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Brain Smarter Than We Are

A study published in the journal *Neuron* finds that the subconscious brain is excellent at making decisions based on data. Whether we take advantage of that good decision, however, is another matter. Cynthia Graber reports

[*The following is an exact transcript of this podcast.*]

We humans don't always make the best choices. But now a study in the journal *Neuron* demonstrates that maybe our brains do make the best possible decisions—but only if it's done unconsciously. Alex Pouget at the University of Rochester takes a look at unconscious information gathering. He says a lot of our good decisions—like stopping at a red light—are unconscious ones.

Subjects stared at dots moving around in random patterns on a screen. A controlled number were heading towards either the right or left of the screen. The subjects were asked if the dots were moving left or right. The longer subjects stared at the screen, the more sure they became of the answer.

Pouget analyzed the subjects' neuronal patterns. If a few dots in the group moved to the right, a part of the brain that recognizes right-direction movement lit up. As time went on, it'd light up more and more frequently until the subjects gave a definitive answer. According to Pouget, the subjects were subconsciously gathering information until they finally felt sure of the answer. So the brain usually gets it right. Too bad we still seem to run so many red lights.

—Cynthia Graber

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