From *Totally Dark to Totally Old*. The Formal Semantics of Subjectification.

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Subjectification is process whereby meanings become increasingly based in the speakers’ attitudes towards a proposition (Traugott 2004). While commonly invoked, such process has been rarely modeled in formal terms (modulo Eckardt 2009, Gutzmann 2013). As a consequence, it is often hard to see (i) what component of an expression undergoes change, and (ii) what semantic core persists through the shift. We present the intensifier *totally* as a case study to shed light on these issues, modeling the shift as a transition along domains with analogous scale-structure

**DATA** - In contemporary English *totally* feature three different usages: (a) a *degree modifier* one; (b) a *slack regulator* one; (c) a *speaker-oriented* one. As shown by diachronic data from COHA\(^1\), while (1) and (2) were found in the 19th century, (3-4) emerged only in the past 30 years.

1. It was **totally** dark about me, and I knew not where I was.\(^2\)  
   **DEGREE MODIFIER**
2. By that time the bison was **totally** extinct east of the Miss. River.\(^3\)  
   **SLACK REGULATION**
3. Because guess what? Castles are **totally** old.  
4. I **totally** think: Have I got to go and play basketball now.  
   **SPEAKER-ORIENTED**

**Degree Modification** - In the early 20th century, *totally* is an endpoint-oriented degree modifier. Consistently, it is found with upper-closed *absolute* gradable adjectives but not with *relative* ones.

1. NOT FOUND: ?? **totally** big/huge/hot...  
   **RELATIVE GRADABLE PREDICATE**

**Slack regulation** - The picture, however, is more complex. At this stage, *totally* is also found with predicates that are *not* gradable. Here, it targets the *pragmatic halo* (Lasersohn 1999) of the expression, determining a shift from a coarse-granularity intrepretation - where a small number of individuals can be ignored - to a maximally fine one - where a single exemplar makes a difference. Note that degree modification and slack regulation, while similar, are distinct. The former operates over gradable predicates, while the latter does not (✓ Room A is darker than room B vs ?? Species A is more extinct than B ). Also, the former operates at a truth-conditional level (‘totally dark’ >\(_{\text{darkness}}\) ‘dark’), the latter does not (‘totally extinct’ =‘extinct’ = no exemplars).

**Speaker-oriented** - Starting from 1980, *totally* broadens its distribution to modify relative adjectives (e.g. *old*) and more non-gradable predicates (e.g. *think*). Here, as noted by McCready and Kauffman (2013), the adverb intensifies speech acts, functioning as an *inquiry stopper*, that is, a signal from the speaker to the addressee to halt discussion about a particular topic.

1. A: Castles are old.  
2. B: ✓ Wait, are you sure?  
3. A: Castles are **totally** old.  
4. B: # Wait, are you sure?  

This usage is sensitive to speech act type - ok in assertions, bad in imperatives or questions - and contributes at an *expressive*, not at-issue level (for diagnostics, see Irwin 2013 and Mc&K 2013).

**ANALYSIS** - We argue that, thoughout its diachronic evolution, *totally* consistently behaves as an intensifier selecting for a scalar maximum. What changes is the source of the ordering, which moves from the domain of lexical semantics to the domain of speech acts.

**Degree modification** - Let G be a gradable predicate. Following Kennedy and McNally (2005), *totally* requires that the degree encoded by the predicate G reaches the maximum on the encoded scale S\(_G\) via the “\(= \text{ max}\)” function. This semantics derives the restriction of the intensifier to absolute adjectives. The lack of a maximum, as in relative adjectives, generates a compositional mismatch.

\(^1\)Corpus of Historical American English, http://corpus.byu.edu/coha/  
\(^2\)1823 Title Randolph: A Novel, Volume 1 Author Neal, John, 1793-1876 Source Randolph: A Novel, Volume 1  
\(^3\)1889 Title:The Extermination of the American Bison Author. Hornaday, William Temple, 1854-1937  
\(^4\)2004 Title: Princess in waiting. Author: Cabot, Meg.  
\(^5\)1996 Title: Wherever he goes, there he is. (cover story). Author: Heath, Chris
Although *extinct* does not encode an upper-closed scale, imprecision can supply one. Let us parameterize the interpretation of *extinct* to different discourses $D$, each of which imposes a different granularity level (for a similar account of slack regulation, see S&Z 2012). In $D_2$ a species is extinct if it has $<10$ exemplars; in $D_1$ if $<5$. Finally in $D_0$, the maximally fine-grained level, if no exemplars remain. Imagining that $|\text{bison}|=0$, $|\text{buffalo}|=5$, and $|\text{cougar}|=7$, the sets associated with each level of granularity can be ordered according to a subset relation, were the set associated with the maximally fine-grained level emerges as the natural endpoint.

For a property $P$, *totally* forces an interpretation with maximal granularity, excluding coarser levels and narrowing down the extension of the predicate.

**DISCUSSION** - Both recent and non recent usages of *totally* operate over same-structured orderings. While the underlying presence of an endpoint makes the move semantically natural, we model subjectification as a shift in the nature of the scale (i) from lexical semantics to speaker-oriented content, (ii) from at-issue to expressive types (see Gutzmann 2013). Moreover, as is the case for other intensifiers (see Beltrama 2013 on *issimo*), slack regulation emerges as a plausible intermediate step for the emergence of speaker-oriented meanings. On the one hand, granularity manipulations, like degree modification, determine different extensions of the predicate; on the other hand, they are a non truth-conditional *pragmatic* phenomenon, which is fixed by the discourse context. As our data show, speaker-oriented *totally* comes after slack regulation/degree modification usages. We therefore suggest that slack regulation serves as a crucial gateway for the subjectification of an intensifier. Once an expression becomes established as a modifier of pragmatic halos, and not just of lexical degrees, it can also have access to other, similarly-structured pragmatic orderings, which are directly anchored to the speaker’s attitudes and pertain to a higher level of the discourse model.