Sometimes the things that *should* be completely obvious turn out to be the hardest ones to see.

That was certainly the case for me as a young economist in the late 1990s. It was an exciting time in the economics world. I had the good fortune to be spending my time at Harvard and MIT, two revered institutions that were at the epicenter of the new wave in economics.

Historically, economics had been a discipline dominated by *theory*. The big advances had mostly come from impossibly smart people writing down complicated mathematical models that generated abstract theorems about how the world worked. With the explosion in computing power and big data sets, however, the economics profession was transformed in the 1980s and 1990s. *Empirical* research—the analysis of real-world data—increasingly became the focus of many economists. It became respectable for a young economist like me, having figured out I was not nearly smart enough to come up with fancy theoretical insights, to spend my time toiling in the data looking for interesting facts.

The big challenge then (and now) was how to figure out whether a relationship between two variables was truly causal, or whether it was merely correlation. Why did it matter? If a relationship was *causal*, then there was a role for public policy. If a relationship was *causal*, then you learned something important about how the world worked.

Causality, however, is very hard to prove. The best way to get at causality is through randomized experiments. That is why, for instance, the Food and Drug Administration requires randomized experiments before approving new drugs. The problem was that the sort of laboratory experiments used to test drugs weren't all that applicable to the kinds of questions economists like me wanted to answer. Consequently, we spent our energy trying to find "accidental experiments"—quirky things that happen more or less by chance in the real world that vaguely mimic randomized experiments. For

instance, when a hurricane happens to devastate one city and leave another untouched, one might think that it was more or less random which city got hit. Or consider the legalization of abortion with the Supreme Court's *Roe v. Wade* decision in 1973. The likelihood a fetus got aborted changed dramatically with that decision in some states, but not in others. A comparison of life outcomes for babies born around that time in different states tells us something about the impact of the policy and maybe also about deeper questions, like how being born unwanted affects a person's life.

So that is how I, along with a lot of other economists, spent my days: looking for accidental experiments.

Everything changed for me, though, when I one day met an economist a few years younger than me. He had a very different pedigree than my own. He hadn't attended Harvard or MIT, but rather, had received his undergraduate degree at the University of Wisconsin–Stevens Point and then his Ph.D. from the University of Wyoming. His first job teaching was at the University of Central Florida—not the most prestigious place.

His name was John List. Unlike me and the other big-name economists, he was doing something that in retrospect was completely sensible and obvious: running randomized economics experiments in the real world. But for some reason, almost no one else was doing it. Somehow, because of the traditions of the profession and what the economists before us had done, it just never occurred to us that we *could* run randomized experiments on real people in real economic settings.

Think about prejudice, for example. If a person acts in a biased way toward another, everyone has always assumed such a person is racist, sexist, homophobic, or what have you. But nobody has ever teased apart the underlying motives in behaviors that appear, on the surface, to be based in dislike, distaste, or flat-out hatred of other people in the way John List and Uri Gneezy have. Their

experiments—which they describe in Chapters 6 and 7—have shown that the hidden motive behind discrimination is not always hatred, but is sometimes simply to make more money.

To me, the sign of true genius is the ability to see things that are completely obvious but to which everyone else is blind. And by that measure, John List and Uri Gneezy are definitely geniuses.

They are true pioneers in one of the greatest innovations in economics of the last fifty years. This book is their story of how the experimental approach, in the hands of incredibly thoughtful and creative researchers, can shed light on just about any problem under the sun. The only limit is the imagination of the person designing the experiment.

Not only are randomized field experiments (as John and Uri's approach has come to be known) a powerful tool, it turns out they can be a whole lot of fun, too, as you will soon discover. I hope you enjoy reading this book as much as I have.