degree – adjectives with this prefix are generally non-gradable in Latin;<sup>20</sup> the abstract noun *praepotentia* ‘superior or outstanding power’ is used only once in Apuleius and testifies to a certain semantic evacuation of the prefix (*praepotentia* means practically the same as *potentia*);

*prodigus* ‘wasteful, extravagant; lavish; unbridled’ is an adjective that – should we rely on its translations into modern languages – gives no reason for its non-gradability; nor can it be due to its low frequency – there are over 150 attested instances of the adjective; an explanation may lie in an inaccurate understanding of the semantics of the adjective that has probably (as for other Latin adjectives with the same suffix that for synchronically unclear reasons do not have attested instances of graded forms) considerably more “verbal” character than we are able to perceive through modern languages (corresponding to a perfect participle in the original sense of the word); the substantive *prodigientia* ‘extravagance, prodigality’ is attested only in Tacitus – it is thus probably just an item of his idiolect;

*varians* is, similarly to the adjective *indifferens* above, an adjective that in its basic meaning ‘of many different colours; of many different kinds’ is evidently non-gradable; the abstract noun *variantia* has the meaning of ‘diversity, variety’, and is apparently derived from the adjective with an already slightly shifted meaning – presumably in this semantics the adjective should be gradable, but the number of occurrences in the researched corpus is too small (the total number of occurrences of the adjective in its all meanings is 43).

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<sup>17</sup> For the substantives *beneficentia*, *magnificentia* and *prodigientia*, it is *beneficus*, *magnificus* and *prodigus* that are regarded as the “corresponding” adjectives; in Classical Latin, the forms in *-nt-* are not used in the positive; however, the comparatives and superlatives are derived from this particular stem: *magnificentior*, *magnificentissimus*.

<sup>18</sup> The number in brackets corresponds to the number of occurrences in the whole analysed corpus, not including secondary citations. What may be considered a “sufficient”, or, on the other hand, “low” frequency when working with the Latin corpus is very subjective, however. For the purposes of my work on the monograph referred to in Section 1, a random sample of relatively frequent adjectives gave a mean ratio of the total frequency of the given adjective to the frequency of its attested degree forms, which is 10 : 1. If an adjective has ten attested occurrences or more in the corpus, there is a significantly better than even chance that one of these instances might be in the form of comparative or superlative, supposing that the adjective were gradable. However, as concerns the forms in *-nt-*, we must use a higher figure since the category of gradability is only relevant for a smaller proportion of them (namely those with a non-verbal meaning).

<sup>19</sup> The comparative *intelligentior* is quite common in later Latin texts; however, in Classical texts, the “non-actual” meaning ‘endowed with intelligence’ is still very rare in this adjective, with the actual form of ‘discerning, having keen understanding’ being much more common.

<sup>20</sup> See André, 1951; Pultrová (to appear).

## **-ia**

The remaining abstract nouns in *-ia* are derived mostly from common adjectives, occurring frequently in the researched corpus. Only 8 abstract nouns of this subtype are derived from adjectives that do not have any attested comparative or superlative form: *copia*, *desidia*, *discordia*, *immodestia*, *iniuria*, *invidia*, *v(a)esania*, *vinolentia* (-*nul-*). The already high percentage correlation between attested gradability and existence of the abstract noun is in fact even higher than that indicated in the table above, because another two adjectives (*deses* and *discors*) have their gradability attested via phrases with the degree adverb *tam* (similar to the adjective *despiciens* above). A further pair of adjectives are extremely infrequent (\**cops*, gen. *copis* and *iniurus*). Only four adjectives remain: *immodestus* ‘lacking of restraint, licentious’ has only 17 occurrences in the whole corpus, and thus its frequency is rather marginal for us to be able to claim that gradability of the adjective not being attested means it is not gradable. The adjective *invidus* ‘bearing ill will’ belongs to the same word-formative type as the adjective *prodigus* – and the comment on this adjective above applies here as well. The adjective *vaesanus* ‘acting uncontrollably, frenzied, mad’ is among those adjectives that are not graded by suffixation because high intensity is expressed by their prefix (here *v(a)e-*; cf. the adjective *praepotens* above).<sup>21</sup> The same explanation also holds for the adjective *vinolentus* ‘immoderate in one’s consumption of wine’: here the word-formative affix (in this case the suffix *-lent-*) has itself the meaning of excessiveness, which would make the use of the comparative or superlative suffix redundant (it must be said, nevertheless, that some other adjectives with the same suffix have attested occurrences of comparison, e.g. *opulentus* or *corpulentus*; the semantics of the suffix was probably no longer entirely clear in Classical Latin).

### **3.3.4 Suffix -tas**

The suffix *-tas* gradually became the main productive suffix for the formation of abstract nouns in Latin. Functionally, it corresponds to the suffix *-ost* in Czech, which can derive neologisms from practically any type of restrictive adjective (including adjectival pronouns and numerals, e.g. *jakost* < *jaký* ‘of what kind’, *dvojitost* < *dvojitý* ‘double’, etc.). A similar situation obtains in Latin. The suffix *-tas* often competes with other abstract suffixes (see *-tudo* above); there are attested nouns derived even from very rare adjectives (e.g. *brocchus* ‘projecting (of teeth)’, or *vacivus* ‘unoccupied’); the suffix can also derive abstract nouns from adjectival pronouns and numerals (*qualitas* < *qualis* ‘of what kind’, in the Late period e.g. *triplicitas* < *triplex* ‘triple’, etc.) and even from substantives (*autumnitas* < *autumnus* ‘autumn’, *captivitas* < *captivus* ‘one taken captive’) or from the superlative forms of adjectives (*maximitas*, *supremitas* etc.). In light of this, it is almost surprising that the correlation between the existence of the abstract noun and gradability of the founding form is so high.

### **3.3.5 Conclusions**

Compared with the proportion of adjectives in the whole corpus that have attested degree forms (less than 14% – see the introduction to Section 3 above), the proportion of adjectives able to form abstract nouns by the suffixes *-itia*, *-tudo* and *-ia* (including *-ntia*) that have attested comparison is extremely high. The existence of an abstract noun derived from a given adjective by the mentioned suffixes therefore serves as a strong indicator of its ability to be graded.

This correlation between gradability of an adjective and existence of a corresponding abstract noun seems to be very strong even in the case of abstract nouns with the most productive suffix *-tas*. Thus, Latin users may even in this case presume that the attested occurrence of a given abstract noun signals with relatively high probability that the founding adjective will be gradable. This statement is, however, only a superficial description of what can be observed from the Latin corpus, and has no solid support in linguistic theory. Abstract nouns with the suffix *-tas* may be derived from restrictive adjectives of all types in Latin. It is highly improbable that the proportion of non-restrictive adjectives (that at the same time never occur with a restrictive meaning) should be so high as to influence the statistics to such an extent (to decrease the overall proportion of gradable adjectives from the 77% observed for adjectives with corresponding abstract noun in *-tas* toward the proportion of 14% observed for all adjectives).

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<sup>21</sup> See Pultrová (to appear).



Evidently, the nature of the researched corpus itself plays a role; first, it is after all smaller by an order of magnitude than the large corpora of modern languages (even the most frequent Latin adjectives only reach figures that the *Czech National Corpus* would label as being, at best, of “lower-middle” frequency<sup>22</sup>); second, and more importantly, it only reflects literary language, and a considerably conservative one. Extremely infrequent words and neologisms are significantly less represented there in comparison with corpora that are richer in genre and contain both published and spoken texts.

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<sup>22</sup> E.g. *magnus* ‘big’ has a little over 12000 occurrences in the whole researched Latin corpus, *bonus* ‘good’ has fewer than 9000 occurrences, *longus* ‘long’ fewer than 5500, while e.g. the *Czech National Corpus* (cf. e.g. Kovářiková, Chlumská & Cvrček, 2012) works with the following frequencies in adjectives (A = little frequent, E = highly frequent): A 250–1249, B 1250–6249, C 6250–31249, D 31250–156249, E 156250+.

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