Conversation is how we communicate the simplest to the most abstract ideas and thoughts. So, why is it that we find conversation so easy?

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By Queen’s Psychology
Photo by Eric Brousseau

No human culture exists that isn’t organized around talking. Conversation is how we communicate the simplest to the most abstract ideas and thoughts. If we can’t converse, we would experience a severe disadvantage in everyday functioning. Queen’s Psychology PhD student Nida Latif is interested in why most of us find conversation a natural, automatic part of our lives and why certain individuals struggle with conversation. “From a cognitive point of view, conversation is, in principle, exceptionally difficult,” Nida explains. “We must simultaneously listen actively while planning our future responses. We must ensure that the content and structure of what we are saying is appropriate for our audience. We must predict what our partner might say so we are prepared to react. Yet somehow most of us find conversation one of the easiest things we do. By straddling the social aspects of conversation and cognitive mechanisms involved, I am interested in exploring why it is that we find conversation so easy.”

Nida came to Queen’s Psychology to begin her MSc/PhD program in 2010. The welcoming attitude of her supervisors towards integrating broad areas of research and providing Nida the freedom to forge her own path, while offering invaluable guidance as she pursued her personal research goals is what had the greatest impact on her choice to come to Queen’s. “I chose Queen’s because here I was presented with a department that not only allowed but encouraged me to pursue my studies in the most diverse manner possible,” Nida recalls. “I saw a department containing a wide range of research interests that presented me the opportunity to pursue my studies in a manner catered to my goals. I knew that if I wanted a thorough exploration of my interests, I needed a well-rounded research environment to pursue it in.”

In her thesis, Nida wants to examine the mechanisms involved in successful conversation. She is exploring the idea that conversation involves interactive alignment where the same conversational representations for both talkers and listeners are activated. In other words, talkers’ and listeners’ conversational representations are coordinated. “There is plenty of evidence that this is true; talkers engaged in conversation adopt the same spatial reference frames, start using the same words and grammatical structures and even begin presenting
similarities in how they move and the acoustical properties of their speech over the course of their interaction," Nida says. “This suggests that people coordinate at many different levels and perhaps it is this coordinated conversational representations that allows for people to converse effortlessly. I am interested in determining how these similarities relate to each - whether we achieve coordination at each level independently or whether coordination occurs at one level and cascades down to other levels presenting overall coordination. In general, I am interested in how we may perceive and act on cues such as coordination to ensure, smooth, successful interaction."

Nida feels this is an especially important line of research because social deficits are a distinguishing characteristic of several social and psychological disorders such as autism spectrum disorders and Schizophrenia. “It has been well established that these impairments significantly affect day-to-day functioning for individuals with these disorders,” Nida explains. “By having a clearer understanding of the mechanisms that are involved in successful conversation, others can begin to understand the processes that might be impaired for those suffering from social deficits. It is possible that this understanding can contribute to the development of treatment to help individuals with social difficulties."

In addition to her main line of research involving conversation, Nida is also interested in visual perception in natural contexts, most specifically artwork. Nida was involved with a project in conjunction with Arlene Gehmacher at the Royal Ontario Museum examining how people can change how they view a piece of art based on its visual properties. “When we look at art, we are initially influenced by the most basic aspects of it – the colours, textures and other similar properties which are dictated by the artist,” she explains. “We used two versions of the same painting, “The Death of General Wolfe” located at the Royal Ontario Museum and the National Gallery of Canada that varied in these aspects yet told the same story. We showed that we could actively change how a viewer looked at this piece by simply modifying one of the basic visual properties. This is especially interesting because it might give us insight into how an artist might manipulate how they want others’ to view their work by varying their artistic techniques.” This project is an example of the diverse research environment that allows Nida to pursue several broad research goals, contributing to her well-rounded graduate studies.

Nida has found working in Speech Perception and Production Lab and the Queen’s Visual Cognition Lab and with her co-supervisors Dr. Kevin Munhall and Dr. Monica Castelhano to be extremely rewarding. “I am provided with an incredibly encouraging environment that allows me to pursue my academic goals in an optimal way,” Nida adds. “I am given the freedom to pursue a chosen research direction and am encouraged openly to discuss projects and concepts. Most importantly, I am never held back from diversifying my research to other areas. My supervisors encourage me to form collaborations and network with people with similar interests.”

Nida says that both academic and personal comfort have always been a high priority to her. The Speech lab and the Visual Cognition Lab environments not only satisfies her academic needs but give her a comfortable, friendly spaces that feel like home.

Nida plans to finish her PhD and further pursue academia. “I am excited and motivated to continue this line of research, she concludes. “Traditionally, social and cognitive psychology have remained separate and we are just beginning to integrate these two lines of research. The social parts of our behaviour are most relevant to us and understanding how we achieve such social success has many direct implications on our everyday lives. I feel that I am just at the tip of the iceberg with this line of work - I hope to further explore and diversify our understanding of how we develop and implement our ability to communicate successfully in our social world."

Nida received the Queen Elizabeth II Graduate Scholarship in Science and Technology in 2011 for her Master’s work, and received the Ontario Graduate Scholarship in 2014 for her doctoral research.