The intonation of accessibility (Baumann & Grice 2006)

Overview

- It is commonly assumed that new information is marked by a pitch accent, while given information is deaccented.
- However, there are a number of studies that claim that both given and new information can be accented.
- It is then the type of pitch accent which is used to differentiate between them (low:given, high:new).
- Most of the work has concentrated on the binary distinction between given and new information, rather than different degrees of givenness.
- Baumann & Grice (2006) investigate how far not only accentuation and lack thereof, but also type of accentuation can be used to indicate different degrees of givenness in German.
- A perception experiment is described in which listeners judged the appropriateness of presence or absence of accentuation as well as accent type in context in which the type of accessibility is controlled.

Givenness

- Following Halliday (1967), given and new are often defined as a dichotomy:
  - given information is recoverable from the discourse context
  - new information is not
- This relation is equivalent to background vs focus
- More recent studies on givenness regard the distinction between given and new as a continuum.
- Chafe (1994) defines three information states:
  - If a referent is active at the time of the utterance, it is given.
  - If a referent becomes activated from a previously semi-active state, it is accessible.
  - If a referent becomes activated from a previously inactive state, it is new.

Types of accessibility

- The category accessible information can be further divided into textually, situationally and inferentially accessible information.
- Textually accessibility requires an explicit antecedent. The difference to textual givenness is that the antecedent is not mentioned immediately prior to the referring expression, but is displaced.
- A referent is situationally accessible if it is part of the extra-textual context.
  1. Those pictures sure are ugly.
- Inferentially accessible referring expressions do not have explicit antecedents.
  2. I got on the bus yesterday and the driver was drunk.
- The study of Baumann & Grice (2006) concentrates on the prosodic marking of textually accessible referring expressions and different kinds of inferentially accessible items.
Prosodic encoding of accessibility

- It is sometimes argued that accessible information does not have a direct phonological correlate: it can be either accented or unaccented.
- Chafe (1994) claims that there is no difference between accessible and new referring expressions since both are marked by accented full NPs.
- Recent studies have proposed that different types of pitch accent are used to distinguish between degrees of givenness:
  - H+L* marks accessible information
  - H* marks new information
  - L* marks given information (if accented at all)

Types of accessibility investigated

Eight different relations between a textually given antecedent and an anaphor (the target referent) were tested with regard to listeners preferred pitch accent type on the target referents.

- Textually displaced: the same expression recurring after three intervening clauses.
- Inferentially accessible relations:
  - A scenario condition (trial - judge)
  - symmetrical lexical relations: synonymy (lift - elevator) and converseness (sister - brother)
  - asymmetrical lexical relations: hypernymy-hyponymy (flower - lily) and meronymy (whole-part, hand - finger)

Perception Experiment

Hypothesis

- The experiment investigates the intonations marking of textually and inferentially accessible referents in sentence final position.
- Basic Hypothesis: The type of accessibility of a referent correlates with the type of pitch accent (including deaccentuation) used for marking it.
- Within the category of accessibility there are differences in degree of activation reflected in the choice of intonational marking:
  - The more active a referent, the more likely deaccentuation is to be the preferred prosodic marker.
  - The less active a referent, the more likely an H* pitch accent is to be preferred.
  - H+L* should take an intermediate position, marking information between the extreme poles of the continuum.

Experimental setup

- In terms of prosodic structure, three different versions of each target sentence were created.
- There were always two pitch accents in the sentence, i.e. the subject and the object noun.
- The subject noun always received a high prenuclear accent H*.
- The target referent either carried a nuclear H* or H+L* pitch accent, or was deaccented.

Fig. 6. Schematized intonation contours of the target sentence “The people at the next table called the waiter”. Capital letters indicate accented syllables, bold face letters indicate syllables bearing nuclear accents. The symbol ‘Ø’ indicates lack of accent.
Results

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Baumann and Grice (2006)

Discussion

The results confirm the hypothesis that the factors 'type of accessibility' and 'type of pitch accent' are highly correlated.

The order of accent type preferences varies across different semantic relations.

The choice of pitch accent type (including deaccentuation) depends on the relation between the antecedent and the anaphor.

Bibliographie


Table 1

Summary of the Results (> : highly significant preference; > : significant preference; = : no significant preference)

<table>
<thead>
<tr>
<th>Type of accessibility</th>
<th>Pitch accent type preferences</th>
<th>Preference values for deaccentuation of target referent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converse 2</td>
<td>No accent &gt; H+L* &gt; H*</td>
<td>1.18</td>
</tr>
<tr>
<td>Part-whole</td>
<td>No accent &gt; H+L* &gt; H*</td>
<td>-0.84 Higher preference</td>
</tr>
<tr>
<td>Synonymy</td>
<td>No accent &gt; H+L* &gt; H*</td>
<td>-0.68</td>
</tr>
<tr>
<td>Hyponym-hyponym</td>
<td>No accent &gt; H+L* &gt; H*</td>
<td>-0.67</td>
</tr>
<tr>
<td>Textually displaced</td>
<td>H+L* &gt; no accent &gt; H*</td>
<td>-0.55</td>
</tr>
<tr>
<td>Whole-part</td>
<td>H+L* &gt; no accent &gt; H*</td>
<td>-0.18 Lower preference</td>
</tr>
<tr>
<td>Scenario</td>
<td>H+L* &gt; H* &gt; no accent</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Preference values for deaccentuation: the lower the score, the higher the preference, and consequently the higher the judged appropriateness for deaccentuation.

The most readily available interpretation is that the factors 'type of accessibility' and 'type of pitch accent' are highly correlated. However, the order of accent type preferences varies across different semantic relations. The choice of pitch accent type (including deaccentuation) depends on the relation between the antecedent and the anaphor.

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