Intensification, gradability and social perception: the case of *totally*

Andrea Beltrama

Abstract The notion of *social meaning*, widely investigated in sociolinguistics, is rarely considered in experimental semantics, mainly due to the assumption that this type of meaning is relatively independent from the semantic properties of its carrier. Following a recent strand of inquiry (Acton and Potts (2014), Glass (2015)), this paper aims to fill this gap by exploring the role of semantic and pragmatic factors in determining the salience of the social meaning of a linguistic expression. Relying on a social perception task, it is shown that listeners perceive the social meaning of the intensifier *totally* − measured in terms of Solidarity and Status attributes − as particularly prominent in situations in which the morpheme combines with a commitment scale provided by the pragmatics, as opposed to when it combines with a scale lexically supplied by the subsequent predicate. This evidence suggests that listeners keep track of semantic information when making social evaluations about speech, pointing to social perception as a novel methodology for research in experimental semantics.

1 Introduction: what is social meaning?

Scholars in semantics and pragmatics have focused on *meaning* as the conventional content associated with linguistic forms, enriched with inferences drawn from the linguistic and non-linguistic context. In other domains of linguistics, however, the notion of meaning has been investigated under a completely different light. In particular, sociolinguists and linguistic anthropologists pursue the investigation of *social meaning* (Eckert (2008)), that is, the cloud of socio-psychological qualities that expressions convey about language users, which typically range from demographic traits (e.g., gender, age) to more local, idiosyncratic categories (e.g.,

Andrea Beltrama
University of Chicago, Department of Linguistics, 1010 E. 59th Street, 60637 Chicago e-mail: andremomora@uchicago.edu

"Jocks", "Burnouts", "Yuppies" and similar. See Agha (2005), Podesva (2007) for further discussion). A typical example of social meaning is represented by the use of raised dipthongs in the island of Martha's Vineyard, investigated in a seminal study by Labov (1963). In reaction to the increasing importance of tourism in the economy of the island, which began to threaten traditional economical activities, the use of raised [ay], already a dialect marker of the island, took on more subtle social meanings such as "locality", "loyalty to the island", becoming a distinctive marker of the local fishermen who expressed their resistance against the looming socio-economic transformations. It can thus be seen in what sense social meanings, just like their semantic counterparts, can be seen as *bits* of content that attach to linguistic forms.

Yet, despite the common label, semantic and social content have typically been seen as pertaining of independent domains, with a number of empirical observations justifying this divide. First, the two types of meaning do not attach to the same units: sounds, for example, are devoid of semantic meaning, and yet often carry a rich cloud of social meanings (e.g., Martha's Vineyard or the association of full releases of [t] with attributes like "articulate", "prissy", "educated", Campbell-Kibler (2007)). Second, semantic and social meaning have a different semiotic status. While the former is conventionally associated with linguistic forms, the latter is only indirectly *indexed* by them (Silverstein (2003)), emerging as more contingent and perspective dependent. Third, while semantic meaning is relatively fixed within a speech community and imperbeable to the influence of extra-linguistic factors, social meaning is deeply affected by the broader social, cultural and ideological context, as the discussion above made clear.

At the same time, the fact that social meaning has a more fluid nature and is heavily affected by non-linguistic factors does not mean that it lacks systematicity, or that it is blind to the language internal properties of its carriers. Quite the contrary, studies focusing on different phenomena and methodologies have pointed to a principled interaction between the perception of social meaning and language structure and processing. In particular, it has been shown that listeners keep track of fine-grained acoustic or syntactic properties when constructing social evaluations about language users (Squires (2013), Staum Casasanto (2008), Bender (2000)); that social meaning plays an important role in speech perception (e.g., Niedzielski (1999), Campbell-Kibler (2010), D'Onofrio (2015)); and that listeners react to social meanings in the same way in which they react to non-at-issue types of semantic meaning (Smith et al. (2010)).

In this paper, I aim to expand on these investigations to explore whether the perception of social meaning is constrained, or at least affected, by fine-grained semantic and pragmatic properties of linguistic expressions. Specifically, I focus on a theoretical and a methodological question. First, can the compositional mechanism whereby an expression is interpreted affect the expression's suitability to serve as a vehicle of social meaning? Second, can social perception data emerge as a novel experimental paradigm to investigate the behavioral correlates of semantic representations?

2 *Totally*: a promising case study

Intensifiers, and more broadly modifiers that target scalar dimensions − *very*, *so*, *really* and others −, emerge as a promising test case for this question. On the one hand, they are frequently embedded in patterns of sociolinguistic variation (Labov (2001), Ito and Tagliamonte (2003), Tagliamonte (2008), among others), therefore emerging as likely candidates to convey social meaning. On the other hand, they present considerable variation on the semantic front, as they appear to be able to contribute their meaning through different compositional mechanisms. These include: direct binding of the degree argument supplied by a gradable predicate (von Stechow (1984), Yoon (1996), Kennedy and McNally (2005)); manipulation of scales grounded in the contextual parameters of interpretation of the expression (Anderson (2013), Beltrama and Bochnak (2015), McNabb (2012a)); modification of gradable epistemic/emotive attitudes held by the speaker towards the propositional content (McCawley (1998), Giannakidou and Yoon (2011), Morzycki (2011), Bochnak and Csipak (2014)). The empirical richness of these expressions on both the compositional semantic and the sociolinguistic front opens up the possibility of investigating whether a principled relationship links these two dimensions together. The present paper focuses on the intensifier *totally*, a ripe testbed to address the question above. In this section, I provide an overview of its features with respect to each type of content.

2.1 Totally: social meaning

While intensifiers have received considerable attention in the sociolinguistic literature in terms of the distribution of their use across different demographic categories, relatively little has been said about the social meanings associated with these expressions. The dearth of investigation on topic is quite surprising in light of the obvious association between these forms and speaker identity attributes. Let us consider the following image, accompanied by the caption in (1).

(1)   I *totally* had this hat as a child ... The bill *totally* quacks when you squeeze it.[1]

_____

[1] https://instagram.com/p/zEZEQQqYPY/

(2)   ? I had this hat as a child . . . The bill quacks when you squeeze it.

At an impressionistic level, the use of *totally* in this particular context adds a flavor of marked informality and reduced social distance, as it suggests that the interlocutors are close to one another, share a set of norms or values and easily agree on the content of the conversation. Besides these effects, the intensifier additionally conveys a set of social attributes about the social identity of its typical users, which track macro-social categories - e.g., *young* and *female* - as well as more specific personae and social types. This emerges in the following excerpt from the website Urban Dictionary[2], a popular repository of social stereotypes that can be used to assess the social significance of specific linguistic expressions in the sociocultural context of North America. While these commentaries do not exhaust the social meaning conveyed by a linguistic variable − they merely reflect those attributes that are stereotypical enought to undergo explicit circulation in a community − they can be seen as the surface manifestation of a complex constellation of social content, which therefore warrants a more systematic investigation.

1. It's a word used by ditzy young girls that means definitely or for sure.
2. Valley Girl Speak that means "Of course!"
3. A word used by girly girls, poppers, and rich spoiled little brats.
4. A word used for emphasis. Makes you sound kinda cheerleaderish when you use it.
   Are you going to do your makeup now, or in 30 seconds?
   Like, Totally, OMG!! Of course I'm gonna do it now, I can't let anyone see me without it, you know, like totally eeew.
5. The smartest comment one can make in the margin of academic articles. *"The hegemonic dialectic surrounding the rising instance of rhetorical myositis ossificans is pedantic beyond belief." And in the margin: "Totally."*
   "Are you going to the bar tonight?" Response: "Totally."

---

[2] http://www.urbandictionary.com/define.php?term=totally

2.2 Totally: semantic/pragmatic meaning

On the semantic and pragmatic front, *totally* likewise presents a rich empirical picture, providing the ideal conditions for testing whether the social meaning of the intensifier is in some way correlated with its semantic/pragmatic features. On a general level, the intensifier combines with a bounded scale and requires that the scalar maximum on such a scale be reached.[3] It is precisely in the way in which this scale is supplied that variation enters the picture. In standard cases, the scale is provided by the following predicate, as in (3): both *full* and *agree* come with a bounded ordering hardwired in their lexical meaning, providing *totally* with an argument to operate on. I shall refer to these as instantiations of *lexical totally*. In other cases (in (4)), though, *totally* combines with predicates that do *not* supply a scale, operating on the *commitment* that the speaker has towards the proposition (McCready and Kaufmann (2013), Irwin (2014)).I shall refer to these cases as *speaker-oriented totally*.[4]

(3) a. The bus is *totally* full.   Lexical

    b. She *totally* agrees with me.   Lexical

(4) a. You should *totally* click on that link! It's awesome.[5] Speaker-oriented

    b. Man in "I have drugs" shirt *totally* had drugs.[6]   Speaker-oriented

Despite sharing reference to maximality, the speaker-oriented usage of *totally* is empirically distinct from the lexical one. First, because it does not combine with a lexical scale, it cannot be replaced by modifiers like *partially* and *almost* (in (5a)). Second, it contributes its meaning at the non at-issue level, as shown by the fact that it cannot be challenged independently from the rest of the propositional content, it resists being embedded under questions and it doesn't interact with truth-conditional operators like negation. From this perspective, it shows compositional properties similar to other expressions that specify the attitude of the speaker such as expressives Kaplan (1999), Potts (2005)), certain evidentials (Faller (2002)), Murray (2014), Rett and Murray (2013); and other speaker-oriented adverbs, see Ernst (2009), Nilsen (2004))

(5) a. * You should *partially/almost* click on that link! It's awesome.

    b. *You shouldn't *totally* click on that link.

    c. *Should he totally click on that link?

---

[3] Authors have put forward different proposal to model this meaning. See Kennedy and McNally (2005) for a degree-based approach and Sassoon and Zevakhina (2012) for a non-degree-based one, among others. The formalization of the contribution of the modifier is orthogonal to the aims of the current paper, and I will therefore remain agnostic as to what the best characterization is.

[4] The OED added a dedicated entry to this flavor of *totally* in 2005: "In weakened use, as an intensifier: (modifying an adjective) very, extremely; (modifying a verb) definitely, absolutely."

[5] https://www.facebook.com/TheBiscuitGames/posts/488916347870627 accessed on June 5th 2015

[6] http://www.miaminewtimes.com/news/wtf-florida-man-in-i-have-drugs-shirt-totally-had-drugs-6542858

   d. She should *totally* click on that link!
      B: # **No!** She should click on that link, but you're not committed to
      saying that!

As far as the exact nature of the contribution of *totally*, although the intensifier
is generally paraphrased with epistemically flavored adverbs like *definitely* or *certainly*[7],I have argued elsewhere that it targets a scale grounded in the speaker's meta-conversational beliefs, rather than in its epistemic state proper. More specifically,
totally intensifiers the speaker's commitment to making the proposition become
shared knowledge for all the interlocutors, thus enriching the Common Ground of
the conversation (see Beltrama (2015) for a full formal analysis). This makes *totally*
crucially different from seemingly similar operators like *definitely* and *certainly*,
which are instead grounded in private, individual certainty of the speaker towards
the truth of the proposition. While subtle, this difference is empirically substanti-
ated. In the following exchange, for example, while expressing individual certainty
sounds somewhat deviant − people are trivially certain about their proper name
−*totally* can be used to dispel the doubt that the interlocutor expressed, serving as
a means to inviting her to accept the content of the proposition and move on in the
conversation.

   (6) Mark: I can't remember if your name is Emily.
       a. ✓Emily: Oh, yes, it's *totally* Emily!
       b. Emily: #Oh, yes. It's *definitely/certainly* Emily.

That the commitment intensified by *totally* crucially bears on the hearer, as op-
posed to just expressing the speaker's private confidence, emerges even more clearly
in contexts in which the intensifier is used out of the blue. Let us consider (4b) again.
On the one hand, the presence of *totally*, by pushing for the addition of the propo-
sition to the Common Ground, signals the shareworthiness of the event described
(e.g., it is particularly outlandish or funny). On the other hand, without a previous
discourse move introducing uncertainty, pure epistemic operators like *certainly* and
definitely sound remarkably bizarre.

   (7) a. Man in "I have drugs" shirt *totally* had drugs.

   (8) a. # Man in "I have drugs" shirt *definitely/certainly* had drugs.

As a final observation, while for most contexts it is possible to determine whether
a bounded scale is provided by the lexicon or needs to be recruited from a speaker-
oriented dimension, a few cases appear to pattern in between the distinction between
lexical and speaker-oriented *totally*. This is what is observed, for instance, in occur-
rences of the intensifier with *extreme* adjectives (Morzycki (2012)) − e.g.,*awesome*,
amazing − which do *not* lexicalize a bounded scale refer to properties with an in-
herently high degree, making it easier to coerce their open scale into a bounded
one (Paradis (2000)). As such, when *totally* modifies these adjectives it features a

---

[7] The OED added a dedicated entry in 2005: "In weakened use, as an intensifier: (modifying an
adjective) very, extremely; (modifying a verb) definitely, absolutely."

somewhat intermediate behavior with respect to the diagnostics and the lexical vs speaker-oriented distinction illustrated above. In particular, it is considerably less deviant than pure speaker-oriented *totally* when replaced by other maximizers or used with *almost*.[8]

(9)　a.　Bob is totally awesome
　　　b.　? Bob is {**not** *totally*/**almost** *totally*/**completely/entirely**} awesome.
　　　c.　? Bob is **almost** *totally* awesome.
　　　d.　? Is Bob *totally* awesome?
　　　e.　? Bob is *completely/entirely* awesome.

In light of the discussion above, the flexibility of *totally* in terms of the type of targeted scale provides a window into the relationship between mechanisms of semantic composition and social meaning. Specifically, the present paper focuses on the following question: does *totally*'s suitability to convey social information about language users change depending on whether the intensifier targets a lexical or a speaker-oriented scale? In section 3 I formulate two hypotheses , which I then proceed to test via a social perception experiment in section 4.

3 From semantic to social meaning: hypotheses

To make an hypothesis about the mapping between *totally*'s target scale and the associated social meaning, it is first necessary to consider what proposals have been made in the literature to capture two different aspects of the relationship between social meaning and linguistic features. First, what linguistic properties make an expression a suitable candidate to emerge as a social meaning carrier? Second, in what situations can semantic and pragmatic contribute to inform the social meaning conveyed by a linguistic form? I first review the extant literature in each of these two areas, and then proceed to formulate two hypotheses on the behavior of *totally*.

3.1 Linguistic constraints on social meaning: the role of markedness

3.1.1 Frequentistic markedness

Since Wolfram (1969), various studies pointed out a positive correlation between markedness and the *salience* of social meaning, observing that, by virtue of their heightened noticeability, marked variants emerge as a more powerful choice for the

---

[8] The symbol ? indicates a minor degree of deviance.

speaker who wishes to create a particular styleand intends to draw the listener's attention. As such, they are better designed for conveying social meaning than their unmarked counterparts. Concerning the exact characterization of the notion of noteworthiness, most investigators link it to the violation of frequentistic expectations that is associated with the use of marked forms, which therefore stand out as as particularly surprising for the hearer.[9]. In a foundational study, Bender (2000)' relies on a matched-guise study to show that users of zero copula are perceived as more strongly associated with African American ethnic identity in environments in which the variant is least frequent, and therefore more marked (i.e., before NPs). Conversely, the perceived intensity of the social meaning decreases in the environments in which copula deletion is more frequent, hence less marked (i.e., before auxiliary verbs), unveiling a principled connection between syntactic environments, frequency of use and the salience of the relevant social meaning. Similar arguments have been provided by the social meanings carried by phonological variables. In a study on intonational contour, Podesva (2011) shows that rising intonation serves as a politeness strategy enabling the speaker to express concern for the hearer. What majes these rising contours particularly apt to take on this social meaning is he fact that they are considerably less frequent than falling ones, and thus emerge as a more suitable resource for doctors to construct a "caring persona" to put patients at ease. By the same token, Callier (2013) provides evidence that creaky voice in mid-phrasal position, a linguistic context where it is less frequent, is perceived more negatively than in phrase-final position. Finally, Grinsell and Thomas (2012) show that *finna* in African American English index a maimally salient ethnic identity when occurring with inanimate subjects and atelic predicates, that is, in a linguistic environment to which it has extended only recently, and which remains highly infrequent. Taken together, these studies constitute an important step towards an understanding of how social meaning is linguistically constrained, providing a non-social criterion that can set apart suitable and less suitable linguistic carriers of social content. At the same time, these investigations focus on a very specific type of linguistic factor. By reducing the language-internal properties of an expressions to patterns of frequentistic distribution, they cannot assess whether more inherent features of linguistic forms - e.g., those pertaining to their semantics, syntax or pragmatics - also contribute to determine the suitability of an expression to serve as a carrier of social meaning.

3.1.2 Pragmatic markedness

The main reason why such issues could not be addressed is that the investigations discussed above are concerned with units with either no independent syntactic/semantic structure - e.g. sounds - or with a basic meaning unambiguously shared across different variants - e.g. copula deletion - making frequency the only linguistic

---

[9] Campbell-Kibler (2007), for example, suggests that "it is likely that those variants which depart more strongly or unexpectedly from a listener's customary experience are more apt to be noticed and assigned meaning than those which differ only slightly"

along which the variants at stake significantly vary. In order to verify whether social meaning can also be constrained by non-frequentistic types of markedness, one therefore has to focus on cases of variation in which the variants do have independent and fully fleshed semantic and pragmatic content, thus providing another layer of linguistic structure that can impact the salience of the associated social meaning. I now turn to discuss two studies that help us cast light on this issue.

Building on an observation by Lakoff (1974), Acton and Potts (2014) argue that demonstratives like *this* and *that* index a sense of "emotional closeness between speaker and hearer" (p. 351) when compared to run-of-the-mill determiners like *your* or *the*.

(10) a. That left front tire is pretty worn.   Lakoff (1974: ex. 32)

   b. Your left front tire is pretty worn.   Lakoff (1974: ex. 33)

In a similar fashion, Glass (2015) contrasts deontic modals like *got/have to*, which merely expresses obligation in light of a set of circumstances/body of law to *need to*, which additionally conveys that the obligation is good for the hearer's well-being, arguing that the latter, when compared to the former, , indexes an additional component of care or presumptuousness. Both case studies echo the body of literature discussed in the previous paragraph in suggesting that the notion of markedness remains the guiding principle of the mapping between linguistic forms and social meaning. Yet, they show that the correlation between the salience of social meaning and the markedness of the variant need not be framed in purely frequentistic terms, but can also be grounded in basic pragmatic principles. More specifically, both demonstratives and *need* emerge as marked with respect to functionally similar competitors that vie for the same slot, and yet provide a simpler semantic contribution: *the/your* for demonstratives; and *have to/got* for *need*. As such, both forms exemplify Horn (1984)'s principle of the *division of pragmatic labor*, according to which, if two forms have the same referential content and different degrees of complexity, the more complex one must have some additional content that motivates its presence, reconciling the apparent violation of Manner with the Cooperative Principle. Within this view, demonstratives are even more marked in contexts in which a determiner could have been left out altogether, thus emerging as completely *unnecessary* for referential purposes. Proper names provides a clear example of this.

(11) That Henry Kissinger sure knows his way around Hollywood!

In such contexts, the proper noun already identifies a unique referent. As such, the presence of the demonstrative is especially redundant, thus highlighting the contrast with the semantically equivalent demonstrative-free alternative that could have been used instead. The result of this contrast is that the speaker-hearer perspectival alignment that is presupposed becomes particularly salient, and has therefore especially high potential to become socially meaningful.[10]

---

[10] The authors observe that it is in these contexts that demonstratives are more frequently used by politicians (and, in particular, Sarah Palin) as a stylistic resource to foster a sense of proximity with

3.2 **Totally** *and markedness asymmetries*

The emerging picture is one in which linguistic markedness − both in its frequentistic and pragmatic notion − provides a non-social criterion that can set apart suitable and less suitable linguistic carriers of social content, illuminating how the circulation of social meaning can be parasitic on forces that are endemic to the linguistic system, and not just grounded in the socio-cultural ideological landscape. It is now becomes possible to consider the specific case of *totally*, with a focus on the following question: can the semantic variation that characterizes the intensifier allow us to make prediction concerning the social salience of the different uses of *totally*? As discussed above, the two basic variants of the morpheme differ in terms of the dimension that they target: lexical *totally* quantifies over the degrees supplied by the lexical meaning of a bounded predicate; speaker-oriented *totally* quantifies over a scale of pragmatic commitment that is grounded in the speaker's attitude towards the content of the assertion. I argue that this distinction at the semantic level does indeed correspond to a markedness asymmetry between the two uses of *totally*, thus leading us to make a clear prediction about what we should expect in terms of social meaning salience.

On the one hand, lexical *totally* modifies a property within the propositional content, restricting the interpretation of the modified predicate in a non-trivial fashion. Let us consider the example below:

(12)   John's personality is different from Katie's personality.

(13)   John's personality is *totally* different from Katie's personality.

Totally crucially increases the informativity of the utterance, changing the truth conditions of the proposition. While (12) is satisfied whener the two personalities are at least slightly different from one another, (13) is only satisfied in a scenario in which the two personalities have no overlapping whatsoever. As such, lexical *totally* is always informative in terms of propositional content. It systematically affects the truth conditions of the modified predicate or, at the very least, the strictness of its interpretation[11] The same does not apply to speaker-oriented *totally*. First, this version of the intensifier does not affect the propositional content, as shown by the fact that it operates on an independent compositional tier (see section 2.2). Second, the

---

the listener, indicating that, once again, markedness is functional to the operation of highlighting social meaning.

[11] Under a theory of gradable predicates, it has been argued that *totally* does not change the truth conditions of the predicate. Let us consider *full* below. While, at least according to certain theories (Kennedy and McNally (2005), Kennedy (2007)), *full* already encodes maximality when occurring in its positive form, modification by *totally* nevertheless makes the interpretation of the predicate more restrictive, excluding those "close-enough" cases that, as part of *full* pragmatico halo (Lasersohn (1999)), would count as true in the positive forn, despite not reaching the scalar maximum.

(1)   The glass is *full*.

(2)   The glass is *totally* full.

contribution of speaker-oriented *totally* is already part of the sincerity conditions of every assertion. Barring obviously defective contexts of communication, the assertion of a proposition is in fact by default accompanied by the commitment of adding *p* to the Common Ground.[12]. Within this perspective, speaker-oriented *totally* appears to lexicalize a move that already underlies the speech act that it modifies. As such, the very same message could have been conveyed by an utterance withouth *totally*, resulting in the minimal pair below:

(14)   A: Is your name Emily?
   a. B: Yes, it's *totally* Emily.
   b. B: Yes, it's Emily

The contrast between (14a) and (14b) exemplifies a case of markedness based on the division of pragmatic labor, where (14a) is an utterance that, *ceteris paribus*, could have been made in a simpler way. As such, the use of *totally* with speaker-oriented scales emerges as a inherently salient: the morpheme adds to the complexity of the utterance while not making any additional contribution to what would have been conveyed without its presence. The seeming redundant of *totally* in this context thus creates the conditions for the emergence of "extra" meanings. It imbues the presence of the intensifier with special social and pragmatic significance, highlighting the social content that it contributes.

3.3 Totally, *scale type and social meaning salience: hypotheses*

In light of this discussion, speaker-oriented *totally* emerges as a more suitable linguistic resource to convey the social identity of its users than lexical *totally*, leading us to predict a correlation between the salience of the intensifier's social meaning and the availability of a lexical scale in the linguistic context. More specifically, I hypothesize the intensifier should be more likely to be interpreted as a social marker when it occurs in contexts that make no bounded scale lexically available, thus making a speaker-oriented interpretation the only possible one. Conversely, the social meaning should be less salient when *totally* combines with a bounded gradable predicate, and thus can receive a lexical interpretation that does nn.

(15)   **Hypothesis 1**: *Totally* is more likely to be interpeted as a carrier of social meanings when it targets a speaker-oriented rather than a lexical scale.

If this hypothesis is confirmed, the question emerges as to whether the salience of social meaning reflects the gradience of the distinction between the two semantic variants of *totally* discussed in the end of Section 2.2. If this is the case, I hypothesize that, with extreme adjectives, the social meaning of *totally* should have intermediate

---

[12] In a more general sense, all cooperative interlocutors are working towards the goal of enriching the amount of mutual knowledge, coordinating their moves to maximize the number of propositions that they mutually accept as true (Stalnaker (1978))

salience between the lexical and the speaker-oriented use, given the fact that, while a bounded lexical scale is not available, it can be easily coerced.

(16)   **Hypothesis 2**: The social meaning of *totally* should be most salient for clear cases of speaker-oriented *totally*; least salient for clear cases of lexical *totally*; and intermediate with *extreme adjectives*.

I test these hypotheses via a social perception experiment.

4 The experiment

4.1 Methods

Exerimental methods have long been used to investigate language attitudes in social pyshcology. An especially popular technique, in particular, has been the *matched guise* task, first intoduced by Lambert et al. (1960) (see Campbell-Kibler (2007) for an overview of the literature). This particular design consists of the collection and measurement of the reactions and attitudes of listeners towards instances of language use, manipulated by the researcher to test the effect of a particular independent variable. Despite their popularity in other fields, it is not until the last ten years that these methods have been systematically applied to test sociolinguistically-related questions (see Campbell-Kibler (2010) and Drager (2013) for further details), and in particular the factors that constrain the emergence and perception of social meaning. A crucial assumption of this method is that social evaluation is a proxy into the social meaning of the variable, as it allows us to have access to "what social information listeners can extract from the speech of particular speakers, and which linguistic cues they rely on to do so." (Campbell-Kibler (2010)). An obvious disadvantage of this methodology is that it is less ecologically faithful than other techniques for data collection (e.g., ethnography). In particular, it is agreed by soci-olinguistics that social meaning is a complex semiotic entity that cannot be separated from the other linguistic and non-linguistic *practices* through humans interact and make sense of the world (Penelope (2000)). As such, investigating it through the lens of a set of attributes that rate speech samples presented on a computer screen obviously comes with a price in terms of empirical simplification. At the same time this method has two important advantages for our purposes. First, it provides to construct a series of controlled conditions in which the possibility of manipulating the type of scale targeted by *totally* in different sentences while leaving the rest of the proposition unchanged, allowing us to isolate scale type as the only changing factors across conditions. Second, by providing a way to measure the intensity of social meaning in terms of a series of evaluative scales, it allows us to detect at a fine-grained level how the perception of the social meaning changes as a function of the semantic/pragmatic features of *totally*. As such, it represents a viable method-ology to test questions about the linguistic factors that constrain the perception of social meaning, just like the one addressed in this paper.

4.1.1 Building test scales

As the first step, I conducted a preliminary study to construct the evaluation scales to be used to measure social meaning in the actual experiment. The study was designed with the software Qualtrics and subsequently circulated on Amazon Mechanical Turk. 60 subjects, who self-declared to be native speakers of American English and between 18 and 35 years old, were recruited and paid $ 0.50 for participating. First, each subject saw in written a sentence containing either an instance of lexical *totally* or speaker-oriented *totally*. The subject was asked to provide four adjectives to describe the imagined speaker of the sentence. Based on the most recurring adjectives in the responses, a total of eight evaluation dimensions were selected as particularly salient in connection to the use of the intensifier. Four of these dimensions express a relationship of social proximity between the speaker and the listener. I label these Solidarity attributes. Based on the participants answers, I predict them to be positively affected by the presence of *totally*. The other four dimensions express other salient identity categories evoked by *totally*. By contrast, these dimensions should be negatively affected by the presence of the intensifier. Following the literature on language attitudes (Lambert et al. (1960)), I label sets of attributes Solidarity and Status attributes respectively, using them as the dimensions of social evaluation to tap into the social meaning of *totally*.

- **Solidarity**: Friendliness, Coolness, Outgoingness, Excitability
- **Status**: Articulateness, Maturity, Intelligence, Seriousness

4.1.2 Stimuli

Two factors were crossed in a 3x4 design. The first factor manipulates the semantic variant of *totally* along the lexical vs speaker-oriented axis of variation by presenting the intensifier in combination with three distinct classes of adjectives. To cue lexical *totally*, the intensifier was used next to *(maximum standard) absolute adjectives* (Kennedy and McNally (2005)), which lexicalize a bounded scale as part of their lexical meaning (e.g., "bald"). To cue the speaker-oriented reading, instead, open-scale *relative* adjectives (e.g., "tall"), which offer a commitment scale as the only possible target for the intensifier. In addition, *extreme adjectives* (e.g., "awesome") were used as an intermediate case between the two other categories. I predict that *totally* affects the social perception of the speaker of the sentence in the following way.

Table 1 Critical conditions and predictions

Adjective type	Bounded scale availability	Markedness of *totally*	Social meaning salience
Absolute	✓	Low	Low
Extreme	≈	Medium	Medium
Relative	No	High	High

In the other factor, the type of modifier accompanying the adjective came in four different conditions: the target intensifier, *totally*; two control intensifiers, *really* and *completely* and the positive, non-intensified form. On the one hand, *completely*, contrary to *totally*, is exclusively able to target lexical scales. As such, it cannot modify speaker-oriented scales, resulting in ungrammaticality when used with a open-scale adjective. On the other hand, *really* has a less selective semantics than *totally*. It does not require the availability of an upper-bounded scale, but, as discussed in the semantics literature, can modify any type of scale (McNabb (2012b), Constantinescu (2011)). Since all the adjectives used in the experiment are indeed scalar, the intensifier should always operate at the lexical level, showing no semantic difference across the adjective types. In light of these properties, I predict that, if an effect of the semantic type of *totally* is observed on the social meaning, the same effect should not be observed on the two control intensifiers. Finally, as I discuss below, the positive form serves as a baseline condition to assess the contribution of each intensifier to the social meaning. Having this contrast is necessary to filter out any effect on social meaning that is contributed by other elements in the sentence, such as the adjectives themselves. 12 items, each with a different set of adjectives, were crossed in a Latin Square Design. The table below provides a full paradigm for an item across all conditions.

- *totally*, the target intensifier
- the positive, non-intensified form
- *completely*, the first control intensifier
- *really*, the second control intensifier

Table 2 A full item

Adj type	Mod type	Sentence
Bounded	Tot	I just met the new boss. He's *totally* **bald**
Extreme	Tot	I just met the new boss. He's *totally* **awesome**
Unbounded	Tot	I just met the new boss. He's *totally* **tall**
Bounded	∅	I just met the new boss. He's **bald**
Extreme	∅	I just met the new boss. He's **awesome**
Unbounded	∅	I just met the new boss. He's **tall**
Bounded	Com	I just met the new boss. He's *completely* **bald**
Extreme	Com	I just met the new boss. He's *completely* **awesome**
Unbounded	Com	I just met the new boss. He's *completely* **tall**
Bounded	Rea	I just met the new boss. He's *really* **bald**
Bounded	Rea	I just met the new boss. He's *really* **awesome**
Bounded	Rea	I just met the new boss. He's *really* **tall**

4.1.3 Procedure and statistical analysis

Every subject saw a total of 12 written sentences, one sentence for each condition. Each sentence was followed by a series of questions aimed at assessing solidarity-based and non-solidarity-based traits of social meaning discussed above. They were presented in the form of a 1-6 Likert scale, where 1 indicated the minimum value and 6 the maximum value. Subjects were explicitly instructed to answer the questions following their instincts and to be very honest and straightforward, even if they felt compelled to provide a particularly negative judgments of the speaker. A full list of the questions, together with the possible answers, is reported below.

(17) **Sentence**: I just met the new boss. He's totally bald.

1.	How **articulate** does the speaker sound?	1 6
2.	How **mature** does the speaker sound?	1 6
3.	How **intelligent** does the speaker sound?	1 6
4.	How **serious** does the speaker sound?	1 6
5.	How **friendly** does the speaker sound?	1 6
6.	How **outgoing** does the speaker sound?	1 6
7.	How **cool** does the speaker sound?	1 6
8.	How **excitable** does the speaker sound?	1 6

The study was created with Qualtrics and carried out online. 36 self-declared native speakers of American English, age 18-35, were recruited on Amazon Mechanical Turk and compensated $2 for their participation.

For statistical anaylis, mixed-effects models were ran for each attribute with the R statistical package *lmer4* (Bates et al. (2014)). The fixed effect predictors included Adjective and Intensifier and their interactions, and the random effects included at least random intercepts for subjects and items. When a higher-level main effect or interaction was significant, I followed up with planned paired-comparisons between relevant conditions. In light of the experimental questions, I am especially interested in comparing each intensifier with the base form of the adjective. This would allow me to assess if, and how, each intensifier affected the social meaning for each of the adjective types.

(18) Planned comparisons:

    a. {Totally/Really/Completely} Rel Adj vs Bare Rel Adj

    b. {Totally/Really/Completely} Ext Adj vs Bare Ext Adj

    c. {Totally/Really/Completely} Abs Adj vs Bare Abs Adj

4.2 Results

For both Solidarity and Status attributes I report the summary of the main effect and interactions in a dedicated table (Table 1 and Table 3).[13] I then report the results of the planned comparisons in a separate table for Solidarity and Status attributes, where the values indicate the difference between the social evaluation of the intensified form and the social evaluation of the bare form, as well as the statistical significance of the difference. Averager scores for each condition are reported in the appendix.

4.2.1 Solidarity

Table 3 reports the summary of the mixed effects models for the Solidarity attributes. For all attributes, an interaction between Intensifier and Adjective was found, reflecting the fact that *totally* with relative adjectives is perceived as higher in solidarity. In addition, a main effect of Adjective was found for Excitable, Outgoing and Cool, reflecting the fact that extreme adjectives tended to be rated higher than relative and absolute ones aling these dimensions. Finally, a main effect of intensifier was found for Excitable and Cool, with the perception of *totally* being generally higher than the one of the other intensifiers.

Table 3 Mixed effect model summary for Solidarity attributes

Factor	Excitable		Outgoing		Friendly		Cool	
	F-value	p-value	F-value	p-value	F-value	p-value	F-value	p-value
Intensifier	4.7	<.001	1.4	–	0.6	-	3.5	<.05
Adjective	11.0	<.0001	7.3	<.0001	1.4	-	6.1	<.001
Adj:Int	3.4	<.05	2.3	<.05	2.5	<.05	2.3	<.05

I now focus on the specific contrasts between intensified forms and the base forms, which allow us to gauge the effect of *totally*, *completely* and *really* in the different linguistic environments in which they were tested. Table 4 reports the differences between the perception of the sentence with the intensifier and the perception of the sentence with the base form for the corresponding adjective type. Results for *totally* are in bold face. Other signficant contrasts between intensifier and base form are indicated with *.[14]

---

[13] Whether it is desirable to generate p values for fixed effect models has been widely discussed recently within the R community. For reporting purposes, the p values were generated with the function summary(aov(model)).

[14] Codes for significance: * =$p < .05$; ** =$p < .01$; *** =$p < .001$.

Table 4 Perception for Solidarity attributes: differentials

Attribute	Relative				Extreme				Absolute			
	Base	Tot	Com	Rea	Base	Tot	Com	Rea	Base	Tot	Com	Rea
Exc	3.51	*+.67	+.25	+.01	3.80	+.34	+.42	−.08	3.19	+.54	−.05	−.08
Out	3.65	*+.74	+.26	+.26	4.34	−.09	+.14	−.48	3.80	+.05	−.39	+.05
Fri	3.68	*+.65	+.37	+.34	4.20	−.26	−.03	−.23	3.94	+.00	−.44	+.17
Cool	3.02	*+.85	+.06	−.02	3.45	−.03	+.26	−.40	2.97	+.17	−.18	+.00
Avg	3.47	*+.72	+.23	+.14	3.95	−.01	+.20	−.30	3.47	+.19	−.26	+.04

For all attributes, *totally* with relative adjectives was perceived as significantly higher than the corresponding base forms. No significant contrasts are found for *totally* with extreme adjectives or absolute adjectives. With the latter, however, *totally* displays a trend to raise the solidarity perception, which is particularly evident with Excitability. Concerning the other intensifiers, no systematic contrast is observed that holds across all the attributes. It can be observed, though, that *completely* with absolute adjectives tend to lower the perception of solidarity.

4.3 Status

Table 5 reports the summary of the mixed effects models for the Status attributes. For all attributes, a main effect of Intensifier was found, with *totally* being associated with lower Status perception than the other conditions. A main effect of Adjective was found for Mature, Intelligent and Serious, with absolute adjectives being rated higher than extreme and relative ones. Finally, an interaction between Intensifier and Adjective is found for Articulate.

Table 5 Mixed effet model summary for Status attributes

Factor	Articulate		Mature		Intelligent		Serious	
	F-value	p-value	F-value	p-value	F-value	p-value	F-value	p-value
Intensifier	6.0	<.001	10.0	<.0001	8.8	<.01	10.9	<.001
Adjective	1.6	—	3.7	<.05	4.3	<.05	3.4	<.001
Adj:Int	3.1	<.01	1.8	—	2.0	—	1.3	—

As was done for Solidarity attributes, I now focus on the specific contrasts between intensified forms and the base forms. Table 6 reports the differences between the perception of the sentence with the intensifier and the perception of the sentence with the base form for the corresponding adjective type. Results for *totally* are in bold face. Other signficant contrasts between intensifier and base form are indicated with *.[15]

---

[15] Codes for significance: * =$p < .05$; ** =$p < .01$; *** =$p < .001$.

Table 6 Perception scores for Status attributes: differentials

Att	Relative				Extreme				Absolute			
	Base	Tot	Com	Rea	Base	Tot	Com	Rea	Base	Tot	Com	Rea
Art	3.68	*−**.87**	−.54	+.23	3.91	*−**.86**	−.26	−.14	3.47	+.03	+.55	−.02
Mat	3.68	*−**.93**	−.54	+.11	4.05	*−**1.20**	+.43	−.50	3.77	−.42	+.31	−.03
Int	3.60	*−**.84**	−.37	+.34	4.00	*−**1.03**	−.35	−.37	3.77	−.19	+.17	+.08
Ser	4.22	*−**1.01**	−.55	−.14	4.25	*−**1.15**	−.31	−.12	4.22	−.31	+.00	+.00
Avg	3.80	*−**.90**	−.50	+.13	4.05	*−**1.08**	−.37	−.28	3.81	−.23	+.26	+.01

For all attributes, *totally* with relative adjectives and with extreme adjectives is perceived as significantly lower than the corresponding base forms. No significant contrasts are found for *totally* with absolute adjectives, even though *totally* displays a trend to decrease the perception with these predicates as well. Concerning the other intensifiers, no significant contrast is observed across all the attributes. Yet, we observe that *completely* with relative adjectives displays a marked trend to derease the perception with relative adjectives, with effects that near significance (all *ps*<.1). At the same time, we note that *completely* with absolute adjectives displays a trend to raise the status perception, featuring an effect that goes in the opposite direction to the one observed for the other adjective types. No effect is observed for *really*. The average differential effects of all the Solidarity attributes are plotted below.

4.4 Discussion

4.4.1 *Totally*

The current study aims to investigate how the social perception of *totally* is affected by variations in the semantic properties of the intensifier across different linguistic contexts. Two hypotheses were tested. First, I predicted that instances in which *totally* targets a speaker-oriented scaleshould be more likely to be interpeted as carriers of social meaning than cases of lexical *totally*. The prediction is confirmed for the attributes used in the experiment: when *totally* occurs next to a unbounded adjective, an environment in which only a speaker-oriented reading is licensed, listeners perceive the intensifier as a salient marker of social identity along eight different dimensions. By contrast, when *totally* occurs next to an absolute adjective and a lexical reading is possible, the intensifier does not significantly impact the social evaluation of the sentence. Note, however, that the effect of the intensifier in this context features a trend that mirrors the effect observed for speaker-oriented uses, suggesting that, even in unmarked environments, the intensifier is still associated with a similar social meaning.

The second hypothesis tested whether the salience of the social meaning would reflect the continuum in the distinction between lexical and speaker-oriented uses, predicting that the social meaning should have intermediate intensity with extreme

adjectives. This prediction, however, is not borne out, as we observe that for none of the tested dimensions a continuum along these lines emerges. Quite the contrary, the social perception of *totally* in this environment is polarized across different dimensions of evaluation. Concerning Solidarity, *totally* has no effect, leaving the perception unchanged from the positive, unintensified form. Concerning the Status, the effect of *totally* is instead comparable to − in fact, even stronger than − the one observed for relative adjectives ones. I suggest that, to better understand this result, it is important to consider the indepedent social meaning contributed by Extreme adjectives, a category of expressions that, by virtue of their inherent emotive charge, normally carry a richer indexical baggage than the other two classes of adjectives. Concerning Solidarity, adjectives like *awesome* turn out to feature remarkably high value *on their own*, as opposed to the other adjectives. This ceiling effect in the positive form, as opposed to the contribution of *totally* per se, could explain the null difference that we obtain. As far as Status is concerned, I suggest that the steep drop associated with *totally* might have to do with the fact that combinations like "totally awesome" have enregistered as a crystallized unit, undergoing wide social circulation and becoming embedded in a variety of metapragmatic commentaries that normally point to a negative evaluation of the speaker. As a result, there is little compositionality between the modifier and the adjective, but the unit as a whole is perceived as having markedly low status.

4.4.2 *Completely* and *really*

Concerning the effect of the control intensifiers, no systematic pattern emerges. As predicted, *really* has a minor impact on all the evaluation scales and presents no significant difference across the tested adjective types. Concerning *completely*, we also observe that the intensifier does not change the perception of the sentence with the positive form in a systematic way. This, at the very least, suggests that the effect observed for *totally* with relative adjectives is not due to a mismatch in scalar structure, or in the perception of the construction as ungrammatical. If that were the case, we should expect to observe the same effect on *completely*, which however we don't. At the same time, it is worth observing that *completely* closely approximates the effect of *totally* on relative adjectives, nearing statistical significance especially with respect to Status attributes. This finding raises the question as to why *completely* displays a trend that is not featured by *really*. I propose two alternative explanations, which can be further explored in further research. One possibility is that the effects of scale type on *completely* are grounded in the ungrammaticality of the combination, rather than to the particular semantic properties of the expression. Saying "completely tall", in other words, amounts to saying something that is located outside of the grammatical knowledge of the speakers, and then evokes whichever social features are associated with a "default other" who does not fully master the grammar of English.[16] The other possibility is that *completely* is also on the way of

---

[16] I thank an anonymous NWAV 44 reviewer for suggesting this explanation.

grammaticalizing a speaker-oriented meaning similar to the one of *totally*. As such, it begins to display the same markedness effects of *totally*, even though it is not deep enough in the grammaticalization trajectory to trigger such effects as consistently as *totally*[17]. This hypothesis would fit in well with he observation that the shift from the lexical to the speaker-oriented domain is rather common for maximizers across languages (see Hoeksema (2011) and Tribushinina (2011) on Dutch *helmaal*).

5 Taking stock

In this section I take stock with the experimental results from a broader angle, returning to the original question that informed this article and: How can the social meaning of an expression be constrained by its semantic/pragmatic properties? More specifically, How can the semantic/pragmatic properties of *totally* explain the observation that speaker-oriented *totally* is a salient marker of speaker qualities?

5.1 Scalarity and social meaning salience

The experimental findings indicate that the salience of the social meaning associated with *totally* co-varies with the semantic/pragmatic properties of the intensifier. While the presence of speaker-oriented *totally* significantly impacts the social perception of a sentence, the presence of lexical *totally* has a much weaker effect. To explain this result, I have argued that speaker-oriented *totally* is a suitable candidate to convey social meaning in virtue of its status as a marked variant. By pragmatically evoking a simpler, semantically equivalent alternative utterance that could have been used in its substitution, this use of the intensifier is naturally equipped to strike the listener's attention as a noticeable linguistic choice. As such, on a par with what has been observed for other socially meaningful expressions, it is associated with a language-internal mechanism that makes it apt to be assigned "extra" meanings besides its regular semantic/pragmatic ones, including those pertaining to the social dimension. On the other hand, as a consequence of its semantics, lexical *totally* does not sufficiently stand out in terms of markedness. It operates within the propositional content of the utterance, failing to invoke the contrast with a simpler alternative. As such, this version of *totally* does not have the inherent salience that marked expressions carry, failing to draw the listener's attention in the way in which its speaker-oriented counterpart does. The emerging picture is one in which, through the mediation of markedness, fine-grained semantic properties like the different types of scales targeted by an intensifier can affect the perception of social meaning. This, in turn, shows that, when making social evaluations about linguistic form, listeners keep track of the semantic/pragmatic properties of these forms, pro-

---

[17] I thank E. Allyn Smith anf Tim Leffel for suggesting, separately and (almost) simultaneously, this explanation

viding further evidence that these two types of meaning, while empirically distinct, are also connected in a principled fashion.

5.2 Lingering questions

As the systematic investigation of the interface between semantic and social meaning has just begun, a number of questions remain open to further investigation. With respect to the particular phenomenon of intensification, I would like to point out two.

5.2.1 Why *that* social-meaning?

First, while we have an understanding of why *totally* becomes associated with *some* social meaning, are we also in the position of explaining why it is associated with *that* particular social meaning just by looking at its semantic and pragmatic profile? In other words, why does it emerge as an index of high solidarity and low status, as vice versa? Providing a complete answer solely on the basis of the linguistic properties appears to be an ambitious task. It is well known that the outcome of any enregisterment process is heavily driven by extra-linguistic ideological and historical factors. As **?** suggests, the social recognition of linguistic features as indexes of speakers qualities is the result of a continuous process of circulation, renegotiation and reanalysis, which cannot be pre-determined by the sheer linguistic features of these forms. Yet, the question remains as to whether such features, besides rendering certain expressions a more or less suitable site for the emergence of social meaning, can also have any effects on the particular type of indexical content that becomes associated with them. At a speculative level, I suggest that a possible route to cast light on this issue would be to consider more carefully the attitude conveyed by *totally* in its speaker-oriented use. More specifically, there could be a qualitative connection between the solidarity boosting effect of *totally* at the social level and the interpersonal convergence that is associated with the act of emphasizing commitment to adding a proposition to the Common Ground. In other words, given the intersubjective nature of the commitment targeted by *totally*, the use of the morpheme could serve as a pragmatic tool to foster agreeement and convergence between the interlocutors, thus resulting in the association of the users of *totally* with social qualities that highlight inclusiveness and proximity at the socual level. Under this view, the commitment to involving the interlocutor in the construction of the Common Ground percolates up to the more durable categories of social identity, contributing to indexing users of *totally* as kind of persons that are likewise committed to fostering inclusion and proximity at the social level. If this were true, than it would be possible to positive a *constitutive* relationship between *totally* and some of the social attributes, opening up another dimension of interaction between semantic

and social content (see Ochs (1992), Acton and Potts (2014) and Glass (2015) for similar proposals).

5.2.2 The role of diachronic innovations

Finally, I would like to briefly elaborate on a possible objection that could be move to the proposed conclusion of the study: What if social indexicality is not foregrounded by the semantic properties of the variable per se, but, more simply, by the fact that speaker-oriented *totally* emerged at a later diachronic state than lexical *totally*, and is therefore more easily associated with the social features of typical language innovators? Under this view, the association with different degrees of social meaning salience would just be an accident of language change, relatively independent from the pragmatics.

A way to respond to this observation would be the following: if recency were the only driving factor, we should expect very little difference between speaker-oriented *totally* and *totally* with extreme adjectives.[18]. And yet, as shown in the experiment, the two variants do not behave in the same way. This suggests that, while the current study does not preclude the possibility that recency effets played a role in shaping the social meaning, an account entirely based on diachronic innovation would need to be supported by stronger evidence.

To provide a more definitive response, it would be possible to run a follow up study that exclusively focuses on speaker-oriented *totally*. The following contrast suggests a potentially promising environment to test the hypothesis.

(19)   **John**: I can't remember if Luke got married at 25.   Doubt about *p*
       Mark: Yes, he TOTALLY got married at 25.

(20)   a. Man in "I have drugs" shirt totally had drugs.
       b. Iowa senator totally thinks you should be drug tested for child support
           payments.

In (19), *totally* has an explicit licensor: the previous discourse move stating uncertainty around *p*. By presenting an incongruence between the interlocutor's and the speaker's view, such a context provides an explicit justification for the act of stressing commitment to adding the proposition to the Common Ground on the part of John. By contrast, other contexts, for example (20), present no such clue: here, *totally* is used with assertions that describe objective facts and do not address doubts or questions from the interlocutors. As such, the use of *totally* in contexts like (20) appears to be even more marked than the use in contexts like (19), since the context

---

[18] A search on the Corpus of Historic American English (COHA, Davies (010)) shows that, while lexical *totally* has been around since the beginning of the 20th century (and, incidentally, also well before), the intensifier in the other two contexts emerged fairly recently, and almost simultaneously. While the attestation of the first occurrence with extreme adjectives predates the first attestation of speaker-oriented *totally* by 20 years, the very low number of occurrences of both contexts in the corpus suggests some caution in taking such a 20 year gap as significant

provides no explicit cue that justifies the act for stressing commitment. If markedness is the crucial factor driving the salience of the social meaning, marked cases of speaker-oriented *totally* should therefore be more socially meaningful than unmarked ones, providing a neat empirical ground to reject the idea that the social meaning differences between lexical and speaker-oriented *totally* are entirely driven by a historical contingency.

6 Conclusion

These results provide further evidence that semantic and social meaning are not disjointed domains. Rather, they do interact with one another to determine the eventual package of content conveyed by an expression, supporting analogous claims from recent investigations on the topic. More specifically, the findings of the perception experiment suggest that, when making social evaluations about the users of a particular expression, hearers keep track of the semantic and pragmatic properties of the form, such as the type of scale that the intensifier targets in a given context. This observation reveals a parallel with well-established findings in work on phonological variation, where authors have convincingly shown that the perception of social meaning can be cued by fine-grained acoustic or articulatory properties of the variant (see Campbell-Kibler (2010) for an overview). While merely representing a preliminary step, the current study opens up a novel area of research on the study of meaning, highlighting the interface between social and semantic content as a ripe, and largely uncharted, domain of investigation. This line of research, if adequately developed, carries two important implications. On the theoretical level, it can lead us to adopt a more comprehensive view of linguistic meaning, in which social meaning is seen as a *bona fide* type of content to be investigated side by side with the logical and pragmatic properties of expressions. On a methodological level, it points to social perception studies as a promising technique to explore the behavioral correlates of semantic and pragmatic features, expanding the toolbox for the experimental investigation of meaning.

References

Acton, E. and Potts, C. (2014). That straight talk. sarah palin and the sociolinguistcs of demonstratives. *Journal of Sociolinguistics*, 18(1):3–31.

Agha, A. (2005). Voice, footing, enregisterment. *Journal of Linguistic Anthropology*, 15:38–59.

Anderson, C. (2013). Inherent and coerced gradability across categories: manipulating pragmatic halos with *sorta*. In by Anca Chereches and Snider, T., editors, *Proceedings of Semantics and Linguistic Theory (SALT) 23*, pages 81–96. eLanguage.

Bates, D., Mchler, M., Bolker, B., and Walker, S. (2014). Fitting linear mixed-effects models using lme4.

Beltrama, A. (2015). Totally between discourse and subjectivity. exploring the pragmatic side of intensification. In *Proceedings of CLS 51*.

Beltrama, A. and Bochnak, M. R. (2015). Intensification without degrees cross-linguistically. *Natural Language and Linguistic Theory*.

Bender, E. (2000). *Syntactic variation and linguistic competence: the case of AAVE copula absence.* PhD thesis, Stanford University.

Bochnak, R. and Csipak, E. (2014). A new metalinguistic degree morpheme. In *Proceedings of SALT24*, pages 432–452. Elanguage.

Callier, P. (2013). *Linguistic context and the social meaning of voice quality variation*. PhD thesis, Georgetown University.

Campbell-Kibler, K. (2007). Accent, (ing) and the social logic of listener perceptions. *American speech*, 82:32–84.

Campbell-Kibler, K. (2010). Perception in sociolinguistics. *Language and Linguistics Compass.*, 4(6):377–389.

Constantinescu, C. (2011). *Gradability in the Nominal Domain*. PhD thesis, Leiden University.

Davies, M. ((2010-)). The Corpus of Historical American English: 400 million words, 1810-2009. Available online at http://corpus.byu.edu/coha/.

D'Onofrio, A. (2015). Persona-based information shapes linguistic perception: Valley girls and california vowels. *Journal of Sociolinguistics*, 19(2):241–256.

Drager, K. (2013). Experimental methods in sociolinguistics: Matched guise and identification tasks. In Holmes, J. and Hazen, K., editors, *Research Methods in Sociolinguistics: A Practical Guide*. Hoboken: WileyBlackwell.

Eckert, P. (2008). *Jocks and Burnouts: Social Identity in the High School*. New York: Teachers College Press.

Ernst, T. (2009). Speaker-oriented adverbs. *Natural Language and Linguistic Theory*, 27:497544.

Faller, M. (2002). *Semantics and Pragmatics of Evidentials in Cuzco Quechua*. PhD thesis, Stanford University.

Giannakidou, A. and Yoon, S. (2011). The subjective mode of comparison: Metalinguistic comparatives in Greek and Korean. *Natural Language and Linguistic Theory*, 29:621–655.

Glass, L. (2015). Need to vs. have/got to: Four socio-pragmatic corpus studies. In *Selected papers from NWAV 43*.

Grinsell, T. and Thomas, J. (2012). Finna as a socially meaningful modal in african american english. In *48th Annual Meeting of the Chicago Linguistic Society*.

Hoeksema, J. (2011). Discourse scalarity: the case of Dutch *helemaal*. *Journal of Pragmatics*, 43(11):2810–2825.

Horn, L. (1984). Towards a new taxonomy of pragmatic inference: Q-based and r-based implicature. In *Meaning, form, and use in context: Linguistic applications*. Washington: Georgetown University Press.

Irwin, P. (2014). So [totally] speaker-oriented: An analysis of "Drama SO". In Zanuttini, R. and Horn, L. R., editors, *Microsyntactic Variation in North American English.*, pages 29–70. Oxford University Press, Oxford.

Ito, R. and Tagliamonte, S. (2003). Well weird, right dodgy, very strange, really cool: Layering and recycling in english intensifiers. *Language in Society*, 32(2):257–279.

Kaplan, D. (1999). The meaning of ouch and oops. explorations in the theory of meaning as use. Manuscript, UCLA.

Kennedy, C. (2007). Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy*, 30(1)(1):1–45.

Kennedy, C. and McNally, L. (2005). Scale structure, degree modification and the semantics of gradable predicates. *Language*, 81(2)(2):345–381.

Labov, W. (1963). The social motivation of a sound change. *Word*, 18:1–42.

Labov, W. (2001). *Principles of Linguistic Change*, volume 2. Blackwell.

Lakoff, R. (1974). Remarks on this and that. In *Proceeding of the Chicago Linguistic Society 10*.

Lambert, W and, R. H., Gardner, R., and Fillenbaum., S. (1960). Evaluational reactions to spoken language. *Journal of Abnormal and Social Psychology*, pages 44–51.

Lasersohn, P. (1999). Pragmatic halos. *Language*, 75(3)(3):522–551.

McCawley, J. (1998). *Th Syntactic Phenomena of English*. University of Chicago Press.

McCready, E. and Kaufmann, M. (2013). Maximum intensity. Paper presented at the Semantics Workshop, Keio University, 29 November.

McNabb, Y. (2012a). Cross-categorial modification of properties in Hebrew and English. In Chereches, A., editor, *Proceedings of Semantics and Linguistic Theory (SALT) 22*, pages 365–382. eLanguage.

McNabb, Y. (2012b). *The Syntax and Semantics of Degree Modification*. PhD thesis, University of Chicago, Chicago.

Morzycki, M. (2011). The several faces of adnominal degree modification. *Proceedings of West Coast Conference on Formal Linguistics 29*.

Morzycki, M. (2012). Adjectival extremeness: Degree modification and contextually restricted scales. *Natural Language and Linguistic Theory*, 30(2):567–609.

Murray, S. E. (2014). Varieties of update. *Semantics and Pragmatics*, 7(2):1–53.

Niedzielski, N. (1999). The effect of social information on the perception of sociolinguistic variables. *Journal of Social Psychology (Special Edition)*, 18:1:62–85.

Nilsen, y. (2004). Domains for adverbs. *Lingua*, 114(6):809847.

Ochs, E. (1992). Indexing gender. In Duranti, A. and Goodwin, C., editors, *Rethinking Context: Language as an Interactive Phenomenon*. New York, Cambridge: Cambridge University Press.

Paradis, C. (2000). It's well weird. degree modifiers of adjectives revisited: the nineties. In Pages, J. M. K., editor, *Corpora galore: analyses and techniques in describing English,*, pages 147–160. Amsterdam & Atlanta: Rodopi.

Penelope (2000). *Language variation as social practice*. Oxford: Blackwell.

Podesva, R. (2011). Salience and the social meaning of declarative contours: Three case studies of gay professionals. *Journal of English Linguistics*, 39(3):233–264.

Podesva, R. J. (2007). Phonation type as a stylistic variable: The use of falsetto in constructing a persona. *Journal of Sociolinguistics*, 11.4:478–504.

Potts, C. (2005). *The Logic of Conventional Implicature*. Oxford University Press, Oxford.

Rett, J. and Murray, S. E. (2013). A semantic account of mirative evidentials. In Snider, T., editor, *Proceedings from Semantics and Linguistic Theory 23*, pages 453–472, Ithaca, NY. CLC Publications.

Sassoon, G. and Zevakhina, N. (2012). Granularity shifting: Experimental evidence from degree modifiers. In Chereches, A., editor, *Proceedings of Semantics and Linguistic Theory 22*, pages 226–246., Ithaca, NY. CLC Publications.

Silverstein, M. (2003). Indexical order and the dialectics of sociolinguistic life. *Language and communication*, 23:193–229.

Smith, E. A., Hall, K. C., and Munson, B. (2010). Bringing semantics to socio-phonetics: Social variables and secondary entailments. *Laboratory Phonology*, 1:121–155.

Squires, L. (2013). It don't go both ways. limited bidirectionality in sociolinguistic perception. *Journal of Scoiolinguistics*, 17(2):200–237.

Stalnaker, R. (1978). Assertion. In *Syntax and Semantics: 9*. New York: Academic Press.

Staum Casasanto, L. (2008). *Experimental Investigations of Sociolinguistic Knowledge.* PhD thesis, Stanford University.

Tagliamonte, S. (2008). So different and pretty cool! Recycling intensifiers in Toronto, Canada. *English Language and Linguistics*, 12(2):361–394.

Tribushinina, Elena & Janssen, T. (2011). Re-conceptualizing scale boundaries: The case of Dutch *helemaal*. *Journal of Pragmatics*, 43(7):2043–2056.

von Stechow, A. (1984). Comparing semantic theories of comparison. *Journal of Semantics*, 3:1–77.

Wolfram, W. (1969). *A sociolinguistic description of Detroit Negro speech*. Center for Applied Linguistics (Washington).

Yoon, Y. (1996). Total and partial predicates and the weak and strong interpretations. *Natural Language Semantics*, 4(2):217–236.