Background

- Speakers mark focus prosodically
  - Focused constituent higher in pitch and intensity
  - Focused word may be lengthened
- Focus can come from:
  - Syntax: Passive vs. active sentences
  - Presupposition: Determiner the vs. a
  - Previous studies examined single-focus utterances

Research Questions

- How do syntax and presupposition affect prosody?
- Which is a stronger source of focus?

Methods

- Participants: 2 adult monolingual English-speakers
- Task: Read sentences aloud
- Stimuli:
  - Syntactic Structure:
    - Active: The pig was kissing the sheep
    - Passive: The sheep was kissed by the pig
  - Presupposition: Links to previous context
    - A (unfocused): The pig was kissing a sheep
    - The (focused): The pig was kissing the sheep
  - Determiner position: 1st or 2nd determiner
  - Verbs: 16 action verbs
- Coding:
  - Morpheme boundaries marked
  - Morpheme duration, pitch and intensity calculated

Results

- Determiner Position: Duration
  - 1st det. 30 ms longer than 2nd (p = .002)
- Determiner Position: Pitch
  - 1st det. 33.6 Hz higher than 2nd (p = .0005)
  - Active det.6.8 Hz higher pitch than passive (p = .012)
- Determiner Choice: Intensity
  - Det. Choice x Act/Psv (p = .004) due to the being louder than a in actives (p = .012)

Discussion

- 1st determiner more focused than 2nd determiner
  - Participant A: 1st determiner longer
  - Participants A & B: 1st determiner higher pitch
- Active determiners more focused than passive determiners
  - Participant A: active determiners longer and higher in pitch
- Determiner position interacts with syntactic structure
  - Participant B: declination in pitch greater for passives than actives
- Presupposition interacts with syntactic structure
  - Participant A: the is louder than a in actives, but not passives

Future Directions

- Run with larger sample size
- Add stronger presupposition triggers
  - That: very strong presupposition
  - The dog was punched by that bear
  - This: moderate presupposition
  - The dog was punched by this bear
- Comprehension study for listener judgments
  - Are certain focus-marking prosodies more felicitous than others?

Acknowledgments

This work was supported by Aresty and the National Science Foundation (REU CNS-1062735; IGERT DGE 0549115). We are also grateful to the 2014 Perceptual Science and Technology REU mentors and interns for their support and feedback.