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THE VALUE OF LANGUAGE: ROBOTIC INTERACTION IN ELDER CARE

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As robots become more embedded in our society, the ability for humans to interact with these agents significantly increases. This, however, is one of the most challenging aspects of robotics. Humans and robots having the ability to maintain both effective and organic communication is a fundamental component of robotics, given its ultimate goal of mirroring the natural human interaction. This natural human interaction enables the understanding of language and intention of each participant through presented utterance and semantics. Roboticists have thoroughly studied and made notable progress in the field of human-robot interaction; however, there has been insufficient work done to produce natural communication between artificial agents and aging populations resulting in the failure to fulfill seniors' specialized needs. This leads to distress and other unfavorable emotions from such populations. This research surveys robots use of language learning, speech recognition and grounding techniques as it relates to elder care and examines the challenges agents face to produce fulfilling robotic interactions with aging populations.

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