

Multitasking: Why Do We Do It?

We complain about split attention, but why then do we embrace distraction?

By **ROBERT W. LUCKY** Posted 20 Jun 2017 | 19:00 GMT

I can't help it. My attention span has shrunk alarmingly, and I'm easily distracted. Worse, I seem to look for and welcome distractions. I should be focusing my attention on the task at hand, which is writing this small essay. Instead I keep checking the Internet with my smartphone. I look around me at this coffee shop and everyone seems to be staring at their cellphones. I don't think we used to be like this, and I wonder: Has technology done this to us, and if so, is this bad or good?

A recent book by Adam Gazzaley and Larry Rosen, *The Distracted Mind: Ancient Brains in a High-Tech World* (<https://mitpress.mit.edu/distracted>) (MIT Press, 2016), examines this phenomenon from the viewpoints of neuroscience and psychology. The authors contend that, just as ancient humans foraged for food, we now forage for information. "We are information-seeking creatures," they affirm. I assume that they do mean to include personal communications and entertainment in the general concept of information, as otherwise the sheer number of emoji-laden texts and [kitten videos](http://spectrum.ieee.org/podcast/telecom/internet/douglas-coupland-analyzes-alcatellucent-in-kitten-clone) (<http://spectrum.ieee.org/podcast/telecom/internet/douglas-coupland-analyzes-alcatellucent-in-kitten-clone>) consumed daily would militate against their thesis.

Our behavior is likened by Gazzaley and Rosen to that of squirrels foraging for food in a patchy environment. As a squirrel experiences diminishing food in its present patch, it instinctively decides when to move to another patch. The squirrel is apparently subconsciously aware of the marginal value theorem, which establishes when the rate of diminishment in a given patch justifies the cost and time of moving to a new patch with a greater expected return. This probably was worked out many years ago by a great squirrel mathematician and then widely circulated in



Illustration: Serge Bloch

the squirrel community.

Yet, looking around, it seems we're not as smart as squirrels. As we browse in an information patch, we are led astray by boredom and anxiety. We're easily bored, and there is the FOMO effect, the great fear of missing out. So we constantly overvalue the perceived return of a new patch, and jump quickly, in spite of what intelligent application of the marginal value theorem might say. For example, most of the time, we remain on a Web page just a few scant seconds.

Of course, we think to ourselves that we're good at this multitasking, but is this really true? Our ancient brains weren't shaped by evolution for this behavior. In spite of the parallel architecture in our brains, we are effectively thinking with a one-core processor, and every task requires a switch in context that is costly in resources and lost time. And as we get older, these costs become greater. Experiments show that from 20 years of age on, it's all downhill.

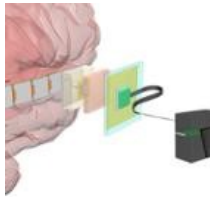
Technology, in its development of the Internet, smartphone, and social media, has not had a passive part to play in this behavior either. As the authors of *The Distracted Mind* say, technology "reaches out to us." It is alluring, and the behavior it induces has many consequences. Studies have shown that the more children multitask, the lower their test scores and grades. Multitasking is often a dangerous activity, as when we are driving and talking or texting or fiddling with GPS controls or.... A proclivity for multitasking also leaves us less inclined to introspective thinking. Instead of awaiting deep thoughts, we seek instant gratification. ^{Advertisement}

But I keep coming back to my dilemma. If this is all so bad, why do we do it? Maybe there are benefits that have not yet been quantified. But if there are not, and this trend continues, what will life be like in another couple of decades? So many questions, so few answers.

If this essay seems disjointed, please forgive me. I'm kind of old, and this ancient brain is all I have.

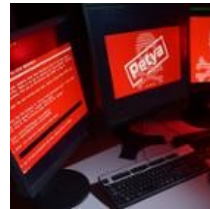
This article appears in the July 2017 print issue as "Technological Distraction."

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