

Graduate School of Science and Technology Master's Thesis Abstract

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Thesis title	Directivity of Text: A Study on Text Targeting across Japanese Demographic Groups Using Large Language Models		
Abstract			
Directivity — the degree to which a text feels written for a particular reader — is central to communication that reaches its intended audience. This thesis asks whether directivity varies across Japanese demographic groups, such as age and gender, and whether a large language model (LLM) prompted with a reader persona can reproduce it. In a survey, 198 Japanese respondents rated eight government press-release texts on a 1-10 directivity scale and explained their ratings; four directivity factors were derived from these explanations, and three texts were held out to test the LLM. Demographic differences proved negligible: respondents identical on all seven measured demographics rated the same text as far apart as 1 versus 10, showing that directivity is an individual rather than a demographic property. Consistently, the persona-prompted LLM failed to reproduce directivity at both the group and the individual level, with or without the discovered factors. We conclude that directivity resides in the individual reader, placing a fundamental limit on persona-based LLM prediction.			