

Our metallic reflection: Considering future human-android interactions

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Everyday human interaction is not what you would call perfect, so what if there was a third party added to the mix - like a metallic version of us? In a new article in *Perspectives on Psychological Science*, psychologist Neal J. Roese and computer scientist Eyal Amir from the University of Illinois at Urbana-Champaign investigate what human-android interactions may be like 50 years into the future.

With knowledge of present day technology, the scientists predict that within 50 years androids will be able to speak in human-like voices, identify spoken words with precision, answer questions from a body of textual information, walk and run in a human-like motion, display realistic [facial expressions](#), and detect others' emotions through visual processing.

However, even with these advances, it will be more than 50 years before we see the human-acting and organic-looking androids of sci-fi movies. By 2060, it is predicted that androids will still be unable to detect aspects of natural language, and be incapable of forming conclusions from visual sensory input (specifically, seeing but not understanding). The most difficult development in artificial intelligence (AI) is trying to program the "Theory of Mind," or the effortless human ability to process other people's speech, actions, underlying motives, and [emotional state](#).

Roese and Amir predict that by 2060 androids will be used for menial jobs, such as toll collectors, where the presence of a non-human is practical, but not frightening. A major worker shift from people to

androids, similar to the shift to machines in factories, is expected to occur.

The psychological challenges of human-android interaction involve the absence of basic human functions such as blinking, body language, eye contact, and the coordination of personal space in an android, which could potentially make people uneasy when interacting with them.

But would people be more or less comfortable interacting with androids if they were ever indistinguishable from humans? Would stereotypes towards non-humans occur? Being unable to gauge who is human and who is not might cause confusion and fear in the public, even though we are the ones creating androids for our own benefit.

Roese and Amir conclude that the psychological impacts of human-android interaction must be considered in the present to shape android development in the future.

More information: www.psychologicalscience.org

Source: Association for Psychological Science ([news](#) : [web](#))

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