

Opinion Artificial intelligence

## Merging with AI would be suicide for the human mind

There may come a moment when the brain is so diminished it is destroyed

Your mind is not a back-up drive for AI, even if it has the same memories and exact behaviours © Getty

Susan Schneider 54 MINUTES AGO

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The idea that human and artificial intelligence should merge is in the air these days. The Tesla and SpaceX chief executive Elon Musk, for instance, suggests “having some sort of merger of biological intelligence and machine intelligence”. His company, Neuralink, aims to make implanting chips in the brain as commonplace as laser eye surgery.

Underlying all this talk is a radical vision of the mind’s future. Ray Kurzweil, the futurist and director of engineering at Google, envisions a technotopia where human minds upload to the Cloud, becoming hyperconscious, immortal superintelligences. Mr Musk believes people should merge with AI to avoid losing control of superintelligent machines, and prevent technological unemployment.

But are such ideas really possible? The philosophical obstacles are as pressing as the technological ones. Here is a new challenge, derived from a story by the Australian science fiction writer Greg Egan. Imagine that an AI device called “a jewel” is inserted into your brain at birth. The jewel monitors your brain’s activity in order to learn how to mimic your thoughts and behaviours. By the time you are an adult, it perfectly simulates your biological brain.

At some point, like other members of society, you grow confident that your brain is just redundant meatware. So you become a “jewel head”, having your brain surgically removed. The jewel is now in the driver’s seat.

Unlike in Mr Egan’s story, let us assume the jewel works perfectly. So which is you — your brain or your jewel? It doesn’t seem possible that the jewel could ever truly be you, as your biological brain and consciousness exist alongside it. It is implausible to think that your consciousness could magically transfer to the jewel upon the destruction of your brain. Instead, it’s more likely that at the moment you opted to remove your brain, you inadvertently killed yourself.

This suggests a human merger with AI is ill-conceived — at least, if what is meant by that is the

eventual total replacement of the brain with AI components. Your mind is not its back-up drive, even if it has the same memories and exact behaviours.

You might object that there could instead be a limited integration, removing some parts of the brain and replacing only those with AI components. But this, too, is problematic. Imagine that scientists one day invent a new type of jewel — call it “the Jade”. The Jade slowly takes over the function of different parts of your biological brain, and as it does so, it destroys the parts it offloads.

Bearing in mind our conclusion in the jewel case (that your mind is not your jewel), we know that at some point in this process your mind ceases to exist. You could augment your intelligence with chips, but there will be a point at which you end your life. I call this horrific event “brain drain”.

At what point in the process might brain drain kick in? While it might be supposed that replacing parts of the brain with a few chips wouldn’t have a dire impact, as the philosopher [Derek Parfit](#) observed it is unclear where to draw the line. Would it be at 15 per cent neural replacement? At 75 per cent? Any choice seems arbitrary.

The upshot is clear. We should be sceptical of any suggestion that humans can merge with AI. AI-based enhancements could still be used to supplement neural activity, but if they go as far as replacing normally functioning neural tissue, at some point they may end a person’s life.

In one sense, if enough people ignore the possibility of brain drain, society still benefits. There would be individuals intelligent enough to [follow the complex computations](#) of AIs and compete with them in the workforce. But in such a world, the people signing up for the enhancements are not the ones who will benefit. They’re already dead.

*The writer is Nasa/Baruch Blumberg chair at the US Library of Congress and author of a forthcoming book, ‘Artificial You: AI and the Future of Your Mind’*

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