

What can explain humans' complex cognitive capacity? Brain maps might give us answers

Imagine looking at Earth from space and being able to listen in on what individuals are saying to each other. That's about how challenging it is to understand how the brain works.

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Scientists have made maps such as these for the [worm](#) and [fly](#) brains, and for tiny parts of the [mouse](#) and [human](#) brains. But those charts are just the start. To truly understand how the brain works, neuroscientists also need to know how each of the roughly 1,000 types of cell thought to exist in the brain speak to each other in their different electrical dialects.

With that kind of complete, finely contoured map, they could really begin to explain the networks that drive how we think and behave.

Such maps are emerging, including in a [series of papers published \[recently\]](#) that catalogue the cell types in the brain.

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It's an onerous undertaking. "But knowing all the brain cell types, how they connect with each other and how they interact, will open up an entirely new set of therapies that we can't even imagine today," says Josh Gordon, director of the US National Institute of Mental Health (NIMH) in Bethesda, Maryland.

[This is an excerpt. Read the original post here.](#)