

RESEARCH IN PROGRESS

Second language acquisition at Carnegie Mellon University, USA

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1. Background

The Second Language Acquisition (SLA) Ph.D. program, housed in the Department of Modern Languages at Carnegie Mellon University (CMU), was established in 1997 under the leadership of Professors G. Richard Tucker and Barbara Freed. The program has since graduated 47 students, many of whom have advanced to tenure-track, postdoctoral research, and teaching positions at universities in the US and abroad, while others have transitioned into successful careers in industry. The SLA program admits a small cohort each year and is built upon an advisor model that emphasizes early and close mentorship. Courses are designed to strengthen students' theoretical foundation in applied linguistics; train them broadly in quantitative, qualitative, and mixed research methodologies; and introduce them to a wide and representative spectrum of topics and sub-disciplines within SLA. Commitment to teaching development and effectiveness is another hallmark of the program: Graduate students are given the opportunity to be instructors of record for various language and culture courses, and faculty and students of the Modern Languages Department are regularly recognized for their pedagogical excellence. SLA students also actively pursue their research and professional interests in other spheres, including working as consultants at the university's Eberly Center for Teaching Excellence and Educational Innovation; collaborating on projects with other programs and departments; and taking courses and forming connections at other area universities, including the University of Pittsburgh. The SLA program is ideally positioned for interdisciplinary research, given CMU's strengths in technology-enhanced learning, learning science, and the arts. Diversity and collaboration are also well-represented among the SLA faculty, whose research spans four core areas: Instruction and learning; society, language, and multilingualism; speech and cognition; and literacy development.

2. Instruction and learning

The first primary area of research in the SLA program is second language (L2) instruction and learning. The program's emphasis on teaching is reflected in faculty research that considers classroom practices as well as opportunities for learning beyond the classroom and explores various pedagogical approaches for developing different learner competences and knowledge areas.

Professor Rémi A. van Compernelle examines various issues related to classroom discourse, interaction, and instruction in his research. He designs and implements instructional interventions grounded in sociocultural theory (SCT), and recently published an article with doctoral student Nuria Ballesteros-Soria on dynamic strategic interaction scenarios for promoting learners' interactional repertoires (van Compernelle & Ballesteros-Soria, 2020). Professor van Compernelle also directed recent graduate Dr. Alexis Adams' dissertation (Adams, 2020) on classroom discourse intervention in an upper-level Hispanic Studies course. He is currently editing a volume on concept-based instruction (van Compernelle, [forthcoming](#)) and conducting a study on epistemics and deontics in classroom interaction in Chinese, French, and Spanish, which includes an upcoming paper on

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topic management and opportunities for learning in an advanced French culture class (van Compernelle, [forthcoming](#)).

Professor Khaled Al Masaeed's research focuses on interaction and teaching in multidialectal and multilingual contexts. He has analyzed translanguaging practices in interactions between learners of Arabic and their native speaker language partners (e.g., Al Masaeed, [2020](#)). Recently, he has expanded his research into instructional methods for promoting L2 Arabic learners' sociolinguistic repertoires and multilingual practices (Nassif & Al Masaeed, [2020](#)) and is working with Professor van Compernelle on an ongoing project on L2 Arabic conversations-for-learning. Doctoral student Joseph Schaefer is also investigating instruction for multidialectal competence in L2 Arabic, with an emphasis on comparing learners from Modern Standard Arabic-centric and Integrated Approach programs.

Professor Sébastien Dubreil's work addresses L2 learning in diverse contexts, including online spaces and (digital) games (Dubreil & Thorne, [2017](#); Sykes & Dubreil, [2019](#)). His most recent study concerns leveraging gameful learning during social distancing (Dubreil, [2020](#)). In one of his ongoing projects, Professor Dubreil examines the power of a spatialized approach to language, culture, and literacy education (Malinowski, Maxim, & Dubreil, [forthcoming](#)). Additionally, he is collaborating with Professor Stephan Caspar and CMU's Eberly Center on a series of projects that explore the efficacy of virtual reality in developing cultural competence.

2.1. Society, language, and multilingualism

The second core SLA discipline addresses the relationship between language and society through various theoretical and methodological perspectives. From speech acts to multilingualism, pedagogical practices to language ideologies, and heritage language classes to study abroad, work in the program brings together a broad range of themes and foci across distinct contexts.

Professor Katharine E. Burns addresses issues of language ideology, language policy, and L2 learner identity in her research (e.g., Burns, [2018](#); Burns & Waugh, [2018](#)). She is presently working on a study that investigates the relationship between language ideology, dialectal competence, and L2 learner identity construction among advanced L2 Spanish learners. In addition, Professor Burns is collaborating with doctoral candidate Joy Maa on a project exploring L2 ideologies, identities, and discourses in computer-mediated communication. Other current research includes a study with recent graduate Dr. Gerdine Ulysse on the relationship between educational language policy, literacy, and language attitudes in Haiti's multilingual society, as well as a project with doctoral student Ding Wang-Bramlett and Professor van Compernelle on a sequential conversation analysis of instructor translanguaging in a business Chinese course.

An additional focus of Professor Al Masaeed's research is the relationship between multidialectal practices and the development of pragmatic competence. Currently, he is engaged in a project examining the effect of proficiency in spoken Arabic dialects on pragmatic development in study abroad. In addition, Professor Al Masaeed is expanding his work to other multilingual environments with Dr. Ulysse in an article that explores language attitudes and literacy in French and Creole in Haiti (Ulysse & Al Masaeed, [forthcoming](#)).

Professor van Compernelle has also written extensively on L2 pragmatics and sociolinguistics. In this line of research, he extends his SCT-based approach to instructional pragmatics, in which he has employed pedagogical practices such as concept-based instruction and dynamic assessment. Recently, he has begun to examine L2 sociolinguistic development from a usage-based perspective (van Compernelle, [2019](#)). He is currently collaborating with SLA graduate Professor Tianyu Qin (University of North Georgia) on a study that implements computerized dynamic assessment to measure L2 Chinese learners' comprehension of implicatures (Qin & van Compernelle, [forthcoming](#)).

2.2. Speech and cognition

The third major research area centers around speech (phonetics, phonology) and cognition (learning, memory, processing) in L2 development. Much of the work in this domain is the product of rich interdisciplinary

collaboration with faculty and students from various sectors of CMU, such as the Department of Psychology, the Entertainment Technology Center, and the Language Technologies Institute.

Professor Seth Wiener heads the Language Acquisition, Processing, and Pedagogy (LAPP) Lab at CMU, which conducts a variety of experiments on L2 speech perception/production and lexical processes. He is presently conducting a study with Professor Lori Holt (CMU Psychology) on adult L2 speech sound acquisition, funded by the National Institutes of Health (NIH) and *Language Learning*. The study examines whether incidental category learning of L2 speech sounds taps into the same category learning systems that are engaged in more explicit classroom learning (Wiener, Murphy, Goel, Christel, & Holt, 2019). The LAPP Lab also trains undergraduate and graduate students in psycholinguistic approaches to SLA. Ongoing research projects include the doctoral dissertation research of Zhe Gao (co-advised by Professor Brian MacWhinney) on the acquisition of Chinese compound nouns and verbs by adult L2 learners (Gao, 2020), non-native English anterior fricative acquisition, perception of Japanese pitch accent by first, second, and third language speakers (Wiener & Goss, 2019), the perception-production link of Arabic L2 learners (in collaboration with Professor Al Masaeed), and heritage learners' lexical processing.

Professor Brian MacWhinney (CMU Psychology) manages the NIH and NSF-funded CHILDES and TalkBank (including SLABank) corpora (MacWhinney, 2020) and continues to refine his influential Competition Model of language processing (MacWhinney, 2015). His current work with SLA students includes studies with online tutors for the learning of English article usage (Zhao & MacWhinney, 2018), studies of beginners' learning of French noun gender, L2 learning of definite article selection in Wikipedia articles in German, and online L2 learning through captioned video. Ongoing studies also include language learning in virtual reality, eye-movement monitoring of predictive processing in L2 Japanese, literacy training in Latin, online methods for learning Pinyin and Chinese tones, computational tools for corpus analysis, and the development of an online database with commentary for analyzing interactions in the L2 classroom.

2.3. Literacy development

The fourth principal strand of research in the SLA program is literacy development. Over the years, faculty and students have explored cross-linguistic issues in L2 reading acquisition in a variety of languages, including Arabic, Chinese, English, Japanese, Kannada, and Portuguese. SLA members investigate differences in the development of reading in L2 learners with contrasting first language (L1) backgrounds, as well as the role of L2 linguistic knowledge in mediating L1 literacy effect on L2 reading development.

Professor Keiko Koda conducts extensive research in L2 reading competence and, in particular, the relationship between L1 literacy and L2 metalinguistic awareness and word recognition. Her ongoing work in this area includes a meta-analysis conducted in collaboration with SLA alumni Professor Sihui Ke (University of Kentucky), Professor Ryan Miller (Kent State University), and Professor Dongbo Zhang (University of Exeter), which examines cross-linguistic sharing of morphological awareness in biliteracy development (Ke, Miller, Zhang, & Koda, 2021). Additionally, Professor Koda is co-editing an invited handbook on SLA and reading with Professor Miller (Koda & Miller, *forthcoming*). The upcoming volume considers L2 reading development across different languages, contexts and teaching methods from various perspectives—including psycholinguistics, sociolinguistics, and education—in order to synthesize current understandings of L2 literacy acquisition.

Professor Koda also addresses the reciprocity between linguistic knowledge and reading ability in her research. Doctoral student Xiaomeng Li explores this topic in her study on the mediating influence of L2 orthographic properties on the contributions of L1 skills to L2 decoding and comprehension among L2 English learners. Meanwhile, doctoral candidate Nour Kweider explores the relationship between speaking and reading skills in her dissertation concerning the effects of oral language proficiency in colloquial and standard varieties of Arabic on literacy development among heritage learners, whereas doctoral student Christine Shi's work reviews factors underlying literacy acquisition in L2 Japanese.

3. Conclusion

Through the rigorous research and interdisciplinary efforts of both faculty and students in these four key areas, along with the important contributions of graduate program coordinator Vera Lampley and business manager Nancy Monda, the SLA program at CMU continues to move forward in its L2 research, teaching, and learning. In Fall 2020, Anne Lambright, previously Dean of Academic Affairs and Professor of Language and Culture studies at Trinity College, succeeded Professor Susan Polansky as the new department head. The SLA program, along with the entire Modern Languages Department, completed its move into newly-renovated space in 2020–2021, which will provide additional room for collaboration as the program and department continue to grow. The SLA program will also celebrate its 25th anniversary in 2022. As it approaches this significant milestone, the program remains committed not only to ongoing research into current issues in SLA theory and L2 instruction, but also to the development of a dynamic group of scholars who will continue to actively push the field forward.

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