“Excuse Me, Robot”:
Impact of Polite Robot Wakewords on Human-Robot Politeness

MINES ROBOTICS

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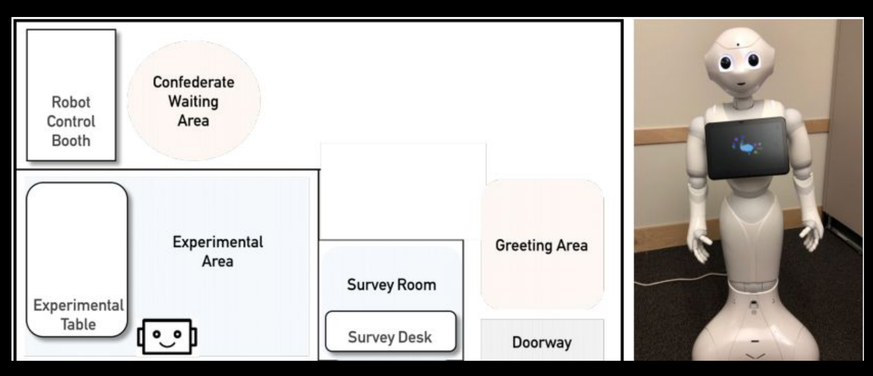
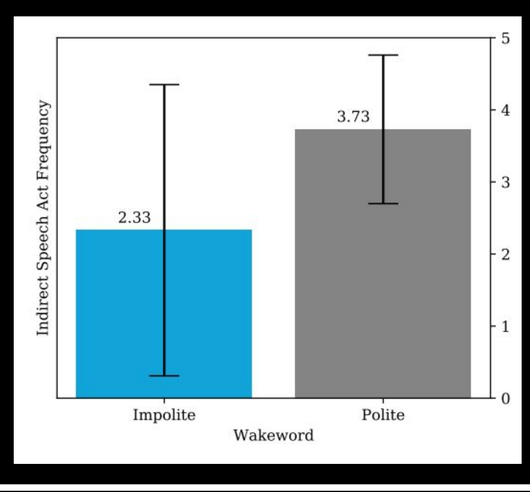
Can we lead people to be **more polite towards robots** by **changing the wakewords** people need to use to interact with those robots?

- We **conducted a human-subject experiment** in which we **systematically evaluated** the impact of **wakewords on efficiency.**
- We found that when people **need to use polite wakewords** to interact with robots, the rest of their language towards robots is **phrased more politely**.



Participants worked with a robot in a simulated **restaurant scenario** in which they needed to get Pepper to bring different dishes to different tables..

We used a **between-subjects** manipulation in which half of participants needed to use a **standard wakeword** to interact with Pepper, while the other half needed to use a **polite wakeword**.



People in the **polite wakeword** condition used more **indirect speech acts** (a common **politeness**) strategy in the language following the wakeword than did participants in the **standard wakeword** condition (BF=2.49).

- Our results suggest that **robot designers** can use **interaction design methods** such as **wakeword requirements** to lead people to interact **more politely** with their robots.
- In future work we plan to **replicate these findings with a larger sample size** (our original experiment was performed in a unique educational context), examine **whether these effects generalize to human-human interactions**, and examine different **robots**, **users**, and **wakewords**.

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