Adding Body Motion and Intonation to Instant Messaging with Animated Text

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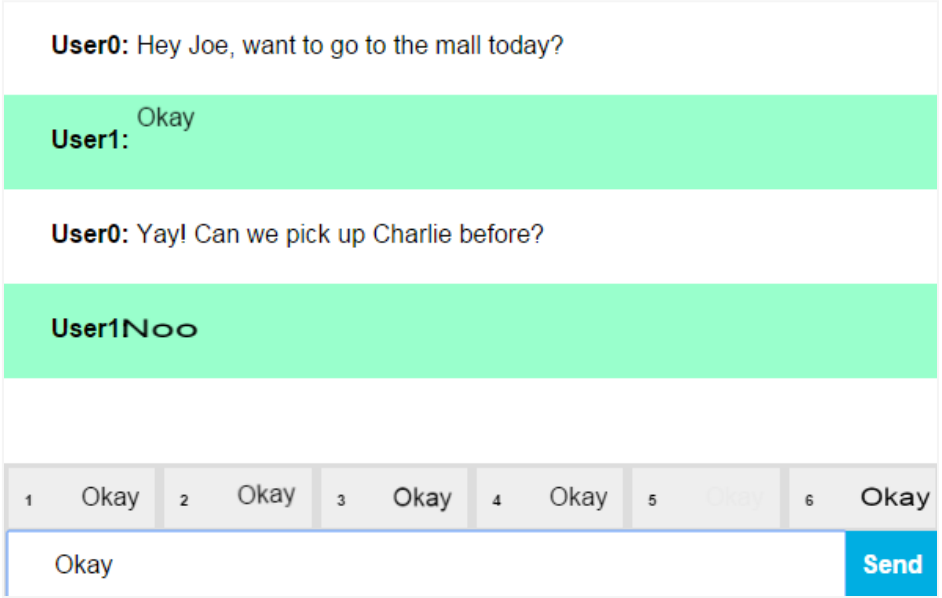
What we did & why we did it

- digital text communication lacks nonverbal cues
- created an Animated Text Instant Messenger (ATIM)
- inline animations integrated into chat log
- animations add body motion and intonation, help convey meaning

System

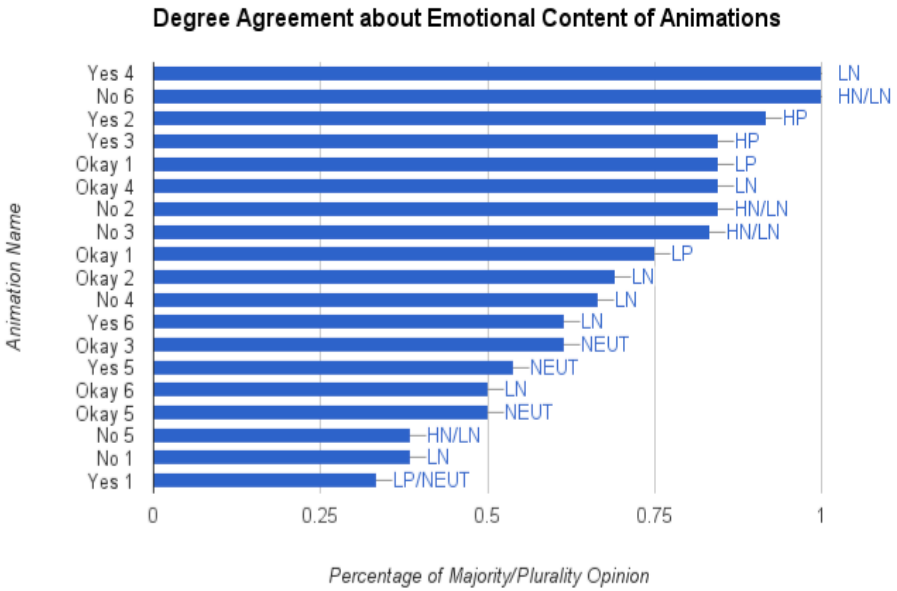
- design principles
  - legibility
  - simplicity
  - visibility
- trigger keywords
- animation design

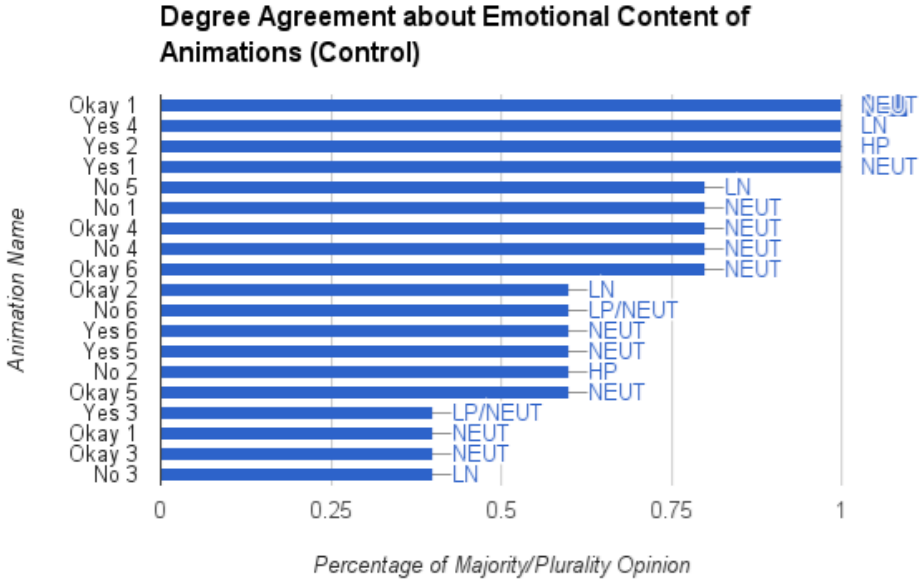


Pilot Testing

- 15 experimental, 5 control participants
- Transcript Labeling
- Scenario Questions
- Qualitative Survey
- Why?

Quantitative Results: Transcript Labeling

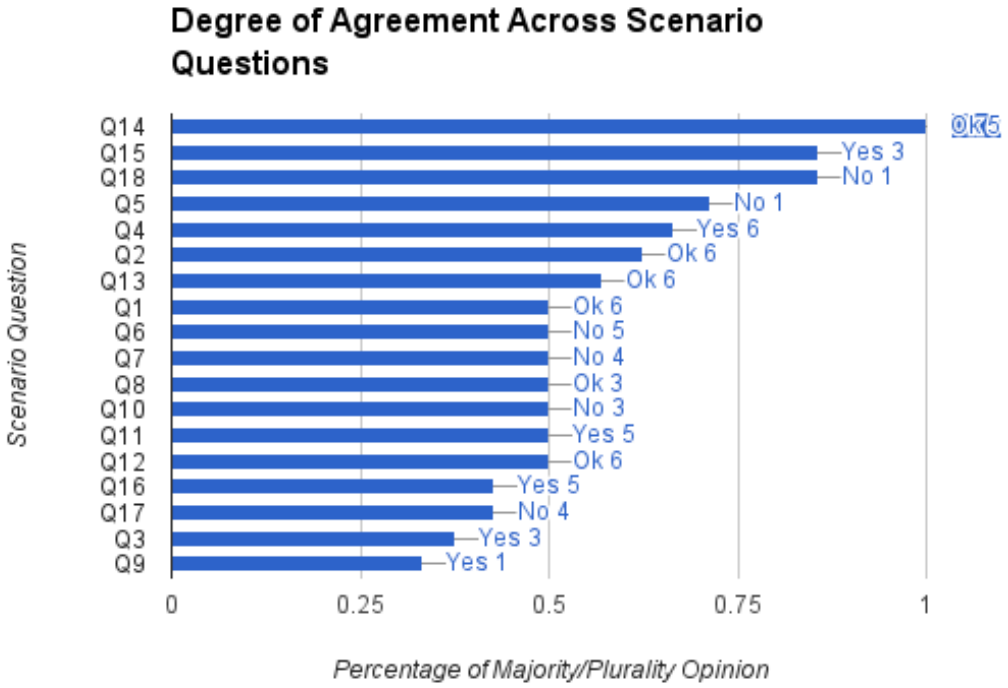




What am I supposed to notice?

- Similar degree of agreement. The control group has more “neutral” categorizations
- In experimental group, two-thirds of the most agreed upon are gestural, not intonational

Quantitative Results: Scenario Questions



What am I supposed to notice?

- Much less agreement than on transcripts (except for a few questions)
- Personal choice of animations is more subjective than interpretation of animations

Qualitative Results

Alice: Hey I'm going to happy donuts, do you want me to bring you back a donut?

Bob: Yes

Trisha: we can't! I'll just be super nervous all night!

Sarah: Ahokay

Qualitative Feedback

“There’s greater potential for misunderstanding, but if you’re on the same page, there’s greater potential for understanding nuance.”

“Rather than using this in ambiguous situations, I’d use this in clear situations to intensify what I’m saying.”

"People use emoticons because they're trying to lessen the bluntness of [plaintext] words. We are socially pillowing our words in messaging... We're usually trying to make what we are saying sound more perky or positive."

"I liked the bouncing, shivering, and shaking animations."

Implications

- ATIM adds layer of nuance and meaning to static text
  - enables more expressivity, but people must be “on the same page” to be effective
  - affordance of expressivity comes with subjectivity

Implications

- Gestural animations were more consistently interpreted than intonational animations
  - 6 of the 9 most agreed upon animations were gestural
    - body motion linked to word motion vs. intonation linked to word motion

Future Investigations

- Applications for ESL
- Creating a standard for animated text, familiarizing people with new “vocabulary”
- greater quality and more variety in animations