

**DIVISION OF RESEARCH AND SPONSORED PROGRAMS
KENT STATE UNIVERSITY**

APPLICATION FOR:

- * (Circle One) 1. SUMMER APPOINTMENT
 2. ACADEMIC YEAR APPOINTMENT

* (Circle One) Screening Committee Preference: A B C D E

* Subject Area: Speech Pathology and Audiology

I. General Information:

A. Short title of project: Tit-for-Tat: The Effect of Speaker Reliability on Discourse Processing

B. Name of Applicant: Jennifer M Roche

C. Title or Rank: Assistant Professor

D. Department or School: Speech Pathology and Audiology, School of Health Sciences

E. Campus: Kent East Liverpool Geauga
(Circle One) Salem Stark Trumbull Tuscarawas

F. Number of years of professional experience (exclusive of degree work): 3

G. Have you been awarded a Summer Research Appointment previously?

Dates: N/A

H. Have you been awarded an Academic Year Appointment previously?

Dates: N/A

I. Have you been awarded an Extramural Grant previously?

Agencies and Dates: National Research Council (June 2011; declined) for postdoctoral funding. Accepted the CLS Postdoctoral Fellowship via NIH Training grant awarded to Michael K. Tanenhaus, University of Rochester (June 2011-2013).

Please email your application and condensed 2-page cv to Peggy Kramer (pkramer@kent.edu) by 5:00 on Monday, October 6, 2014.

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II. Proposal:

USING ESSENTIALLY NON-TECHNICAL TERMINOLOGY, DESCRIBE IN YOUR PROPOSAL:

- (1) What is the problem around which your project is focused?
- (2) What is the significance of this problem to your line of scholarship/research and to yourself? What is important, unique, timely about this?
- (3) What approach are you proposing to take to this problem? What is your research design, your choice of scholarly procedures, your artistic innovation?

Limit this portion of your proposal to not more than 4 pages, double- or single-spaced (not including a bibliography or list of references, which may also be included.) Use a font size not smaller than 10. Please note that the review committee may give you penalty points if your proposal exceeds these limitations.

NOTES:

- . Please make very clear what you want to do, how you propose to do it, why it is important, and how it fits in with the state of the art in the discipline. Special attention should be given to explaining your methodology.
- . See attached "Shortcomings" for commonly observed difficulties found in research applications. Remember, your proposal is judged by what you write in this application.

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III. Supporting Information:

- A. Are additional facilities (library materials, space, travel, equipment, etc.) needed for this proposal? If so, list the items, their cost, and describe how they will be obtained. (Appointment does not commit additional funds from the University Research Council to the project.)

The only additional costs will be the payments to participants (\$10/hr X 30 participants= \$300), but I am willing (and will) to apply for alternative forms of funding for this.

- B. How is the project related to your previous research in this area and to the appropriate field of your discipline? What other funding do you have to support this project? How is this project different from previous work? Does it represent a departure, and if so, what is your preparation for this "new" line of work?

My research evaluates social and action dynamics during human interaction, with a focus on successful/unsuccessful communication. In the past I have evaluated the ambiguity in language production, but not comprehension. I also have a track record of publications using mouse-movement methodologies. Therefore, the current research assesses how ambiguity affects language processing (much like the production work from my PhD work), but now integrates a comprehension component. Once the data from this initial study is collected, I would like to extend the project to capture the dynamic interplay between production and comprehension during an interactive dialogue task. This project will act as pilot data for the preparation of an early career grant through the NIH or NSF.

- C. How do you expect to disseminate or use the results of this work, e.g., publication, concert, show, etc.?

I intend to present this work as a poster, presentation, or as a published proceedings paper at a National or International conference. If the data are promising and the design can be extended to a more complex dyadic interaction. I also intend to publish the work in a peer-reviewed journal as a multi-experimental study.

- D. If this application is for a "Creative Activity" grant, could you furnish the University Research Council tangible representative evidence of your previous creative activity that might make the evaluation of your present proposal more reliable, such as slides, recordings, photographs, articles, reviews, etc.? (No more than 12 slides may be submitted per proposal.)

N/A

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- IV. If you have previously been awarded a Research or Creative Activity Appointment, please describe how you put it to use and what scholarly or creative results accrued from the activity.

N/A

- V. In what realistic and specific ways might the proposed work aid you in obtaining extramural funding? Please provide a plan for submitting proposals for outside funding.

I plan to apply for a New Investigator-R01 from the NIH (National Institute of Health) or CAREER award from the NSF (National Science Foundation) to support research on this related topic. The topic of the grant will look at individual differences in the adaptation to conversation-specific ambiguity. In this grant, I intend to propose experiments specifically looking at how the cognitive system adapts to violations (both helpful and hindering types) of conversational heuristics.

The data from the proposed study will be used as pilot data in the Early Career grant application. At best, the data would provide further evidence that the flexibility of the cognitive system should allow the development of strategies to successfully communicate, even in less than ideal conversational settings. However, if I find that my hypotheses are not supported (i.e., listeners do not adapt), integrating a production component should still elicit a clearer understanding of how the comprehension system is breaking down when the listener is interacting with an unreliable speaker. Therefore, the focus on how interlocutors adapt during conversation will still provide important evidence towards understanding the cognitive processes necessary for communicating in a social and highly variable environment.

- VI. Please submit your CV with your proposal. Mark with an asterisk those publications that bear on the nature of the proposal you are submitting. (You may submit an already prepared bibliography on 8 1/2 x 11 paper that is appropriately marked.)

Curriculum Vitae
Jennifer M. Roche
2014

**CONTACT
INFORMATION**

Position: Assistant Professor
(www.jennyroche.com)
Department of Speech Pathology & Audiology
School of Education, Health & Human Sciences
Kent State University

Email : jroche3@kent.edu

EDUCATION

2011-13 Center for Language Sciences Postdoctoral Fellow, University of Rochester
2011 *Ph.D.* Cognitive Psychology, University of Memphis
2007 *M.A.* Cognitive Psychology, James Madison University
2004 *B.A.*, Psychology, University of Nevada, Las Vegas

RESEARCH GRANTS, FELLOWSHIPS, & SCHOLARSHIPS

2011-13 2 year - Center for Language Sciences NIH Postdoctoral Fellowship Training Grant to Michael K. Tanenhaus (~\$78,000) – Awarded, and Accepted
2011 National Research Council, Navy Research Labs: Intelligent Systems Division, Research Associate Award (\$74,872) Title: *Action Dynamics of Procedural Errors* – Awarded, but Declined

PEER REVIEWED PUBLICATIONS

- ***Roche, J. M.** & Dale, R. (2015). “Your tone says it all”: The processing and interpretation of affective language. *Speech Communication*, 66, 47-64.
- Roche, J. M.**, Paxton, A., Ibarra, A. & Tanenhaus, M. (2014). From minor mishap to major catastrophe: Lexical choice in miscommunication. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. to appear). Austin, TX: Cognitive Science Society.
- ***Roche, J. M.**, Dale, R., Kreuz, R. J., & Jaeger, T. F. (*under review*). Don’t rush the navigator: Effective communication strategies in language production are hard to establish, but easier to maintain.
- Roche, J. M.**, Dale, R., & Caucci, G. (2011) Doubling up on double meaning: Pragmatic alignment. *Language and Cognitive Processes*, 27(1), 1-24.
- *Dale, R., Duran, N.D., & **Roche, J. M.** (2011). Action dynamics in language processing. In R.K. Mishra & N. Srinivasan (Eds.). *Language-Cognition Interface: State of the Art*. LINCOM Europa.
- Hall, M.D., Beauchamp, J.W., Horner, A.B., & **Roche, J. M.** (2010). Importance of spectral detail in musical instrument timbre. *Proceedings of the 11th annual meeting of the International Conference of Music Perception and Cognition*. Seattle, WA.
- ***Roche, J. M.**, Dale, R., & Kreuz, R. (2010). The avoidance of ambiguity during conversation: More than mere priming or mimicry? *Proceedings of the 32nd Annual Meeting of the Cognitive Science Society*, Portland, OR.
- Roche, J. M.**, Dale, R., & Caucci, G. (2009). Pragmatic alignment: The coordination of

ironic statements in pseudo-interaction. *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*, Amsterdam, NL.

*Dale, R., **Roche, J. M.**, & Duran, N. (2008). Language is complex. *International Journal of Psychology and Psychological Therapy*, 8(3), 351-362.

*Dale, R., **Roche, J. M.**, Snyder, K., & McCall, R. (2008). Exploring action dynamics as an index of paired associate learning. *Plos One*, 3(3), e1728, 1-10.

PRESENTATIONS

Salverda, A. P., Brown, M., & **Roche, J. M.** (2013, November). *Exploring the attentional demands of whispered speech*. Poster presentation to be presented at the Auditory Perception, Cognition, and Action Meeting, Toronto, Ontario, Canada.

Roche, J. M. (2013, May). "Wait, what?" *Pragmatic cues to successful and unsuccessful communication*. Invited oral presentation at University of Wisconsin, Parkside. Kenosha, WI.

***Roche, J. M.** (2012, March). *Communication Breakdown Induces Audience Design Strategies*. Poster presented at the 25th Annual Meeting of the CUNY: Human Sentence Processing Conference. New York, NY.

***Roche, J. M.** & Dale, R. (2012, November). *The Influence of Talker Variability on the Interpretation of Pragmatic Intent*. Oral presentation presented to the Auditory Perception, Cognition and Action Meeting, Minneapolis, MN.

***Roche, J. M.**, Dale, R., & Kreuz, R. (2010, November). *Don't rush the navigator: Disambiguation strategies require cognitive flexibility*. Poster presented at the 51st annual meeting of the Psychonomics Society, St. Louis, MO.

Roche, J. M., Mills, C., Booker, E. & Dale, R. (2010, November). *Who I am, what I say, and how I say it: The effects of talker variability on affective language*. Oral presentation presented at the 9th Annual Meeting of the Auditory Perception, Cognition and Action Meeting, St. Louis, MO.

Roche, J. M., Caucci, G., Dale, R., & Kreuz, R. (2009, November). *Conversational puppetry: priming via pseudo-confederate*. Poster presented at the 50th annual meeting of the Psychonomics Society, Boston, MA.

Roche, J. M., Dale, R., Farmer, T., Zevin, J. (2009, July). *An exploration of dialect-driven modulation of spoken word recognition*. Poster presented at the 31st annual meeting of the Cognitive Science Society (CogSci), Amsterdam, NL.

SERVICE

2009-13 Reviewer Plos One, Frontiers in Psychology, Cognitive Science Society, Behavior Research Methods, Journal of Educational Psychology, FLAIRS (Florida Artificial Intelligence Research Society)

Tit-for-Tat: The Effect of Speaker Reliability on Discourse Processing

When planning what to say during conversation, one must consider how much information is necessary for communicative success (Blacfkmer & Mitton, 1991; Horton & Keysar, 1996; Shintel & Keysar, 2009). This process involves weighing the amount of production effort needed in relation to how much added knowledge the listener needs (Bock, 1986; Shintel & Keysar, 2009). A speaker often has minimal knowledge of her listener's mental representations and must make predictions and enlist strategies to elicit the comprehender's (listener) current knowledge base. This inquiry is resource (cognitively) demanding, but may reveal gaps in knowledge (sampling someone else's knowledge is hard to do, but strategies aid in simplification; Bock 1986; Levelt, 1983). For example, when giving directions on campus, a speaker might say: "Take a left past Bowman [Hall] to get to the Esplanade." If the listener is unfamiliar with campus, they may produce a question like: "Bowman? Huh? What's an *esplanade*?" Asking questions like this provides information to the speaker about how to design instructions on future utterances (e.g., instruct via common landmarks, instead of proper names, such as the *red brick road* for Esplanade; Clark & Brennan, 1996).

This example speaks directly to how a listener's comprehension of the speaker's statement may later influence the speaker's utterances. However, it is possible that some speakers may not strategically omit words to elicit more information, rather they omit because it is simply easier on their production system (i.e., egocentric response strategy: responding to benefit oneself, and not another; Bock, 1986; Wu & Keysar, 2004). Therefore, the purpose of the proposed study is to assess how listeners handle egocentric talkers. Do they "give up" or try harder over the course of the interaction? It is more likely the former to reduce his/her processing load, for reciprocity sake (Brennan & Clark, 1996). This also relates to real world interactions, in which listeners often face difficulty whilst decoding messages from educators, medical doctors, and even during typical conversation (e.g., misunderstanding how to take new medications).

Therefore, it is imperative for speakers to design language towards one's audience (i.e., audience design, Clark & Marshall, 1981). This notion is primarily based on the Cooperative Principle, which assumes that conversation must be reciprocal and cooperative as a means to increase communicative success (Grice, 1975). However, violations are sometimes permissible (Gunlogson, 2008). If a maxim is flouted, then the default might be to interpret the information pragmatically; often indicating the violator intended the listener to interpret the response beyond what was literally stated (e.g., sarcasm or an information retrieving strategy; Roche, Dale, Jaeger, & Kreuz, *submitted*). Therefore, it is possible that violating the Quantity Maxim (*give me the appropriate amount of information, no more, no less*) may indirectly signal to the listener that the speaker is looking for more information (because we know when production is hard for us; Haywood, Pickering, & Branigan, 2004; Pickering & Garrod, 2004).

Most accounts suggest flouting maxims may not be a good conversational technique, unless the "flouter" is confident the listener will acquire the appropriate interpretation (e.g., via established referents or common ground; Clark & Marshall, 1981; Brennan & Clark, 1996). Often times, flouting a maxim does fail (e.g., misunderstanding sarcasm) or the flout is not always executed for pragmatic reasons (i.e., the speaker is egocentric: unaware that a conversational rule has been broken, or they simply do not care; Keysar & colleagues). Anecdotally speaking, it is probably safe to say we all know a person that infelicitously flouts a Gricean Maxim: one that never gives us enough information (Quantity flout), constantly changes the subject without telling us (Manner Maxim flout), or often fabricates large parts of their stories (Quality Maxim flouts). All of which could be talker specific styles of speaking for various social/cultural reasons.

Sensitivity to talker specific characteristics has been relatively well established with regards to gender, age, social status, race/ethnicity, and syntactic preferences (e.g., Kamide, 2012; Ryalls, Zipprer, & Bauldauff, 1997). Nevertheless, talker specific characteristics related to a speaker's ability to successfully engage in conversation and how pragmatic violations affect a

listener's comprehension has been less studied in this context. Consequently, if a speaker tends to give unreliable information, will the listener (comprehender) weigh the speaker's message differently relative to a reliable speaker? We know interlocutors monitor and adjust their own behavior for speech errors (Brown-Schmidt & Tanenhaus, 2006; Horton & Keysar, 1996). Fine et al. (2011) even report a series of studies that suggest comprehenders adapt to speakers use of syntax (e.g., even for less common syntactic structures), but little to no research has evaluated how much effort the listener will put forth to decode a speaker's intent (if it is unreliable).

Therefore, the proposed study intends to evaluate how language comprehension is contingent upon on the reliability of the speaker: 1) how long does it take a listener to recognize the talker is untrustworthy, and 2) if deemed untrustworthy, how does this influence the listener's comprehension efforts over time? In order to test this, the proposed experiment will evaluate computer mouse-movement trajectories during the comprehension of spoken language by a *Speaker* that varies on reliability (see below). The use of computer-mouse cursor movements have been validated and shown to unveil online (cognitive) processing of language (see primarily Spivey, Grosjean, & Knoblich, 2005 and Dale, Kehoe, & Spivey, 2007).

Method

Participants

Participants should include approximately 30 typically developed native speakers of American English, undergraduate students with normal to corrected-to-normal vision and no diagnosis of speech or hearing impairment.

Materials

The participants will be seated at a comfortable viewing distance from an apple iMac computer screen, in which experimental stimuli will be presented.

Auditory & Visual Stimuli. Visual stimuli will include 32 images [2 Size (large/small) x 4 Geometric shape (triangle, square, circle, star) x 4 Color (red, blue, green, yellow)]. Auditory Stimuli will consist of 3 types of pre-recorded statements created by a single research assistant¹: *Understated*, *Overstated*, and *Intermediate*. *Understated* instructions will include at least one scalar *or* color implicature, with an ambiguous referent to the object name (e.g., Big Red Triangle = "*Click on the big/red one.*" see description below regarding the effects of the referential ambiguity). *Overstated* instructions will include a scalar *and* color implicature, plus an unambiguous description of the object (e.g., Big Red Triangle = "*Click on the big red triangle.*"). *Intermediate* instructions will include a scalar *or* color implicature, with an unambiguous object referent (e.g., Big Red Triangle = "*Click on the big/red triangle.*").

Design

The experiment will consist of a 3 Speaker Type (*Variable-Reliable--VR*, *Full-Reliable--FR* vs *Unreliable--U*) between subjects effect by 2 Feedback Type (*Positive* vs *Negative*) by 3 Statement Type (*Understated*, *Overstated*, & *Intermediate*) within subjects effects. All participants will be exposed to Critical and Filler trials. Filler trials will be presented to mask the purpose of the experiment. Filler trials will consist of *Overstated* (25% of trials) and *Intermediate* (25% of trials) instructions and will always receive *Positive* feedback (green ✓ after making a response; see further description below) to prevent the participant from predicting the purpose of the experiment. Critical trials (experimental trials of interest) will consist of *Understated* informative instructions, but will vary based on the amount of *Negative* feedback the participant experiences from the *Speaker*. Feedback refers to the "correctness" of the participant's response. In order to establish "correctness", participants will receive two pieces of information upon making a response to the speaker's instruction: 1) the objects the *Speaker* saw² and 2) either a "red X" for *Negative* feedback

¹ A single research assistant will be used to control for extraneous talker variability.

or “green ✓” for *Positive* feedback (see Figure 1 and full description of this below in the procedure section).

With respect to the role of *Negative* feedback during the critical (*Understated*) trials, the key here is that participants will learn (after the first trial) that their objects will sometimes differ from that of the *Speaker* (see Figure 1). *Negative* feedback is intended to provide the Listener a context that indicates that the *Speaker* does not realize being ambiguous is problematic for the Listener (i.e., giving the participant the sense that the *Speaker* is unhelpful). That is, if the *Speaker* does not share the same visual referents as the listener³, an ambiguous referent of “one” should make it difficult for the Listener to make a choice (see Figure 1 for an example). Therefore, on a subset of these *Understated* trials, the participant will be “penalized” for not “reading the mind” of the *Speaker* (which should, in turn force the Listener to adjust their comprehension strategy). *Understated* critical trials will make up about 50% of experimental trials and will be pseudo-randomly presented throughout the interaction.

Participants will also be randomly assigned to one of three between-subjects *Speaker* conditions (*Variable-Reliable*, *Full-Reliable*, or *Unreliable*). These between-subjects conditions will vary based on the amount of *Negative* feedback. Participants will receive 10% *Negative* feedback in the *VR* condition (to increase ecological validity, by cuing the listener that when describing things, mistakes are sometimes made, but not largely problematic) and 0% *Negative* feedback in the *FR* condition (cues the Listener that the *Speaker* is taking on all the cognitive load). Finally, Participants assigned to the *U* condition, will receive a high rate of *Negative* feedback (75% of *Understated* Critical Trials). This will give the participant a sense that the *Speaker* is egocentric and fails to consider they are making comprehension difficult. This will make the expression of an ambiguous (*Understated*) statement quite problematic for the Listener’s comprehension because the participant will be forced to “guess” what the *Speaker* intended to describe.

Procedure

During a trial, the participant will be presented with a virtual display (computer screen) in which s/he will listen to the *Speaker’s* instruction and click on an image. To initiate a trial, the participant will be asked to click on a bull’s-eye displayed at the bottom of the screen. This will initiate the pre-recorded *Speaker* instruction sound file (e.g., “Click on the small green circle”). The participant will be instructed to start moving their mouse towards what she thinks is the correct answer as soon as the sound file starts playing. This is a typical instruction used by researchers investigating mouse movements, which allows the researcher to sample cognitive processes as the participant listens to the sound file, rather than post categorically.

Once the participant has made a selection, she will be presented with feedback. On the feedback screen, the participant will see “what the *Speaker* saw” in the top left corner of the screen. On *Positive* feedback trials, one of the *Speaker’s* shapes will only differ based on one featural dimension (either size or color), but in a non-meaningful/harmful way (see Figure 1, (right panel) for an example of this). However, on *Negative* feedback trials, the participant’s and *Speaker’s* shapes may vary along both dimensions (shape and size), thus increasing referential ambiguity on those trials (see Figure 1, (left panel) for an example of this). Feedback will be

² Note: The *Speaker* does not actually “see” these images, because the statements were pre-recorded. This will be done to give the illusion of perspective taking and increase the ecological validity of the task.

³ Note: The participant’s feedback about the *Speaker’s* objects will be contingent upon the participant’s response. On *Negative* feedback trials, the *Speaker’s* items will always be shown as the competing referent (see Figure 1 (left panel) for clarification). This will be controlled by an if-statement in the experiment’s computer program.

presented to the participant for approximately 2 seconds, and then the participant will be allowed to proceed to the next experimental trial. Participants will continue in this manner until the end of the experiment, which will consist of approximately 500 trials (with planned rest breaks; 250 Filler & 250 Critical).

Results

Hypothesis 1: A mixed fixed/random effects model will be used to evaluate mouse-movement trajectories. This analysis should show that more variable response patterns for the *Negative* feedback trials should occur for the *VR Speaker* group relative to the *FR* and *U Speaker* group (once the participant realizes the *Speaker* is *unreliable* or is doing enough work for the both of them—*FR Speaker*). Differences will likely indicate that the Listener is more willing to exert cognitive effort for the *VR Speaker*, if she (the speaker) is perceived as trying, but still sometimes makes mistakes (which would not be the case for the *FR* and *U Speaker*). Therefore, arm trajectories for participants in the *FR* and *U* condition should exhibit less variability. Less variability in the *U* condition would likely be an egocentric response from the Listener as a means to match the *Speaker's* production style (i.e., Tit-for-Tat communication). Alternatively, less variability in the *FR* condition could signal that the participant has come to rely heavily on the *Speaker's* effort, while reducing one's own effort. This analysis unfortunately, will not model time course of listener adaptation.

Hypothesis 2: Therefore, a growth curve analysis will be used to model mouse-movement variability over the course of the interaction. This analysis should reveal a clear point at which *Listeners* (participants) become sensitive to the reliability of the *Speaker*. The prediction is as follows: once the listener realizes the *Speaker* does not provide reliable information (relative to the *VR Speakers*), the participant should exert less processing effort, as seen in less variability in arm trajectory variability movements towards the end of the experiment, relative to the beginning. Alternatively, arm trajectories in the *FR Speaker* condition should also be marked by less variability, if the Listener perceives they do not have to put as much effort into the interaction, but this should happen much sooner than in the *U Speaker* condition (relative to the *VR Speaker*).

Significance

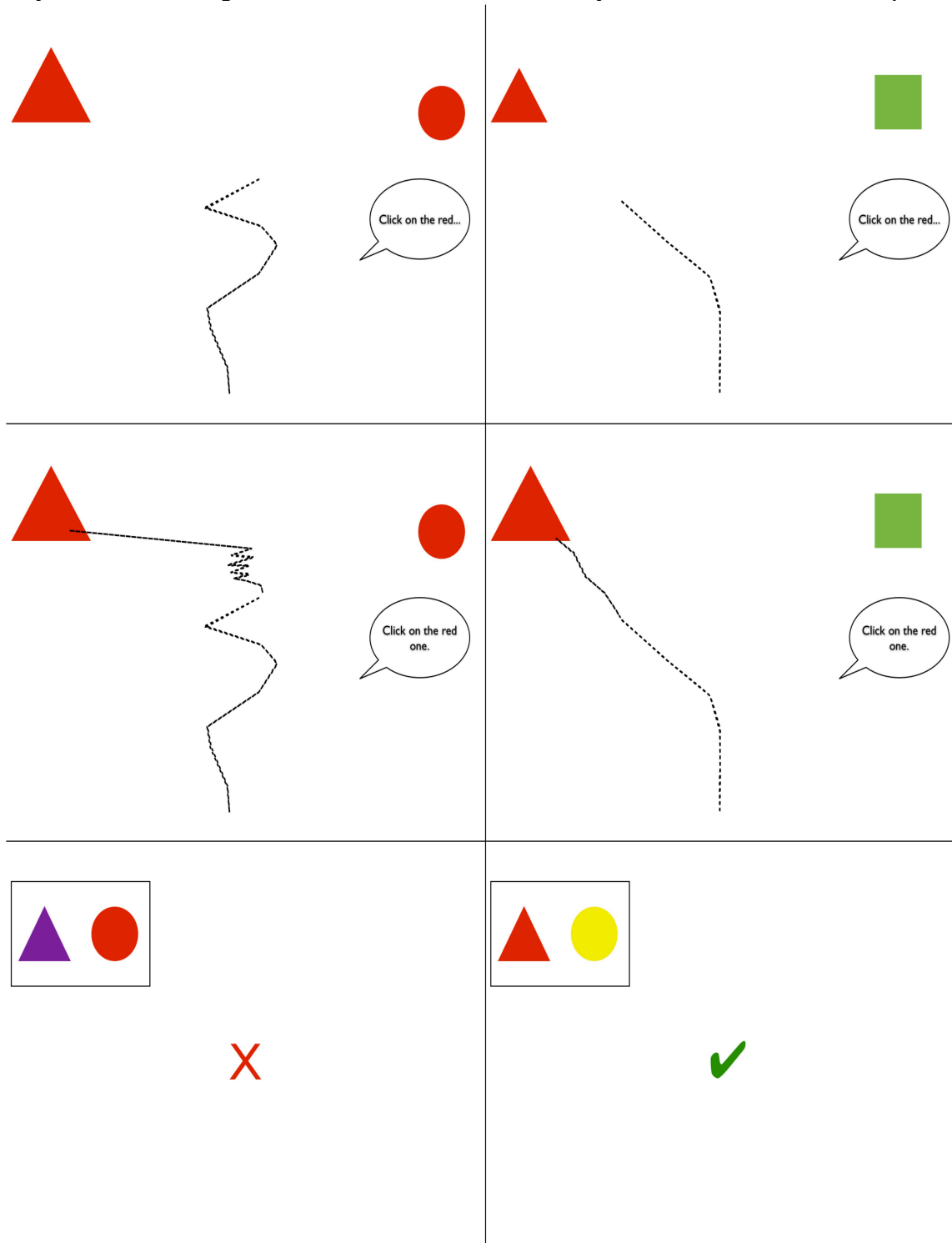
The implications from this work will provide insight into how comprehenders weigh the information their conversation partners provide. This is important, especially when we find ourselves interacting with or acting as experts on various topics (e.g., medical doctors providing diagnoses, or as educators disseminating information to students). As experts, we must recognize (and remember) that the novice is often unaware of what is important to attend to, and that the evidence we present should be solid, sound, and truthful. One could imagine that a student will quickly lose interest in a course in which the instructor seems less like an expert (e.g., the first graduate course any of us have taught), relative to a well-seasoned instructor that no longer skips a beat when a student *throws a curve ball*. However, it could be that making mistakes may also cue the listener to see the professor as more approachable and may be more willing to want to learn from that instructor. So it could be that talker specific cues help listeners and learners adjust their own cognitive processes to acquire new information. Though the current project only proposes a single method to merely skim the surface of this question, it is a step in the right direction and has important implications in areas of education, research, and clinical practice. Therefore, the significance of the proposed study will be to show that speaker variability may influence the processes that underlie comprehension. This project is meant to be a precursor to more experiments that will evaluate the bidirectional nature of production and comprehension, and for adaptation in special populations (e.g., elderly or disordered).

References

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- Ryalls, J., Zipprer, A., & Baldauff, P. (1997). A preliminary investigation of the effects of gender and race on voice onset time. *Journal of Speech, Language and Hearing Research*, 40, 642-645.
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Figure Caption

Figure 1. A hypothetical example of mouse-cursor responses: *Negative* feedback (left) and *Positive* feedback (right) for *Understated* statements. Note: “one” is ambiguous in the left panel, because there is a competing (two-referent) representation between *Speaker* and Listener. That is, “red one” may refer to the triangle OR circle for the listener, but only refers to the circle for the *Speaker*.



UNIVERSITY RESEARCH COUNCIL

RESEARCH/SCHOLARLY ACTIVITY SUPPORT REQUEST

\$500-\$2,500* (maximum) - 1 Award per Academic Year

*Up to \$3,500 available for projects involving undergraduate research

**[PLEASE READ CAREFULLY THE GUIDELINES FOR SUPPORT LISTED ON PAGE 4.]
PLEASE SUBMIT YOUR REQUEST BY THE FIRST OF THE MONTH
IN WHICH YOU WISH IT TO BE REVIEWED**

<i>This section to be completed by staff.</i>	Request Number: _____
Date received: _____	Awarded: _____
	Denied: _____

A. Amount Requested: \$ 3500 Date: _____

Name: Jennifer M. Roche _____ Dept./School Speech Pathology and Audiology__

Nature of Request Research Materials, Data Collection, Guest Speaker, and Undergraduate Conference Travel
[Research Materials, Data Collection, Research Travel**, Equipment, Unusual Opportunity]

Period of Support: From January 1, 2015 _____ to January 1, 2016 _____

Signature _____

=====

B. Using **non-technical terminology** understandable to educated persons outside your discipline, describe the project for which you need research support. **Please follow this format in writing your proposal. Limit your proposal to two pages or less (using at least a 10 pt. font and 1-inch margins); proposals that exceed this length will be returned.**

(1) The Problem: What is the focus? What are the goals and objectives of your project?

(2) Its Significance: What is important, unique, and/or timely about this project to:

- a. You and your personal research/scholarly interests?
- b. The particular area of your discipline?

(3) The Need: What do you need research support for? How will you use it, if awarded?

(4) Methodology or Procedures: How do you propose to carry out this project?
Why have you chosen this particular methodology and why is it best suited to your study?

* If you wish to be considered for \$3,500 instead of \$2,500, please describe how the student will be involved in the research project. The student must play a more substantive role than simply being an assistant. In addition you must include from each student involved a 1-page statement of objectives including expected outcomes of his/her participation in the research.

** Travel to disseminate research (including conferences) is limited to \$500 and should be applied for using the Professional Conference Support form. This restriction does not apply to contexts where the dissemination of the scholarly activity is the primary mode of scholarship for the discipline (generally performances in the arts). Travel to conduct research is supported. **However, adequate justification specifying why the researcher's physical presence is required and why the research cannot be accomplished through other means is required.** Collaboration with a colleague is generally not justified without special circumstances that require face to face interaction.

C.

Project Budget by Item and Amount: [Please provide costs and sources for entire project. Please note Council does not cover the cost of meals.]

ITEM	COST	Basis for estimate:	Portion from other sources (identify)
Participant payment	\$ 2400	6 projects x 40 participants per project x \$10	The last \$50 will be requested from departmental funds, but other sources will be evaluated (e.g., personal funds or start up)
Conference Registration	\$ 500	Conference registration for the Cognitive Science Society, which will allow me to begin/continue collaborations with colleagues Stephanie Huetten (University of Memphis), Alexandra Paxton (University of California, Merced) and Pat Healy (Queen Mary University, London)	Start up and department travel funds
Guest Speaker	\$ 500	Alexandra Paxton: air travel from San Francisco, CA to Akron, OH	Alexandra Paxton will be requesting travel funds from her home institution as well to pay for lodging and other travel expenses.
Equipment	\$ 100	1 terabyte hard-drive for Mac (\$50), 1 noise cancelling head-set (\$50)	Start-up
	\$		
	\$		
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 3500		

- a. What will be the source of any needed funds not specified above?
Students will be required to seek funding from other sources for conference travel, such as travel awards for specific conferences, KSU's Undergraduate Student Government Allocation program and the Undergraduate Research Scholars Program.

- b. If you have sought or are currently seeking extramural support for this project, name the sponsors and when you submitted (or plan

to submit) the proposal. If you do not plan on seeking extramural funding please describe any efforts on your part to determine if funding opportunities exist for your research. It is the applicant's obligation to investigate possible external funding opportunities before submission to the URC. You must describe your reasonable effort to identify such funding.

N/A

- c. Please describe your *specific* plans for dissemination of the research and/or pursuing extramural funding.
There are currently 3 projects currently being developed. There are 8 undergraduate assistants currently working in the MAD! lab (Miscommunication and Dialogue Interaction Lab) in Speech Pathology and Audiology. Of the five projects, undergraduate research assistants whom will be the primary investigator have proposed two. The other three projects are proposals developed by a graduate student in the laboratory and the primary investigator. The undergraduate students have been assigned to each of these projects with primary roles involving data collection, data management, data analysis and writing. Each of these projects will result in an abstract submission to an undergraduate, national, and/or international conference in which each undergraduate student will be named as a co-author.
- d. Where have you sought assistance in funding this project within the University other than Research Council?
Not yet.