1.0 Introduction

Differences in adjectival meaning attributed to scale structure has been a topic of recent research (Cruse 1986, Bierwisch 1989, Paradis 1997, Rotstein and Winter 2004, Kennedy and McNally 2005). Kennedy and McNally (2005) characterize a basic division between adjectives with open scales (RELATIVE ADJECTIVES: short, tall, narrow) and adjectives with physically fixed – and often measurable – minimum ($d_{\text{min}}$) or maximum ($d_{\text{max}}$) endpoints (ABSOLUTE ADJECTIVES: bent/straight, dirty/clean). Kennedy and McNally do not extend this classification schema to account for the categorization of all major adjectival groups in English, however. One such group is NEGATIVE EVALUATIVE ADJECTIVES (rude, ugly, unenthusiastic, sad, etc.), the negative members of the class of evaluative adjectives proposed by Bierwisch (1989), which includes adjectives describing qualitative rather than quantitative properties of individuals. On the basis of similar behavior on the comparative entailment task (Section 2.2), Rett (2008) argued that negative evaluative adjectives are a subclass of minimum endpoint absolute adjectives.

I extend Rett’s proposal by examining the scale structure of negative evaluative adjectives from a processing perspective. I argue that negative evaluative and minimum endpoint absolute adjectives both have a minimum endpoint ($d_{\text{min}}$) as part of their obligatorily processed scale structure. This proposal builds on work for absolute adjectives by Frazier, Clifton, and Stolterfoht (2008). Following their experimental framework, I take the availability of diminishers (slightly, a little). The felicity of minimum endpoint absolute and negative evaluative adjectives (1a,b) contrasts with the infelicity of maximum endpoint absolute adjectives (1c), which lack a $d_{\text{min}}$ on their scales.

(1)  a. The red pipe is slightly bent.
    b. The waiter at the restaurant was a little rude.
    c. #The red pipe is slightly straight.

1 I am very grateful to Lyn Frazier, Rajesh Bhatt, and Charles Clifton Jr. for their guidance and advice in this project. I thank members of the Second Year Seminar for their suggestions and support. This work also benefitted from discussion with Chris Kennedy. All errors are my own.
However, a challenge is posed by the data in (2). Diminishers are felicitous with open scale adjectives like *tall*.

(2) The bookshelf was slightly tall.

Rather than argue that (2) invalidates diminishers as $d_{\min}$ diagnostics, I argue that the difference between *bent* and *rude* vs. *tall* is that $d_{\min}$ of *bent* and *rude* is obligatorily processed, while the $d_{\min}$ made available for *tall* in (2) is the result of scale coercion by *slightly*.

The paper is structured as follows. In Section 2, I summarize Kennedy and McNally’s (2005) scale classification schema and introduce the evidence used by Rett (2008) to group negative evaluative adjectives with minimum endpoint absolute adjectives. Assumptions about obligatory and coerced meaning are also summarized. Section 3 presents the results of the offline rating tasks Experiments 1 and 2, which confirm the intuitions about the distribution of diminishers. In Section 4 (Experiments 3 and 4), I contrast the online processing and semantic interpretation of diminisher-modified negative evaluative adjectives with diminisher-modified dimensional adjectives, which only gain a $d_{\min}$ through coercion. I conclude that the $d_{\min}$ of a negative evaluative adjective is part of its obligatorily processed meaning, just as the $d_{\min}$ of minimum endpoint absolute adjectives was argued to be by Frazier et al. (2008). A formal analysis of the coercion process is also developed. Section 5 concludes and offers directions for future research relating to points of typological connection between the proposal for negative evaluative adjectives and other adjectival classes and degree constructions. In particular, I highlight one way in which negative evaluative adjectives differ from absolute adjectives: the former have context sensitive standards of comparison while the latter have physically fixed, ‘absolute’ standards. I suggest that negative evaluative adjectives require an extension to the typology proposed in Kennedy and McNally (2005).

2.0 Classification and Aspects of Adjectival Meaning

2.1 Relative and absolute adjectives

I further assume that all gradable adjectives project a scale. A scale consists of three components: a domain or set of degrees \( D \), a total ordering on \( D \), and a dimension of ordering \( \delta \) (e.g., ‘height’) (Bartsch and Vennemann 1972, Bierwisch 1989, Kennedy 1997). The degree \( d \) returned by an adjective as in (1) is a member of the set \( D \).

Recent work has uncovered heterogeneity within the class of adjectives. One locus of division is the presence or absence of upper or lower bounds on the domain of degrees \( D \). Adjectives with unbounded domains \( D \) are described by Kennedy and McNally (2005) as projecting open scales and are termed RELATIVE ADJECTIVES. Adjectives with lower and/or upper bounds on \( D \) are described as projecting closed scales with minimal and/or maximal endpoints. Such adjectives are termed ABSOLUTE ADJECTIVE. I follow Kennedy and McNally’s terminology and classification structure in this paper, but similar accounts can be found in Cruse (1980), Kamp and Rossdeutscher (1994), Yoon (1996), and Rotstein and Winter (2004). Representative lists of each adjectival category discussed are given in Appendix A.

The class of relative adjectives is most frequently exemplified with dimensional adjectives, such as tall or short. A pair of relative adjectival scales is shown below to illustrate their open structure. Antonymic pairs of relative adjectives project scales with inverse directions of ordering on degrees in \( D \).

\[
(4) \quad \begin{align*}
\text{a. Tall:} & \quad \ldots \text{--------------------------------------------} \quad \text{RELATIVE} \\
& \quad \rightarrow \text{Increasing height} \\
\text{b. Short:} & \quad \ldots \text{--------------------------------------------} \quad \text{RELATIVE} \\
& \quad \leftarrow \text{Increasing height}
\end{align*}
\]

Kennedy and McNally (2005) argue that relative adjectives must project open scales because when used in the comparative-marked form (taller), there is no entailment that an individual that is taller exceeds a standard, or cutoff point, for tall. Appendix B contains the results of the comparative entailment test for a larger set of adjectives.

\[
(5) \quad \begin{align*}
\text{a. Sandy is taller than Ben} \neq \text{Sandy is tall.} \\
\text{b. Sandy is taller than Ben, but Sandy isn’t tall.}
\end{align*}
\]

I follow many previous authors in assuming that the predicative adjective tall in Sandy is tall is marked by the null POS(ITIVE) morpheme. A representative formulation of the POS is given in (6).
The function \text{STND} takes an adjective \(g\) and returns a standard of comparison appropriate to that adjective (i.e., the average height of individuals in the context) such that the subject \(x\) ‘stands out’ relative to this standard of comparison (Kennedy 2007).

\[(6) \quad \text{POS} = \lambda g \lambda x \exists d.g(d(x)) \land d > \text{STND}(g)\]

POS composes with an adjective \(g\) of type \(<d,\text{et}>\) and an individual \(x\) such that there exists a degree \(d\) to which \(g\) holds of \(x\) and which exceeds a standard of comparison \(\text{STND}(g)\) calculated such that \(x\) ‘stands out’ in terms of \(g\) in the context.


The morpheme POS is in complementary distribution with other degree morphemes, e.g., \(\text{more}\), \(\text{too}\), and \(\text{as}\). As a result, given a comparative-marked open scale adjective like \(\text{taller}\), we do not predict – or find – an entailment that the subject (\(\text{Sandy}\)) exceeds some standard of comparison.

By contrast, the scales of absolute adjectives contain and minimum and/or maximum endpoint. I focus on adjective that contain one or the other. Antonymic pairs of absolute adjectives share an endpoint that Kennedy (2007) argues corresponds to a salient degree that is, in many cases, physically ‘real’ or measurable. For example, the antonymic pair of absolute adjectives \(\text{straight}\) and \(\text{bent}\) share the endpoint ‘zero degrees of bend.’ Antonyms differ in the direction of ordering of degrees in \(D\) and whether their scale includes, or excludes, the endpoint.

In the case of \text{MINIMUM ENDPOINT ABSOLUTE ADJECTIVES} (\(\text{bent}, \text{sick}, \text{dirty}, \text{wet}, \text{etc.}\)), all degrees on the scale exceed the minimum endpoint \(d_{\text{min}}\): a minimally bent object has at least a non-zero degree of bend. By contrast, \text{MAXIMUM ENDPOINT ABSOLUTE ADJECTIVES} (\(\text{straight}, \text{healthy}, \text{clean}, \text{dry}\)) project scales that contain the maximum endpoint \(d_{\text{max}}\).

\[(7) \quad \text{a. Bent: } \bullet \langle \cdots \cdots \rangle \cdots \text{ MINIMAL ENDPOINT} \quad d_{\text{min}} = 0 \text{ degrees of bend} \Rightarrow \text{Increasing bend} \Rightarrow \]

\[\text{b. Straight: } \langle \cdots \cdots \rangle \cdots \text{ MAXIMAL ENDPOINT} \quad \leftarrow \text{Increasing bend} \leftarrow d_{\text{max}} = 0 \text{ degrees of bend} \]

Kennedy and McNally (2005) also present the results of the comparative entailment test as evidence for the scale structures proposed for absolute adjectives. Focusing on minimum endpoint absolute adjectives, we find that comparative-marked minimum endpoint absolute

---

2 The felicity of maximum endpoint adjectives like \(\text{straight}\) in comparative constructions (\(\text{This stick is straighter than that stick}\)) indicates that their scales also contain degrees exceeding zero degrees of bend (Rotstein and Winter 2004).
adjectives entail that their subject exceeds $d_{\text{min}}$: a pipe that is more bent than another must itself have a degree of bend exceeding zero (as well as exceeding the degree of bend of the other pipe). Kennedy (2007) argues that the transition point $d_{\text{min}}$ is selected by $\text{POS}$. Given that the comparative-marked adjective also entails that this transition point is exceeded by the subject, this indicates that $d_{\text{min}}$ already delimits the scale of a minimum endpoint absolute adjective.

(8)  

a. The red pipe is more bent than the blue pipe. $\vdash$ The red pipe is bent.

b. The red pipe is more bent than the blue pipe, #but the red pipe isn’t bent.

c. $\blacklozenge$ \hfill $\downarrow$ Increasing bend $\rightarrow$

\[ d_{\text{min}} \quad \text{bent}_{\text{blue-pipe}} \quad \text{bent}_{\text{red-pipe}} \]

\[ \rightarrow \text{Increasing bend} \rightarrow \]

2.2 Introducing negative evaluative adjectives

Bierwisch (1989) posited another class of adjectives, EVALUATIVE ADJECTIVES. Bierwisch (1989) defines evaluative adjectives as denoting non-quantifiable, positive and negative descriptive attributes. FIGURE A gives a representative list of evaluative adjectives.

\begin{figure}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\textbf{Positive Evaluative} & \textbf{Negative Evaluative} & \\
\text{Pretty} & Polite & Ugly \\
\text{Happy} & Smart & Sad \\
\text{Enthusiastic} & Graceful & Unenthusiastic \\
\text{Interesting} & Friendly & Boring \\
\text{Energetic} & Reliable & Lethargic \\
\text{Strong} & Interested & Weak \\
\text{Industrious} & Obedient & Lazy \\
\text{Outgoing} & Brave & Shy \\
\hline
\end{tabular}
\caption{POSITIVE AND NEGATIVE EVALUATIVE ADJECTIVES}
\end{figure}

The class of evaluative adjectives has not been studied in depth with respect to the absolute vs. relative classification schema. With respect to their standard of comparison (as when

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3 Kennedy (2007) argues that for any absolute adjective, $d_{\text{min}}$ or $d_{\text{max}}$ is selected by $\text{STND}$ given that these degrees are (i) sufficiently salient transition points to satisfy the demands of $\text{STND}$ and (ii) degrees that are conventionally associated with an absolute’s adjective and, therefore, preferential to variable context-determined standards of comparison. This move is largely tangential to the present study although I briefly return to the possibility of context-determined values of $d_{\text{min}}$ for negative evaluative adjectives in Section 4.

4 Appendix A gives a longer list. The adjectives shown in Appendix A were utilized in Experiments 1 – 4 reported below. Evaluative adjectives were selected to avoid members of the class of ‘Extreme Adjectives,’ discussed by Morzycki (2009). Extreme adjectives express properties that are superlative forms of some other property (e.g., gorgeous from pretty, gigantic from large). While, as Morzycki points out, there exist some similarities between the classes of extreme and evaluative adjectives, the two classes should not be conflated.
they are POS-marked), evaluative adjectives pattern like relative adjectives in terms of their standard of comparison: there is no physically measurable ‘cut-off’ point that distinguishes pretty or polite individuals from ugly or rude ones.

However, negative evaluative adjectives differ from relative adjectives with respect to the comparative entailment test, instead patterning like minimum endpoint absolute adjectives. Positive evaluative adjectives pattern like relative adjectives. While comparative-marked positive evaluative adjectives (more polite) do not entail that the POS-marked form of the adjective holds (9), the opposite is true for negative evaluative adjectives (10) (Bierwisch 1989, Rett 2008).

(9) a. Sandy is more polite than Ben. $\not\equiv$ Sandy is polite.
    b. Sandy is more polite than Ben, but Sandy isn’t polite.

(10) a. Sandy is ruder than Ben. $\equiv$ Sandy is rude.
    b. Sandy is ruder than Ben, #but Sandy isn’t rude.

Rett (2008) cites the results of the comparative entailment diagnostic as evidence that negative evaluative adjectives should be considered a subset of the class of minimum endpoint absolute adjectives. Negative evaluative adjectives project scales as in (11).

(11) Rude: $\blacklozenge$(-----------------------------------------------... NEGATIVE EVALUATIVE
    $d_{\text{min}}$ $\Rightarrow$Increasing rudeness $\Rightarrow$

2.3 Obligatory vs. coerced meaning

In this paper, I study the scale structure proposed in (11) from a processing perspective. I examine the relationship between the $d_{\text{min}}$ endpoint posited for minimum endpoint absolute adjectives and the $d_{\text{min}}$ posited for negative evaluative adjectives. The diagnostic employed in this study is the distribution of diminishers, sketched in Section 1 and returned to below.

I will argue that there are two ways in which a $d_{\text{min}}$ can arise. First, $d_{\text{min}}$ can be part of the obligatorily processed, or ‘basic’, meaning of an adjective. Frazier et al. (2008) argue that this is the case for $d_{\text{min}}$ and $d_{\text{max}}$ endpoints of absolute adjectives.

(12) Obligatory Scale Hypothesis: The minimum vs. maximum endpoint ($d_{\text{min}}, d_{\text{max}}$) of the semantic denotation of an adjective is “obligatory processed as part of comprehending the meaning of a phrase or sentence containing a scalar adjective.” (Frazier et al. 2008)
An alternative to basic, obligatorily processed scale endpoints is to allow coercion to create endpoints in response to semantic selectional restrictions of other expressions. I define coercion preliminarily as in (13), modifying the definition proposed by Traxler, Pickering, and McElree (2002).

(13) **Coercion** *(preliminary)*: An operation that converts an expression $\alpha$ to an expression $\alpha'$ compatible with a governing function $\beta$. (adapt. Traxler et al. 2002: 531)

My assumptions about the coercion of scale structure are further elaborated in Section 4, where I propose a final definition of coercion assumed in this paper. I follow Traxler et al. (2002) in assuming that coercion results in an increase in processing cost where there has been an interpolation of semantic structure for which there is no syntactic support.

The difference between obligatorily processed and coerced endpoints requires an online experimental approach. Increased processing cost for maximum endpoint absolute adjectives modified by diminishers was demonstrated by Frazier et al. (2008). They followed previous authors (Rotstein and Winter 2004, Kennedy and McNally 2005) in adopting diminishers (*slightly, a little*) as a diagnostic for $d_{\text{min}}$. Frazier et al. predicted, and found, that adjectives lacking a $d_{\text{min}}$ endpoint (i.e., maximum endpoint absolute adjectives like *straight*) would incur increased processing cost when modified by diminishers. The same cost was not observed for minimum endpoint absolute adjectives. They took these results to support their hypothesis that $d_{\text{min}}$ is obligatorily processed for minimum endpoint absolute adjectives. Where $d_{\text{min}}$ is not part of an adjective’s meaning, the semantic clash between the diminisher and the adjective results in increased processing cost.

I build on this experimental approach, using the distribution and processing of diminishers as a probe into the obligatorily processed vs. coerced nature of the $d_{\text{min}}$ posited for negative evaluative adjectives. I argue that like minimum endpoint absolute adjectives, negative evaluative adjectives project a $d_{\text{min}}$ as part of their basic meaning: $d_{\text{min}}$ is the lower bound on the domain of degrees $D$ associated with an adjective like *rude* and this endpoint is obligatorily processed whenever *rude* is used in a sentence or phrase. Negative evaluative adjectives contrast with dimensional adjectives, whose scales are coerced to include a $d_{\text{min}}$ by diminishers.
3.0 Diminishers as Diagnostics for $d_{\text{min}}$

Paradis (1997) terms the degree modifiers *slightly, a little, a bit, and somewhat* ‘diminishers.’ I focus on *slightly* and *a little.* Paradis (1997), Rotstein and Winter (2004), and Kennedy and McNally (2005) observe that within the domain of absolute adjectives, diminishers are restricted to minimum endpoint absolute adjectives (14). They are infelicitous with maximum endpoint adjectives (15). Although relatively little cross-linguistic work has been done on this topic, Kagan and Alexejenko (2010) report the same pattern in Russian.

(14)  
\begin{align*}
\text{a. The red pipe is slightly bent.} & \quad \text{MINIMUM ENDPOINT} \\
\text{b. The kitchen counter is a little dirty.} & \quad \text{MINIMUM ENDPOINT}
\end{align*}

(15)  
\begin{align*}
\text{a. # The red pipe is slightly straight.} & \quad \text{MAXIMUM ENDPOINT} \\
\text{b. # The kitchen counter is a little clean.} & \quad \text{MAXIMUM ENDPOINT}
\end{align*}

Accounts of this distribution cite the intuition that diminishers denote a range of degrees at the lower end of the scale and are, as a result, only compatible with adjectives whose scales have lower cutoff points naming the lowest possible degree of the property.

(16)  
\begin{align*}
\text{a. “The denotation of} \text{slightly } A \text{ is an interval open at one end (of some arbitrary length),} \\
\text{at the beginning of the denotation }[[A]] \text{ on the scale } S_A\text{” (Rotstein and Winter 2004: 282).}
\end{align*}

\begin{align*}
\text{b. “The point of departure for [diminishers] is a lowest possible degree of a certain} \\
\text{property and a bit up from that zero-position” (Paradis 1997: 69).}
\end{align*}

Kennedy and McNally (2005) capture this asymmetry by requiring the denotations of diminishers to contain function $\min$, which takes a scale as argument and returns the minimal endpoint of an adjectival scale. If the scale does not contain a minimal endpoint, the function is undefined.\(^5\) The ordering relation $\geq_{\text{exceeds to a small degree}}$ expresses ‘exceeds to a small degree’ (Sawada 2011).

(17)  
\begin{align*}
[[\text{slightly/a little}]] &= \lambda_d \exists x. d \geq_{\text{exceeds to a small degree}} \min(g) \land g(d)(x) \\
&= (\text{Kennedy and McNally 2005, Sawada 2011})
\end{align*}

---

\(^5\) Throughout this paper, I will assume that *slightly* and other adverbal degree modifiers compose directly with adjectives, which I take to be expressions of type $<d,\text{et}>$, and not with adjectives that have already composed with the POS morpheme. As such, modifiers diagnose underlying scale structure rather than the standard of comparison associated with the adjective. This assumption is due to Kennedy and McNally (2005) and represents a point of divergence from the analysis presented in Rotstein and Winter (2004) and assumed by Frazier et al. (2008).
A widely reported intuition is that diminishers are felicitous with negative, but not positive, evaluative adjectives (Bolinger 1972; Quirk, Greenbaum, Leech, and Svartvik 1985; Paradis 1997). Given the proposal and evidence for a $d_{\text{min}}$ on the scales of negative evaluative adjectives, the data in (18) initially seem to follow if diminishers diagnose minimum endpoints.

(18) a. Sally thought that the dress Sandy bought was slightly ugly / #pretty.
    b. Jenny said that the waiter was a little rude / #polite.
    c. Martin was slightly nervous / calm before his audition.
    d. Vera seemed a little sad / #happy at school yesterday.

However, a challenge is presented by data like (19), which suggest that diminishers are also felicitous with dimensional adjectives (cf. Kennedy 2007):

(19) a. The North Face tent is slightly big / small.
    b. The road in front of the library is a little wide / narrow.

Before developing an account of these facts, I first present the results of Experiments 1 and 2, two offline rating tasks that compare the felicity of diminishers with absolute and evaluative adjectives (Experiment 1) and dimensional and evaluative adjectives (Experiment 2). The results of these experiments confirm the intuitions presented above that diminishers are licensed for minimum endpoint absolute, negative evaluative, and dimensional adjectives.

3.1 Experiment 1: Negative evaluative vs. minimum endpoint absolute adjectives

Experiment 1 was modeled on the first experiment reported in Frazier et al. (2008), a speeded acceptability task that compared the felicity of diminisher-modified maximum and minimum endpoint absolute adjectives. They found that diminisher-modified minimum endpoint absolute adjectives were rated ‘acceptable’ significantly more often than modified maximum endpoint absolute adjectives. The present Experiment 1 extended the comparison to include positive and negative evaluative adjectives. The goal was to determine whether diminisher-modified negative evaluative and minimum endpoint absolute adjectives were rated felicitous to a similar degree.

Participants: Twenty-four undergraduates at the University of Massachusetts Amherst took part in the study. All participants were native English speakers with normal or corrected vision. They participated to receive extra credit in introductory linguistics courses. Participants did not take part in any of the other studies reported here.
**Items:** Thirty-two sentence sets like (20) and (21) were tested. Form (a) and (c) sentences contain an unmodified adjective ((a) positive evaluative or maximum endpoint absolute; (c) negative evaluative or minimum endpoint absolute). Form (b) and (d) sentences contain the same adjectives modified by diminishers *slightly* or *a little*.

(20)  
a. During the lecture on ecosystems, the graduate students looked *interested*.  
b. *slightly interested*.  
c. *uninterested*.  
d. *slightly uninterested*.

(21)  
a. The camp leader said that the pole we found to hold up the tent was *straight*.  
b. *a little straight*.  
c. *curved*.  
d. *a little curved*.

Half of modified sentences contained *slightly* and the other half contained *a little*. 44 filler sentences of various forms were included. Participants rated sentences sentence on a scale from 1-5, where ‘1’ was ‘completely unacceptable’ and ‘5’ was ‘completely acceptable’. Each participant only saw one sentence from each set of four. This was done to reduce the chances that a subject’s ratings for a modified adjective would be influenced by having encountered the same adjective in unmodified form, or the adjective’s modified or unmodified antonym, earlier in the session.

Given the assumptions made about the semantics of absolute adjectives and diminishers, and the \( d_{\text{min}} \) hypothesized for negative evaluative adjectives, type (d) sentences (modified negative evaluative and minimum endpoint absolute adjectives) were predicted to receive higher felicity ratings than type (b) sentences (modified positive evaluative and maximum endpoint absolute adjectives). Unmodified type (a) and (c) sentences were used as controls and were predicted to receive uniformly high ratings.

**Results:** FIGURE B presents the average ratings by sentence type (MOD = diminisher modified).

---

6 Minimum and maximum standard absolute adjectives used were a subset of those forms used by Frazier et al. (2008) and correspond to the adjectives so classified by Rotstein and Winter (2004), Kennedy and McNally (2005), and Kennedy (2007). A full list of experimental items from Experiments 1-4 is given in Appendix C.
FIGURE B  Mean ratings for absolute (MINABS, MAXABS) vs. evaluative (POS EVAL, NEG EVAL) adjectives

<table>
<thead>
<tr>
<th>Absolute</th>
<th>MINABS</th>
<th>MOD MINABS</th>
<th>MAXABS</th>
<th>MOD MAXABS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.47</td>
<td>4.31</td>
<td>4.60</td>
<td>3.25</td>
</tr>
<tr>
<td>Penalty:</td>
<td>-0.16</td>
<td></td>
<td>Penalty:</td>
<td>-1.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluative</th>
<th>NEG EVAL</th>
<th>MOD NEG EVAL</th>
<th>POS EVAL</th>
<th>MOD POS EVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.59</td>
<td>4.32</td>
<td>4.63</td>
<td>3.58</td>
</tr>
<tr>
<td>Penalty:</td>
<td>-0.27</td>
<td></td>
<td>Penalty:</td>
<td>-1.05</td>
</tr>
</tbody>
</table>

Ratings were analyzed with Linear Mixed Effects Models. The fixed effects were bare vs. modified status, and adjective polarity and category (MINABS/NEG EVAL vs. MAXABS/POS EVAL). Subject and item were used as random effects. Individual models were constructed for each category of adjective (absolute and evaluative).

The base line condition for the first (absolute) model was a bare MINABS adjective. Against this base line, ratings for MOD MINABS were compared, as well as ratings for MAXABS and MOD MAXABS. There was a significant interaction between MINABS vs. MAXABS adjective type in relation to bare vs. modified status: pMCMC = 0.0001. The difference between bare MINABS and MOD MINABS was not significant (pMCMC = 0.226).

The base line condition for the second (evaluative) model was a bare NEG EVAL adjective. Against this base line, ratings for MOD NEG EVAL were compared, as well as ratings for POS EVAL and MOD POS EVAL. There was a significant interaction between NEG EVAL vs. POS EVAL adjective type in relation to bare vs. modified status (pMCMC = 0.0001). The difference between bare NEG EVAL and MOD NEG EVAL was significant (pMCMC = 0.019). This significant difference appears to be due to NEG EVAL adjectives incurring a greater penalty given the bare form being rated higher in comparison with bare MINABS adjectives (4.59 vs. 4.47). Crucially, the ratings given to MOD NEG EVAL (slightly ugly) and MOD MINABS (slightly bent) were basically equivalent (4.32 vs. 4.31).

A third model was constructed to determine whether the two categories of adjective (evaluative and absolute) diverged from each other with respect to the availability of diminishers. In this model, the random effects were subject and item. The fixed effects were adjective category (absolute vs. evaluative), bare vs. modified status, and adjective polarity (MIN/NEG vs. MAX/POS). The base line condition was a bare MINABS adjective. The interaction was not
significant (pMCMC = 0.0996), demonstrating that the two types of adjectives (absolute vs. evaluative) did not diverge significantly with respect to the (in)felicity of diminishers.

The results for absolute adjectives recapitulate the ratings reported by Frazier et al. (2008) for diminisher-modified absolute adjectives. The large penalties incurred by maximum endpoint absolute and positive evaluative adjectives reflect the predicted infelicity between these adjectives and diminishers. By contrast, modified minimum endpoint absolute and negative evaluative adjectives incurred small penalties. As noted above, while the penalty incurred by modified negative evaluative adjectives was significant and the penalty for modified minimum endpoint absolute adjectives was not, the difference was due to the overall lower ratings given to bare minimum endpoint absolute adjectives in comparison with bare negative evaluative adjectives. The source of this disparity is unclear. However, the crucial observation was the basic equivalence between the ratings given to modified forms of both adjectives. I take this equivalence as evidence that negative evaluative and minimum endpoint absolute adjectives are similar in some way that is relevant to the licensing of diminishers. Given our assumptions about the semantics of diminishers, this is an initial, although ultimately inconclusive, piece of evidence that both types of adjectives have $d_{\text{min}}$ endpoints.

### 3.2 Experiment 2: Comparing Negative Evaluative and Dimensional Adjectives

The goal of Experiment 2 was to determine whether diminisher-modified negative evaluative and dimensional adjectives were rated felicitous to a similar degree.

**Participants:** Thirty-six undergraduates at the University of Massachusetts Amherst took part in the study. Participants in this study also completed the paraphrase questionnaire reported as Experiment 3.

**Items:** Items were the same in number and conditions as in Experiment 1. The only difference was that sentence sets with dimensional adjectives were balanced across only two conditions (modified vs. unmodified) due to the smaller numbers of purely dimensional adjectives in the English lexicon. Sentences with evaluative adjectives were imported (with minor changes) from Experiment 1.

(22) a. During the lecture on ecosystems, the graduate students looked *interested.*  
   b. …*slightly interested.*  
   c. …*uninterested.*  
   d. …*slightly uninterested.*
(23) a. Marsha said that the hallway in her apartment building was **narrow**.
b. …**slightly narrow**.

*Results:* The mean ratings from Experiment 2 are presented in **Figure C.**

<table>
<thead>
<tr>
<th></th>
<th><strong>NEG</strong></th>
<th><strong>MOD NEG</strong></th>
<th><strong>POS</strong></th>
<th><strong>MOD POS</strong></th>
</tr>
</thead>
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<tr>
<td><strong>Evaluative</strong></td>
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<td>4.19</td>
<td>4.60</td>
<td>3.71</td>
</tr>
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</tr>
<tr>
<td><strong>Dimensional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DIM</strong></td>
<td>4.41</td>
<td>4.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Penalty:</strong></td>
<td>-0.23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We will look first at negative vs. positive evaluative adjectives. Ratings were again analyzed with a Linear Mixed Effects Model. The fixed effects were bare vs. modified status and adjective type (positive vs. negative evaluative). Subjects and items were used as random effects. Base line conditions were negative evaluative adjectives and unmodified adjectives. The results for positive evaluative adjectives and diminisher-modified adjectives were compared against these results. The interaction was fully significant (pMCMC = 0.0028), demonstrating that ratings of modified positive evaluative adjectives were lower than predicted given ratings assigned to other conditions.

A second Linear Mixed Effects Model was composed to compare **NEG** and **DIM** adjectives. The fixed effects were bare vs. modified status, and adjective type (negative evaluative vs. dimensional). Subjects and items were used as random intercepts. Base line conditions were bare negative evaluative adjectives. The interaction was significant (pMCMC = 0.03). However, significance of the interaction appears to be due to the difference in penalties incurred by dimensional and negative evaluative adjectives (-0.47 vs. -0.23). The mean ratings assigned to **MOD NEG** and **MOD DIM** sentences were basically equivalent (4.19, 4.18). The difference in penalties can be attributed to bare dimensional adjectives receiving a lower baseline rating than bare negative evaluative adjectives (4.41 vs. 4.66).

The near equivalence of ratings for diminisher-modified negative evaluative and dimensional adjectives is the most important result from Experiment 2. Putting the results of Experiment 2 together with Experiment 1, we find that diminishers are judged to be felicitous...
modifiers of minimum endpoint absolute, negative evaluative, and dimensional adjectives. The results for minimum endpoint absolute and negative evaluative adjectives agree with the entailment test reported in Section 2, which also suggested that both types of adjectives have scales with $d_{\text{min}}$ endpoints. By contrast, the entailment test suggested that dimensional adjectives lack a $d_{\text{min}}$ endpoint, contra the results of Experiment 2. This conflict is resolved in Section 4 by arguing that $d_{\text{min}}$ arises for dimensional adjectives from coercion.

4.0 Obligatorily Processed vs. Coerced $d_{\text{min}}$

Given our assumed semantics for diminisers, we predicted that adjectives judged to be felicitous with diminishers must have $d_{\text{min}}$ on their scales. Adjective classes that received high ratings with diminishers were negative evaluative adjectives (Experiment 1, Experiment 2), minimum endpoint absolute adjectives (Experiment 1), and dimensional adjectives (Experiment 2). There are two questions unanswered by the results of these experiments.

The first question arises from Experiment 1. While both negative evaluative and minimum endpoint absolute adjectives received high ratings when modified by diminishers, this result is, at best, a suggestion that both types of adjectives have a $d_{\text{min}}$ on their scales at some point. However, Experiment 1 does not give any indication as to whether negative evaluative adjectives’ $d_{\text{min}}$ is part of the ‘obligatorily processed’ meaning of negative evaluative adjectives.

A similar question arises from Experiment 2. The results of Experiment 2 suggested that dimensional adjectives have a $d_{\text{min}}$ endpoint on their scales. As discussed above, this result contradicts the results of the entailment from the comparative test discussed in Section 2. In response to this contradiction in results, we could discard diminishers from our arsenal of scale structural diagnostics due to its apparent ‘false positive’ result for dimensional adjectives (Kennedy, p.c.). A second response – and the one that will be adopted – is to maintain our account of the semantics of diminishers but argue that the scales of dimensional adjectives gain a $d_{\text{min}}$ endpoint rather than contain a $d_{\text{min}}$ as part of their obligatorily processed meaning.

To summarize:

(24) a. Is the $d_{\text{min}}$ that diminishers apparently access upon composition with negative evaluative adjectives an obligatorily processed part of their meaning or does it arise through some other process (i.e., coercion)?
b. Is the $d_{\text{min}}$ that diminishers apparently access upon composition with dimensional adjectives an obligatorily processed part of their meaning, or does it arise through some other process (i.e., coercion)?

An offline rating task is not a suitable experimental approach if our goal is to address these questions. The offline ratings from Experiments 1 and 2 are informative only insofar as they give an indication about what combinations of diminishers and adjectives are licensed when the full battery of processing and inferential mechanisms has been employed. It is known that certain types of semantic and pragmatic operations are not employed in the course of normal speech signal processing. Breheny, Katsos, and Williams (2006) and Chierchia, Frazier, and Clifton (2009) discuss the calculation of Gricean pragmatic scalar implicatures in these terms. Breheny et al. argue that calculation of such implicatures (e.g., *some of the Xs* entails *not all of the Xs*) are drawn only when required by context and are not calculated obligatorily.

I will argue that the high ratings of diminisher-modified dimensional adjectives reported in Experiment 2 are due to coercion of a $d_{\text{min}}$ endpoint. Similar to the inferential processes discussed by Breheny et al. and Chierchia et al., calculation of $d_{\text{min}}$ endpoint is not an operation normally employed in the course of processing a dimensional adjective. A $d_{\text{min}}$ is only coerced for these adjectives when required by the grammatical environment. In the present case, I argue that diminishers coerce a $d_{\text{min}}$ for dimensional adjectives. By contrast, the $d_{\text{min}}$ of a negative evaluative adjective is part of its obligatorily processed meaning: it is calculated by default no matter the grammatical context.

In Section 4.1, I set up my basic assumptions about the semantics, timing, and associated processing costs of coercion as it applies to diminisher-modified dimensional adjectives. In Section 4.2, I present the results of an offline questionnaire (Experiment 3) that demonstrates that multiple semantic interpretations are available to diminisher-modified dimensional adjectives, which I argue is a sign of coercion. In Section 4.3, I present the results of an online self-paced reading study (Experiment 4). This study demonstrates that diminisher-modified dimensional adjectives incur processing costs (longer reading times) in comparison with modified negative evaluative adjectives. The results of Experiment 4 provide empirical support for the theory of coercion developed below.
4.1 Account of coercion

Paradis (1997) observed that diminisher-modified dimensional adjectives have a meaning distinct from diminisher-modified negative evaluative adjectives:

In combination with neutral [dimensional – EBA, emphasis added] adjectives like long or short, diminishers tend to imply excess, i.e., a bit long means ‘on the verge of being too long’ or simple ‘a bit too long,’ whereas together with negatively loaded adjectives [negative evaluative adjectives – EBA, emphasis added] they have the effect of toning down the negativity of the excess. (Paradis 1997: 76)

To this, I add that the ‘effect of toning down the negativity of the excess’ is observed for minimum endpoint absolute adjectives as well as for negative evaluative adjectives. I term this reading the SMALLDEG(REE) reading: the subject exceeds the standard of an adjective to a small degree. The standard can be implicit or, in the case of negative evaluative adjectives, named explicitly with a for-phrase (e.g., Martin was slightly nervous for a seasoned actor).^7

(25) a. The red pipe is slightly bent. **MINIMUM ENDPOINT ABSOLUTE**
   SMALLDEG = The pipe is bent to a degree slightly exceeding a minimal degree (0°)

b. Martin was slightly nervous before his audition. **NEGATIVE EVALUATIVE**
   SMALLDEG = Martin was nervous to a degree slightly exceeding the standard of nervousness in the context (e.g., compared to other people at the audition).

As Paradis points out, diminisher-modifier dimensional adjectives receive an interpretation distinct from modified negative evaluative (and minimum endpoint) adjectives. In addition to the SMALLDEG reading (not recognized by Paradis for dimensional adjectives), there exists the reading I will term TOOMUCH. Under the TOOMUCH reading, the subject exceeds a degree corresponding to the maximal degree of a property that the subject can express and still be appropriate for some use or purpose. The use of purpose can be left implicit or named explicitly with a to-infinitival.^8 This reading is also reported by Kagan and Alexejenko (2010) for Russian

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^7 A for-phrase names a contextual standard of comparison. Kennedy (2007) argues that given the fixed, ‘absolute’ nature of the standards/endpoints of absolute adjectives, they are not amenable to being interpreted with contextual standards of comparison. See Footnote 3 for further discussion of this issue.

^8 One further interpretation of diminisher-modified adjectives that I will not address here is the ‘ironic understatement’ or litotes usage of diminishers, where slightly Adj is understood to mean very Adj. This reading appears to be able for all types of adjectives, including maximum endpoint absolute and positive evaluative adjectives, which are usually not felicitous with diminishers (Experiment 1). For discussion of processing of ironic understatement for (not) exactly, see Majewski (2007).
dimensional adjectives modified by a diminisher: they term the standard contributed by the to-infinitival a ‘functional’ standard.

(26) The North Face tent was slightly big.  
   Dimen\makebox[0pt]{sio\makebox[0pt]{na\makebox[0pt]{l}}\makebox[0pt]{}onal}  
   a. TOO\makebox[0pt]{MUCH} ≈ The North Face tent was slightly big (to take on a long trail.)  
   b. SMALLDEG ≈ The North Face tent was slightly big (for a pup tent.)

If the TOO\makebox[0pt]{MUCH} reading is even available for negative evaluative and minimum endpoint absolute adjectives, it is strongly dispreferred (see Experiment 3). I argue that negative evaluative and dimensional adjectives only receive the SMALLDEG interpretation because this is the meaning that results from a diminisher accessing the $d_{\text{min}}$ already present on these adjectives’ scales: $d_{\text{min}}$ corresponds to the minimal standard that an object must meet before it can ‘count’ as rude, bent, etc. Turning to dimensional adjectives, both the SMALLDEG and TOO\makebox[0pt]{MUCH} reading arise due to a single type of scale coercion that creates a $d_{\text{min}}$ endpoint. The SMALLDEG reading again arises where $d_{\text{min}}$ corresponds to a standard of comparison appropriate for the adjective and subject (i.e., a for-phrase). The TOO\makebox[0pt]{MUCH} reading arises where $d_{\text{min}}$ corresponds to the maximal degree of the adjective that is required or permitted for some purpose (i.e., a to-infinitival).\footnote{The relation between modifiers and ‘undesirable excess’ is also reduced by Paradis (1997) to the requirement of particular modifiers to describe “the potential differentiability, [or] difference of degree between an item described and some reference point” (1997: 75). Paradis makes this point specifically for the modifier rather, citing its similarity in function to diminishers: it’s rather short can be paraphrased as it’s too short. The use of the term ‘excess’ should not be taken to mean that the semantics of diminishers requires them to compose with adjectives that express undesirable excess or inherently negative properties. This view appears in early discussions of diminishers, including Quirk et al., who claim that diminishers are only licensed for “adjectives with ‘unfavorable’ meanings, and with an implication of ‘more than wanted’” (Quirk et al. 1985: 447). This claim overlooks the use of diminishers under the SMALLDEG reading. I argue that the relation between diminishers and undesirable excess arises indirectly, as a result of coercion giving rise to the TOO\makebox[0pt]{MUCH} interpretation, where $d_{\text{min}}$ is valued by a to-infinitival.}

The preliminary definition of coercion that I cited in Section 2.3 is repeated below:

(27) \textit{Coercion (preliminary):} An operation that converts an expression $\alpha$ to an expression $\alpha'$ compatible with a governing function $\beta$.  
   (adapt. Traxler et al. 2002: 531)

The specific ‘conversion’ process that I assume is the interpolation of semantic structure between the adjective and the diminisher, rather than type shifting. There is no syntactic or morphological structure supporting the semantic material interpreted between the adjective and diminisher. The semantic structure that I posit has the denotation below:

\begin{center}
\textbf{\textit{Lorem ipsum dolor sit amet, consectetur adipiscing elit.}}
\end{center}
MIN-LIMIT composes with an adjective $g$ of type $<d,et>$ and returns an expression of type $<d,et>$ which is true iff $g$ holds to degree $d$ of individual $x$, AND $d$ exceeds the degree returned by $\text{STND}(R)(g)$.

MIN-LIMIT returns an adjective $g'$ of the same semantic type ($<d,et>$) as is adjective $g$ that is input. The only difference between $g$ and $g'$ is that all degrees on the scale of $g'$ exceed the degree returned by the function $[\text{STND}(R)(g)]$. This degree is equivalent in function to a $d_{\text{min}}$ endpoint and the scale of $g'$ is equivalent to the scale of a minimum endpoint absolute adjective. The process of composition of an open scale adjective with MIN-LIMIT is represented graphically below.

\begin{align*}
\text{(28)} & \quad [\text{MIN-LIMIT}] = \lambda g_{d,et} \lambda d \lambda x . g(d)(x) \land d > \text{STND}(R)(g) \\
\text{MIN-LIMIT} & \text{ composes with an adjective } g \text{ of type } <d,et> \text{ and returns an expression of type } <d,et> \text{ which is true iff } g \text{ holds to degree } d \text{ of individual } x, \text{ AND } d \text{ exceeds the degree returned by } \text{STND}(R)(g).
\end{align*}

The value of the degree returned by $[\text{STND}(R)(g)]$ is a standard of comparison for an adjective $g$. $R$ is a contextually determined domain restrictor property (Fleisher 2011). The degree returned by this function is either a contextual standard of comparison (leading to the SMALLDEG reading) or a standard of comparison naming the maximal degree of the adjective that is required or permitted for some purpose (leading to the TOO MUCH reading). Fleisher proposed $R$ in order to account for the same range of readings as they are found in the unrelated degree constructions (e.g., *Middlemarch* is long for a book vs. *Middlemarch* is a long book to assign). I summarize Fleisher’s discussion of these constructions and relate them to the semantics of diminisher-modified adjectives in Section 5.

The denotation of MIN-LIMIT is modeled very closely on a proposal by Rett (2008) for EVAL, a null degree morpheme that restricts the scale of an adjective to degrees exceeding a contextual standard of comparison. Rett does not include to-infinitivals or the TOO MUCH reading in her account and does not explicitly invoke coercion as the source of EVAL. I summarize Rett’s proposal in Section 5 and relate it to the account of MIN-LIMIT.

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10 A point for future study is whether the scale restriction accomplished by MIN-LIMIT and EVAL is the function of overt degree morphology (e.g., more/er, less, as) more generally. A proposal along these lines is made by Grano and Kennedy (2010), building on Faller (2000), Svenonius and Kennedy (2006), and Kennedy and Levin (2008). They posit that an adjective like *heavy* is a function from individuals to degrees of weight “along an unbounded scale of weights.” Similarly, a phrase like *heavier than Kim* is a function from individuals to degrees, where the degrees occupy “the subpart of the weight scale that begins with Kim’s weight” (Grano and Kennedy 2010: 18).
Given this proposal for scale coercion, two predictions are made. First, where coercion with \textsc{min-limit} creates a $d_{\text{min}}$, either the \textsc{smalldeg} or \textsc{tocomuch} interpretation should be possible, given different values of $R$. In the preceding discussion, I claimed that both interpretations are readily available for dimensional adjectives while the \textsc{smalldeg} interpretation is the (much) more readily – or, the only – available interpretation of diminisher-modified negative evaluative and minimum endpoint absolute adjectives. These intuitions are supported with the results of a questionnaire that examined possible and preferred interpretations of diminisher-modified adjectives (Experiment 3).

Second, where coercion by \textsc{min-limit} is necessary for the creation of a $d_{\text{min}}$ endpoint, we expect there to be an associated processing cost. I follow Traxler et al.’s (2002) claim that the interpolation of semantic structure leads to an increase in processing, or computational, load. Frazier et al. note that the Obligatory Scale Hypothesis alone does not predict the exact locus of the increase in processing load, beyond predicting it to occur during the processing of the sentence itself rather than in some “post-sentence assessment computation” (2008: 21). Adoption of the account of coercion developed above allows us to make more specific predictions. I follow Piñango et al. (1999) in assuming an interpolation, or compositional, approach to coercion. Piñango et al. develop their account of coercion in the domain of aspectual coercion from point-action activities (e.g., \textit{jump} (\textit{once})) to repeated activities (e.g., \textit{(repeatedly) jump}). Coercion is triggered by temporal phrases requiring a repeated activity interpretation. Piñango et al. argue that as with syntactic processing, semantic processing first operates locally. In order for a sentence to be well-formed, individual phrases must first be well-formed. Coercion is, as a result, both mandatory and local.

Putting this assumption about coercion together with our preliminary definition, we get:

(30) \textit{Coercion (final):} An operation applying mandatorily and locally to convert an expression $\alpha$ to an expression $\alpha'$ compatible with a governing function $\beta$.

We predict, then, that any increase in processing cost (e.g., increase in reading times) due to scale coercion will become evident soon after the processor encounters the adjective modified by the diminisher.
4.2 Experiment 3: Preferred paraphrase questionnaire evidence

Participants chose between paraphrases of sentences containing diminisher-modified dimensional, negative evaluative, and positive evaluative adjectives. The two provided paraphrases correspond to the contributions of diminishers discussed by Paradis (1997), which I labeled SMALLDEG and TOO MUCH (Section 4.1). The questionnaire was designed to examine more closely participants’ intuitions about preferred interpretations of sentences containing diminishers and dimensional, negative evaluative, and positive evaluative adjectives.

4.2.1 Method

Participants: A paper and pencil exit poll given to all participants (n=36) after Experiment 2.

Items: Three forms of the exit poll were distributed randomly among subjects. Each form of the poll contained six sentences with diminisher-modified adjectives taken from Experiment 2. Only one member of an antonymic pair of adjectives appeared on each form of the poll. Each sentence was followed by two possible paraphrases as in (31). Paraphrase (a) represents the SMALL DEG reading while (b) represents the TOO MUCH reading.

(31) Christopher read many reviews that said that the North Face tent was slightly big.

How would you paraphrase this sentence?

a. SMALLDEG: The North Face tent is big, but not extremely so.

b. TOO MUCH: The tent is excessively/too big.

If dimensional adjectives require coercion in order to license diminishers, we expect to observe a split in preference for the SMALLDEG vs. TOO MUCH paraphrases, with the response determined by the situation described by the sentence, the participant’s own biases, etc. By contrast, if negative evaluative adjectives’ scales are fundamentally compatible with diminishers due to their $d_{\text{min}}$ endpoint, we predict that the SMALLDEG reading will be strongly preferred for these adjectives. Even if the adjective denotes a property (e.g., rude or ugly) that may not be desirable in any context – and, hence, ‘inherently excessive’ in some sense – the diminisher selects the degrees that minimally exceed the scale’s $d_{\text{min}}$ endpoint, where $d_{\text{min}}$ names the minimal degree of the property that an individual must exceed in order to ‘count’ as expressing that property in that context. A TOO MUCH reading – where degrees exceeding a point explicitly or implicitly named by a infinitival to-phrase – is predicted to incur extra cost due to coercion of a new $d_{\text{min}}$ and, as a result, be avoided.
4.2.2 Results and Discussion

The results of the exit poll are presented in Figure D. Where participants were undecided between the two paraphrases, both responses were added. Note that indecision occurred most frequently with dimensional adjectives and least frequently with negative evaluative adjectives.

**Figure D Responses by adjective type**

<table>
<thead>
<tr>
<th>Adjective</th>
<th>NEG EVAL</th>
<th>POS EVAL</th>
<th>DIMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOO MUCH</td>
<td>4 (6.7%)</td>
<td>11 (20.8%)</td>
<td>47 (39.4%)</td>
</tr>
<tr>
<td>SMALL DEG</td>
<td>54 (90%)</td>
<td>37 (69.8%)</td>
<td>70 (58.8%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (3.3%)</td>
<td>5 (9.4%)</td>
<td>2 (1.7%)</td>
</tr>
</tbody>
</table>

Participants overwhelmingly preferred the SMALL DEG paraphrase for negative evaluative adjectives (90%). By contrast, participants’ responses for dimensional adjectives were split: the TOO MUCH paraphrase was preferred 39.4% of the time, while the SMALL DEG paraphrase was preferred 58.8% of the time. In addition, many participants were ambivalent between the two paraphrases: the total number of responses for dimensional adjectives was greater than for negative evaluative adjectives (119 vs. 62).

The variation and flexibility of paraphrases of dimensional adjectives is consistent with an analysis in which these adjectives require scale coercion of a $d_{min}$ endpoint due to the semantic selectional restrictions of diminishers. The absence of such variation for negative evaluative adjectives is likewise consistent with the proposal that these adjectives include $d_{min}$ as part of their basic meaning: diminishers compose with negative evaluative adjectives to return degrees exceeding the $d_{min}$ endpoint (i.e., the SMALL DEG reading).

The proportions of paraphrases for dimensional adjectives (majority of 58.8% preference for SMALL DEG) also presents a piece of counterevidence to Paradis’ assertion that diminishers with dimensional adjectives “tend to imply excess” rather than “toning down the negativity of the excess” (Paradis 1997: 76). While the TOO MUCH reading is relatively more prevalent for dimensional adjectives, the SMALL DEG reading was accepted more frequently. I have argued that both readings are essentially the same: both readings refer to a point $d_{min}$. The nature of $d_{min}$ (contextual standard of comparison vs. to-infinitival) produces both readings.

4.3 Experiment 4: Self-paced reading evidence

The Obligatory Scale Hypothesis was proposed by Frazier et al. (2008) for absolute adjectives in part on the basis of an online, eye-tracking experiment that compared diminisher-modified
maximum and minimum endpoint absolute adjectives. They found that the total length of fixation on regions following the critical region was significantly greater for modified maximum endpoint adjectives as compared to minimum endpoint adjectives. They concluded that the disruption in reading for semantically incompatible modifier-adjective combinations supported the Obligatory Scale Hypothesis: endpoints on the scales of absolute adjectives were calculated obligatorily and not only when required by context. When the value of the obligatorily processed endpoint clashed with other elements in the sentence (e.g., a diminisher), processing was disrupted.

The present Experiment 4 seeks to find comparable online differences in the processing of negative evaluative and dimensional adjectives. As previously discussed, dimensional adjectives were hypothesized to undergo coercion of a $d_{\text{min}}$ by diminishers. Slower processing was predicted for this condition. If processing were found to be more rapid for diminisher-modified negative evaluative adjectives, this could be taken as evidence that the $d_{\text{min}}$ on these adjectives’ scale is obligatorily processed like the $d_{\text{min}}$ of minimum endpoint absolute adjectives.

A self-paced reading experiment compared reading times for diminisher-modified negative evaluative and dimensional adjectives with reading times for the same adjectives in a control condition (the too...to degree construction). The too...to condition was selected as the control in large part because a to-infinitival is a felicitous continuation for an adjective modified by slightly or headed by too. Thus, the too...to condition served as the control condition for both adjective types such that word length frequency effects could be isolated and separated from slowdown due to coercion.

4.3.1 Method

Participants: Thirty-six undergraduates at the University of Massachusetts Amherst took part in the study. All participants were native English speakers with normal or corrected vision. They participated to receive extra credit in introductory linguistics courses. Participants in this study did not participate in any of the other experiments reported here.

Items: Twenty-four contexts and sentence sets like (32) were tested. Items were constructed and counterbalanced across four conditions: slightly vs. too, negative evaluative vs. dimensional adjective. Sentences were presented in the moving window format. All sentences in each set were kept constant except for the critical region (bold). A to-infinitival phrase always comprised the continuation region. Participants only saw one sentence from each set. 48 filler
sentences were also presented in the moving window format. The set of filler sentences included 24 sentences minimally changed from (32) such that the continuation region was a so-clause rather than a to-infinitival (e.g., the film was slightly boring so she decided to show another one). This was done so that participants would see the same number of slightly adj. and too adj. sentences.

(32) Context: Mr. Richards suggested that | Ms. Smith show a film on the Massachusetts railway system | to her students during civic studies class.

a. Ms. Smith thought that | the film was | slightly boring | to interest | her students, | so showed | another film.
b. Ms. Smith thought that | the film was | slightly long | to interest | her students, | so she showed | another film.
c. Ms. Smith thought that | the film was | too boring | to interest | her students, | so she showed | another film.
d. Ms. Smith thought that | the film was | too long | to interest | her students, | so she showed | another film.

Reading times for the critical, continuation, and post-continuation regions were collected. On average, English evaluative adjectives are longer and (impressionistically) less frequently used than dimensional adjectives. Thus, if a slowdown were observed for diminisher-modified dimensional adjectives, it could be more subtle than the length and frequency-induced slowdown incurred by negative evaluative adjectives. We expected lexical effects to trigger a slowdown on the critical region while semantic coercion, if found, was predicted to trigger slower reading times in the continuation regions. The delay to the continuation region is observed by McElree et al. (2001) for entity-to-event coercion and is discussed in general terms by Clifton, Staub, and Rayner (2007). In addition, the continuation region was the locus of the greatest increase in reading time in the Frazier et al. (2008) study.

The need to keep the continuation constant in order to facilitate reading time comparison across all four conditions was one factor that motivated the use of the too...to condition as the control condition: a to-infinitival is a felicitous continuation for an adjective modified by slightly or headed by too. In addition, the use of a to-infinitival continuation gave a maximal ‘advantage’ to dimensional adjectives. As discussed in Experiment 3 above, the implicit too paraphrase was preferred for diminisher-modified dimensional adjectives much more frequently than for negative evaluative adjectives. If a slowdown is observed for the slightly...to condition for
dimensional adjectives, then we can rule out dispreferred semantic interpretation as the source of this slowdown.

Putting these observations together, if diminishers coerce the scales of dimensional adjectives, then the difference between the slightly and too conditions for dimensional adjectives should be greater than the difference between the slightly and too conditions for negative evaluative adjectives. Given that subtraction of the control (too) condition should remove lexical effects, the difference remaining between the two adjective types should equal the time required for coercion.

(33)  *Predicted Interaction in the Continuation Region:*
      (slightly DIMEN – too DIMEN) > (slightly NEGÉVAL – too NEGÉVAL)

### 4.3.2 Results and Discussion

Significant differences were restricted to the continuation region. However, the difference between *Sl. Dimen* and *Too Dimen* (76.4ms) was twice as large as the difference between *Sl. NegEval* and *Too NegEval* (31.5ms). The mean reading times (ms) for the continuation region are reported in **Figure E**. The observed differences between conditions are shown in (34).

**Figure E**  **Mean Reading Times (ms) in the Continuation Region**

<table>
<thead>
<tr>
<th>Condition</th>
<th>SL. NEGÉVAL</th>
<th>SL. DIMEN</th>
<th>TOO NEGÉVAL</th>
<th>TOO DIMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>548.7</td>
<td>548.9</td>
<td>517.2</td>
<td>472.5</td>
</tr>
</tbody>
</table>

(34)  (slightly DIMEN – too DIMEN) > (slightly NEGÉVAL – too NEGÉVAL)  

76.3 > 31.5

The increase in reading times can be phrased in terms of an interaction between the factors of adjective type and modified vs. unmodified status. A Linear Mixed Effects Model was used. Fixed effects were adjective type (dimensional vs. negative evaluative) and modification type (too vs. slightly). Random effects were subjects and items. The base line condition was dimensional adjectives modified by too. The interaction of adjective type and modification type relative to this base line was found to be fully significant (pMCMC = 0.0346). In prose, the
increase observed for the SL DIMEN condition was significantly larger than predicted given the model.\textsuperscript{11}

The results of Experiment 4 do not directly compare the rates of processing of minimum endpoint absolute adjectives and negative evaluative adjectives. However, the results do demonstrate that additional processing costs are incurred by dimensional adjectives modified by diminishers, while comparable costs are not found for negative evaluative adjectives. The types of costs incurred recall costs due to coercion observed for other domains discussed above (Piñango et al. 1999, Traxler et al. 2002, McElree et al. 2001) as well as the findings of Frazier et al. (2008).\textsuperscript{12}

5.0 Conclusions and Future Work

The scale structure that I have proposed for negative evaluative adjectives is repeated below. The minimal endpoint $d_{\text{min}}$ corresponds to the contextual standard of rude. This structure contrasts with the scales of dimensional adjectives (tall), which lack minimal or maximal endpoints. The structure is the same as proposed for minimal endpoint absolute adjectives (bent) by Kennedy and McNally (2005).

\begin{align*}
\text{a. Rude:} & \quad \bullet \langle \underbrace{\text{---}}_{d_{\text{min}}} \text{---------} \cdots \text{NEGATIVE EVALUATIVE} \rangle \quad \rightarrow \text{Increasing rudeness} \rightarrow \\
\text{b. Tall:} & \quad \cdots \underbrace{\text{------------}}_{\text{RELATIVE}} \cdots \quad \rightarrow \text{Increasing height} \rightarrow \\
\text{c. Bent:} & \quad \bullet \langle \underbrace{\text{---}}_{d_{\text{min}} = 0 \text{ degrees of bend}} \text{---------} \cdots \text{MINIMAL ENDPOINT} \rangle \quad \rightarrow \text{Increasing bend} \rightarrow 
\end{align*}

Experiments 1 and 2 demonstrated that minimum endpoint absolute, negative evaluative, and dimensional adjectives were judged felicitous with diminishers, which I assume, following

\begin{align*}
(35) & \quad \text{a. Rude:} \quad \bullet \langle \underbrace{\text{---}}_{d_{\text{min}}} \text{---------} \cdots \text{NEGATIVE EVALUATIVE} \rangle \quad \rightarrow \text{Increasing rudeness} \rightarrow \\
& \quad \text{b. Tall:} \quad \cdots \underbrace{\text{------------}}_{\text{RELATIVE}} \cdots \quad \rightarrow \text{Increasing height} \rightarrow \\
& \quad \text{c. Bent:} \quad \bullet \langle \underbrace{\text{---}}_{d_{\text{min}} = 0 \text{ degrees of bend}} \text{---------} \cdots \text{MINIMAL ENDPOINT} \rangle \quad \rightarrow \text{Increasing bend} \rightarrow 
\end{align*}

\begin{align*}
\text{Experiments 1 and 2 demonstrated that minimum endpoint absolute, negative evaluative, and dimensional adjectives were judged felicitous with diminishers, which I assume, following}
\end{align*}

\begin{align*}
\text{11} \quad \text{The data were pruned to eliminate reading times below 200 ms and over 1500 ms. Elimination of improbably short and long reading times resulted in a reduction of 12 responses out of a total of 864 (or, 1.39%).}
\text{12} \quad \text{The semantics we adopted for diminishers is not the only semantics that has been proposed. Sawada (2011) presents the semantics in (i) in his discussion of Japanese diminishers chotto and sukoshi. In prose, (i) states that diminishers are felicitous for any adjective provided that there exists a degree $d$ that exceeds STND(g).}
\end{align*}

\begin{align*}
(\text{i}) & \quad \begin{bmatrix} \text{chotto/sukoshi} \end{bmatrix} = \lambda g \exists d \exists x \exists d \cdot d > \text{STND}(g) \land g(d)(x) \quad \text{(adapt. Sawada 2011)}
\end{align*}

Sawada predicts that diminishers will compose felicitously with dimensional adjectives that lack a $d_{\text{min}}$ on their scales. This prediction is borne out in Japanese and in English (Experiment 2). However, Sawada’s proposal predicts that coercion is not required by diminishers for dimensional adjectives: STND applies equally well to all adjective types. Thus, Sawada’s proposal incorrectly predicts that there will be no delay in processing – or variation in semantic interpretation – is predicted for dimensional adjectives.
Rotstein and Winter (2004) and Kennedy and McNally (2005), to only compose with adjectives for which a $d_{\text{min}}$ is available. Two questions arose from the offline experiments, repeated below:

\[(36)\]  

a. Is the $d_{\text{min}}$ that diminishers apparently access upon composition with **negative evaluative adjectives** an obligatorily processed part of their meaning or does it arise through some other process (i.e., coercion, deliberate reasoning)?

b. Is the $d_{\text{min}}$ that diminishers apparently access upon composition with **dimensional adjectives** an obligatorily processed part of their meaning, or does it arise through some other process (i.e., coercion, deliberate reasoning)?

Offline rating tasks could not differentiate between felicity of diminisher-adjective combinations due to semantic compatibility (i.e., a scale with a $d_{\text{min}}$) and felicity due to application of extra inferential mechanisms or coercion. Two further experiments (Experiments 3 and 4) were designed to explore the hypothesis that the $d_{\text{min}}$ of negative evaluative adjectives is obligatorily processed while the $d_{\text{min}}$ for negative evaluative adjectives is coerced.

The results of Experiments 3 and 4 supported a coercion analysis for diminisher-modified dimensional adjectives. In Experiment 3, the observed variation in interpretations of diminisher-modified dimensional adjectives was predicted given the context sensitivity of $\text{MIN-LIMIT}$. The lack of variation for modified negative evaluative adjectives follows if the $d_{\text{min}}$ accessed by the diminisher is not the product of coercion by $\text{MIN-LIMIT}$ but instead is part of the adjective’s meaning.

In Experiment 4, diminisher-modified dimensional adjectives were read more slowly than diminisher-modified negative evaluative adjectives, relative to a control condition (too...to). Following conclusions drawn from similar evidence reported for other semantic domains by Piñango et al. (1999), McElree, Traxler, Pickering, Seely, and Jackendoff (2001), Traxler et al. (2002), and Clifton, Staub, and Rayner (2007), I concluded that the increase in reading times was due to semantic coercion of the scales of dimensional adjectives. This finding provided further empirical support that coercion by $\text{MIN-LIMIT}$ is necessary for the composition of diminishers with dimensional adjectives, while negative evaluative adjectives do not require coercion.

5.1 Future work: Questions left open by the experiments

I highlight two questions that have not yet been fully addressed. First, are there alternatives to coercion as a source of processing cost? Second, how do we account for the lower ratings
assigned to positive evaluative and maximum endpoint absolute adjectives given the availability of coercion?

A possible caveat to these results is that coercion is not the only potential source of an increase in processing load reported in the literature. Piñango et al. (1999) and McElree et al. (2001) also discuss the possible effects of non-prototypicality and plausibility on online processing. McElree et al. (2001) compared sentences like (37) in a self-paced reading study:

(37)  
a. The author was writing the book in his house on the island.  
b. The author was starting the book in his house on the island.  
c. The author was reading the book in his house on the island. (McElree et al. 2001: B19)

Condition (a) represented sentences that did not require semantic coercion and which described a prototypical event. Condition (b) represented sentences that required semantic coercion of entity the book to a event (e.g., start the book). Condition (c) represented sentences that did not require semantic coercion which described non-prototypical events. McElree et al. found an increase in reading times for both conditions (b) and (c). However, the increase in reading time for condition (c) was restricted to the region directly following the noun (the book) while an increase was observed for condition (b) on the two regions following the noun. McElree et al. conclude that “interpreting type-shifting constructions is more computationally intensive than interpreting non-preferred [non-prototypical] constructions” (2001: B22).

Could the increase in reading time for diminisher-modified dimensional adjectives be due to non-prototypicality or non-plausibility? While I leave detailed examination of this question to future work, I propose that this is not a likely explanation. While participants in the rating task in Experiment 2 were not explicitly asked to rate sentences based on plausibility or prototypicality, we might predict ratings to be lower if sentences were perceived as implausible. We might expect these factors to play a more noticeable role in offline rating studies, where participants would have time to take into account the context and other ‘additional’ factors beyond fundamental components of adjectival meaning like scale structure. Thus, the equivalence in the offline ratings assigned to diminisher-modified dimensional and negative evaluative adjectives suggests that neither combination was perceived as particularly non-prototypical or implausible. As such, these factors are unlikely to be the source of the increase in processing cost reported in Experiment 4.
A second issue that must eventually be addressed is why, given the availability of coercion, why did diminisher-modified positive evaluative and maximum endpoint absolute adjectives still receive low offline ratings in Experiment 1? I propose a separate reason for the lower offline ratings of each class, leaving deeper investigation of both reasons to future work. First, positive evaluative adjectives. I propose that the lower offline ratings are due to the pragmatic difficulty posed by the TOO MUCH mode of coercion: only in special contexts can an individual be too polite, too pretty, or too smart. A similar intuition is discussed by Quirk et al. (1985), Paradis (1997), and Kagan and Alexejenko (2010). It remains to be determined, however, why the availability of the SMALLDEG reading is not sufficient to produce high offline ratings. While the account I have developed of diminishers and their distribution has been entirely based on scale structure, it may ultimately be necessary to take into account pragmatic factors that may reduce the felicity of the SMALLDEG reading for positive evaluative adjectives (i.e., speakers are reluctant to ‘down play’ the degree to which a positive adjective holds of an individual). Pragmatic factors along these lines are discussed by Sawada (2011).

By contrast, maximum endpoint absolute adjectives may be rated lower due to the infelicity of the SMALLDEG interpretation: if STND must select $d_{\text{max}}$ where available (see footnote 4 above and Kennedy 2007 for elaboration), then diminishers will be infelicitous: there exist no degrees greater than $d_{\text{max}}$ (see also Sawada 2011). However, an independent explanation would be necessary to account for why availability of the TOO MUCH reading is not sufficient to save the offline ratings of these adjectives. One possibility is that while most maximum endpoint absolute adjectives have scales consisting of $d_{\text{max}}$ and smaller degrees, others may consist of a single degree ($d_{\text{max}}$) and thus have reduced gradability and, as a result, be less felicitously modified by diminishers which require access to a range of degrees at the lower end of an adjective’s scale. One way to examine this question would be to conduct a rating task to examine the felicity of absolute adjectives used in comparative constructions, which require a scale consisting of more than one degree (Rotstein and Winter 2004). For example, are both sentences in (38) equally felicitous?

(38) a. This table is cleaner than that one.
    b. This solution is more perfect than that one.
According to my intuitions, (38b) is less felicitous, suggesting that the scale of *perfect* may consist of a single point, $d_{\text{max}}$. The results of this rating task could then be related to the results of Experiment 1: were adjectives that received low ratings in comparative constructions more likely to receive low ratings when modified by diminishers? If so, the source of the infelicity of the TOO MUCH reading may be due to the adjectives in question having single degree ($d_{\text{max}}$) scales rather than the full scale required to support the TOO MUCH interpretation, where the *to-* infinitival names a lower bound on the scale.

5.2 Future work: Extending the adjectival typology

The thrust of this paper has been to determine whether both the $d_{\text{min}}$ posited for negative evaluative adjectives and the $d_{\text{min}}$ of minimum endpoint absolute adjectives are obligatorily processed. I argued that the existence of an obligatorily processed $d_{\text{min}}$ suggested that negative evaluative adjectives grouped with minimum endpoint absolute adjectives instead of with open scale relative (dimensional) adjectives, which only acquired a $d_{\text{min}}$ through coercion by diminishers.

In response to this finding, we might be tempted to call negative evaluative adjectives a subset of minimum endpoint absolute adjectives, like Rett (2008). However, there are ways in which negative evaluative adjectives do not pattern like absolute adjectives. Recall from discussion in Section 2.2 that relative adjectives have context-determined standards (selected by POS) that are determined based on flexible, changing factors like individuals in the context.

Absolute adjectives’ $d_{\text{min}}$ or $d_{\text{max}}$ endpoints correspond to a physically real, fixed value. For example, the value of $d_{\text{min}}$ of *bent* is 0 degrees of bend, where all degrees on the scale exceed this value. To be sure, there are some absolute adjectives for which the endpoint is not as easily measured: for the minimum endpoint absolute adjective *dirty*, one would not be expected to count crumbs or pieces of dirt. There is also some degree of context sensitivity associated with the calculation of the range of values that ‘count’ as, for example, 0 degrees of bend. For example, a rod that counts as *straight* for the purpose of staking a tomato may not count as *straight* for the purposes of building a bridge. This type of context sensitivity involves expansion, or retraction, of a halo of degrees around a fixed value and is discussed for other constructions by Lasersohn (1999). It is different from the type of context sensitivity of relative...
adjectives’ standards, which may shift considerably up and down the scale based on contextually variable considerations.

By contrast, the standards of negative evaluative adjectives seem to have more in common with relative adjectives than with absolute adjectives. Let us consider the adjective rude as a test case. While there may be widely held views on what counts as ‘rude’ behavior in our society, rude may apply to an individual in one context but not in another. A brusque, no-nonsense waiter in a diner may not be considered rude relative to other waiters at the diner, but such behavior would surely be classified as rude if exhibited by a waiter in a refined, expensive restaurant.

As alluded to throughout the paper, I hold that the $d_{\text{min}}$ of a negative evaluative adjective – and, thus, its standard of comparison selected by POS (Kennedy 2007, footnote 3 above) – is context-determined rather than determined in relation to a fixed degree on the scale. A similar proposal can be found in Bierwisch (1989), although he does not refer to the lower end of a negative evaluative adjective’s scale as a $d_{\text{min}}$.

We may put this proposal into the context of the adjectival typology developed by Kennedy and McNally (2005). They argue that two parametric features – scale structure (open vs. closed) and nature of the standard (context-determined vs. scale-determined) – characterize the class of adjectives. However, they only discuss relative and absolute adjectives. As previously discussed, relative adjectives are characterized by open scales and context-determined standards. Absolute adjectives are determined by closed scales (containing $d_{\text{min}}$ and/or $d_{\text{max}}$) and standards determined in relation to some fixed point on the scale.

However, if scale structure and nature of the standard are truly intended to operate parametrically, the typology shown in Figure F is predicted. Relative adjectives occupy Quadrant I while absolute adjectives occupy Quadrant III. Of the two remaining quadrants, negative evaluative adjectives can be argued to occupy Quadrant IV: they have closed scales ($d_{\text{min}}$) but context-determined standards (i.e., the precise position of $d_{\text{min}}$ is context-determined).
Figure F  Scale Structure Typology

<table>
<thead>
<tr>
<th>I. Relative Adjectives</th>
<th>II. ???13</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Open scale</td>
<td>• Open scale</td>
</tr>
<tr>
<td>• Context-determined standard</td>
<td>• Scale-determined standard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Negative Evaluative Adjectives</th>
<th>III. Absolute Adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Closed scale</td>
<td>• Closed scale</td>
</tr>
<tr>
<td>• Context-determined standard</td>
<td>• Scale-determined standard</td>
</tr>
</tbody>
</table>

Ways in which the context sensitivity of negative evaluative adjectives is similar to, or different from, the context sensitivity exhibited by dimensional and other relative adjectives is an issue that deserves further work. It may be the case that the farther reaching societal pressures and ‘standards’ that come into play for evaluative adjectives like ugly, rude, or unenthusiastic may cause these adjectives to behave differently from dimensional adjectives, where standards seem less likely to be influenced by societal pressures that hold constant across contexts.

5.3 Future work: Sources of TOO MUCH and the proposal for MIN-LIMIT

In Section 4, I argued that coercion of a $d_{\text{min}}$ endpoint is accomplished through MIN-LIMIT. While it is neither morphologically realized nor apparently syntactically supported, I assume that MIN-LIMIT is interpolated between an adjective and a diminisher.

\[
[[\text{MIN-LIMIT}]] = \lambda g_{\text{det}} \lambda d \lambda x_{\text{c}} . g(d)(x) \land d > \text{STND}(R)(g)
\]

The semantics that I propose for MIN-LIMIT rely on previous proposals by Rett (2008) and Fleisher (2011). I will summarize each and relate issues that arise in relation to them to the proposals developed here. I then discuss a third environment in which the TOO MUCH reading arises.

First, Rett (2008) develops a null degree modifier EVAL that is the source of the semantics for MIN-LIMIT. EVAL restricts the scale of an adjective to degrees exceeding a standard of comparison for an adjective.14 Rett proposed EVAL to account for the entailment pattern shown for negative adjectives in (40). The adjective short used in the equative (as...as) construction

\[\text{short} \]

13 I leave Quadrant II unoccupied: if a scale is open, then a scale-determined standard could only equal some degree that is not also an endpoint. To my knowledge, no such adjectives have been formally described. However, Kennedy (p.c.) suggests special, technical meanings of more familiar relative adjectives as possible occupants of Quadrant II. For example, a particular meat may only count as ‘hot’ if it reaches 170°F, where this temperature is a fixed standard selected by POS.

14 Rett only takes into account contextual standards of comparison as opposed to the functional standards of comparison (i.e., to-phrases) that MIN-LIMIT was intended to also handle.
entails that the subject expresses the adjectival property to a degree exceeding the standard of comparison of short in the context. By contrast, no such entailment holds in (41) for the adjective denoting a positive dimension.

(40)  
   a. Sandy is as short as Ben. ⊨ Sandy is short.  
   b. Sandy is as short as Ben, #but Sandy is not short.

(41)  
   a. Sandy is as tall as Ben. ≠ Sandy is tall.  
   b. Sandy is as tall as Ben, but Sandy is not tall.

Prior to Rett’s proposal, the only source of relation to a contextual standard of comparison was the morpheme POS proposed to mark apparently bare adjectives, as in Sandy is short, as discussed in Section 2.1.

(42)  
  

Rett’s innovation was to permit the relation to a contextual standard associated with POS to occur in other degree constructions. The adjective short used in the equative construction in (40) cannot bear POS: as composes with an adjective of type <d,et> but POS returns an adjective of type <e,t>. By contrast, EVAL returns an adjective of the same semantic type as is input and can participate in further degree constructions, like the equative.

(43)  
  

Apart from the crucial function that Rett’s proposal plays in the development of MIN-LIMIT and the account of coercion of $d_{min}$ by diminishers, the fact that negative dimensional adjectives – but not positive dimensional adjectives – can be interpreted as having scales restricted to degrees exceeding a contextual norm under particular grammatical circumstances (i.e., where a degree construction would otherwise have semantics identical to a degree construction containing the positive antonym, as in (40) vs. (41)). This is precisely the meaning that I, along with Bierwisch

\[ 15 \] Rett (2008) actually assumes that EVAL composes with the adjective after the individual argument $x$ has already raised, leaving a trace that composes with the adjective and yields a predicate $D$ of type <d,t>. The semantics that Rett proposes for EVAL under this syntactic analysis are as in (ii), where $s$ is the standard of comparison.

(ii) \[ [[EVAL]] = \lambda_d \lambda_{D,y} D(d) \land d > s \]
(1989), proposed for negative evaluative adjectives: all degrees on their scale exceed $d_{\text{min}}$, which is the contextual standard for the adjective.

One question that arises from consideration of Rett’s constructions and the present proposal for negative evaluative adjectives is why it appears to typically be negative adjectives that have restricted scales, either in a subset of degree constructions or as part of their obligatorily processed meaning. An even more fundamental question is why negative members of an antonymic pair are somehow ‘special’ or ‘marked’ in comparison with their positive antonyms. Other patterns also contribute to this generalization. For example, measure phrases (e.g., $6\text{ft}$) are only licensed for adjectives denoting positive dimensions (Seuren 1978, Svenonius and Kennedy 2006, among many others).

(44) Sandy is $6\text{ft}$ tall / # short.

The question of negative adjectival exceptionality has been recently addressed by Büring (2007). Büring expands on a concept originally sketched by Rullmann (1995), that a negative dimensional adjective like short is a collocation of two abstract items LONG, where LITTLE is a negation operator. But while this proposal makes a lexical distinction between positive and negative adjectives and takes the latter to be more semantically complex than the former, this it does not make any progress on the restriction of negative adjectives’ scales to degrees exceeding some standard of comparison.

We now turn to Fleisher’s (2011) proposal for the semantics of the POS morpheme. Recall that MIN-LIMIT incorporated $R$, “a contextually determined domain restrictor property, a free variable whose value is filled in on the fly, in context” (Fleisher 2011: 367). Fleisher’s $R$ was incorporated into the semantics of MIN-LIMIT in order to account for TOO-MUCH interpretation of diminisher-modified dimensional adjectives. $R$ permitted the standard-selecting STND function to select either a contextual standard of comparison (explicitly given by a for-phrase) or a standard of comparison denoting some purpose or function (explicitly given by a to-infinitival). I did not explain the details of that process. I summarize Fleisher’s proposal in more detail here.

Fleisher (2011) proposes $R$ as part of an account of a class of construction termed ‘nominal attributive infinitival comparison’ (nominal AIC). In this construction (45), the POS-marked adjective (long) selects a to-infinitival as its standard of comparison such that Middlemarch is understood to be a book that is too long to assign.
(45) *Middlemarch* is a long book to assign. (Fleisher 2011)

The nominal AIC construction contrasts with occurrences of POS-marked *long* in (46), where the standard of comparison is taken to be *book*. This standard of comparison arises both when the adjective is used attributively (46a) and when the standard is introduced by a *for*-phrase (46b).

(46)  
   a. *Middlemarch* is a long book.  
   b. *Middlemarch* is long for a book.

I refer the reader to Fleisher’s own account for full derivations of (44) and (45) and further discussion of the valuation of, and motivation for, *R*. What is of more local interest to the present analysis is the similarities between the **too**MUCH reading identified for diminisher-modified dimensional adjectives and the semantics of the nominal AIC construction, which receives a paraphrase much like **too**MUCH. One topic for future research is whether a **too**MUCH-type reading appears in other constructions where a degree morpheme like *too* is not present. Along the same lines, we can ask whether this reading appears primarily for dimensional adjectives or whether it is also attested for negative evaluative adjectives.

Examples like (47) cited by Fleisher (2011) suggest that negative evaluative adjectives can appear in the nominal AIC construction.

(47) Bob is a crafty person to hire as your accountant.  
Paraphrase: Bob is too crafty to be a trustworthy accountant.  
(Fleisher 2011: 345)

Thus, it does not appear that the **too**MUCH reading is always dispreferred for negative evaluative adjectives in comparison with dimensional adjectives. Nevertheless, it does appear that the **too**MUCH reading arises more frequently for dimensional adjectives than for other types of adjectives. Another such construction is shown in (48). This construction and its relation to the **too**MUCH interpretation has not been previously discussed, to my knowledge.

(48)  
   a. Sandy finds her bowl of pasta delicious.  
   b. (??) Sandy finds her bowl of pasta large.

The adjectives in (a) and (b) are POS-marked and embedded beneath the attitude verb *find*. Kennedy reports the contrast shown for (48): evaluative adjectives are felicitous under *find* while dimensional adjectives are not. *Find* has been independently argued to select subjective
predicates (Stephenson 2007). Subjective predicates are argued to be judge dependent: the semantic content of a subjective predicate is fixed but its applicability to a particular individual (e.g., bowl of pasta) is subject to the speaker or matrix subject’s (Sandy) judgment.

Kennedy notes one way in which (48b) can be ‘saved’: through the addition of a subjective modifier like surprisingly, remarkably, or inappropriately.

(49) Sandy finds her bowl of pasta {surprisingly, remarkably, inappropriately} large.

However, according to my intuitions (48b) can be ‘saved’ even without the addition of a modifier, provided that large is given a TOO MUCH reading. The same reading is not necessary to save (48a), and does not even seem to be available. Thus, embedding under find represents another environment in which a dimensional – but not an evaluative – adjective receives the TOO MUCH interpretation outside of the overt too…to construction.

(50) Sandy finds her bowl of pasta (too) large.

Further study of the connections between diminisher-modification, the nominal AIC construction, and embedding under find may lead to a deeper understanding of the semantic conditions that lead to the TOO MUCH interpretation – especially for dimensional adjectives in contrast with negative evaluative adjectives – and provide future points of comparison that can be approached experimentally in order to examine the scale structures of these adjectives.

References


Appendix A: Lists of Adjectives

**Absolute Adjectives**

<table>
<thead>
<tr>
<th>Maximum Endpoint</th>
<th>Minimum Endpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean</td>
<td>Dirty</td>
</tr>
<tr>
<td>Dry</td>
<td>Bent, Curved</td>
</tr>
<tr>
<td>Safe</td>
<td>Wet</td>
</tr>
<tr>
<td>Perfect</td>
<td>Open</td>
</tr>
<tr>
<td>Complete</td>
<td>Dangerous</td>
</tr>
<tr>
<td>Truthful</td>
<td>Untruthful</td>
</tr>
<tr>
<td>Pure</td>
<td>Impure</td>
</tr>
<tr>
<td>Whole</td>
<td>Cracked</td>
</tr>
<tr>
<td>Clear</td>
<td>Incomplete</td>
</tr>
<tr>
<td>Satiated</td>
<td>Hungry</td>
</tr>
<tr>
<td>Smooth</td>
<td>Rough</td>
</tr>
<tr>
<td>Healthy</td>
<td>Sick</td>
</tr>
<tr>
<td>Certain</td>
<td>Uncertain</td>
</tr>
<tr>
<td>Famous</td>
<td>Obscure</td>
</tr>
</tbody>
</table>

**Evaluative Adjectives**

<table>
<thead>
<tr>
<th>Positive Evaluative</th>
<th>Negative Evaluative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretty</td>
<td>Ugly</td>
</tr>
<tr>
<td>Happy</td>
<td>Sad</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>Unenthusiastic</td>
</tr>
<tr>
<td>Interesting</td>
<td>Boring, Dull</td>
</tr>
<tr>
<td>Energetic</td>
<td>Lethargic</td>
</tr>
<tr>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>Industrious</td>
<td>Lazy</td>
</tr>
<tr>
<td>Outgoing</td>
<td>Shy, Timid</td>
</tr>
<tr>
<td></td>
<td>Shabby</td>
</tr>
<tr>
<td></td>
<td>Apathetic</td>
</tr>
<tr>
<td></td>
<td>Cheap (quality)</td>
</tr>
<tr>
<td></td>
<td>Fragile</td>
</tr>
<tr>
<td></td>
<td>Nervous</td>
</tr>
<tr>
<td></td>
<td>Unwelcoming</td>
</tr>
<tr>
<td></td>
<td>Rude</td>
</tr>
<tr>
<td></td>
<td>Dumb</td>
</tr>
<tr>
<td></td>
<td>Clumsy</td>
</tr>
<tr>
<td></td>
<td>Unfriendly</td>
</tr>
<tr>
<td></td>
<td>Uninterested</td>
</tr>
<tr>
<td></td>
<td>Disobedient</td>
</tr>
<tr>
<td></td>
<td>Cowardly</td>
</tr>
<tr>
<td></td>
<td>Timid</td>
</tr>
<tr>
<td></td>
<td>Flimsy</td>
</tr>
<tr>
<td></td>
<td>Insensitive</td>
</tr>
<tr>
<td></td>
<td>Immature</td>
</tr>
<tr>
<td></td>
<td>Unreliable</td>
</tr>
<tr>
<td></td>
<td>Inconvenient</td>
</tr>
</tbody>
</table>

**Relative/Dimensional Adjectives**

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide</td>
<td>Narrow</td>
</tr>
<tr>
<td>Heavy</td>
<td>Lightweight</td>
</tr>
<tr>
<td>Old</td>
<td>Young</td>
</tr>
<tr>
<td>Long</td>
<td>Short</td>
</tr>
<tr>
<td>Big</td>
<td>Small</td>
</tr>
<tr>
<td>Thick</td>
<td>Thin</td>
</tr>
<tr>
<td>Tall</td>
<td>Short</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Appendix B: Comparative Entailment Test

**Absolute Adjectives**

1. **Clean, Dirty**
   - a. The kitchen is cleaner than the bathroom.
     - ⊭ The kitchen is clean.
   - b. The bathroom is dirtier than the kitchen.
     - ⊨ The bathroom is dirty.

2. **Dry, Wet**
   - a. The floor is drier than the countertop.
     - ⊭ The floor is dry.
   - b. The countertop is wetter than the floor.
     - ⊨ The countertop is wet.

3. **Straight, Bent**
   - a. The red pipe is straighter than the blue pipe.
     - ⊭ The red pipe is straight.
   - b. The blue pipe is more bent than the red pipe.
     - ⊨ The blue pipe is bent.

4. **Closed, Open**
   - a. The front door is more closed than the back door.
     - ⊭ The front door is closed.
   - b. The back door is more open than the front door.
     - ⊨ The back door is open.

5. **Healthy, Sick**
   - a. The girl is healthier than the boy.
     - ⊭ The girl is healthy.
   - b. The boy is sicker than the girl.
     - ⊨ The boy is sick.

**Evaluative Adjectives**

1. **Pretty, Ugly**
   - a. Sally is prettier than Janie.
     - ⊭ Sally is pretty.
   - b. Janie is uglier than Sally.
     - ⊨ Janie is ugly.

2. **Happy, Sad**
   - a. Don is happier than Michael.
     - ⊭ Don is happy.
   - b. Michael is sadder than Don.
     - ⊨ Michael is sad.

3. **Interesting, Boring**
   - a. This film was more interesting than the last one.
     - ⊭ This film was interesting.
   - b. The last film was more boring than this one.
     - ⊨ The last film was boring.

4. **Energetic, Lethargic**
   - a. Danny is more energetic than Mark.
Danny is energetic.
b. Mark is more lethargic than Danny.
⇒ Mark is lethargic.

(5) Smart, Dumb
a. Randall is smarter than Kate.
    ⊭ Randall is smart.
b. Kate is dumber than Randall.
    ⇒ Kate is dumb.

Dimensional Adjectives
(1) Tall, Short
a. Sandy is taller than Ben.
    ⊭ Sandy is tall.
b. Ben is shorter than Sandy.
    ⊭ Ben is short.

(2) Old, Young
a. Ms. Jameson is older than Mr. Davis.
    ⊭ Ms. Jameson is old.
b. Mr. Davis is younger than Ms. Jameson.
    ⊭ Mr. Davis is young.

(3) Heavy, Light
a. The brown box is heavier than the white box.
    ⊭ The brown box is heavy.
b. The white box is lighter than the brown box.
    ⊭ The white box is light.

(4) Wide, Narrow
a. Market Street is wider than Northern Avenue.
    ⊭ Market Street is wide.
b. Northern Avenue is more narrow than Market Street.
    ⊭ Northern Avenue is narrow.

(5) Large, Small
a. This box is larger than that box.
    ⊭ This box is large.
b. That box is smaller than this box.
    ⊭ That box is small.
Appendix C: Experimental Materials

Experiment 1

Evaluative:
(1) I think that the dress Molly bought is (a little) (pretty / ugly).
(2) According to Marta, John looked (a little) (happy / sad).
(3) When they found out that they would be learning basketball, the kids were (slightly) (enthusiastic / unenthusiastic).
(4) Terry thought that the film Jenna produced was (slightly) (interesting / boring).
(5) During the afternoon gym class, the little boy was (a little) (energetic / lethargic).
(6) Jane told Meg that her new boyfriend was (slightly) (strong / weak).
(7) Rachel told Ron that over the summer she had been (slightly) (industrious / lazy).
(8) To the other children, it was clear that the new student was (slightly) (outgoing / shy).
(9) Ms. Thompson thought that her new neighbor's daughter was (a little) (polite / rude).
(10) To his classmates, Max appeared to be (slightly) (smart / dumb).
(11) The ballet instructor said that Tara was (slightly) (graceful / clumsy).
(12) Marta's coworkers think that she is (a little) (friendly / unfriendly).
(13) When they needed help, Rich's friends found him to be (a little) (reliable / unreliable).
(14) During the lecture on ecosystems, the graduate students looked (slightly) (interested / uninterested).
(15) When he took it to the park, Ted's dog was (a little) (obedient / disobedient).
(16) In the face of danger, Matt proved to be (slightly) (brave / cowardly).

Absolute:
(17) According to the review in the newspaper, the tables at this restaurant are (slightly) (clean / dirty).
(18) The construction workers said that the pavement around the building was (slightly) (dry / wet).
(19) According to the chamber of commerce, this neighborhood is (slightly) (safe / dangerous).
(20) The teacher felt that the student's paper was (slightly) (complete / incomplete).
(21) According to industry reports, these vitamin supplements are (a little) (pure / impure).
(22) I felt that the author's reasons for writing the article were (slightly) (clear / unclear).
(23) According to the park ranger, the rocks at the bottom of the lake are (slightly) (smooth / rough).
(24) When it came to finding the way home, Mark felt (a little) (certain / uncertain).
(25) The camp leader said that the pole he found to hold up the tent was (a little) (straight / curved).
(26) When she got to school, Ana found that the door to the classroom was (a little) (closed / open).
(27) According to the potter, the glaze on this vase is (a little) (perfect / imperfect).
(28) The editor felt that the author's claims were (a little) (truthful / untruthful).
(29) The museum guide said that the fossil was found (slightly) (whole / cracked).
(30) It appeared to us that the guests were (slightly) (satiated / hungry).
(31) Danny told me that the guppies in his aquarium were (a little) (healthy / sick).
(32) According to the paper, the author who won the prize was (slightly) (famous / obscure).

**Experiment 2**

**Evaluative:**

(1) The trainer told Meg that her upper arm muscles were (slightly) (strong / weak).
(2) The doctor told the nurse that the little boy was (a little) (energetic / lethargic).
(3) Daniel told his boss that the company's new intern was (slightly) (industrious / lazy).
(4) Terry thought that the film Jenna produced was (a little) (interesting / boring).
(5) Marta's coworkers think that she is (a little) (friendly / unfriendly).
(6) Maxine thought that the dress Molly bought was (slightly) (pretty / ugly).
(7) When they needed help, Rich's friends found him to be (slightly) (reliable / unreliable).

(8) In the face of strong opposition, Matthew proved to be (a little) (brave / timid).

(9) To his classmates, Max appeared to be (slightly) (smart / dumb).

(10) According to Marta, John looked (a little) (happy / sad).

(11) When they found out that they would be learning basketball, the students were (slightly) (enthusiastic / unenthusiastic).

(12) The ballet instructor said that Tara was (slightly) (graceful / clumsy).

(13) Ms. Thompson thought her new neighbor's daughter was (a little) (polite / rude).

(14) Ted's friends said that his new dog was (a little) (obedient / disobedient).

(15) During the lecture on ecosystems, the graduate students looked (slightly) (interested / uninterested).

(16) To the other children, the new student appeared to be (a little) (outgoing / shy).

**Dimensional:**

(17) Principal Jones said that the street in front of the new elementary school was (a little) wide.

(18) The tailor told his customer that the fabric she selected was (a little) heavy.

(19) Rachel told her coworker that the recently hired employee was (slightly) old.

(20) Ms. Michaels said that the book she assigned her class to read was (a little) long.

(21) Christopher read many reviews that said that the North Face tent was (slightly) big.

(22) Christina told Martin that the fabric she bought was (slightly) thick.

(23) According to the team captain, the girl who made the cheerleading team was (slightly) tall.

(24) The curator said that the pedestal he planned to use for the new statue was (a little) high.

(25) Marsha said that the hallway in her apartment building was (slightly) narrow.

(26) The architect told his client that the shingles on his house's roof were (slightly) lightweight.

(27) The librarian told her friends that the new library director was (a little) young.

(28) Dr. Greenberg told his class that the film they were required to watch was (slightly) short.
(29) Sarah read a review in an automobile magazine that said that the Toyota Corolla was (a little) small.

(30) Vera said that the girl who received the role of Cinderella in the school play was (a little) thin.

(31) According to John, Ted's girlfriend is (a little) short.

(32) The director said that the platform that the actors would sit on was (slightly) low.

**Experiment 3**

**Questionnaire Form 1:**
*Circle your choice(s).*

(1) The curator said that the pedestal he planned to use for the new statue was slightly high. *How would you paraphrase (1)?*
   a. The pedestal is high, but not extremely so.
   b. The pedestal is excessively high. The curator is worried about the pedestal’s height.

(2) Daniel told his boss that the company’s new intern was slightly industrious.
   a. The new intern is excessively industrious.
   b. The new intern is industrious, but not extremely so.

(3) The doctor told the nurse that the little boy was a little lethargic.
   a. The boy is lethargic, but not extremely so.
   b. The boy is excessively lethargic.

(4) Vera said that the girl who received the role of Cinderella in the school play was a little thin.
   a. Vera thinks that the girl is too thin for the role.
   b. Vera thinks that the girl is thin, but not extremely so.

(5) Maxine thought that the dress Molly bought is slightly ugly.
   a. Maxine thinks that Molly’s dress is ugly but not extremely so.
   b. Maxine thinks that Molly’s dress is excessively ugly.

(6) Rachel told her coworker that the recently hired employee was slightly old.
   a. Rachel thinks that the employee is too old for the job.
   b. Rachel thinks that the coworker is old but not extremely so.

**Questionnaire Form 2:**

(1) The director said that the platform that the actors would sit on was slightly low.
   a. The platform is low, but not extremely so.
   b. The platform is excessively/too low. (The director may be worried about its height).

(2) The doctor told the nurse that the little boy was a little energetic.
   a. The little boy was excessively/too energetic.
   b. The little boy was energetic, but not extremely so.

(3) Daniel told his boss that company’s new intern was slightly lazy.
   a. The new intern is excessively/too lazy.
b. The new intern is lazy, but not extremely so.

(4) Principal Jones said that the street in front of the new elementary school was a little wide.
   a. The street is wide, but not extremely so.
   b. The street is excessively/too wide.
(5) Maxine thought that the dress Molly bought was slightly pretty.
   a. Maxine thinks that Molly’s dress is pretty, but not extremely so.
   b. Maxine thinks that Molly’s dress is excessively pretty.
(6) The librarian told her friends that the new library director was a little young.
   a. The librarian thinks that the new director is excessively/too young for the job.
   b. The librarian thinks that the new director is young, but not extremely so.

**Questionnaire Form 3:**

(1) Christopher read many reviews that said that the North Face tent was slightly big.
   a. The North Face tent is big, but not extremely so.
   b. The tent is excessively/too big.
(2) When they needed help, Rich’s friends found him to be slightly reliable.
   a. Rich is excessively/too reliable; (there is something ‘weird’ about how reliable he is.)
   b. Rich is reliable, but not extremely so.
(3) Ms. Thompson thought her new neighbor’s daughter was a little rude.
   a. The new neighbor’s daughter is excessively rude.
   b. The new neighbor’s daughter is rude, but not extremely so.
(4) Dr. Greenberg told his class that the film they were required to watch was slightly short.
   a. The film was short, but not extremely so.
   b. The film was excessively/too short.
(5) Marta’s coworkers think that she is a little unfriendly.
   a. Marta’s coworkers think that Marta is unfriendly, but not extremely so.
   b. Marta’s coworkers think that Marta is excessively/too unfriendly.
(6) Ms. Michaels said that the book she assigned her class to read was a little long.
   a. The book was excessively/too long.
   b. The book was long, but not extremely so.

**Experiment 4**

(1) When she heard that the mall was having a fashion show featuring locally designed clothes, Martha considered which of her three hats to submit. Martha thought that the blue hat's brim was (slightly / too) (tacky / wide) to appear in a fashion show, so she decided to submit the red hat instead.

(2) Mr. Richards suggested that Ms. Smith show a film on the Massachusetts railway system to her students during civic studies class. Ms. Smith thought that the railway film was (slightly / too) (boring / long) to interest her students, so she showed another film.
(3) Marianne was recently interviewed to be the new model representing Cover Girl. A Cover Girl model must have classic good looks and a friendly, refined attitude. The interviewer felt that Marianne was (slightly / too) (rude / short) to succeed as a Cover Girl model, so she wasn't offered the job.

(4) The local gymnasium offers wrestling lessons. Matthew has been taking lessons for several years and wants to be a professional wrestler. The coach thinks that Matthew is (slightly / too) (timid / light) to do well as a professional wrestler so he isn't supportive of him.

(5) The Olympic Committee is deciding which city will host the next Winter Games. Stockholm and Moscow are finalists. The committee thinks that Stockholm is (slightly / too) (dull / small) to attract large crowds of spectators to the Games.

(6) Kristen grew up in the country but wants to move to a city. One of her friends suggested that she move to Los Angeles. Kristen has heard that Los Angeles is (slightly / too) (unwelcoming / big) to appeal to people who are not used to city life so she is considering other cities more seriously.

(7) Sandra entered her poodle in a regional dog show. Poodles are known for their delicate bone structure and good behavior. The judges felt that Sandra's dog was (slightly / too) (disobedient / heavy) to deserve the top prize so they gave the prize to another dog.

(8) The Wal-Mart corporation is considering where to build a new store. The realtors have shown the company representatives a vacant lot for sale on Northern Street. The local manager feels that Northern Street is (slightly / too) (inconvenient / narrow) to contain a successful store and wants to see other lots.

(9) Laurence auditioned for the role of Frodo in the school production of The Lord of the Rings. The actor who gets the role must be small but have a commanding presence on stage. Laurence's friends thought that Laurence was (slightly / too) (nervous / tall) to succeed at getting the part so they encouraged him to work backstage.

(10) Isabella wanted to play Clara in the school production of The Nutcracker. The character of Clara is a graceful young girl. The ballet instructor felt that Isabella was (slightly / too) (clumsy / tall) to perform as Clara and suggested that she be a backup dancer.

(11) Samuel has been in the hospital to treat a stomach infection. He has not been able to eat very much while hospitalized. He was due to be released today. The doctor thinks that Samuel is (slightly / too) (lethargic / thin) to go home from the hospital before next week, however.
(12) Meredith is shopping for a new dress to wear to a friend's wedding. The sales assistant brought a dress that she thinks Meredith will like. Meredith thought that the dress's neckline was (slightly / too) (plain / low) to purchase for a wedding so she asked to be shown another one.

(13) Thomas has built a remote-controlled model airplane. He wants to fly the plane in a race against other model airplanes. Thomas is worried that his plane's wings are (slightly / too) (fragile / thin) to hold up during the competition so he is trying to reinforce them.

(14) Maggie is shopping for a carpet to be used in the entryway of her hotel. The clerk selected a carpet for Maggie to consider. Maggie thought that the carpet was (slightly / too) (cheap / narrow) to be used in her hotel's spacious entryway so she asked to see other carpets.

(15) Vera wanted to see a film and then go to dinner on her first date with Steven. She read positive reviews about the film Never Let Me Go but decided not to buy tickets. Vera thought that the film was (slightly / too) (sad / long) to be ideal for their first date and suggested that they see another film.

(16) Rachel has been training for three years to sail across the Atlantic on a sailboat. She wants to complete a solo journey before high school graduation. Rachel's parents feel that their daughter is (slightly / too) (immature / young) to go on such a challenging journey and have asked her to wait another year.

(17) The editor-in-chief of the Daily Gazette wants to promote one of her writers to assistant editor. She is considering several candidates. Margaret is a particularly good journalist. The editor thinks that Margaret is (slightly / too) (unreliable / young) to deserve the promotion, however, and is only considering other applicants.

(18) Ms. Simpson had planned to take her biology class to a nearby lake so that they could gain hands-on experience in field biology methodology. She feels that the class was (slightly / too) (apathetic / large) to make it a worthwhile experience, however, so she will cancel the trip.

(19) Richard wants to reupholster the seat of his delicately carved antique chair. The furniture store attendant gave Richard a sample of fabric for him to consider. Richard thinks that the fabric is (slightly / too) (ugly / thick) to cover such a fine piece of furniture so he has asked to see other fabric samples.

(20) The high school principal said that students should record how frequently they exercise. A certificate would be awarded to the grade whose students exercise most often. The teachers knew that their students were (slightly / too) (lazy / old) to want to enter the competition so they offered extra credit.
(21) Chris's friend Antonio wants to have a relationship. Antonio has been using dating websites and has gone on dates with several women. Chris heard that Antonio is (slightly / too) (insensitive / old) to appeal to the women that he has met, however, so he hasn't had much luck.

(22) Miranda wants to be the school mascot. The mascot wears a costume at football games. The costume was designed for a larger student to wear. Miranda's friends think that Miranda is (slightly / too) (shy / short) to be picked as the school mascot and think that she should try cheerleading first.

(23) William is trying to fill all of the apartments in the building that he owns. He has one more apartment to rent and has shown it to several potential tenants. It seems that the apartment is (slightly / too) (shabby / small) to appeal to the people who have looked at it so it still hasn't been rented.

(24) Ana wants to buy a tent to take on her long distance hiking expedition. The clerk showed her the store's best-selling model. Ana felt that the tent was (slightly / too) (flimsy / large) to carry on a lengthy trip so she asked to see other popular models.