The prosody of negative ‘yeah’

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Goal
Examine acoustic-prosodic patterns of negative ‘yeah,’ lexically positive words that express negative stance (attitudes, opinions [1-2]).

ATAROS Corpus
34 dyadic conversations
- Strangers, from Northwest
- Matched by age group
- Matched/crossed gender
5 collaborative tasks [3-5]
- Stance-dense
- 2 used in this analysis:
  - Inventory: arrange items in a supermarket
  - Budget: cut items from a county budget

Transcription [7-9]
- Manually transcribed
- Force-aligned to audio

Annotation [4-6]
- Utterances marked for stance strength (none, weak, moderate, strong) and polarity (positive, negative, neutral)

Available online
deads.washington.edu/phonlab/projects.htm

Sample
46 speakers, 8.7 hours, 2870 ‘yeah’s uttered:
- 68% occur in positive utterances (agree, affirm)
- 30% in neutral/non-stance (answer, backchannel)
- 2% in negative utterances

Content Analysis
Negative ‘yeah’s examined for stance function (N=46 from 24 speakers)
Common categories:
- “Yeah but” (N=12) followed by explanation against preceding stance
- “Reluctance” (N=13) hesitation to accept or agree with preceding stance
- “Tough problem” (N=12) expresses shared difficulty (e.g., “shoot, what a tough problem”)
- “That’s bad” (N=6) states agreement with a negative assessment without the empathy implied in “tough problem” (e.g., “you’re right, that’s bad”)

Measures
- Pitch & Intensity taken at every decile of word duration via Praat script [7]
- Normalized via speaker-internal z-transform

Plots
- Smoothing-Spline ANOVA
- Shading shows 95% confidence intervals around means (splines)

Results
Negative ‘yeah’s (N=43)
- Cross-cutting pitch and intensity patterns distinguish the four categories identified via content analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Cross-Contours</th>
<th>Flatter Intensity</th>
<th>Domed Intensity</th>
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</thead>
<tbody>
<tr>
<td>Problem</td>
<td>(N=12)</td>
<td>(N=6)</td>
<td></td>
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<tr>
<td>Reluctant</td>
<td>(N=13)</td>
<td>but</td>
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<td>Yeah but</td>
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<td>Yeah no</td>
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</tbody>
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Future Work
Classify, compare other polarized lexical items: non-negative ‘yeah’s, positives (yes, uh-huh), negatives (no, nah) [10]
Intermediate contours of positive/neutral ‘yeah’s (black line, N=2824) & ‘no’s (brown, N=246) suggest subcategories

References