# Don't Interrupt this Talk! <br> Analyses of Academic Engineering Job Talks 

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## Gender Gap in ECE Faculty: Many Causes

## Not much studied: The Interview Day

## 1-hour research seminar

Job Talk

- Questions \& Interruptions during Job Talks
- Preliminary work: Analyses of Introductions


## Research on Interruptions in Conversation

Many contexts studied:

- Corporations
- Press briefings
- Parent-child
- Fictional TV
- Doctor-patient
- Supreme Court

Groups with different:

- Gender composition
- Knowledge level
- Status
- Size
- Setting
- Topics of discussion
- Interruptions indicate power \& dominance
- Gender and status effects
- Many complex effects


## How would you define an Interruption?

- Simultaneous speech more than two syllables before the end of someone's sentence
- Interrupting in midst of incomplete grammatical unit
-It's raining outside so I am going to leave.
- It's rainingoutside ...
- tt's..

Didn't raise your hand; didn't get acknowledged by the speaker


## Definitions of Interruptions

## Presenter is Presenting:

Raise your hand, get acknowledged

- ACKNOWLEDGED QUESTION

Otherwise

- INTERRUPTION


## hard

Presenter is Answering a Question:

Wait until the presenter has finished their answer, then ask another question without raising hand

- FOLLOW-UP QUESTION

Otherwise (ask another question without letting presenter finish, speech overlap)

- INTERRUPTION


## Data Set: Video recordings of job talks

- 140 videos
- 91 men, 49 women
- Seniority:
- PhD students: 44
- 1-2 years out: 26
- 3-4 years out: 28
- 5-6 years out: 12
- 7-21 years out: 30
- 2 large public R1 schools
- Multiple departments
- EE, CS, ME, BioEng
- Use all available $\underset{\boldsymbol{q}}{\mathbf{~ d}}$ data
- $\boldsymbol{\sigma}^{\top}$ Select approx. 2:1 seniority matched data
- Data analysis from preQ\&A portion

Question: Is it Bad to get More Questions?

## Sample Data

| Female, PhD+4 | Start | End | Duration |
| :--- | :--- | :--- | :--- |
| Presenting | $0: 01: 22$ | $0: 11: 25$ | $10: 03$ |
| Question (Acknowledged) | $0: 11: 26$ | $0: 11: 33$ | $00: 07$ |
| Answer | $0: 11: 34$ | $0: 11: 46$ | $00: 12$ |
| Presenting | $0: 11: 47$ | $0: 15: 40$ | $03: 53$ |
| Question (Interruption) | $0: 15: 41$ | $0: 15: 44$ | $00: 03$ |
| Answer | $0: 15: 45$ | $0: 15: 51$ | $00: 06$ |
| Question (Follow-up) | $0: 15: 51$ | $0: 15: 54$ | $00: 03$ |
| Answer | $0: 15: 55$ | $0: 16: 09$ | $00: 14$ |

## Number of Questions vs. Length of Talk



- Male - Female


## Number of Questions vs. Years since PhD



- Female
- Male


## Descriptive Statistics (excluding BioEng)

| Dependent Variables | Men | Women |
| :--- | :--- | :--- |
| Interruptions | 3.77 | 4.95 |
| Ack. Questions | 5.49 | 5.39 |
| Follow-ups | 4.83 | 6.66 |
| Total Questions | 14.1 | 17 |
| N talks | 78 | 41 |

- Gender effect:
- Women get 3 more questions, on average
- Women experience more talks with zero questions
- Conditioned on getting any questions, women get 6 more questions than men, on average
- Slight seniority effect for both men and women
- More senior people get fewer questions


## Is it Bad to get More Questions?

- Could be a sign of audience interest
- No outcome information (offers, hires)
- More questions correlated with speaker rushing:
- "For the sake of time, I'm going to skip this part"
- "There's not much time left; I will rush through this"
- "I'm going to skip to the end"
- "I'm going really quick here because I want to get to the second part of the talk"
- "We're running out of time so I'm not going into the details"


## Didn't expect \#1: So many questions!

Some people get pummelled!

## Didn't expect \#2: Department gender effect

- More women on faculty $\rightarrow$ fewer questions are asked - Both men/women candidates receive fewer questions
- Bigger effect than gender of speaker or seniority


## Didn't expect \#3: Interdisciplinary issue

- $81 \%$ of talks in Bioengineering have zero questions
- Unless it's a clarification question, save it for the Q\&A
- Only 9\% of talks in other departments do
- Culture clash:
- Candidate can be shocked by unaccustomed aggressiveness
- Risk for interdisciplinary candidates


## Some Thoughts

- Analysis difficulty: Zero questions because of
- Departmental effects
- Candidate is super clear
- Train wreck

- Possible double effect:
- Women get more questions
- Even with same number, women may view questions as more aggressive, unfriendly
- Many people seem to accept that their department has reputation for being mean



## Suggestions of what to do

- Fix the Woman or Change the System

- Do both


## Suggestions for Faculty

- Awareness: Not all candidates are comfortable saying: "Let's hold remaining questions for the end"
- Search committee can agree on host who can step in and say it, if needed
- Most natural for introducer to say it
- But any faculty member in audience can step in
- No explicit formula
- Some questions are good (elicit useful clarifications, convey audience interest, etc.)
- Holistic decision based on Number/Content/Tone of questions, reaction of candidate, etc.


## Discussion

- Have a departmental discussion about norms of behavior
- People say "We don't want a snowflake"
- Ability to handle aggressive questioning required at age 27?
- Are we really adding that to our criteria?
- Or can a faculty member develop that skill on the job?
- People say "Talk is useless if I don't understand something early on"
- But everyone else may want to hear the talk
- Agree that audience will be reminded of behavioral norms at start of each talk
- Especially important if faculty from other departments are present


## For more information...

M. Blair-Loy, L.E. Rogers, D. Glaser, Y.L.A. Wong, D. Abraham, P.C.Cosman, "Gender in Engineering Departments: Are there Gender Differences in Interruptions of Academic Job Talks?," Social Science, Volume 6, Issue 1, 2017.

## Preliminary research: Analyses of Introductions

- 85 Introductions transcribed
- Introduced by first name only:
- 12.1\% of women
- 8.8\% of men
- Not significant
- Presenter refers to introducer by first name:
- 11.5\% of women
- 30.3\% of men
- Marginally significant


## Analyses of Introductions

- Count of positive comments in introduction:
- Awards
- Number of citations
- h-index
- Media attention
- Influence of their work
- Direct compliment
- Positive introduction = more than 1 positive comment
- Men are four times as likely as women to have a positive introduction


## Introductions

- Research awards:

|  | Listed in CV | Mentioned in Intro |
| :--- | :--- | :--- |
| Men | $78 \%$ | $52 \%$ |
| Women | $73 \%$ | $27 \%$ |

## Irrelevant or Inappropriate

- 6 introductions (5 for women) had an inappropriate item:
- Elizabeth, Dr. Elizabeth ... went to [university] and I can tell you the place is like an awesome place. It's amazing. My first girlfriend was from [university].
- Counting irrelevant statements in introduction:
- Things that wouldn't be found in the CV
- Women: 40.9 \%
- Men: 14.5 \%


## Concluding Thoughts

- Be aware of cultural differences:
- Departments \& disciplines have different cultures
- Especially an issue for interdisciplinary candidates
- Give strongly positive introductions for all candidates
- Remember:
- Department is interviewing the candidate
- Candidate is interviewing the department
- Engineering should have a more friendly, less aggressive culture!

