

Scalar meaning in diachrony. The suffix *-issimo* from Latin to Italian

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1 Introduction

Over a time span of two millennia, the intensifier *-issimo* has developed new usages, expanding its distribution. It has gone from being restricted to gradable predicates in Latin (in (1-a)), to include certain non-gradable ones in Old Italian (in (1-b)), and, finally, has extended to nouns in contemporary Italian (in (1-c)). The three stages of this process are represented below.

- (1) a. In alt-**issimam** turrem ascendit animo.
In tall-ISSIMO-F.SG tower climbed.he corageously.
'He climbed the extremely tall tower coragesously'¹
- b. Nella apoplessia arrivare alla sanita è cosa impossibil-**issima**.
In apoplexy getting to sanity is thing impossibl-ISSIMO-F.SG
'In apoplexy healing is truly/absolutely/precisely impossible'².
- c. E la partit-**issima**, la sfida cruciale come nel settimo incontro
It's the game-ISSIMO-F.SG, the match crucial like in.the seventh game
del baseball.
of baseball.
'Its the game-issimo (huge/important/awaited/spectacular game), like the World Series' Game7'³

¹100a.D. Source: LatinLibraryText.

²1300 a.D.,Source: Lessicografia.it.

³1987, Source: LaRepubblica.

This paper proposes an analysis of this diachronic path, modeling the change as involving the weakening of a selectional restriction to a pragmatic presupposition. By applying the theoretical tools of synchronic semantics to historical data, I argue that *-issimo* starts out in Latin selecting for hosts that lexically encode a scale, and ends up merely requiring that such a scale be pragmatically supplied in Contemporary Italian. This trajectory is mediated by an intermediate period, in Old Italian, in which *-issimo* expands to target scales of pragmatic precision, which are still provided by the semantics of the host, but, contrary to Latin, are not directly encoded in its lexical meaning.

2 Intensifiers in synchronic and diachronic approaches

Intensifiers can be broadly defined as “linguistic devices that boost the meaning of a property upwards from an assumed norm” (Quirk et al. (1985)). Examples of such expressions (in English) include *VERY*, *EXTREMELY*, *SUPER*, along with many others.

- (2) a. Mark is **very** tall.
 b. He’s **extremely** beautiful.

The notions of “intensifier” and “intensification” have received a great deal of attention both in synchronic and diachronic semantics.

2.1 Intensifiers in synchronic semantics

Studies in synchronic semantics have been concerned with capturing the aforementioned “boosting” effect within a compositional, truth-conditional theory of meaning. At first glance, intensifiers share a rather straightforward condition of usage: in order to be felicitous they *presuppose* the presence of a scalar, non-discrete property (Eckardt (2009)), whose intensity they can modulate accordingly. In (2-a), for instance, such a requirement is satisfied by the presence of a gradable adjective like *tall*. By contrast, the presence of an all-or-nothing property (e.g. ?? *very bipedal*) would violate this requirement, producing an utterance that would sound infelicitous to most, if not all, speakers of English. Yet, recent findings (Lasersohn (1999), McCready and Kauffman (2013), Bylinina (2011), Irwin (2014), Beltrama and Bochnak (To appear), McNabb (2012)) have revealed that the boosting effect can be achieved through a variety of different semantic operations, and that the environments where intensification is found extend well beyond the category of gradable expressions. A paramount example in support of this observation is represented by so called *slack regulators* (Lasersohn (1999)), as in ((3-a)-(3-b)).

- (3) a. Mary came at **exactly** 3 o’clock.
 b. The ball is **perfectly** spherical.

On a par with *very*, *exactly* and *perfectly* also somehow “boost” the meaning of the predicate with which they combine. However, the source of the scale on which they operate is not directly supplied by the predicate, but comes from the pragmatic precision used by the speaker in the utterance context (see Section 3.2 for further details). These examples suggest that intensification is semantically a more nuanced phenomenon than it appears at first sight. Specifically, intensifiers appear not to be exclusively licensed by gradable pred-

icates, but can also target scalar dimensions that are supplied by levels of precision in the context, or by some other pragmatic source. In light of this observation, an important question emerges for the semanticist: What are constraints and the semantic mechanisms that license intensification in the *absence* of a lexical scale?

2.2 Intensifiers in diachronic semantics

Studies in diachronic semantics have uncovered intensifiers' tendency to systematically participate in processes of change, including relatively fast ones involving just a few generations of speakers (Tagliamonte (2008), Partington (1993) among others). In particular, authors have focused on two main diachronic processes. The first one is *grammaticalization*, the process whereby intensifiers emerged as the final result of a shift from lexical words to functional ones (Partington (1993), Lorenz (2002)) (e.g. *very*, "genuine, true" → "a high degree"). Similar trajectories can be pointed out for many other intensifiers which innovated a usage that is relatively independent from their original meaning (*pure*, discussed by Macaulay (2006), or *dead*, discussed by Blanco-Suarez (2013)). The second one is *subjectification* (or *pragmaticalization*, Traugott (2004), Traugott (2010)), the process whereby meanings become increasingly based in the speakers subjective beliefs/attitudes towards a proposition. An example of such process is represented by the trajectory involving *boor*, which went from meaning 'countryman, farmer' to 'crude person', gradually moving from expressing a regular property to expressing a subjective evaluation on the part of the speaker (Traugott (2004) and Gutzmann (2013)). Notably, the category of subjectification has been invoked as an independent principle to account for a wide variety examples of change. A common underlying thread for all these trajectories, though, appears to be that meanings tend to move from the domain of lexical semantics, where they are computed on the basis of simple compositional mechanisms, to the domain of pragmatics, where they require substantial inferential work to be interpreted⁴.

Yet, while both synchronic and diachronic lines of research have produced important results within their respective domains, each of them has remained largely isolated from the other. On the one hand, synchronic studies have looked at intensification as a crystallized phenomenon, with no interest for language change. On the other hand, diachronic studies have rarely made use of the semantic diversity among different kinds of intensification that has been discussed in synchronic semantics. The current paper represents a preliminary attempt to bridge this gap by providing an analysis of semantic change involving the intensifier *-issimo*.

3 *-issimo*: a case study

The suffix *-issimo* in Italian⁵ presents itself as a promising case-study for our purposes. In contemporary Italian, this morpheme appears to be able to target a variety of different

⁴A particular perspective on the topic of subjectification is provided by Eckardt (2009). While the author does not challenge the claim that meanings evolve towards a speaker's oriented dimension, she rejects the necessity of invoking subjectification as an independent principle of language change. Rather, she claims that semantic change is driven by hearers' reanalysis, following the attempt to make sense of expressions that are used in innovative contexts, and therefore are not easily interpreted according to their original meaning.

⁵Coming from Latin, this suffix is found in many Romance languages, including Spanish, Catalan and Portuguese. The paper, however, exclusively focuses on Italian.

scales⁶. In light of this, examining the diachronic trajectory of *-issimo* provides a window into the pattern tying together the emergence of various flavors of intensification over time.

- (4) a. La casa è bell-**issima**.
The house is beautiful-ISSIMO-F.SG
'The house is extremely beautiful.' LEXICAL DEGREE SCALE
- b. Il 20 giugno 1967 comprai la mia prim-**issima** TV.
The 20 June 1967 I.bought the my first-ISSIMO-F.SG TV.
'On June 20th I bought my very first TV (exactly the first, not just one of the first) SCALE OF PRECISION
- c. Real-Barca è una partit-**issima**.
Real-Barca is a game-ISSIMO-F.SG.
'Real-Barca is a highly significant game for the speaker {big game / heck of a game / spectacular game}.' INFERRED SCALE

I now attempt to cast light on this issue by illustrating the three main stages of *-issimo*' pathway of change: (i) Classical Latin (section 3.1), (ii) Old Italian (3.2) and (iii) Contemporary Italian (3.3).

3.1 Stage 1: *-issimo* as a degree modifier

In Classical Latin the suffix combines with gradable predicates, as the following examples show⁷. In such environments, the suffix intensifies the degree of the adjective, in a similar way to English *very*⁸

- (5) a. In alt-**issimam** turrem ascendit animo.
In tall-ISSIMO-SG.F tower he.climbed courageously.
'He climbed the extremely tall tower with great courage' (1st Century a.D)
- b. Quaedam rect-**issima**, cum in aquam amissa sunt, speciem
Things straight-ISSIMO-M.PL, when in water submerged are, aspect
curvi reddunt.
of.curved return.
'Perfectly straight things, when submerged, look bent.'(1st Century a.D)

⁶The examples below are from the written newspaper Corpus *LaRepubblica*.

⁷Sources for ((5-a)) and ((5-b)): Latin Library Text Corpus.

⁸It must be noted that, at this stage, *-issimo* also has a superlative reading, meaning, according to which *altissimus* would be translated as "the tallest". In most environments - including the sentences above - the superlative and intensifier readings are both viable options. In other situations, however, the surrounding context can help disambiguate these two usages. In particular, the presence of explicit comparison classes (in (i)) is usually taken as a clue for a superlative reading. While the present paper will not deal with the superlative meaning, a full explanation of the diachronic trajectory of *-issimo* will have to eventually take into account the loss of a superlative meaning in the transition from Latin to Italian.

- (i) In montem Aetnam, qui **altissimus** in Sicilia esse dicitur, fugerunt.
On mount Etna, which tall-ISSIMO-M.SG in Sicily to.be they.say, they.fled.
'On Mount Etna, which is claimed to be the tallest in Sicily, they fled (1st Century a.D).

These occurrences of the suffix share an important property: They require that the host be a *gradable predicate* (Kennedy and McNally (2005), Heim (2000) among others). A common⁹ proposal to capture the semantics of gradable predicates is to posit that these expressions inherently encode a scale in their denotation, whose value can be modified by specialized morphemes such as comparatives (e.g. *more* or the suffix *-er*) or degree modifiers (e.g. *very*). Productivity in such contexts is commonly used as a diagnostic to tell gradable predicates like *tall* from non gradable predicates like *bipedal*. (Kennedy (2007)).

- | | | | |
|-----|----|---|-----------------|
| (6) | a. | Mark is tall- er than John. | COMPARATIVE |
| | b. | Mark is very tall. | DEGREE MODIFIER |
| | c. | ?? Mark is more bipedal than John. | COMPARATIVE |
| | d. | ?? Mark is very bipedal. | DEGREE MODIFIER |

At this stage, *-issimo* compositionally operates over the degree scales encoded in the denotation of such predicates, boosting the degree to which the object possesses the relevant properties. A corollary of this property is that, since the suffix operates on lexical degrees, it modifies the semantic contribution of the host, just like any other degree modifier. For instance, in order to be *altissimus*, it is not sufficient for the individual to exceed the degree required by *altus* in its positive form, but a significantly higher degree must be exceeded. In light of this, the operation triggered by the suffix is more restrictive than the one in the positive form: an individual will count as *altissimo* only if the degree to which he is tall is part of the extreme upper portion of a scale. This will leave out all those degrees for which an individual would count as *alto*, but which are still not part of the extreme portion.

In order to capture this operation formally, I introduce the contextually restricted function **Extreme_C**, which takes a degree as argument and imposes the requirement that such degree exceeds the standard *and* is part of a final subinterval of the scale that counts as extreme in the context. Given a degree *d* from a gradable adjective *G*,

- (7) $\text{Extreme}_C(d)=1$ iff $d > \text{standard}_G$ & $d \in i$: $i \subset_{\text{final}} G$ & i counts as extreme in C

An individual *x* is *alt-issimo* if the maximum degree to which *x* is tall exceeds the standard *and* belongs to such extreme final subinterval¹⁰.

- (8) a. $\llbracket \text{-issimo}_{\text{STAGE 1}} \rrbracket = \lambda G_{\langle d, et \rangle} \lambda x. \text{Extreme}_C(\text{Max}\{d: G(d,x)\})$
 b. $\llbracket \text{Alt-issimo} \rrbracket = \lambda x. \text{Extreme}_C(\text{Max}\{d: \text{TALL}(d,x)\})$

The presence of a gradable predicate *G* as the input of the composition captures the selectional restriction operating on *-issimo* at this stage. The suffix must combine with a gradable predicate, or the derivation will crash due to type mismatch.

⁹It must be noted that degree-less approaches have been proposed as a possible alternative (see in particular the work by Klein (1980) and its recent revisitation by Doetjes et al. (2009)). For the purpose of the current paper, however, degree and degree-less approaches do not differ in a substantial way. While I will be proposing an analysis within the degree semantics framework, a proposal that makes no reference to degrees in its ontology would be equally feasible.

¹⁰I follow Heim (2000)'s account of gradable predicates, where a gradable adjective denotes a monotone function from degrees to functions from individuals to truth values (type $\langle d, et \rangle$). However, other ways of modeling gradability would also be possible here, as the current analysis does not specifically bear on a specific way of formalizing gradable predicates.

3.2 Stage 2: *-issimo* as a slack regulator

In Old Italian (XIV Century, henceforth OI) *-issimo* expands its distribution. At this stage the suffix is attested with several non gradable expressions¹¹, such as *impossibile* (= ‘impossible’) in (9-a), *nessuno* (= ‘any’) in (9-b) and *primo* (= ‘first’) in (9-c)¹².

- (9) a. Nella apoplessia arrivare alla sanità è cosa impossibil-**issima**.
In apoplexy getting to sanity is thing impossible-ISSIMO-SG.M.
'In apoplexy, healing is {truly/absolutely/precisely} impossible'. (1300 a.D)
- b. Un sì fatto poema riuscirà di più giovamento che nessun-**issima**
A so made poem will.be of higher utility than any-ISSIMO-F.SG
storia.
story.
'Such a poem will be much more useful than any story at all' (1500 a.D)
- c. Il primo prim-**issimo** fu un ladro di mestiero, chiamato A.Borga
The first first-ISSIMO-M.SG was a thief of profession, called A.Borga.
'The vert first one was a professional thief, named A.Borga' (1600 a.D)'

Nessuno, contrary to *alto*, is not gradable. It cannot be used in comparatives, nor can it be intensified by other degree modifiers. However, its meaning still features a scalar component, as the quantification operation triggered by *nessuno* is typically restricted to a contextually determined domain, which might change across different utterance situations (see, among others, Kadmon and Landman (1993)). For instance, in the sentence above, *nessuno*, depending on the context, can reasonably be taken to operate over *every* story in the world, or a pragmatically defined subset of them (e.g., only the stories that are unanimously considered to be written by human beings, excluding sacred texts such as the Bible).

- (10) a. $D1=x$: x is a story in the world.
b. $D2= x$: x is a story written by human beings.

Crucially, these domains can be ordered according to an inclusion relation, where they form a scale in which the largest domain, being a superset of all the other subdomains, is the maximum element. Crucially, within this ordering, the size of the domain according to which the quantifier is evaluated determines the strength of the statement containing it. For instance, if in sentence (9-b) *nessuno* is evaluated with respect to the largest domain $D1$, it follows that the sentence will necessarily be true also for *any* domain included in $D1$, such as $D2$. By contrast, if the sentence is true with respect to $D2$, it does *not* necessarily follow that the sentence will also be true with respect to a larger domain.

- (11) If $D_2 \subset D_1$: $\text{Any}(x)_{D_1} \rightarrow \text{Any}(x)_{D_2}$, but $\text{Any}(x)_{D_2} \not\rightarrow \text{Any}(x)_{D_1}$.

¹¹Unsurprisingly, besides the examples discussed above, the suffix starts being attested with a considerable amount of predicates that cannot be considered as gradable, and which were not productive hosts in Classical Latin. Several examples include *necessario*(= necessary), *infinito* (= infinite), *identico* (= identical) , *tutti* (= all), *ultimo* (= last).

¹²Source for (9-a): www.lessicografia.it. Source for (9-b): LIZ-Zanichelli. Source for ((9-c)): LIZ-Zanichelli.

This asymmetrical entailment relation represents the scalar component encoded by quantifiers. As they have their interpretation relativized to domains which can be ordered and give rise to statements of different strength, expressions of this kind naturally provide a scale. Following Lasnik (1999), we suggest that, at least for quantifiers, slack regulation can be seen in terms of an operation analogous to Kadmon and Landman's (1993) *domain widening*, where making the quantifier more precise essentially means relativizing its interpretation to a larger/expanded domain. As a result, those elements that were "exempt" in the unmodified interpretation must now be targeted by quantification. Going back to the two sample domains discussed above, if *nessuno* is evaluated with respect to D2 (stories written by human beings), *-issimo* forces the quantifier to take a larger D into consideration, one which includes D2 plus all the elements that were pragmatically excluded in D2 (e.g. stories not written by human beings, such as the Bible).

In order to formalize the operation, I follow Morzycki (2011) and Anderson (2013) in modeling precision in terms of a degree d (superscript value in (12)) to which the interpretation of an expression α is parameterized. For *any*, the higher the degree of precision, the larger the domain according to which the expression is interpreted (see (12)).

$$(12) \quad \text{For } \llbracket \text{Any}_{D1}(x) \rrbracket^{d1}, \llbracket \text{Any}(x)_{D2} \rrbracket^{d2}, \text{ if } d1 > d2 \rightarrow D2 \subset D1$$

The suffix requires that the maximum degree of precision relative to which the expression can be truthfully interpreted must count as extreme in the context (via **Extreme_C**). In this respect, the meaning remains essentially the same as it was in Classical Latin. What changes is the nature of this scale, which comes from precision, and not from lexical degrees.

$$(13) \quad \begin{array}{l} \text{a. } \llbracket \text{-issimo}_{\text{STAGE } 2} \rrbracket = \lambda \alpha \lambda x. \mathbf{Extreme}_C(\text{Max}\{d: \llbracket \alpha(x) \rrbracket^d\}) \\ \text{b. } \llbracket \text{Any-issimo} \rrbracket = \lambda x. \mathbf{Extreme}_C(\text{Max}\{d: \llbracket \text{NESSUNO}(x) \rrbracket^d\}) \end{array}$$

The same reasoning can be extended to the other expressions that start getting attested with *-issimo* at this point in time, namely modals and ordinals.

For example, *impossible*, while not a full-fledged gradable predicate¹³, does encode a scalar component. Under normal circumstances, its meaning is relativized to a set of worlds W containing the worlds that are sufficiently close to the actual one, and excluding those which are particularly outlandish or unlikely (Klecha (2012)). In this case, some event qualifies as *impossible* if it has no possibility of happening in any of the worlds therein contained. Here, the fact that this event could be possible in "crazy" worlds is not relevant, as these worlds are pragmatically excluded. However, things change if the modal is interpreted with respect to an expanded set W' , which also includes the outlandish worlds which were previously excluded, and now must be taken into consideration in computing the meaning of the modal. As with quantifiers, this scale of sets of worlds gives rise to an asymmetrical entailment relation.

$$(14) \quad \text{If } W \subset W': \text{Imp}(x)_{W'} \rightarrow \text{Imp}(x)_W, \text{ but } \text{Imp}(x)_W \not\rightarrow \text{Imp}(x)_{W'}.$$

¹³The issue is actually debated. For example, Lassiter (2011) proposes a detailed account of *impossible* and other modals as gradable predicates. Yet, the fact that *impossible* cannot appear in comparatives seems to suggest that it is, at least to a certain extent, not identical to predicates like *full* or *straight*. Needless to say, an exhaustive account of the semantic differences between *impossible* and maximum standard adjectives goes beyond the scope of this paper.

Slack regulation, once again, can be seen as based on this ordering. The presence of *-issimo* forces an evaluation of the modal according to a larger set of worlds than the one of the unmodified version, causing previously ignored worlds to be taken into consideration. A more precise use of the modal amounts to an interpretation according to a larger set of worlds.

- (15) a. For $\llbracket \text{Impossible}_{W'}(x) \rrbracket^{d1}$, $\llbracket \text{Impossible}(x)_W \rrbracket^{d2}$, if $d1 > d2 \rightarrow W \subset W'$
 b. $\llbracket \text{Impossibil-issimo} \rrbracket = \lambda x. \mathbf{Extreme}_C(\text{Max}\{d: \llbracket \text{IMPOSSIBLE}(x) \rrbracket^d\})$

In conclusion, quantifiers such as *nessuno* and modals as *impossible* encode a scalar mechanism in their semantics that provides a natural explanation for why these expressions lend themselves to imprecise uses. On the one hand, such mechanism gives us a semantically grounded reason to model slack regulation as a scalar phenomenon. On the other hand, from a diachronic perspective, the change appears to be semantically natural: the core meaning of *-issimo* remains the same, while the transition is captured in terms of an expansion of the kind of ordering that the suffix can target.

3.3 Stage 3: *-issimo* as a nominal intensifier

The final step of the diachronic evolution emerges only in Contemporary Italian, where the suffix extends its distribution to modify nouns.¹⁴

- (16) a. Ci siamo, è la **partit-issima**, la sfida cruciale, come nel
 Here we are, it's the game-ISSIMO-F.SG, the crucial game, like in the
 settimo incontro del baseball.
 seventh game of baseball.
 'There we go, it's the crucial game, just like in game 7 of the baseball (1987)
- b. Fiducia cieca, pronta, assoluta in Paolo VII, lo chiamano così, il
 Confidence blind, immediate, absolute in Paolo VII, him they call so, the
president-issimo che ha realizzato lo storico riscatto.
 president-ISSIMO-M.SG who has made possible the historic resurgence.
 'Blind, immediate, total confidence in Paolo VII - that's his nickname - the
 great president who made possible the historic resurgence'
- c. A pranzo sono stata presentata a un emerito professor-**issimo**
 Over lunch I have been introduced to a emeritus professor-ISSIMO-M.SG
 che pubblica articoli come una macchina da guerra.
 who publishes articles like a machine to fight.
 'Over lunch I got introduced to a emeritus big professor,
who publishes articles like a machine gun.'

The effect of *-issimo* in the contexts above appears to be yet again different from the effects observed for Classical Latin and Old Italian. In this case, the suffix is neither modifying lexical degrees - there are not different degrees of "gameness" or "professoriness" - nor is it saying anything about the precision with which such predicates should be used. Rather,

¹⁴While occurrences of *-issimo* with nouns are widely attested, they still feature patchy productivity and a somewhat idiosyncratic flavor. All examples from Repubblica Corpus.

-issimo is signalling that the referent of the noun is somehow outstanding/significant according to the speaker's judgment. In turn, this leads to the inference that there must be some contextually associated property along which the referent ranks extremely high. For *partitissima*, for example, viable candidates might be, among others, "hype", "importance", "rivalry between the opponents". For *presidente*, we can think of "leadership", "power", "success". For *professore*, the options include "academic productivity", "teaching skills", "fame". Two observations are in order regarding these dimensions. First, they are merely *externally* associated with the meaning of the noun¹⁵. While, for instance, "hype" or "rivalry", via world knowledge, can be routinely associated with a game, they do not directly contribute to determine the truth conditions of the nouns in the way in which a scale of "tallness" does for *tall*. Second, the relevant dimension that is targeted by *-issimo* changes across contexts, and must be *inferred* on a case by case basis. The exact contribution of the suffix, in most cases, must be computed via some nontrivial inferential work. Consistently, all the examples reported above feature a string of text (in two cases, a relative clause) that specifies the relevant scale among all those which are in principle available with no effect of redundancy. The relevant section has been underlined in the examples above¹⁶.

In order to formalize this effect, I build on Sassoon (2013)'s account of the usage of size adjectives like *big* as nominal intensifiers¹⁷.

- (17) a. John is a **big** fan of Madonna.
b. John is a **big** smoker.

According to Sassoon, in its usage as an adnominal modifier, *big* presupposes that the noun is associated with a maximally salient dimension and requires that the degree to which such dimension holds exceeds a contextually determined standard. Accordingly, the meaning of *big* would be the following, where DIM(N) represents the set of dimensions associated with the noun and σ is the function that retrieves the *most salient* gradable dimension Q from such set. Q has <e,d> type: it combines with an individual and outputs a degree, on which the size adjective ultimately operates.

- (18) $\llbracket \text{big} \rrbracket = \lambda N_{\langle e,t \rangle} : \sigma(\text{DIM}(N)) = Q_{\langle e,d \rangle} . \lambda x. N(x) : Q(x) > \text{Standard}(Q)$.

For instance, assuming that the maximally salient dimension associated with *fan of Madonna* is "degree of admiration", this dimension maps individuals to the degree to which they admire Madonna. The expression "big fan of Madonna" essentially means that the individual at stake must admire Madonna to a considerably high degree, one which is high compared to the degrees of admiration of other fans.

- (19) $\llbracket \text{Big}(\text{fan of Madonna}) \rrbracket = \lambda x. \text{for } Q \in (\text{DIM}(\text{fan of Madonna}) = \text{admiration of M.}, \text{Admiration}(x) > \text{Standard}(\text{Admiration}))$

While the bulk of Sassoon's formal machinery can be adopted to account for nominal usages of *-issimo*, some modifications need to be introduced to account for the empirical

¹⁵In this sense, they resemble certain occurrences of constructions like "Quite a N" and "Such a N" discussed in Constantinescu (2011).

¹⁶By contrast, specifying that an individual must have a high degree of tallness after an occurrence of *altissimo* would result in a clearly redundant effect.

¹⁷See also Morzycki (2012), Morzycki (2009) for a formalization of *big* within a degree framework.

differences between *big* and the suffix. First, contextually associated dimensions need to be included in the set from which the relevant dimension Q will be selected. Therefore, I replace the set $\text{DIM}(N)$ with the larger set $\text{DIM}_C(N)$, which contains any gradable dimension that can be mapped onto the noun in a certain context. Second, it is crucial to loosen the requirement that one dimension be more salient than the others: all that is needed is that at least one such dimension be available in the context. Scalarity, as a consequence, is now merely pragmatically presupposed. The burden of supplying a scalar dimension is on the context must, and if more than one scale happens to be available, it will be the responsibility of the speaker or other aspects of the context to highlight the relevant one. Finally, rather than just requiring that a standard be exceeded, I suggest to capture the prominent intensifying effect of *-issimo* by having the now familiar predicate **Extreme**_C select for a final subinterval of the scalar dimension Q : the maximum degree to which Q holds of x must qualify as extreme in the context. The final denotation for the nominal usage of the suffix is the following:

$$(20) \quad \llbracket -issimo_{\text{STAGE3}} \rrbracket = \lambda N \lambda x. \exists Q_{\langle e, d \rangle} : Q \in \text{DIM}_C(N) \ \& \ \mathbf{Extreme}_C(\text{Max}\{d : Q(x)\})$$

A sample derivation for *partitissima* is offered below for a few possible dimensions.

$$(21) \quad \begin{array}{l} \text{a.} \quad \llbracket \text{Partit-issima} \rrbracket = \lambda x. \exists Q_{\langle e, d \rangle} : Q \in \text{DIM}_C(\text{GM}) \ \& \ \mathbf{Extreme}_C(\text{Max}\{d : Q(x)\}) \\ \text{b.} \quad \llbracket \text{Partit-issima} \rrbracket = \lambda x. \text{for } Q_{\langle e, d \rangle} : Q \in \text{DIM}_C(\text{GAME}) = \{\text{importance/hype/ spectacularity}\} \ \mathbf{Extreme}_C(\text{Max}\{d : \text{importance / hype / spectacularity}(x)\}) \end{array}$$

By this final stage, it can be seen that the presupposition that needs to be satisfied to license the suffix is much looser than in Latin or Old Italian. *-issimo* takes a noun as argument. as long as the context makes at least one associated scalar dimension available, $\text{DIM}_C(N)$ can retrieve it and make it available for composition with the suffix.

4 Conclusions

The paper has provided a formal analysis of the meanings innovated by *-issimo*, suggesting that the suffix always presupposes the presence of a scale. In each case, the intensifier selects for a final subinterval that counts as extreme in the context (via the function Extreme_C). In Latin, Extreme_C operates over degrees that are encoded as an argument in the lexical meaning of the host. In Old Italian it operates on a parameter of precision, which is ultimately determined by an ordered scale of domains/worlds to which the interpretation of the modified expression is relativized. Finally, in contemporary Italian the function Extreme_C operates on degrees that are totally external to the semantics of the noun. By this stage, the degrees that are targeted by the suffix have completed their migration away from the realm of lexical semantics and into the realm of pragmatics.

The transition from Classical Latin to Contemporary Italian shows that different subtypes of intensification emerge in a principled manner. This, in turn, suggests that intensification is not just the endpoint of diachronic trajectory, but that semantic change can happen *within* the category of intensification. The notion of scalarity constitutes the common thread tying together the various diachronic stages, and captures the semantic core maintained by the suffix throughout such trajectory.

Moreover, the trajectory outlined here naturally aligns with the semantics-to-pragmatics

direction outlined by general models of change such as *subjectification* and *pragmaticalization*. While these models are an empirically sound account of semantic change, they have rarely been modeled in terms of a formal theory of meaning. The present study proposes an implementation of them within a degree semantics framework, where subjectification has been recast as a transition between different sources of scalarity, and a broadening of the compositional mechanisms necessary to access and modify such scales.

While an analysis of more case studies is necessary to verify how cross-linguistically common a trajectory of this kind is¹⁸, the path associated with *-issimo* provides an example of how synchronic and diachronic approaches to the study of meaning can be fruitfully integrated.

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¹⁸At first glance, expressions like *totally* and *so* seem to be strong candidates for a similar analysis.

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