Scientism is roughly coeval with science,¹ but the two should not be confused. Scientism is the assumption that “only scientific knowledge counts as real knowledge” (Williams, 2015, p. 6), but this is not an assumption inherent to science, nor one that all scientists make. In fact, there is no one thing that could be called science and so no coherent, unified object that could stand for the totality of objective truth. Though science is often cast (particularly by those of a scientistic bent) as a single, unified “method” or approach, scientists have actually worked under quite variable assumptions. As Paul Feyerabend (1993) points out in *Against Method*, there is no definition of science that includes everything we call science while excluding everything we do not. Science is too complex, spans too much history, embodies too much cultural and human variability to be understood in terms of one fully consistent set of assumptions or practices.

Accordingly, a scientific exceptionalism privileging “the methods and assumptions underlying the natural sciences” (Williams, 2015, p. 6) is basically nonsense because “there is no one ‘scientific method’” (Feyerabend, 1987, p. 36). Science as actually practiced has involved a tremendous variability of method, across time (compare Roger Bacon and James Watson), discipline (compare Harry Harlow and Jane Goodall), and place (compare Wilhelm Wundt and John Watson). Science is not a method but a history and a culture, “a network of material practices, built environments (laboratories, instrumentation, etc.), traditions of apprenticeship, and learned rituals that emerged over time, in particular configurations, in different places” (Smith, 2015, p. 181).

Science has been, and is, many (sometimes contradictory) things and scientism is thus a misreading of the nature and limits of science, a kind of science boosterism that ignores the complexities of history. That

¹ Even Galileo had an exaggerated confidence in what science could do.
boosterism includes both “extend[ing] the natural sciences beyond their proper sphere of explanatory competence” (Hacker, 2015, p. 97) as well as encouraging “an exaggerated confidence in science (i.e., natural science in all its avatars) to produce knowledge and solve the problems facing humanity” (Williams, 2015, pp. 6–7).

Scientism, in short, is an “idolatry of scientific method” (Gadamer, 1975b, p. 316), and so is probably best understood as “a kind of fundamentalism” (Principe, 2015, p. 51). Under a fundamentalist account, the assumptions that frame a given institution are not subject to criticism or even discussion: “to the fundamentalist it is not just that the question of interpretation does not arise, the very idea is anathema, a heresy, a snare, a delusion” (van Fraasen, 2015, p. 81). Science understood as epistemically privileged invokes precisely this kind of immunity to critique or interpretation – under scientism, science makes a claim on truth that cannot be legitimately challenged by any other form or tradition of knowing.

The trouble with this sort of dogmatism is not just that it “fetters thought as cruelly as ever the churches had done” (Polanyi, 1958, p. 279), but that when we take it into our bodies, we also increase our immunity to certain kinds of critique. Under scientism, legitimacy comes in being a science and this means distancing our methods from those of philosophy, history, the humanities, and other humanizing and contextualizing traditions. Scientism can thus breed in us an unwillingness to accept limitations or take correction in the service of human or moral concerns. A basic scientistic assumption is that, on matters of truth, the facts decide, and science grants a special access to those facts; other considerations (other forms of wisdom, other obligations, other desires) can step to the back of the line.2 Scientism thus inoculates us against the ways of knowing that reveal to us our human, moral, cultural, social, and historical contexts and attendant responsibilities.

At this point, it should be obvious that scientism is a term of abuse rather than anything someone might claim for herself; it is an accusation. But is it a fair one? Do any scientists really understand their work in this way? Or, more specific to my purposes here, do any psychologists understand their work in this way? The simple answer, of course, is that some do and some do not, but not in equal

2 Or maybe just get in a different, much less important, line.
proportions. Though there is no way to fully document the degree to which scientism is represented in psychology, the available evidence suggests that it is the predominant view.

Sigmund Koch, who oversaw the monumental mid-century self-evaluation *Psychology: A Study of a Science*, certainly saw scientism as the mainstream view. Writing in 1981, he decried the “restrictive scientism and rule-saturated ideologies of the psychological and social sciences” (p. 82), seeing in them and their pretense to “preemptive truths,” a “grave moral issue reflective of a widespread moral bankruptcy within psychology” (p. 93). Koch (1973) attributed psychology’s scientism to a sort of wish-fulfillment fantasy, where the “entire ... history of psychology can be seen as a ritualistic endeavor to emulate the forms of science in order to sustain the delusion that it already is a science” (p. 636). This desire has taken form, according to Koch (1981), as “a loose melange of vaguely apprehended ideas derived from logical positivism, operationism, and neopragmatism” (p. 81); a never-renounced positivist allegiance to “philosophies of science that had begun to crumble even before psychologists borrowed their authority and that are now seen as shallow and defective by all save the borrowers” (pp. 80–81).

Koch’s critique is unforgiving (and perhaps somewhat overdrawn) but not unusual. Countless historians and scholars (e.g., Kurt Danziger, Kenneth Gergen, Richard Williams, Jill Morawski, among many others) have made closely related arguments. We should, of course, be careful about relying too much on critical accounts, but the notion that psychology is scientistic is not particularly controversial, nor hard to accredit. Scientistic claims can be found everywhere in the discipline, usually without apology or caveat.

For example, in an analysis I conducted of commonly used methods texts (Clegg, 2016), the picture of psychology that emerged was uniformly scientistic. In these texts, science was characterized as “a framework for drawing on independent realities to evaluate claims rather than to depend on tradition, authority, or armchair reasoning” (Rosnow and Rosenthal, 2008, p. 6) and psychology as one of its success stories: “the one hundred or so years in which people have conducted systematic research on human behavior have taught us more than we learned in the hundreds of centuries that preceded the last one hundred years” (Pelham and Blanton, 2007, p. 4).
This sort of scientistic vision can also be seen in disciplinary and professional documents. For example, the APA Presidential Task Force on Evidence-Based Practice (2006) includes a clear statement of epistemic privilege: “the scientific method is a way of thinking and observing systematically, and it is the best tool we have for learning about what works for whom” (p. 280). Similarly, in the Report of the American Psychological Association 2009 Presidential Task Force on the Future of Psychology as a STEM Discipline (2010), science is described as the “foundation of teaching, research, and practice in psychology” (p. 13) and psychological science as “a form of engineering” (p. 9) that plays a “critical role . . . in solving society’s problems” (p. 16). That report makes other fairly typical scientistic arguments for psychology’s status as a science, including the claim that psychology “has used state-of-the-art scientific instrumentation since its inception” (p. 7) and that “psychological researchers routinely use sophisticated mathematics” (p. 8) as well as “experiments to gain basic knowledge” (p. 8).³

This sort of scientism remains largely invisible and normalized, but it is sometimes made explicit. A particularly dramatic example is the 2016 American Psychologist article where Timothy Melchert makes the rather startling claim that “psychology is no longer a preparadigmatic academic discipline, but has become one of the paradigmatic natural sciences” (p. 490). According to Melchert, this assertion is “fully accepted across the behavioral sciences generally” (p. 489)⁴ and for this reason it “might be considered irresponsible for [professional practice] not to systematically transition to the new scientific framework” (pp. 494–495). Melchert vaguely ties this new framework to evolutionary theory and to “the invention and use of more powerful and precise scientific tools” (p. 490), claiming that “there is now overwhelming evidence supporting this perspective” (p. 491). His conclusion is that theoretical debate is essentially ended: “from a paradigmatic scientific perspective, one does not select from an array of competing theoretical orientations or philosophies for

³ Common enough arguments, even though many scientists do not routinely employ sophisticated mathematics, instruments, or experiments.

⁴ A claim that couldn’t possibly be substantiated but that seems implausible, given the difficulty of getting any two psychologists to agree about anything.
understanding natural phenomena” but instead theories are “tested and verified using experimental research methods” (p. 491).\(^5\)

Ignoring for the moment the fact that basically none of these assertions is actually true (and that most couldn’t even be shown to be true),\(^6\) these claims are beautifully paradigmatic of scientism. Melchert does not make any attempt to describe the complexities and nuances of scientific research as actually practiced in psychology but, instead, provides sweeping generalizations about a scientific psychology that can no longer be legitimately challenged.

And this broad rejection of anything outside the bounds of science (variously conceived) is really the point of the scientistic critique. A critique of scientism is a critique of exceptionalism, of privilege. Science is a vitally, indispensably, important human institution – one of the most important in history – but this cannot justify an immunity to critique or an arrogant dismissiveness of complexity, dissent, or alternative perspectives. If I can avoid reflection, engagement with different viewpoints, or social or moral critique simply by claiming the label “science,” then only dogmatism and fiat can result; this is always the result of unchecked fundamentalism. That kind of hubris is the enemy of good, responsible science.

\(^{5}\) It is not clear how Melchert thinks we can test theories or run experiments without a theoretical orientation.

\(^{6}\) There is certainly not one unified view of science in psychology; there would be no way to show that every scientific psychologist agreed about any given claim or perspective; there is no definitive way to “show” that a discipline is paradigmatic science, and so on.