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Laura Wagner , Cecile McKee
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How to Talk Language Science with Everybody

Do you want to talk about the linguistic research that you think is important, but you don't know where to start? Language is a topic that is relevant to everyone, and linguists are often asked to speak publicly about their research, to a range of lay audiences in the media, politics, festivals and fairs, schools, museums, and public libraries. However, relaying this vital information in an engaging way can often feel like an insurmountable task. This accessible guide offers practical advice on how to talk about language to a range of nonacademic audiences. It draws on the linguistics behind effective communication to help you have cooperative conversations, and to organize your information for a diverse range of people. It is illustrated with a wealth of examples from real-life scenarios and includes chapter-by-chapter worksheets, enabling you to make your own fun and interesting language science activities to share with others.

Laura Wagner is a professor in the Department of Psychology at The Ohio State University. She directs the Language Sciences Research Lab at the Center of Science and Industry in Columbus, OH.

Cecile McKee is a professor in the Department of Linguistics at The University of Arizona, where she directs the Developmental Psycholinguistics Lab. The American Association for the Advancement of Science recently recognized her service in promoting public awareness of the significance of linguistic study.

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Laura Wagner The Ohio State University
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Preface

Becoming an expert is a narrowing process. We start by wanting to answer the broad questions: What makes people tick? How does the universe work? But the only way to answer such questions is to break them down into smaller pieces. By the time that you become an actual expert in something, the question you're trying to answer can look downright tiny. What's important is that you never lose sight of what the bigger picture is. For example, there are people who spend their whole lives studying how children learn the meanings of verb endings (or, as one of our mothers once said: "You're only studying parts of words? You can't even study how children learn whole words?"). Verb endings are a very tiny piece of language, but understanding how children learn them tells us a little bit about how children learn their native language, which in turn tells us something about what the human mind is capable of learning, which in turn tells us something about what it means to be human at all. Verb endings are a tiny piece of a very broad question.

This book is about how to do effective science communication, and our goals are both broad and narrow. Our broad concern is to help someone with scientific expertise (or really, any kind of expertise) communicate what they know and why it is important to people who don't have the same knowledge. Effective science communication is important because it genuinely matters for societal problems. We wrote this book during the COVID-19 pandemic, which illustrated to us daily what happens when people don't trust scientific experts. Scientists who know how to connect with people, how to explain their science, and how to engender trust as they do so are a rare commodity. We hope our book can help make more of them.

However, science communication is too broad a topic area to focus our advice: We needed to narrow ourselves down to one particular science so that our points could be concrete and understandable (which are important properties for effective communication). And we feel very lucky that the science we know best is language science because it's a really good domain to use to illustrate our broader ideas. Language is a piece of the world that people have a lot of personal experience with, making it easy to find relevant examples and also to connect with people's lived experiences. It doesn't hurt

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that our science also helps explain why many core practices in science communication are effective.

These two different levels are on display right in our title. Broadly, our book is about how to talk science with everybody. More narrowly, we are aware that our specific scientific topic is language and that this book will have special resonance for people who are interested in language specifically. We've made the language part of the book's title look a bit different typographically, though, to help us remember that other topic areas fit there too.

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CM wants to especially thank CMT colleague Autumn Rentmeester, who welcomed her into the museum world and so taught her a great deal more about it than one finds in books and articles. UA colleague Sally Stevens introduced CM to the funds of knowledge approach, which radically affected everything after that. The following students made substantive contributions to specific demos described in this book: Nikolis Atkinson, Marg (Max) Beltran, Yamile Diaz, Genesis Grijalva, Sean Harley, Jaycie Martin, Joe McDonough, Matt Mutterperl, Donovan Pete, Mia Vento, and especially Elly Zimmer. The students in the Spring 2016 LING 392/492 course contributed critically to the CMT-based project described here: Marissa Amezcua, Yahaira Garcia, Julia Ribeiro, Noemi Rodriguez, Lexie Sorrentino, Lisa Winslow, and Hannah Zedek.

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We are extremely grateful to the people who read through this manuscript in full or in part at various stages of its development: Nick Bednar, Chris Heffner, Rachael Holt, Dan Reynolds. They helped us improve many things in the book (and, of course, all remaining errors are our own). Thanks also go to our reviewers (both of the proposal and of the manuscript) and to our contacts Helen Barton and Izzie Collins at Cambridge University Press, who also provided invaluable feedback. Our editor, Helen Barton, deserves special thanks for being willing to take on a book that was a little different from the

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typical linguistics title at Cambridge University Press. In fact, the whole field of linguistics owes her thanks, as she's shepherded a number of wonderful books through Cambridge University Press's processes.

On a more personal note, LW gives love and thanks to Dan Reynolds. Beyond all the things he deserves thanks for every day, he has always been a stalwart supporter of my engagement work, which has meant, among other things, carrying boxes, bringing snacks, posing for pictures, traveling to events, testing out demos, proofreading materials, and generally holding me together. He has more than earned every language science T-shirt he's gotten (including the one he is pictured in within this book)!

CM is also grateful for her personal paladin. Though not a scientist, Jesse Zoernig memorizes the periodic table and reads about astronomy and ornithology for fun. She believes in the enterprise that we describe here like we do. Jesse responds enthusiastically to my every request (including demonstrating some vowels for this book). Indefatigable and dauntless, Jesse has run emergency errands during the maddest of events, entertained students, and helped improve several of the demos we describe here.

Most of this book was written during the COVID-19 pandemic, and we both worried at times that we might be writing about something that was forever past: a time when people met face-to-face and actually had a chance to talk with each other. We are profoundly grateful that we all do again have the opportunity to engage with people in real life.

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