

SUNDAY BOOK REVIEW

The Trouble With Common Sense

By NICHOLAS A. CHRISTAKIS JUNE 24, 2011

The popularity of the Mona Lisa is an illusion. As Duncan J. Watts explains: “We claim to be saying that the Mona Lisa is the most famous painting in the world because it has attributes X, Y and Z. But really what we’re saying is that the Mona Lisa is famous because it’s more like the Mona Lisa than anything else.” In other words, we are trapped inside a hall of mirrors of our own devising. We think the Mona Lisa is famous because of its traits, but we think those traits are significant only because they belong to the Mona Lisa, which we know to be famous. Ditto Shakespeare? Yes. When an incredulous English professor asked him whether he believed “Shakespeare might just be a fluke of history,” Watts indicated that he meant exactly that.

Watts doesn’t tell us how that conversation ended, but common sense does. Either the literature professor sputtered that Watts — a sociologist, physicist and former officer of the Australian Navy — had no idea what he was talking about, and left him standing with a half-empty drink in his hand, or she was quite taken with his unorthodox views and spent the rest of the evening engrossed.

That both outcomes — although incompatible — strike us as predictable is actually Watts’s point in this penetrating and engaging book. We rely on common sense to understand the world, but in fact it is an endless source of just-so stories that can be tailored to any purpose. “We can skip from day to day and observation to observation, perpetually replacing the chaos of reality with the soothing fiction

of our explanations,” Watts writes. Common sense is a kind of bespoke make-believe, and we can no more use it to scientifically explain the workings of the social world than we can use a hammer to understand mollusks.

Nowadays, of course, it’s common sense to distrust our common sense. A number of best-selling books have made us painfully aware of the biases that beset our everyday reasoning — we overrate the importance of recent events and overvalue objects because we happen to possess them, and so on. Watts turns his attention elsewhere: his primary aim is to debunk “methodological individualism,” the notion that “until one has succeeded in explaining some social phenomenon — the popularity of the Mona Lisa or the relation between interest rates and economic growth — exclusively in terms of the thoughts, actions and intentions of individual people, one has not fully succeeded in explaining it at all.”

Watts’s point is that however well we understand the parts, we do not thereby acquire a complete understanding of the whole. This is one of the big reasons that common sense is unreliable. We are prone to think in terms of individual actors whose doings set predictable chains of events in motion. But social systems can acquire properties that don’t easily jibe with this kind of common sense — through processes like self-reinforcing cascades, in which outcomes feedback upon themselves, or nonlinear dynamics, in which small changes in input can lead to large changes in output.

Consider the view that those well-connected people the marketing industry labels “influencers” have an outsize effect on other people’s behavior. It’s only natural to assume that certain individuals have a disproportionate impact because of their particular characteristics — charisma, intelligence, popularity. But when Watts used computer simulations to model how new behaviors might spread through social networks, he found that the most highly connected individuals were not the whole story. The spread of an idea or taste depended not only on such individuals, but also on “a critical mass of *easily influenced* people who influence other easy-to-influence people. When this critical mass existed, even an average individual was capable of triggering a large cascade.” If we drop a match on a forest floor, we cannot predict whether the result will be a conflagration or a campfire just by knowing a lot about matches. The outcome much depends on what is going on nearby: how dry is the terrain, how dense is the forest, how fast is the wind?

When the right conditions for a fire exist, any spark will set it off; but when they do not, no spark will suffice.

In such a world, can we really use common sense as a guide? No. We need a kind of uncommon sense, Watts argues. And we're in luck. If you had asked social scientists even 20 years ago what powers they dreamed of acquiring, they might have cited the capacity to inconspicuously track the behaviors, purchases, movements, interactions and thoughts of whole cities of people, in real time. Of course, this is exactly what is possible now that so many of us — via credit cards, cellphones, online social networks, blogs and so on — leave just such digital breadcrumbs as we move through our lives. Watts provides powerful examples, many taken from his own work in this new field of computational social science. One project tracked patterns of tweets and retweets among 1.6 million Twitter users. Another followed thousands of people as they judged which songs they wanted to download, and found that their individual tastes were easily trumped by small, and random, differences in a song's perceived popularity among other people.

In 1969, the sociologist Morris Zelditch asked, rhetorically, "Can you really study an army in a laboratory?" Nearly half a century later, the answer appears to be yes. It's this sort of study, not common sense, that will shed bright light on human affairs.

EVERYTHING IS OBVIOUS, ONCE YOU KNOW THE ANSWER

By Duncan J. Watts

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