Introduction

When psychologists write about how to do science, we mostly devote our time to the technical elements of data collection and analysis. A guiding assumption in this book is that these technical elements are relatively minor considerations in the prosecution of good science. This is not to say that they are unimportant, but only that they are regional concerns within a much larger scientific geography whose principal contours are not technical nor procedural, but social and moral.

I think it uncontroversial to claim that, like everyone else, the scientist navigates a world of moral choices, human relationships, and political systems that shape and constrain the kinds of work it is possible to do. The scientist must make difficult, inherently ambiguous choices about who and what matters (e.g., is worthy of study), where to make compromises and accept constraints, what counts as evidence, and so on. The scientist must also attend to an often vast network of relationships — with supervisors, administrative staff, collaborators, research participants, journal editors, policy makers, and so on — through which her work is fashioned and disseminated. And that work is bound up in a range of political systems she must navigate, including institutions that hold legal or financial interest, those that provide auxiliary support and oversight, those that administer local resources and responsibilities, and those that arbitrate disciplinary influence and prestige.

1 In this book, I will often make use of collective pronouns (i.e., “we” and “our”) in discussing psychological research. I do this to highlight my role as a practicing psychological researcher and not as an outside commentator. I take all of the arguments and analyses presented in this book as applying to me, to my students, and to my colleagues. From my perspective, we are all in this together.

2 Throughout this book, I will very often use the term “moral” (and its cognates). I employ this term in a broad way to encompass all questions of the good, right, and just. When I am talking about science and psychology as everyday moral practices, I mean that these practices are anchored in ideas about, and commitments to, right action.
Every working scientist knows and navigates this world of choices, relationships, and institutions, but this is generally not what we talk about in research methods texts and courses and certainly not the terms by which we account for or warrant scientific claims. Our habit, rather, is to write, talk, and teach as though a small set of narrowly defined technical “methods” for collecting and analyzing data are what constitute science.

There may be good reasons for this habit. The real complexities of science as practiced are not easily conveyed in the short page lengths and time frames available to the writer and teacher. And, in any case, the vast tacit dimensions of science are absorbed primarily through mentored practice and not through the study of post hoc descriptions. Methods descriptions, rather, function as a kind of shorthand for the activities of scientists, with the full-bodied details of real practice supplied either from experience or from the imaginations of other scientists already familiar with them. More textured, descriptively complete accounts of science (of the sort, for example, that you find in sociological and historical studies of science) are clearly not necessary to train technically capable researchers, nor to convey the intent and substance of one scientist’s work to another.

To put it colloquially, we figure it out – novices figure out the things they weren’t taught or didn’t fully understand and other researchers figure out (or, really, assume) those things left out of a research report. Time and space constraints (in both the teaching and reporting of research) require us to make choices about what we will leave out of any research account and these constraints are such that we will have to leave out nearly everything. A research project is a tightly woven fabric of small human moments that no report and no text can adequately convey. I don’t contest these limits and don’t pretend that researchers can or should explicate the full human scope of their activities. But there are good reasons to turn more of our attention to the social and moral contours of these activities and real dangers in ignoring them.

At the very least, the moral contours of research practice merit attention because these can have profound consequences for the discipline, as well as for those affected by psychological research. Visible to all, for example, are the damaging effects of researcher misconduct, with cases of fabricated data or participant abuse creating mistrust in
the status and intentions of psychological science. Also damaging are the countless examples of scientific work (in psychology and out) in the service of oppression, injustice, and harm. Too often, psychologists have been on the side of the powerful, the aggressor, the oppressor (supporting apartheid in South Africa, eugenic programs across the world, torture in the Bush-era USA, etc.) and too often we have hidden those allegiances behind the neutrality of science. Too often psychologists have chosen to dehumanize, manipulate, instrumentalize, and outright harm and it is not a coincidence that we have also too often chosen to ignore the political and moral dimensions of research. The rhetorical retreat into objectivism is a thin veneer for our history of compromised allegiances.

But even if the history of psychological research were a sunny catalogue of human good, in need of no particular oversight, accounts of research divorced from its moral and political context are also insufficient on purely descriptive and epistemic grounds. What I am suggesting in this book is that science as a whole is best understood, and most responsibly and effectively practiced, from the perspective of its moral, social, and political context. We mistake science when we talk of it as a technical method, not just because there is no general set of rules, techniques, or assumptions that uniquely define science (Feyerabend, 1993), but because science as practiced is much more a community than a particular set of techniques. Science is a delicate human system, completely dependent on the trust, good faith, and consensus shared between particular scientists and within the much larger network of support that makes science possible. The integrity of this human system is the integrity of science.

Thus, the most important reason to frame science in terms of everyday moral practices is because such practices are science; they are its shape and attending to the obligations inherent within them is the substance of doing good science. Among these contours are those that shape best practices for designing and conducting data collection and analysis, but these best practices (i.e., traditional “research methods”) cannot be defensibly considered independent of the people and institutions that constitute them (and thus universal and value-neutral), nor as the full and final arbiters of scientific work or truth. They are one set of considerations to which a scientist must attend, but they do not constitute science. Good science comes in and from particular persons paying careful attention to the whole range of moral choices,
human relationships, and social institutions through which everyday science work is done.

The aim of this book is to provide researchers with a framework for understanding and practicing science in terms of this careful moral attentiveness. In Part I of the book, I outline the most basic ways that traditional notions of objectivity, science, and ethics must be reframed for this moral attentiveness to be possible. This “reframing” is not at all original and has roots older than the discipline, so I present it in the character of a critical summary.

In Chapter 1, I discuss scientism, or the belief that scientific knowledge is the most (or only) legitimate form of knowledge. My argument is that scientism mischaracterizes science as an epistemically privileged and unified method. Actual scientific practice, however, has demonstrated tremendous variability in theory and method across time, place, and disciplinary context, and can best be understood as a historically contingent human activity. Drawing on historical and philosophical critiques, I characterize scientism as a kind of science fundamentalism that insulates scientists from social and moral critique and so contributes to the institutionalization of exceptionalism and privilege.

In Chapter 2, I discuss theories of objectivism, or the requirement that all genuine knowledge be observer-independent and (or) neutral. I provide a brief outline of objectivist accounts and distinguish these from objectivity. Drawing on historical analyses, I show how objectivity in science refers to a set of practices aimed at reducing variability in the recording and transmission of observations, but that objectivism is an overgeneralization of these practices into an incoherent epistemological mandate. I argue that objectivism is illusory, both because knowledge can never be produced independent of a historically situated knower and also because neither individuals nor human systems can be neutral. Objectivism, I claim, can only be performative and so serves as a cover for, rather than a defense against, institutionalized forms of privilege. Objectivist practices also dehumanize the subjects of scientific labor and so anesthetize the moral responsiveness of those who produce and consume research.

In Chapter 3, I discuss scientific instrumentalism, or the notion that scientific findings are morally neutral and that scientific activities are
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justified primarily in terms of their pragmatic utility. I argue that an instrumentalist approach to psychology disguises the moral and political agendas of those who deploy psychological research, conflating these with a neutralist account of “what works.” I provide a broad historical sketch of those for whom psychology has worked – primarily, large institutions – and of those for whom psychology has not worked – principally, those in disenfranchised social positions. I detail some of the most egregious examples of harm, exploitation, and injustice in the history of psychology, providing a general analysis of the ways that psychologists have encoded racism, sexism, and other forms of prejudice under seemingly neutral categories like intelligence.

Speaking very generally, Part I of this book draws on a long critical tradition to argue that scientism, objectivism, and instrumentalism have functioned both to strategically dehumanize persons and to provide a “neutralist” veneer for morally destructive practices. To be clear, this is a critique of an overgeneralized metaphysical program (objectivism, scientism, and instrumentalism) and not of the more local traditions that have lent it authority. In other words, it is not a critique of objectivity – which is a set of very useful practices whose purpose is to reduce variability in the recording and reporting of observations – but of objectivism, which casts all true knowledge as context and observer-independent. Likewise, this is not a critique of science, but an attempt to disentangle science from the shallow dogmas of scientism – that is, the insistence that science is the transparent and final arbiter of all truth.

In Part II of the book, I draw on contemporary philosophy of science, and critical, feminist, and science studies scholarship to move beyond the critique of objectivist frameworks and toward an account of psychological science as actually practiced.

In Chapter 4, I draw on social science, historical, and philosophical studies of science to describe the everyday activities involved in science. I characterize the core scientific task as the production of accounts that legitimate, organize, and mobilize scientific labor. These accounts are shaped by a complex network of social constraints and processes. Through the main body of the chapter, I describe some of these constraints and processes, including those cultural and political (e.g., national funding priorities), professional and disciplinary (disciplinary norms concerning methods, equipment, writing conventions, etc.), institutional (e.g., managing the requirements of bureaucracies and
budgets), local and interpersonal (e.g., lab politics and professional rivalries), and dispositional and personal (e.g., personal talents and capacities for science work). I argue that these various social constraints and processes constitute the moral geography of science and that to navigate them well and responsibly is the substance of good science.

In Chapter 5, I extend the social and moral account of scientific work with a similarly social and moral account of scientific justification. My argument is that scientific justification should consist, not simply in the construction of evidentiary rationales, but in the refinement of the whole moral architecture of science. I insist that the “core competency” in training and oversight for psychological inquiry should be the justification – that is, the making just, right, and true – of research practices. Drawing on the work of Emmanuel Levinas and Helen Longino (among others), I argue that two forms of practice essential to such justification are an open disciplinary politics, or an institutionalized openness to uncertainty, critique, and correction by the widest possible range of qualified contributors, and a committed research praxis, or an approach to research where everyday scientific practices are interrogated and refined to become consistent with explicit values.

In Chapter 6, I discuss the practices conducive to an open disciplinary politics. I critique rhetorics of certainty in science (and psychology), characterizing these as dogmatic and antithetical to good science, and contrasting them with the humility, skepticism, and openness required for healthy scientific inquiry. My claim is that such openness can only occur when the broadest possible range of qualified contributors have equal standing to challenge scientific claims and practices, particularly those reflective of historical and structural inequalities. I discuss some practices conducive to such openness, focusing on recommendations from decolonizing and feminist traditions, including the centering of historical and cultural critiques of science and the privileging of marginalized and oppressed perspectives in publishing, governance, and hiring decisions. Practices like these, I argue, are integral to an open disciplinary politics, and they only become possible through active epistemic citizenship aimed at transforming disciplinary structures and practices.

In Chapter 7, I describe a committed research praxis where scientists strive to articulate the community-level value commitments that define
good science, and to evaluate the degree to which particular scientific activities and products reflect those commitments. I argue that one primary way for psychologists to engage in this sort of committed praxis is by asking questions together in a place. That is, we can subject our work to insistent moral attention through collective and locally situated forms of reflection and responsibility. I suggest that these forms could include reflexivity, transparency, participatory and community-oriented research practices, political, historical, and material analyses of our research traditions and products, resistance to overgeneralized and “scaled” forms of neoliberal management, and other practices that help anchor research work to the local and communal commitments that justify it.

Speaking generally, the aim of Part II is to frame the practices of psychological research in terms of their social, moral, and historical foundations, and to point toward a similarly social and moral account of scientific justification. I use the word justify here with intention. Those who write about scientific justification have generally treated it as a sort of defensive maneuver – as the construction of evidentiary rationales – but this is an echo of an objectivist tradition that I have no wish to defend. Here, I point instead toward an older set of meanings – one where justification is about justice, about making just our practices, relationships, and systems. It is not coincidental that our truth words are also moral words and I argue here that this relationship is primordial, formative, and indissoluble; that there is no separating being right and upright; truth and being true; conscience and science. Justifying psychological research is thus about justifying the social and moral architecture of particular scientific communities, an endeavor, I argue, that requires both a disciplinary commitment to open political structures and more local commitments to explicit, community-driven values.

In the simplest terms, my argument in Part II is that good science is a matter of individual and collective moral attention, something that I attempt to model in Part III of the book. In each of the chapters in Part III, I frame the research endeavor in terms of particular choices the researcher must make, relationships that she must attend to, and social systems and structures within which she must work.

In Chapter 8, I discuss some of the most salient moral questions, dilemmas, and duties involved in choosing a research community (and conversation) in which to participate. Conducting research in some
area, I argue, is not so much a solitary domain choice as a process of becoming socialized to a particular community and to its values, languages, traditions, institutions, and ways of thinking, writing, and working. In some measure, this also means becoming responsible for those traditions and values. I also discuss the ways that participating in a research community involves building the relationships of trust and good faith upon which all science rests, a relational process requiring honesty, the nurturing of cooperative relationships, and other duties. I also emphasize the political, institutional, and economic forces that structure research communities and the necessity of active epistemic citizenship to transform these in ways that serve the collective values of those communities.

In Chapter 9, I outline some of the most important moral considerations involved in the design and conduct of research. I first discuss research funding, emphasizing conflicts between resource limitations and epistemic and moral values. I then discuss research space considerations, framing these in terms of dwelling practices that express our commitments (to hospitality, conservation, etc.) and that shape our communities and environments. Next, I discuss the moral affordances of research equipment, arguing that such equipment is not just a set of neutral tools but a way of extending and transforming our individual and collective embodiment. I then discuss how organizing research entails a moral ordering (of priorities and persons) set amid a micro-politics of local power relationships. Finally, I discuss some of the moral dilemmas involved in soliciting and managing research participation, focusing on the duties to cultivate the choice, voice, and safety of all who participate in research.

In Chapter 10, I discuss the moral context of research interpretation and reporting. I describe interpretation as the constitution of evidence within an epistemic frame, characterized by the totality of (always at least partly moral) commitments underlying analytic choices. These analytic choices include those concerning what is worthy of study, what kinds of methods and forms of evidence are considered acceptable, and what kinds of claims are warrantable. I also emphasize the ways that evidence is not merely gathered or reported, but constituted within a rhetorical and political context. In the latter half of the chapter, I discuss the moral affordances of research reporting, focusing on questions of fairness, honesty, representation, and other considerations involved in report authoring. I focus specifically on questions of:
collaboration and credit; style and representation; venue, availability, and audience; submission, editorial, and revision; and the dissemination and use of research reports.

As I consider these lived elements of research, I outline important moral, social, and political questions and dilemmas that must be addressed. My contention is that in addressing research from this moral and political perspective, we will, in fact, be doing the most that we can to fulfill the obligation of creating good, truly justifiable, science.

In Chapter 11, I summarize the book as a whole, arguing that the dilemmas, decisions, relational and institutional commitments, and other moral considerations described here are the essence of good science. I also argue that, because a social and moral account of science does not ignore nor hide the human and moral contexts of research, it subjects scientific claims to a more rigorous scrutiny than does an objectivist account and so strengthens the warrant for those claims. Finally, I discuss how the account offered in this book impacts everyday psychological practice, acknowledging the inevitably local and contextual ways that a moral accounting of psychology might be realized within specific research communities. This caveat notwithstanding, I suggest that anyone could begin by asking, in their own communities, the kinds of questions posed here as well as by participating in an epistemic activism aimed at transforming disciplinary structures and practices.

Following the final chapter of the book, I provide, in Appendix A, a detailed Instructor’s Guide. This guide includes a brief essay on methods instruction in psychology, and a discussion of ways to use the chapters and sections of this book in methods instruction and mentoring. In Appendix B, I include a detailed curriculum, based on a Master’s-level introductory research methods course, integrating concepts and readings from the book. In Appendix C, I outline a list of dilemmas common in research design, accompanied by a set of questions meant to inspire moral reflection about those dilemmas (a resource that could be useful in mentored research).