AI Will Drive the Coming Integration of Interpretive and Positive Methodologies[1]

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In the past few months, from December 2025 to March 2026, I have come to believe that generative Artificial Intelligence, colloquially called Gen-AI, will fundamentally change much of how we produce human knowledge. I've been using machine learning – the basis for artificial intelligence – in my research for years, and I've been skeptical that it will transform the social sciences. No longer. Catastrophic success[2] of colleagues executing years-long quantitative research projects in hours has changed my mind (Messing and Tucker 2026, Kustov 2026).

Generative AI is generative. It can be trained to work on improving itself and its analyses, so it is gaining function faster than our norms and institutions can adapt. If Gen-AI is currently at a level where it can perform the tasks of a sophisticated research assistant, it will very soon be able to perform most well-defined analytical tasks that I am able to perform. This kind of automation has been a goal of quantitative research all along. For good reasons, we don't trust human intuition about probability, so when we want to make decisions that involve probability, we incorporate a series of algorithms: rules for how one ought to update one's beliefs given new information, and how one should make decisions, given those updated beliefs. Our graduate training in the quantitative social sciences has been oriented towards helping colleagues learn a common set of algorithms (and invent new ones based on the same normative principles, when we uncover problems for which no satisfactory algorithm has yet been created). Now, Gen-AI makes so much more of it automatable that the future of quantitative research will not be coding, but rather prompting AI agents to collect data and analyze it according to a comprehensive synthesis of a statistics literature so vast that no human can ever read it in a lifetime and produce answers that would have previously taken years or lifetimes to achieve in mere days, or even minutes.

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2 Catastrophic, because the short-term success wildly exceeds expectations, but the long-term implications may be very negative. See Downes (2021).

Augmenting researcher time with algorithms isn't new. In my first book, *Deadly Clerics*, I collected 150,000 documents and had a rudimentary AI model "read" them because it would have taken decades to read them myself, synthesize them, and test my argument that Sunni Muslim clerics are more likely to preach anti-system jihad on the Internet when their academic ambitions are blocked (Nielsen 2017). It still took me two years to do a pilot study, and another 3 years to build the full study, write it, and publish it. Could this project be done overnight now? I don't know, but we are close. If data is on the open web, an AI agent can access it, collect it, analyze it, and produce findings in minutes. What is left for me to do? Why should someone pay me to do it? We are facing a crisis of economics in knowledge-making.

The theoretical claim of *Deadly Clerics*, then, is so relevant that it's a bit on the nose. When would-be academics have their ambitions blocked, they reject the system. If we use AI to eliminate many entryways to a research career, the junior scholars whose academic ambitions are inadvertently blocked will reject our discipline and take their talents elsewhere. We must think as a discipline about a fair transition to this new research world. Automating much of the research process will affect us all, but the most abrupt and painful consequences may hit junior researchers and those in precarious positions. Research workflows are becoming obsolete every month right now. How can a graduate student write a dissertation prospectus this Spring if the project will take three years with today's technology but will take only days to complete once they are on the job market? Will search committees reward them for time well spent, or ask, "shouldn't you have more?"

What, then, should a graduate student, writing a dissertation proposal this year, propose to do with their time? Rather than emphasizing the most algorithmic parts of what we do, the future work of this graduate student needs to be focused on what they, the human researcher, are making, creating, and contributing to new knowledge that is not reducible to an algorithm. I believe that human research has an aesthetic quality in addition to its technical correctness. I've come to understand myself and my own research as interpretivist, even as it draws deeply and faithfully from the canon of positivist methodology in many respects.

I recommend that a student starting now should adopt what Ed Schatz calls an ethnographic sensibility (Schatz 2009). This ethnographic sensibility is unique, not reproducible with AI, and developed from close, embodied interaction with the world, at the "nearest possible vantage-point" (Schatz 2009, p. 307). This is what is uniquely human about research. Human researchers come to their projects embodied and endowed with subjective agency: making meaningful choices about what questions to ask, how to ask them, and how to interpret the meaning of the answers for themselves and for the world.

When algorithms can do all the "objective" work, what is left is *interpretive* inference. I have encountered this most obviously in quantitative text analysis as I deploy machine learning models to infer the meaning(s) of a certain text, intended or not, by their authors and their audiences. These are problems of interpretive inference, and I believe that interpretive inference will remain a fundamentally human enterprise. I will trust a series of AI agents to "read" the statistics literature and design a causal study to test a correlation, long before I will trust an AI agent to tell me how humans make meaning out of what they

write, even when I use algorithms to summarize that writing in service of my interpretation. This thought experiment reveals, to me at least, that the part of research I am most confident will remain important in the age of AI is the interpretive. Because of the causal revolution's success at standardizing causal analyses, very few applied researchers will spend much of their time on solving causal inference problems. (We will still need methodologists to help us understand new types of causal inference problems.)

A third type of inference, descriptive inference, will remain important for Political Science. To be analyzed by Gen-AI, data that is not connected to the Internet must be connected. Here, humans will have an advantage for a long time. The archives will resist full digitization; there will be value in going in person to find the boxes that were missed in the rush to put "everything" online. Despite advances in using video oral histories (Milliff 2024) and virtual reality surveys (Miller 2024) to collect the experiences of humans, I believe there will still be an important role for human-centered interviewing and survey enumeration, following an interpretive, relational approach (Fujii 2017).

Other forms of description and measurement with an ethnographic sensibility, such as Cramer's gas-station and diner focus groups in Wisconsin (Cramer) or Wood's mapmaking exercises in El Salvador (Wood 2003), will increase in importance, even when they support quantitative findings, as in Jones' (2017) palace ethnography (paired with experiments) to understand social order in the UAE or Parker-Magyar's (2024) ethnographic observation to understand teacher protest in Jordan (paired with a network survey).

With coauthors, Diana Fu and Ed Schatz (2026), I have argued that in the age of AI, an ethnographic sensibility is more important, not less. Don't misunderstand me. I think causal inference is crucial, but automatable. Given fixed meanings and defined sets of relevant variables, an algorithm can (and should) produce the estimates we use for causal inference. This is the core of the "credibility revolution." When Don Rubin referenced "knowing the science,"[3] he meant that the algorithms, which he pioneered, will only work for estimation if a researcher is willing to say, "here's the structure of my problem." However, that prior knowledge of the structure cannot be specified by Rubin's algorithms. It comes from a human understanding of the problem, what is previously known about the problem, and what we desire to know now about the problem. That's "the science." And so, I think, the task for human researchers in the age of AI will be to know the science. Quantitative analyses will become democratized. As almost anyone can access quantitative tools via adequate prompting, scholars will spend years honing their sensitivity to the structure of the social world to ask better questions and offer new interpretations.

Let me return to our ethical obligations as individuals and a discipline. My work has been so disrupted by advances in AI that I am rethinking the entire workflow I've relied on to remain gainfully employed for the last 15 years. I have the luxury of doing so with a secure academic position. Most researchers are rethinking, or will rethink, their workflow from a place of precarity. I feel the responsibility to think hard about what we owe to future generations of scholars and take concrete steps to create the discipline we want them to inherit. As in many industries, agentic AI is

3 Personal communication.

on the cusp of replacing entry-level research assistance, which will sever the pipeline that got me and so many dear colleagues into Political Science research. The project that made me fall in love with social science was scanning and coding Development Bank documents, a task that is completely automatable now. If we pull up the ladder to new entrants in a short-sighted, self-interested arms race to use AI to publish more articles in top journals for the next decade, then our field will cut itself off at the knees. Each researcher has a unique capacity to see the world through their own eyes, to hone that into a sensibility unique to them, that they use to teach us all about the infinite facets of human societies. We must step back from an AI-fueled publication arms race to intentionally choose discipline-wide institutions and norms that make the social sciences an enterprise worth entering, no matter how much we must transform for that to be true. We must do this so that we humans can keep learning about ourselves.◆

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