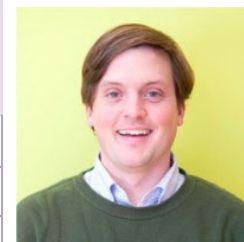


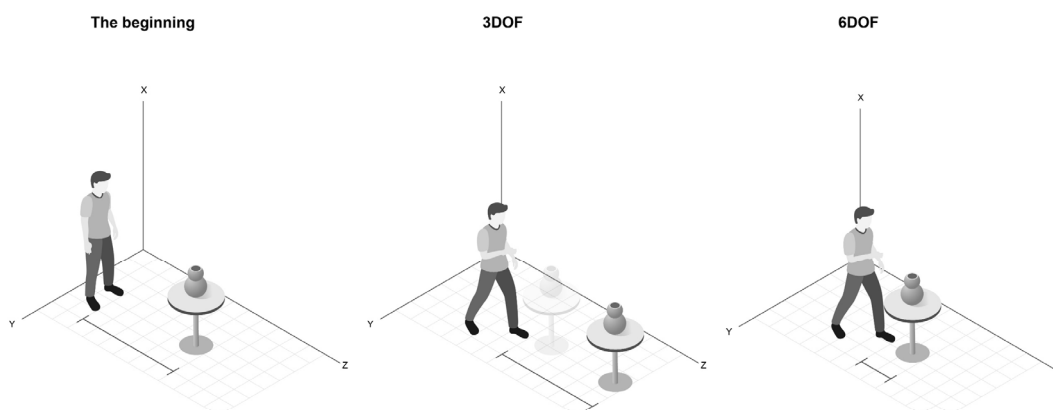
# バチャル言語学習・ Virtual Reality and Language Learning



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<b>Status</b>	Associate Professor		
<b>Affiliations</b>	General Education English		
<b>Keywords</b>	Educational Technology, Virtual Reality, Augmented Reality, Mixed Reality		
<b>Technical Support Skills</b>	コーパスツール(LexTutor)を使って学習者コーパスの分析 Dartmouth X と IMT による C プログラミングの資格		

## Research Contents

## VR and Language Learning



My research focus is on the intersections of educational technology and language learning. Past projects have explored the microblogging of students in their second language, learner corpora, and use of web applications for vocabulary learning. Current projects include exploring the use of virtual reality (VR) for language learning and also using commercial home assistants as AI chatbots for language learning.

The technology used to facilitate VR is rapidly developing. Shown in the figure presented above, a most recent provision of 6 degrees of freedom in commercial VR allows for users to move freely in a virtual world as they would in the physical world. I am interested in the types of language and iconic gestures that learners use while engaged in VR experiences.

## Available Facilities and Equipment

Multi-media laboratory	Oculus Go
CALL (language laboratory)	Google Nest Mini
Oculus Quest	
Oculus Quest 2	

## Title: Iconicity in virtual spaces for learning English as a foreign language



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Status :	Associate Professor	Degree :	M.S. Ed TESOL
Affiliations :	Virtual Reality Society of Japan / JALT CALL / ACM		
Keywords :	Virtual Worlds, Virtual Reality, Second Language Acquisition, Iconicity , Semiotics of VR		
Technical Support Skills :	Teaching English as a Foreign Language / Educational Technology / IT for Language Learning		

### Research Contents: The Use of Iconicity while learning English in Virtual Reality

The current approach to language teaching in Japan is dominated by a “language as a system” approach. Foreign language study is focused on mastering grammar forms of the target language. In practice, teachers advocate for grammar translation. Many classroom studies in Japan have pointed to the persistence of this approach to be the cause of the low overall English competency in Japan when compared to other developed countries.

Recent advances in technology and language research show that language use is situated in contexts of use. Iconicity is a measure of how accurately a sign relates to its referent (see figure 1). In current classroom contexts, movement is restricted. Barricelli et. al (2016) created a framework for better understanding of interaction in VR. We propose using VR as a communication system to learn English (see figure 2). By allowing students access to multimodal resources, we hypothesize the freed use of iconic resources will optimize EFL acquisition.

[1] Barricelli, B. R., Gadia, D., Rizzi, A., & Marini, D. L. R. (2016). Semiotics of virtual reality as a communication process. *Behaviour & Information Technology*, 35(11), 879-896

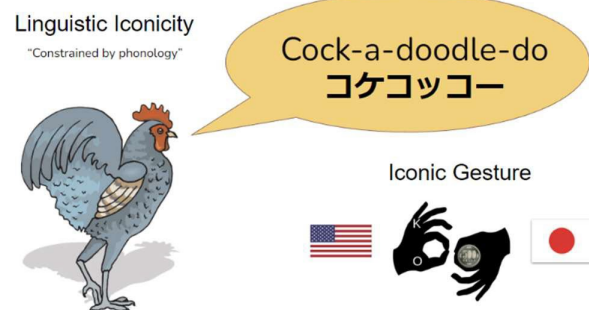


Figure 1: Types of Iconicity

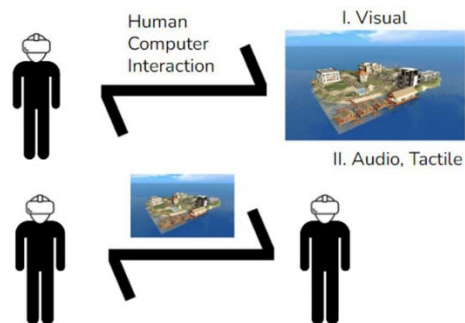


Figure 2: VR as a Communication System

#### Available Facilities and Equipment :

8 Meta Quest Headsets	Intel Volumetric Capture Camera
Otter.ai transcription software	Leap Motion Camera