What is deaccentuation?

Arto Anttila (Stanford) & Michael Wagner (McGill)

GLOW Targeted Collaborative Debate
What do phonology/focus interactions tell us about deaccentuation?

Perspective A: Prosodic focus as a metalinguistic operator (MW)
- Capturing phonological effects using focus theory
- Parallel 1: Form and meaning are each sufficient triggers by themselves
- Parallel 2: Deaccentuation is (sometimes) preferred when possible
- Parallel 3: The contrast requirement
- Parallel 4: The need for a semantic alternative
- Prosodic focus operates over linguistic alternatives

Perspective B: Deaccentuation is phonology (AA)
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Perspective B: Deaccentuation is phonology (AA)
Deaccentuation can be phonologically motivated

(1)  

a. ‘This whiskey,’ said O’Reilly, sampling spirits that claimed to be from his homeland, ‘was not exported from Ireland; it was deported.’ (Bolinger, 1961, 83)  
b. John is more concerned with *affirmation* than with *confirmation*. (Chomsky, 1971, 205)  
c. John expected to be promoted, and was shocked at being *demoted* (Wennerstrom, 1993, 311)  
d. Greek divers have found the wreck of the British liner Britannic, sister ship of the *Titanic*... (Ladd, 2008, 234)

(SMALL CAPS = accented; underlining = deaccentuation)

What do we mean by deaccentuation?  
Cases were an accent is not placed where default stress usually falls, reflecting (or giving rise to) a marked prosodic prominence relation between words/constituents
Phonological/phonetic effect?

*Reduction due to prior activation of a phonetic form:*

**Jacobs et al. (2015):** “The results suggest that repetition reduction occurs when there is a recently experienced auditory memory of the item.”

*Constraint against accents on homophonous words in adjacent intonational units:*

**Williams (1981, 1997):** “The Rhyming law: The final nucleus of an Intonation unit (roughly, clause) cannot be identical to any final portion of the preceding intonation unit.”
Phonological effects on deaccentuation

- Do we need a phonological/phonetic constraint in addition to a semantic theory of deaccentuation?
- Or do we need to rethink apparently semantically driven cases of deaccentuation?
- We present two perspectives
Outline

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**Perspective B: Deaccentuation is phonology (AA)**
Capturing phonological using focus theory

▶ Williams (1997, 619): ‘two sorts of disanaphora (referentially based and phonetically based)’
▶ Artstein (2004, 3): phonological focus involves functions from phonological representations to meanings

A focus account of semantic focus/givenness:

(2) Rooth (1992) (simplified)
   a. Syntax: \(\sim [\text{Ede-F wants coffee}]\)
   b. Prominence: \(\underline{EDE} \text{ wants coffee}\)
   c. Semantics: Requires antecedent(s) with meaning \(x \text{ wants coffee}\), where at least one \(x \neq \text{Ede}\)

A focus account of phonological focus/givenness could be (we will see why this does not work, and instead an analysis similar to Artstein (2004) is needed):

(3) Phonological Alternatives
   a. Syntax: \(\sim [\text{de-F ported}]\)
   b. Prominence: \(\underline{DE} \text{ported}\)
   c. Semantics: Requires antecedent(s) of phonological form \(x \text{ ported}\), where at least one \(x \neq [\text{di}]\)

Expectation: Parallels between meaning-only and form-only antecedents
Parallel 1: Form and meaning are each sufficient triggers

Salience of meaning is sufficient for deaccentuation:

(4)  a. I went to see the dentist, I could kill the butcher.  
(butcher = dentist)  
(cf. Ladd, 1980)

b. Amal gave up. Then Frankie threw in the towel.  
(Wagner, 2021)

Can homophone antecedents cause deaccentuation?

(Wagner 2020 Psychonomics; Wagner & Coumel, in prep)

Joint work with Marion Coumel, Warwick University
Parallel 1: Form and meaning are each sufficient triggers

Example recordings from each condition: y/n deaccented

**New:** Robin was very scared. He really did not like that bear.  
**Homophone:** The fear was hard to bear. He really did not like that bear.  
**Repeated:** Robin was attacked by a bear. He really did not like that bear.

To our knowledge the first study that shows that homophone antecedents can cause deaccentuation (32 participants, 15 item sets. note that it could be that people deaccent, but then the utterance is infelicitous, more on this below)

*Jacobs et al. (2015) already show a gradient reduction effect due to homophone antecedents, but argued does not involve deaccentuation. However, the relevant constituents were sentence-initial, which may explain why deaccentuation did not happen*
Parallel 2: Deaccentuation is preferred when possible

*Same form/same meaning:*

(5) A: I’ve made some coffee.
B: #Could I have some COFFEE?

*Different form/same meaning (cf. Ladd, 1980):*

(6) I went to see the dentist.
# I could kill the BUTCHER. \(\text{butcher} = \text{dentist}\)

Different accounts:

▶ Williams: ‘Don’t overlook anaphoric possibilities’
▶ Schwarzschild (1999): AvoidF
▶ Others: Maximize presupposition (e.g. Wagner, 2005; Sauerland, 2005)

What about cases with a form-only antecedent?

*Sometimes deaccentuation is not obligatory, for example when there are multiple contrast options (Klassen and Wagner, 2017), also see Schlöder and Lascarides (2020) for failures to deaccent due to interactions with the contribution of the intonational tune.*
Parallel 2: Deaccentuation is preferred when possible

*Same form/different meaning: Williams Effect* Williams 1981/1997

(7) John does not usually give advice to his SON, but he did recently tell him not to look at the SUN.

Sounds like one should have deaccented—but can one?

- Yes, in the sense that it happens (see above)
- But according to Williams (1997) no—deaccenting sounds odd because meaning not given (but says this is relatively weak effect)

**Experimental evidence:** Wagner (2020 Psychonomics); Wagner & Coumel (in prep): Naturalness ratings are somewhat inconclusive, we could elaborate on this
Parallel 2: Deaccentuation is preferred when possible

A clearer Williams effect Williams (1981, 1997):

Contrast, full NP:
Jordan kissed Lane, and then Lane kissed JORDAN.
Contrast, pronoun:
Jordan kissed Lane, and then he was kissed by HER.
Williams, full NP:
# Jordan kissed Lane, and then Jordan was kissed by LANE.
Williams, pronoun:
# He kissed her, and then he was kissed by HER.

Experimental evidence: Perception: Wagner and McCurdy (2010). Production: Wagner (2012). Speakers avoid the problem by placing stress elsewhere, or else rate the utterance as less felicitous

<table>
<thead>
<tr>
<th></th>
<th>Passive</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>by</td>
<td>66 (74.2%)</td>
<td>na</td>
</tr>
<tr>
<td>Verb</td>
<td>19 (21.3%)</td>
<td>65 (98.5%)</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>0</td>
<td>Na</td>
</tr>
<tr>
<td>Subject</td>
<td>4 (4.5%)</td>
<td>1 (1.5%)</td>
</tr>
</tbody>
</table>

So: deaccentuation can be obligatory when possible also for phonological reasons
Parallel 3: The contrast requirement

Deaccentuation requires a semantic contrast:

(8) a. New
   Guess what Jody’s aunt, who is incredibly generous, brought for his birthday: a new BICYCLE!

b. No Alternative
   Guess what Jody’s aunt, who produces expensive bicycles, brought for his birthday: a new BICYCLE!

c. Alternative
   Guess what Jody’s aunt, who deals with used bicycles, brought for his birthday: a NEW bicycle!

▶ Repetition of bicycle and even antecedent of form x bicycle is not sufficient for deaccentuation (deaccentuation is rare)
▶ Antecedent and focused constituent have to be ‘true’ alternatives of each other

(Wagner, 2005, 2006; Büring, 2008; Katzir, 2013; Büring, 2016; Gotzner et al., 2016; Gotzner, 2017)

Experimental evidence: Wagner (2016):
18 participants, 12 item sets
Parallel 3: The contrast requirement

No deaccentuation in complete repetitions:

(Coumel & Wagner, in prep; cf. Klassen and Wagner 2017), as well as discussion in Schwarzschild (1999):

(9) They were surprised by a bear.
   Despite their best efforts, they were surprised by a **BEAR**.

Speakers could avoid accenting the same word, but they do not

Actually not clear that deaccentuation without phonological contrast is bad in the presence of semantic contrast. One could try to test with homophones. But here’s a different kind of example Wagner (cf. 2021):

(10) A: Drew wants coffee.
    B: DREW wants coffee! (...of all people...)
Parallel 4: The need for a semantic alternative

A missing piece in the puzzle of phonological contrast: Phonological contrast requires a semantic contrast

The examples involve words used to contrast each other:

(1) a. ‘This whiskey,’ said O’Reilly, sampling spirits that claimed to be from his homeland, ‘was not exported from Ireland; it was deported.’ (Bolinger, 1961, 83)

b. John is more concerned with affirmation than with confirmation. (Chomsky, 1971, 205)

c. John expected to be promoted, and was shocked at being demoted (Wennerstrom, 1993, 311)

d. Greek divers have found the wreck of the British liner Britannic, sister ship of the Titanic... (Ladd, 2008, 234)

What happens if with words that have the potential for marking a phonological contrast that are not used as alternatives to each other?
Parallel 4: The need for a semantic alternative

*Deaccentuation is rare if words are not used to convey contrast:*

(11)  
   a. Their methods of oppression were very refined.  
       Many critics soon found themselves confined.  
   b. She was proud of the letter she composed.  
       In it, all the lies were exposed.  
   c. She had had a nightmare that she just remembered.  
       She had dreamt she fought aliens whom she all dismembered.

Marking a phonological contrast *within* a word requires a semantic contrast *to* the word

preliminary annotation of 10/24 participants; 12 word pairs used as alternatives, 12 not used as alternatives
Parallel 4: The need for a semantic alternative

Could this be because some prefixes are unstressable? Or because they are not prosodic words? (Kiparsky, 1979; Booij, 1985; Wennerstrom, 1993; Artstein, 2004; Clayards et al., 2021, i.a.)

This is not a sufficient explanation—the same antecedents can cause deaccentuation or fail to do so, depending whether they’re used as alternatives:

(These examples haven’t been experimentally tested yet, but I tried them out on a few people)

(12) a. Canning will not refine the peaches, it will only CONfine them.
    b. Don’t worry. You’re not the one who composed it. You’re not even the one who EXposed it.
    c. This drug will not help you remember your trauma. It will help you DISmember your trauma.
Prosodic focus operates over linguistic alternatives

- Even phonological contrast involves semantic alternatives
- This is unexpected if phonological contrast involves phonological alternatives
- It is expected if phonological focus generates linguistic alternatives whose meaning is contrasted (Artstein 2004)
- I propose that in fact all prosodic focus involves linguistic alternatives (see Katzir, 2013, for a very different argument for linguistic alternatives)
- Syntactic/phonological substitutions of the focused piece are used to generate a set of linguistic expressions
- The set of meanings these denote have to be contextually relevant alternatives to each other (∼)

In the version presented at the conference, I erroneously said that Artstein’s account doesn’t predict that a semantic contrast is needed when marking phonological contrast—but the analysis actually works beautifully for these cases! I updated the slides accordingly on April 22 2021.
Prosodic focus operates over linguistic alternatives

There’s nothing special about phonological contrast:

(13)  \textit{Ede \underline{wants} coffee}  \\
→ requires linguistic antecedent of the form $\text{x wants coffee}$, such that $\llbracket x \text{ wants coffee} \rrbracket$ is contextually a relevant pragmatic alternative to $\llbracket \text{Ede wants coffee} \rrbracket$

(14)  \textit{Dis\underline{member}}  \\
→ requires a linguistic antecedent of the form $\text{x member}$, such that $\llbracket x \text{ member} \rrbracket$ is contextually used as a semantic/pragmatic alternative to $\llbracket \text{dismember} \rrbracket$

▶ The Williams effect suggests phonology of antecedents can’t be ignored
▶ This makes sense if prosodic focus always looks for a linguistic antecedent
Prosodic focus operates over linguistic alternatives

- Prosodic focus is a metalinguistic operator in the sense that it operates over linguistic alternatives.
- Linguistic alternatives are compatible with metalinguistic uses of focus (Horn, 1985; McCawley, 1991) or with expressing ‘expression focus’ (Krifka, 2008; Mankowitz, 2020)...
- ...but evoking alternatives through linguistic objects is also compatible with non-metalinguistic uses of focus.
- The salience requirement of focus antecedents is typical of anaphoric relations that require a linguistic antecedent (e.g. VP ellipsis and other ‘surface anaphora’ Hankamer and Sag 1976).
- Göbel (2020) shows evidence that focus-sensitive but not non-focus-sensitive presuppositions require salient local antecedents.

One could imagine a givenness-based version of this account, translating (Schwarzschild, 1997, 1999) into requiring linguistic pieces, rather than meanings, to be contextually ‘given’—but not having access to alternatives would clearly similar issues that make the givenness theory problematic (see Wagner, 2021, for arguments and a review).
Focus as operating over linguistic alternatives

Many questions not addressed here... but one is particularly pressing: **What about purely semantic antecedents?**

(4-b) Amal gave up. Then **Frankie threw in the towel**

Accommodation?
- Maybe we can treat *Amal gave up* as if it had been *Amal threw in the towel*.
- Accommodation of linguistic antecedents also possible for VP ellipsis

(15) *Robin was getting bludgeoned during the boxing fight. Out of the corner of her eye she saw her coach reach for the white towel. She said: Please don’t!*  

- Accommodating the antecedent *throw in the towel* for ellipsis is possible here ([Merchant cf. 2004, for a review, Geiger and Xiang 2017; Geiger 2020 for experimental evidence])
- In (4-b), accommodation may be even easier, since there’s a linguistic antecedent with the target meaning

Thanks to Alex Göbel and Marion Coumel for comments on this presentation, and as well as the members of Rose-Marie Déchaine’s seminar on syntax/prosody at UBC, Alex Nastevski, Bruce Oliver, Zachary Gilkison
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Perspective B: Deaccentuation is phonology (AA)
Deaccentuation is phonology

Arto Anttila
Stanford University

Targeted Collaborative Debate with Michael Wagner
Part B
April 16, 2021
Inaugural addresses

Based on joint work with Timothy Dozat, Daniel Galbraith, and Naomi Shapiro

(a) You meet heroes across a COUNTER, and they're on both SIDES of that counter. (Ronald Reagan 1981)

(b) We will build our defenses beyond CHALLENGE, lest weakness INVITE challenge. (George W. Bush 2001)

(Anttila, Dozat, Galbraith & Shapiro 2020, Shapiro & Anttila to appear)
What deaccentuation is not

Is deaccentuation a cognitive universal?  
Or maybe just common sense? Why emphasize given information?
What deaccentuation is not

Is deaccentuation a cognitive universal?
Or maybe just common sense? Why emphasize given information?

Problems:
(a) **Language-specificity** (Ladd 1996: 175, Cruttenden 2006):
    Not all languages/dialects have it.
What deaccentuation is not

Is deaccentuation a cognitive universal?
Or maybe just common sense? Why emphasize given information?

Problems:

(a) **Language-specificity** (Ladd 1996: 175, Cruttenden 2006):
    Not all languages/dialects have it.

(b) **Independence of meaning** (Terken and Hirschberg 1988):
    Given can be accented, new can be deaccented.
    Deaccentuation applies to meaningless strings.
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Is deaccentuation a cognitive universal?
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Problems:

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Not all languages/dialects have it.

(b) **Independence of meaning** (Terken and Hirschberg 1988):
Given can be accented, new can be deaccented.
Deaccentuation applies to meaningless strings.

(c) **Strange phonological consequences** (Ladd 1980):
Deaccentuation results in automatic PRE-accentuation.
Defining deaccentuation

To be deaccented means

to be PERCEIVED with less stress than EXPECTED

What is PERCEIVED stress? Ask native speakers.

What is EXPECTED stress?

The normal stress based on structure (syntax, phonology).

≈ The Nuclear Stress Rule / Compound Stress Rule of SPE
(Chomsky & Halle 1968)
Expected and perceived stress (Ladd 1980, Shapiro & Anttila to appear)

Expected stress (computed by MetricalTree)

```
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
```

*I brought her a bottle of **WHISKY**. But it turns out she doesn't like **WHISKY**.

Perceived stress

```
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
  X  X  X  X  X  X  X  X  X  X
```

I brought her a bottle of **WHISKY**. But it turns out she doesn't like **whisky**.
Quantifying deaccentuation

Accentuation Index = Perceived Stress − Expected Stress

We will build our defenses beyond challenge,

Perceived stress:

\[
\begin{array}{cccc}
  & x & & x \\
  & x & x & x \\
  x & x & x & x \\
\end{array}
\]

lest weakness INVITE challenge.

Expected stress (= SPE):

\[
\begin{array}{cccc}
  & x & & x \\
  & x & x & x \\
  x & x & x & x \\
\end{array}
\]

lest weakness invite challenge.

Accentuation Index: 0 0 1 -1
Accented given, deaccented new (Shapiro & Anttila to appear)

a. Well, I believe we, the Americans of today, are ready to act worthy of ourselves, ready to do what must be done to ensure happiness and liberty for ourselves, our CHILDREN, and our CHILDREN’s children.

(Ronald Reagan 1981)

b. Expected stress (computed by MetricalTree)

\[
\begin{array}{cccccccc}
  & x & x & & & x & x & x & x \\
  & x & x & x & x & x & x & x & x \\
  & x & x & x & x & x & x & x & x \\
  & x & x & x & x & x & x & x & x \\
\end{array}
\]

*for ourselves, our CHILDREN, and our children’s CHILDREN.

c. Perceived stress

\[
\begin{array}{cccccccc}
  & x & & & & & x & x \\
  & x & x & & & & x & x \\
  & x & x & x & x & x & x & x & x \\
\end{array}
\]

for ourselves, our CHILDREN, and our CHILDREN’s children.
... our $\text{CHILDREN}_1$ and our $\text{CHILDREN}_2$’s $\text{children}_3$

- $\text{CHILDREN}_2$ should be deaccented
  because it is GIVEN and REPEATED, but it has nuclear stress.

- $\text{children}_3$ should be accented
  because it is NEW, but it is deaccented.
Deaccentuation applies to meaningless material

1a. How old are you? I’m six\textsc{teen}.

1b. \textsc{fifteen, sixteen, seventeen, eighteen, nineteen} (Ladd 1996: 178)

2. I get \textsc{abc} on channel 7 and \textsc{nbc} on channel 11. (Will Leben, p.c.)
Two conflicting phonological generalizations (Shapiro & Anttila to appear)

1. Avoid stress peak on a word with a copy in the preceding context. **Distance matters:** The closer the copies, the worse the result.

2. Stress peak falls as close to the right phrase edge as possible.
Two conflicting phonological generalizations (Shapiro & Anttila to appear)

1. Avoid stress peak on a word that has a copy in the left context. 
   Distance matters: The closer the copies, the worse the result.

2. Stress peak falls as close to the right phrase edge as possible.

*SSTRESS-COPY
Assign a violation to a word that carries a stress peak and has a string-identical copy in the left context.

RIGHTMOST ≈ Chomsky & Halle’s (1968) NSR
Assign a violation to each word between a stress peak and the phrase edge.
Deaccentuation as minimal stress retraction (Shapiro & Anttila to appear)

<table>
<thead>
<tr>
<th></th>
<th>I brought her a bottle of <strong>WHISKY</strong></th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. But it turns out she doesn’t like <strong>WHISKY</strong></td>
<td>1!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✈ b. But it turns out she doesn’t <strong>LIKE</strong> whisky</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. But it turns out she <strong>DOESN’T</strong> like whisky</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Stress retraction with multiple copies (Shapiro & Anttila to appear)

<table>
<thead>
<tr>
<th>our CHILDREN</th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. and our children’s CHILDREN</td>
<td>2!</td>
<td></td>
</tr>
<tr>
<td>b. and our CHILDREN’s children</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Stanford University
Williams Effect (Williams 1997; Wagner 2012): Expected stress

(a)

\[
\begin{array}{cccccccc}
\times & \times & \times & \times & \times & \times & \times & \times \\
\times & \times & \times & \times & \times & \times & \times & \times \\
\end{array}
\]

John saw Mary, and then Mary saw John.

SPE: 3 3 2 3 2 2 2 2 1

(b)

\[
\begin{array}{cccccccccccc}
\times & \times & \times & \times & \times & \times & \times & \times & \times & \times & \times & \times \\
\times & \times & \times & \times & \times & \times & \times & \times & \times & \times & \times & \times \\
\end{array}
\]

John saw Mary, and then John was seen by Mary.

SPE: 3 3 2 3 2 2 3 2 3 1
Williams Effect as *STRESS-COPY avoidance

cf. Wagner 2012: 1447, Table 15

<table>
<thead>
<tr>
<th></th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>John saw MARY and then</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Mary saw JOHN</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. Mary SAW John</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c. MARY saw John</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>John saw MARY and then</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. #John was seen by MARY</td>
<td>1!</td>
<td></td>
</tr>
<tr>
<td>b. John was seen by Mary</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>c. John was seen by Mary</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>d. John was seen by Mary</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>e. JOHN was seen by Mary</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
No deaccentuation if the repetition is complete

<table>
<thead>
<tr>
<th>They were surprised by a bear.</th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Despite their best efforts,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. they were surprised <strong>bear</strong></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. they were surprised <strong>bear</strong></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c. they were <strong>SURPRISED</strong> by a bear</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Wagner, this talk
Deaccentuation with a minimally different repetition

<table>
<thead>
<tr>
<th>Putting America back to work</th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. means putting all Americans back to work</td>
<td>1!</td>
<td></td>
</tr>
<tr>
<td>b. means putting all Americans back to work</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c. means putting all Americans BACK to work</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d. means putting all AMERICANS back to work</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>e. means putting ALL Americans back to work</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>f. means PUTTING all Americans back to work</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>g. MEANS putting all Americans back to work</td>
<td>6!</td>
<td></td>
</tr>
</tbody>
</table>

Reagan 1981, Sentence 38
Accentuation Indices for one annotator

Putting
putting
America
Americans
back to work
back to work
means

0
-1
1
3
1
0
0
0
-1
-1

-1
The role of focus (Rooth 1992, Shapiro & Anttila to appear)

**FOCUS ⊃ STRESS**

Assign a violation to a focused constituent that does not contain a stress peak.

Growing rice under broad focus

<table>
<thead>
<tr>
<th>People who grow rice</th>
<th>FOCUS ⊃ STRESS</th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. eat RICE</td>
<td></td>
<td>1!</td>
<td></td>
</tr>
<tr>
<td>b. EAT rice</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

“People who grow rice eat RICE; people who grow beans eat BEANS.”

Narrow focus blocks deaccentuation

<table>
<thead>
<tr>
<th>People who grow rice</th>
<th>FOCUS ⊃ STRESS</th>
<th>*STRESS-COPY</th>
<th>RIGHTMOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. eat RICE&lt;sub&gt;FOC&lt;/sub&gt;</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. EAT rice&lt;sub&gt;FOC&lt;/sub&gt;</td>
<td></td>
<td>1!</td>
<td></td>
</tr>
</tbody>
</table>
Statistical modeling (Shapiro & Anttila to appear)

Dependent variable:
• Accentuation Index

Fixed effects:
• Repetition: Distance between a repeat and its antecedent, labeled on the repeat (continuous variable)
• Retraction: A repeat’s repetition value, labeled on the content word closest to the repeat (continuous variable)

Random intercepts:
• President, Annotator, Word type

Separate models for different parts of speech
Model summary (Shapiro & Anttila to appear)

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Estimate</th>
<th>SE</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nouns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repetition</td>
<td>$3.34 \times 10^{-2}$</td>
<td>$5.56 \times 10^{-3}$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Retraction</td>
<td>$-4.84 \times 10^{-2}$</td>
<td>$5.62 \times 10^{-3}$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Adjectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repetition</td>
<td>$9.96 \times 10^{-2}$</td>
<td>$8.98 \times 10^{-3}$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Retraction</td>
<td>$-2.47 \times 10^{-2}$</td>
<td>$1.34 \times 10^{-2}$</td>
<td>0.065</td>
</tr>
<tr>
<td>Verbs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repetition</td>
<td>$4.68 \times 10^{-2}$</td>
<td>$8.08 \times 10^{-3}$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Retraction</td>
<td>$-3.28 \times 10^{-2}$</td>
<td>$8.40 \times 10^{-3}$</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Function words</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repetition</td>
<td>$6.97 \times 10^{-3}$</td>
<td>$2.75 \times 10^{-3}$</td>
<td>0.011</td>
</tr>
</tbody>
</table>

*Table 1. Associations with the Accentuation Index.*
Pragmatic effects (Shapiro & Anttila to appear)

- Deaccentuation is sometimes possible without a *STRESS-COPY violation:

  John called Mary a XXX and then SHE insulted HIM.
  where XXX = Republican, Democrat, linguist,…

- The entailment is not semantic, but speaker-defined.
  (van Deemter 1994, Rochemont 2016: 47)

Proposal: Here deaccentuation is put into productive rhetorical use:
- Deaccentuation invites the hearer to identify two strings.
- When identity of form fails, the hearer infers identity of meaning.
- This interpretation pivots on shared phonological knowledge.
Summary

a. Deaccentuation is a phonological rule of English.
b. Deaccentuation means to be perceived with less stress than expected.
c. Deaccentuation is stress retraction (Ladd 1980).
d. “Decay” effects suggest that processing matters (Jacobs et al. 2015).
Questions

Questions from A to B
• Why are antecedents that have the same meaning but not the same form valid antecedents for deaccentuation?
• Why is there a contrast requirement on deaccentuation?
• Why is there a need for a semantic antecedent?

Questions from B to A
• I can’t imagine what it would be like to be a dentist -- but I am awfully glad there are guys who want to be dentists (Ladd 1980: 81).
• Is it circular to say focus determines the location of accent if the only way to identify focus is the location of accent?
• How can we identify focus independently of accent, so as to be able to genuinely predict accent from focus?
References


