INTRODUCTION –

THE NATURE OF NATURALISM

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The critical concern of the present volume is contemporary naturalism, both in its scientific version and as represented by newly emerging hopes for another, philosophically more liberal, naturalism. The papers collected here are state-of-the-art discussions that question the appeal, rational motivations, and presuppositions of scientific naturalism across a broad range of philosophical topics. As an alternative to scientific naturalism, we offer the outlines of a new non-reductive form of naturalism and a more inclusive conception of nature than any provided by the natural sciences. Our authors collectively believe that holding scientific naturalism up for philosophical scrutiny and challenging its misconceptions is of the first importance both for understanding ourselves and our place in the world; and, also, for the future direction of philosophy itself.

Instead of presenting an unwieldy for-and-against anthology, we decided that since scientific naturalism is the current orthodoxy, at least within Anglo-American philosophy, it would be more fruitful to collect papers that
are critical of that orthodoxy and aim at constructively reforming it. We have restricted ourselves to authors broadly within the analytic tradition of philosophy. Partly this is a matter of the sheer magnitude of undertaking to compare the attitudes of the analytic and continental traditions to the sciences; partly, it is because we believe that the fate of analytic philosophy is more closely aligned with the fate of contemporary or scientific naturalism.

Eleven of the fourteen articles collected here are new papers, most by distinguished philosophers written especially for this anthology. Three have previously appeared in print. The papers by Donald Davidson and Barry Stroud are reproduced here on the grounds that they are seminal discussions of scientific naturalism that are relatively difficult to find. Davidson’s paper, however, is accompanied by an original Afterword. John McDowell's paper, which clarifies and amplifies some key themes of Mind and World (1994), has previously only appeared in German.

In Section I, we first turn to consider the background and central themes of scientific naturalism before briefly summarising some of the main lines of criticism presented by the papers collected here. In Section II, we provide some indication of the ways in which our authors provide a road-map, outlining some positive theoretical directions for
philosophy after scientific naturalism. The volume can usefully be thought of as providing the beginnings of a more liberal or pluralistic form of naturalism.

I. SCIENTIFIC NATURALISM: SOME THEMES

An overwhelming majority of contemporary Anglo-American philosophers claim to be “naturalists” or to be offering a “naturalistic” theory of a key philosophical concept (say, knowledge) or domain (for example, ethical discourse). Naturalism has become a slogan in the name of which the vast majority of work in analytic philosophy is pursued and its pre-eminent status can perhaps be appreciated in how little energy is spent in explicitly defining or explaining what is meant by naturalism, or in defending it against possible objections.

For the few who do take the trouble to explain naturalism, perhaps the most familiar definition is in terms of the rejection of supernatural entities such as gods, demons, souls and ghosts. However, the category of the supernatural is no clearer and no less controversial than the category of the natural. As John Dupré notes in the present volume, it is no good simply identifying the supernatural with the immaterial since there are many
immaterial things that we are perfectly happy to countenance: for example, concepts and numbers. In philosophy, the idea of the supernatural is often associated with theism and Cartesian dualism. But it is hard to see how this idea of the supernatural can help to provide a satisfactory understanding of contemporary scientific naturalism. Although naturalism may once have been primarily understood in terms of the rejection of the Judeo-Christian God or the immaterial soul, the most pressing questions about naturalism now arise in areas of philosophy other than theology, and the great majority of philosophers of mind have long since abandoned Cartesian dualism.  

Apart from being used to refer to the denial of the existence of God or to indicate the rejection of the dualism of mind and body, the term “naturalism” is also commonly used to mark one’s acceptance of a scientific philosophy, or to denote the attempt to “naturalize” some allegedly contentious entities or concepts; and in various other ways as well. The papers by Hilary Putnam and John McDowell both suggest that the major battles in contemporary metaphysics concern the status of the normative: one side claiming it as a *sui generis* aspect of nature; and the other side, treating such a conception as supernatural, and so reducing norms to something non-normative, on a more restrictive, scientific
conception of nature. In this debate also, both naturalism and supernaturalism are contested terms and there is no neutral understanding of either to settle the dispute.

It is a philosophical commonplace that "Naturalism means many different things to many different people."5 When one considers this widely varied usage it seems plausible that at least part of the attraction of naturalism depends upon a common tendency to vacillate between uncontentious and contentious senses of the term. This has led to a situation in which one might despair of finding any unified doctrine(s) lying beneath the various claims made on behalf of naturalism. And this, in turn, fosters a sense that "naturalism" is a hopelessly portmanteau term without any discernible core meaning, and as such, not a particularly suitable candidate for philosophical examination.

Nonetheless, in spite of its complexity and ambiguity, we believe that there is a substantial core conception of naturalism that underlies a great deal of current philosophical thought. Whilst it may not be possible to capture everything philosophers now associate with the term "naturalism," there are, we believe, two core themes--although there are, of course, real and apparent disagreements about how they are to be understood in detail.
These two important and characteristic themes of naturalism are:

a) **An Ontological Theme**: a commitment to an exclusively scientific conception of nature;

b) **A Methodological Theme**: a re-conception of the traditional relation between philosophy and science according to which philosophical inquiry is conceived as continuous with science.

In order to distinguish this kind of naturalism from other, or older, versions let us call it *scientific* naturalism. Now let us consider each of its themes in turn.

1. The Ontological Theme: A Scientific Conception of Nature

Schematically, the first theme is a commitment to a scientism that says not only that modern (or post-seventeenth century) natural science provides a true picture of nature but, more contentiously, that it is the only true picture. Wilfred Sellars expresses its animating spirit in his remark that, “science is the measure of all things, of what is that it is, and of what is not that it is not.”
Perhaps the most common reason cited in favour of this view is some version of what might be called the Great Success of Modern Science Argument. It argues from the great successes of the modern natural sciences in predicting, controlling and explaining natural phenomena—outstanding examples of which are mathematical physics and Darwin’s theory of evolution—to the claim that the conception of nature of the natural sciences is very likely to be true; and, moreover, that this is our only bona fide or unproblematic conception of nature. It is the latter claim that earns scientific naturalism the label of "scientism."

The acceptance of an exclusively scientific conception of nature is what leads to the demand for the various projects of naturalizing the mind and its contents (involving, say, ethical values, colours, and numbers\(^8\)) that dominate contemporary research in metaphysics. Projects of naturalization have typically been conceived as substantive semantic projects in which the concepts of apparently non-natural discourses must be: 1) reduced or reconstructed in terms of naturalistically respectable posits, i.e. the posits of the natural sciences; or 2) treated as useful fictions; or 3) construed as playing a non-referential or non-factual linguistic role; or 4) eliminated altogether as illusory manifestations of "pre-scientific" thinking.
The highly revisionary aims of most naturalization projects is an indication of the fact that, by and large, scientific naturalists tend to adopt a narrow or restrictive conception of what constitutes legitimate natural science: at a minimum, physics; or, more plausibly, that and chemistry and biology. In so doing, they draw a (no doubt controversial) line between science proper and other kinds of rational enquiry such as history or art criticism. The substantive conception of natural science they presuppose has complex roots, but two discernible influences are a continuing allegiance to the in-principle unity of the sciences and the appeal of a strong version of physicalism.

In the recent past, it is significant that the terms “naturalism” and “physicalism” have often been used interchangeably. Part of the reason, as John Dupré's paper explains, is that the Great Success of Science Argument has been thought to provide grounds for physicalist monism: the thesis, as Armstrong explains it, “that the world contains nothing but the entities recognised by physics.” And this is no doubt related both to the idea of the unity of the sciences and to the tradition of privileging physics as our paradigm of a natural science.

However, it is worth noting that there is no consensus about there being one master conception of scientific
nature. That reflects the fact that there is dispute about the unity and scope of the sciences, even within the scientific naturalist camp. Not surprisingly, then, scientific naturalism is not identical to physicalism. Although every physicalist\textsuperscript{13} (in Armstrong’s sense) is committed to scientific naturalism, not every scientific naturalist is a physicalist. On a pluralist conception of science, a scientific naturalist might think there are entities such as acids or predators or phonemes that chemistry or biology or experimental psychology commits him to, that are not (reducible to) physical entities; and that, consequently, the explanations of, say, biology are not reducible, even in principle, to the explanations of physics.

Of course, some philosophers understand physicalism otherwise, as a supervenience claim, namely, that all non-physical properties (such as mental and aesthetic properties) supervene on physical properties. Whether that is something that all scientific naturalists must accept depends upon how supervenience is understood, a highly controversial matter.\textsuperscript{14} Yet, however it is understood, most physicalists also assume that the non-physical is (in some strong but hard to define sense) dependent on, and determined by, the physical but not vice versa. Although
many may find the idea of a non-reductive physicalism appealing, these further commitments seem to inexorably push physicalism in the direction of various forms of reductionism.

There is a longstanding and quite general problem distinguishing science proper from other forms of critical inquiry. In both the analytic and continental traditions there has been much dispute, for instance, about whether the so-called “human and social sciences,” including intentional psychology, sociology, and anthropology, are really autonomous and legitimate sciences in their own right like physics, chemistry and biology. Most scientific naturalists tend to answer “no” to this question; more liberal naturalists, such as the writers included in this anthology, would instead say “yes” on the grounds that the limits of the “scientific” are broader, and looser, than the orthodoxy suggests.

2. The Methodological Theme: The Continuity of Philosophy and Science

The second scientific naturalist theme involves a major re-conception of the traditional relation between philosophy and science. Traditional philosophy attempted to establish a
priori, and once for all, the presuppositions, extent and limits of knowledge and reality. It bore a foundational relation to the enterprise of scientific inquiry. In Cartesian and Kantian thought, for example, philosophy provides the epistemological and metaphysical foundations for the natural sciences.\(^{18}\)

Over the past four centuries since the beginnings of the scientific revolution, there has been a gradual but relentless reversal of the roles of philosophy vis-à-vis science as we find in, say, Descartes’s “First Philosophy.” Hume took a decisive step towards scientific naturalism in severely restricting the scope of a priori knowledge to the relation of ideas, in adopting an ironic and cautious agnosticism, and in advocating a new “science of Man,”\(^{19}\) whose guiding ideal is to regard the human as simply a part of nature, not set over against it.\(^{20}\)

Scientific naturalism is, as Quine elegantly puts it, the “abandonment of the goal of a First Philosophy prior to natural science.”\(^{21}\) Abandoning First Philosophy involves two related ideas: 1) The denial of philosophy’s traditional authority—philosophy can no longer claim to be the master discipline that sits in judgement of the claims of the natural sciences--; and 2) the denial that the results of
Philosophy play a foundational role with respect to the sciences.

In fact, scientific naturalists defend an even stronger claim, namely, that “philosophy is continuous with the natural sciences.” What this adds to the rejection of First Philosophy is the idea that philosophy has no autonomy with respect to the sciences. Philosophy, on this conception, is science in its general and abstract reaches.

3. Some Common Forms of Scientific Naturalism

The ontological and methodological themes can come apart, in principle. An ontological scientific naturalist need not subscribe to the methodological theme since one might believe in a scientific conception of nature on distinctively philosophical grounds. However, a methodological scientific naturalist will presumably endorse the ontological theme on the ground that scientific inquiry has ontological presuppositions and implications.

It is also worth noting that we can also define a semantic version of naturalism that presupposes a prior commitment to the ontological version. Here, then, are the three influential types of naturalism:
i) The *ontological scientific naturalist*\(^{23}\) holds that the entities posited by acceptable scientific explanations are the *only* genuine entities that there are.\(^{24}\) A weaker version holds that scientific posits are the only unproblematic (or non-queer\(^{25}\)) entities that there are.

i) The *methodological (or epistemological) scientific naturalist*\(^{26}\) holds that it is *only* by following the methods of the natural sciences--or, at a minimum, the empirical methods of a posteriori inquiry--that one arrives at genuine knowledge. A weaker version holds that the methods of the natural sciences are the only unproblematic methods of inquiry. On this view scientific knowledge is the only unproblematic (or un-mysterious) kind of knowledge that there is, thus provisionally allowing for non-scientific knowledge in some loose or practical sense.

iii) The *semantic scientific naturalist*\(^{27}\) holds that the concepts employed by the natural sciences are the *only* genuine concepts we have and that other concepts can only be retained if we can find an interpretation of them in terms of scientifically respectable concepts. A weaker version holds that such concepts are the only unproblematic concepts we have. [Note that this kind of naturalism *might* be defended on a priori conceptual grounds, although it will be
under considerable internal pressure to abandon such methodology.]

Of course, scientific naturalism tends towards a global doctrine, committed to all of these versions together, on the basis of the scientific aspiration for a complete and exhaustive explanation of all phenomena. There are many ways of further refining and elaborating the present understanding of scientific naturalism involving, for example, different ways of accounting for such things as values, numbers, meanings or modalities—all very problematic in the eyes of the scientific naturalist. Rather than explore these matters here, we have left it to each author to articulate a conception of scientific naturalism that fits broadly with our characterisation whilst also suiting their own dialectical purposes.

At this point we must make mention of the controversy surrounding the a priori. It is clear that scientific naturalist, indeed naturalists of all stripes, reject the traditional (that is, unrevisable) a priori. Yet it is worth noting that one might give up the traditional a priori yet retain a notion of revisable a priori truths. That is, one might still think that conceptual analysis remains possible, so long as a priori claims about meanings are admitted to be empirically defeasible.26 Yet, from the perspective of
strict scientific naturalism, this position will seem an unstable half-way position.\textsuperscript{29}

4. Scientific Naturalism and the Analytic Tradition

The nineteenth century positivism of Comte, Mill, Spencer, Mach and others, was a commitment to the idea that scientific knowledge is the only knowledge there is and that philosophical method is nothing other than scientific method. Although science and philosophy of science had been growing in importance since the scientific revolution, the positivists were, in effect, the first fully-fledged scientific naturalist movement.

It is an important fact about analytic philosophy that its founders strongly attacked scientific naturalism, even as they called for a scientific philosophy. Frege and Wittgenstein notoriously rejected the positivists’ psychologism in the philosophy of logic. And together with Russell and the Logical Positivists, they believed that “Philosophy aims at the logical clarification of thoughts”\textsuperscript{30} by way of logical or conceptual analysis. Early analytic philosophers believed that philosophy could investigate logic, or elucidate the structure of knowledge, or the
nature of our concepts, a priori without any help from the empirical sciences.

Russell’s hopes for a “scientific philosophy” must be understood in the light of a widespread confidence that philosophy is fundamentally distinct from science and that philosophy is authoritative over its own domain of logic. Analytic philosophers followed Russell in hoping that by employing modern methods of logical analysis “philosophy would thus achieve something like the status of a science,”31 not in becoming science but in adopting a method that, like science, is “co-operative and cumulative.”32

No one is more important in undermining this early analytic conception of the relation of philosophy and science than W. V. Quine. His attack on the analytic/synthetic distinction and the possibility of traditional a priori truths dismantled the presuppositions of the logical analysis of language or concepts that was central to the “Linguistic Turn.”33 Quine’s naturalization of epistemology34 undermined the last vestiges of First Philosophy and strongly endorsed the continuity between philosophy and science.35 Today, many scientifically-minded analytic philosophers think there is no theoretical alternative to full-blown scientific naturalism.
Although it comes in various kinds and strengths, scientific naturalism is now the philosophical orthodoxy within Anglo-American analytic philosophy—a phenomenon signalled by the title of a recent centennial article, “The Naturalists Return.”\textsuperscript{36} It seems fair to say that the fate of analytic philosophy is now, in large part, tied to the fate of scientific naturalism. This conjecture seems to be borne out by the fact that a growing number of analytic philosophers of the late twentieth and early twenty-first century have been drawn to increasingly reductive (some might say militant)\textsuperscript{37} forms of scientific naturalism—those that depends upon very restrictive conceptions of natural science and (scientific) nature.

5. Criticisms of Scientific Naturalism

It must be emphasised that what is at issue here is not respect for the results of the natural sciences.\textsuperscript{38} That is an attitude every sane philosopher can be expected to have. Scientific naturalism involves the much stronger claim that science is, or ought to be, our only genuine or unproblematic guide in matters of method or knowledge or ontology or semantics.
The criticisms of scientific naturalism presented here cluster around four main topics: 1) the self-consistency of scientific naturalism; 2) naturalist accounts of mind; 3) naturalist accounts of agency; and 4) reductive attitudes to normativity, especially in the ethical and aesthetic domains. Due to considerations of space, we have not been able to cover all the topics that one might hope to cover in a full treatment of naturalism. In particular, several important topics, including religion, mathematics and logic, have received little or no attention here. In spite of that, we have managed to cover a large range of issues which have the combined virtues of being topical and of central philosophical importance.

In order to give some sense of the directions the papers take and of their mutual affinities, we shall now briefly summarise some of their main lines of criticism. In the next section we will try to indicate how our authors provide some positive directions for philosophy beyond the naturalist orthodoxy.

i) The Self-Consistency of Scientific Naturalism

The papers of this section all question the scientific naturalists’ own understanding of science. As we have seen,
the projects of naturalization of contemporary metaphysics depend upon a restrictive conception of nature which, in turn, is based on a restrictive conception of science.

Barry Stroud’s "The Charm of Naturalism" is an excellent piece to open the volume as it provides a very useful survey of the difficulties facing scientific naturalism in a number of different areas. Stroud argues that the scientific naturalist who attempts to reduce or eliminate colours, values, and meanings is at least required to make sense of the content of our beliefs about colours, values, and meanings--something that a restrictive conception of nature does not seem to allow one the resources to do.

John Dupré’s "The Miracle of Monism" argues that naturalism’s commitment to a minimal empiricism is at odds with the scientific naturalist tendency to endorse physicalist monism and associated reductionisms. These two doctrines are supported by what are, paradoxically, supernatural myths about the unity of science and the completeness of physics. They represent a form of First Philosophy that the consistent naturalist is committed to reject!

In "The Content and Appeal of Naturalism," Hilary Putnam criticises Quine’s distinction between unproblematic
first-grade and problematic second-grade conceptual systems and its philosophical legacy in the work of Richard Boyd, Simon Blackburn, Bernard Williams, Peter Railton, Jerry Fodor, Stephen Leeds and David Lewis. In so doing he makes room for the possibility of "conceptual pluralism": the view that ethical statements, statements of meaning or reference or counterfactuals—indeed most of the statements denigrated as second-grade by naturalists—are bona fide forms of rational discourse, governed no less than scientific statements, by norms of truth and validity.

In "Naturalism Without Representationalism," Huw Price attempts to demonstrate a paradoxical feature of scientific naturalism. He argues that contemporary scientific naturalism is really an object naturalism concerning how to "place" various objects (for example, values, numbers and meanings) within the-world-as-studied-by-science. Price shows that these placement problems presuppose, independently of the empirical study of language, metaphysically substantial conceptions of reference and truth. He argues that a subject naturalism, which concerns itself, first and foremost, with questions about our use of linguistic terms and expressions, places important constraints on object naturalism. From this linguistic
perspective, object naturalism seems insufficiently naturalistic by its own lights.

ii) Scientific Naturalism and the Mind

Scientific naturalists typically conceive nature as a causally closed spatio-temporal structure governed by efficient causal laws--where causes are thought of, paradigmatically, as mind-independent bringers about of change or difference. It is assumed that human beings can be fully understood in terms of finding how they fit into this larger causal structure. The papers of this section explore whether such an account could do justice to the normative character of intentional states, reasons and concepts.

John McDowell's paper, "Naturalism in The Philosophy of Mind," traces our modern philosophical obsessions concerning the mind and its intentional states to a restrictive naturalism that identifies nature with the realm of law as developed by modern science. On this conception rational and normative items are made to seem supernatural and must either be eliminated or reduced. By way of an examination of some ideas of Ruth Millikan, McDowell proposes a different liberal naturalism--inspired by Aristotle--according to which reasons, values and meanings are conceived as sui
generis but natural items on the basis of the actual character and role of thinking, knowing and evaluating in our lives.

In “Naturalism and Skepticism,” David Macarthur argues that scientific naturalism is committed to what he calls a causal model of experience. According to this conception, there is an (efficient) causal gap between the mind and the world, that invites unanswerable skeptical problems. Macarthur shows that by overlooking or rejecting the intimate relation between belief and reason-giving, naturalists such as Quine, Goldman and Strawson are unable to defuse the skeptical threat that naturalism naturally invites. This undermines one of the main argument in its favour, namely, that scientific naturalism is supposed to earn the right not to have to answer the skeptic.

Akeel Bilgrami reflects on the thought that intentional states are essentially normative in "Intentionality and Norms." He argues that this implies their irreducibility to physical states and that intentional states cannot be dispositions as scientific naturalists tend to suppose. Intentional states such as beliefs are commitments; and one can have a commitment to thinking something without being so disposed. Since this conclusion seems to be at odds with the widely held thesis that the intentional supervenes on the
physical, Bilgrami wonders whether this thesis is, perhaps, a naturalistic prejudice.

According to Donald Davidson in "Could There Be a Science of Rationality?," psychological concepts are characterised by normative, holistic and externalist elements that cannot be reduced—whether nomologically or definitionally—to the concepts of the hard natural sciences. Yet, notwithstanding the failure of reductionism, our psychological concepts are indispensable for understanding human thought and action.

iii) Scientific Naturalism and Agency

In this section the authors challenge the idea that action or freedom can be reductively accounted for in terms of the causal world-view of scientific naturalism.

For instance, naturalists typically try to explain agency by reducing action to behaviour caused by some belief-desire pair. Jennifer Hornsby's paper, "Agency and Alienation," criticises this conception as defended by David Velleman. She argues that the belief-desire model of psychology provides an impoverished account of human motivation. Pace Velleman, it cannot be corrected by simply adding other mental states and events as further causes of
actions. She goes on to show that the naturalistic picture does not have the resources to adequately capture an agent’s doing something intentionally.

Mario De Caro ponders the fact that a growing number of philosophers argue that human freedom is incompatible both with causal determinism and causal indeterminism, and that, for this reason, free-will is either an illusion or a complete mystery. In "Is Freedom Really a Mystery?," he shows that these arguments only appear compelling if one assumes a scientific ontological naturalism, especially one taking the form of physicalist monism. He argues that on an alternative pluralist view, skepticism about free will loses much of its appeal.

Stephen White's paper "Subjectivity and the Agential Perspective," concerns the difference between the normal agent and a “passive subject” who agrees with us about all the natural facts, but who finds the idea of action unintelligible. White appeals to this example to address a question that is logically prior to the increasingly common claim that freedom is an illusion: the question what, if freedom is an illusion, it is an illusion of. White sees analogies between this question and those raised by recent work on the meaning of evaluative terms and on the perceptual phenomenology of evaluative experience. And he
suggests that reductive, naturalistic accounts of agential concepts face the same difficulties as their counterparts in metaethics. White goes on to propose an alternative account which is anti-reductionist and which grounds the meaning of agential terms in a richer conception of visual experience than the currently entrenched camera metaphors allow.

iv) Ethical and Aesthetic Normativity

Although the issue of normativity is a leit motif of this entire volume, in this section we consider how ethical and aesthetic normativity cannot be adequately accounted for in a scientific naturalist setting that denies the existence of the relevant *sui generis* norms.

When we turn to consider the contemporary philosophical debate on personal identity we find it, too, is dominated by scientific naturalists who only disagree as to *which* natural facts constitute personal identity: whether they are psychological (Lockeans); or biological (animalists). In "A Non-Naturalist Account of Personal Identity," Carol Rovane offers an alternative normative analysis of personal identity that is "non-natural" insofar as what constitutes personal identity are not natural facts, but rather the products of effort and will. Persons can, and sometimes do,
choose and strive to redraw the boundaries that distinguish them from one another, allowing for the possibility of group persons containing many human beings and multiple persons within a single human being.

In her paper, "Against Naturalism in Ethics," Erin Kelly considers current scientific naturalist theories that see morality as aiming to reach intersubjectively justifiable norms, and that attempt to account for morality without relying upon evaluative concepts. Kelly argues that these theories inevitably fail to appreciate the ineliminable normative content of ethics. No set of empirical facts can adequately account for the role that substantive moral reasoning plays in our attempts to reach a reasonable consensus about moral norms.

Stanley Cavell’s contribution, originally written to appear as an postscript to "The Investigations’ Everyday Aesthetics of Itself," provides a profound reading of Wittgenstein’s remarks on nature and the natural history of the human. Cavell discerns an intimate relation between human nature and the normativity of judgement, the capacity of one's words to speak for others, and others for oneself, perhaps in new or better ways.

II. SOME DIRECTIONS FOR A NEW NATURALISM
No doubt there will be those who will be strongly inclined to characterise these criticisms of scientific naturalism as forms of anti-naturalism. But that would be to take a stand on the very issue in question, namely, who has the right to the key terms of “naturalism” and “nature.” It is important, in considering this question, to recall that what is at issue in this volume is scientific naturalism, not anything that might properly deserve the title of “naturalism.” Although no one here wants to deny that scientific descriptions of nature are very likely to be true, what is in question is whether it they provide us with our only conception(s) of nature, or the only conception(s) we need.

After Quine’s widely influential work, it is an important fact that almost all philosophers--including those who oppose scientific naturalism--want to claim for themselves the title of “naturalism.” All sides can agree that this represents a major shift in philosophy’s conception of itself and of its relation to the sciences, even if there is disagreement about how to understand the nature of this shift. Nowadays very few philosophers will want to claim that philosophy has any special domain--whether the study of knowledge, language, concepts, being or
whatever—which is wholly independent of the findings of the best current scientific theories. Nor would they claim that philosophy can dictate to the sciences from a higher position of authority. As Quine puts it, where the sciences are concerned, there is now no higher tribunal than science itself.

The rejection of First Philosophy can be regarded as a minimal sense of “naturalism” that even the authors of the present volume subscribe to. It is widely acknowledged that philosophy can no longer claim for itself its traditional foundational status, something that has led Richard Rorty to say that we should simply “[cease] to worry about the autonomy of philosophy”\(^{39}\). However, it is precisely the issue of autonomy around which the hopes for a new naturalism turn, as we shall explain below.

Apart from being united with scientific naturalists in this negative conception of naturalism, most of our authors hope for a new, more substantive, non-scientistic naturalism distinct from the scientific (or, better, scientistic) naturalism that is currently so influential. In this spirit, John Dupré has endorsed “pluralistic naturalism,” Jennifer Hornsby, “naive naturalism,”\(^{40}\) John McDowell, a “liberal naturalism,”\(^{41}\) and Barry Stroud, a “more open minded or expansive naturalism.”\(^{42}\) Although the ways in which our
authors conceive of this alternative differ in emphasis and detail, they share four general features:

* 1) The papers represent a shift in philosophical focus from concern with non-human nature to human nature, where this is conceived as a historically conditioned product of contingent forces. This shift is evident in a greater concern to accurately describe, in Cavell’s phrase, “the full panoply of things” as they figure in our experience or language. All the papers acknowledge a descriptive task, a concern to accurately map our actual responsiveness to norms, our actual uses of language, or the actual nature of our commitments—even in spite of our tendencies to reflectively distort our lives in thought.

* 2) A non-reductive attitude to normativity in its various guises runs through the volume. One of the primary motivations for scientific naturalism is what Putnam calls "a horror of the normative." Sui generis norms are stigmatised as supernatural, and in need of “naturalization.” The contributors to the present volume all want to question this project and to argue that sui generis norms need not be supernatural, mysterious or queer. Some of our authors are even happy to include them as genuine
aspects of nature, on a broader conception than we are currently familiar with.

3) Another important theme running through the volume, is the need for a new self-image for philosophy after scientific naturalism. As a start, it is important to distinguish the rejection of First Philosophy from the stronger claim that philosophy is continuous with the sciences. Although all of our authors accept the former, most (though not all) reject the latter, favoring a conception of philosophy as, at least in some areas and respects, autonomous from scientific method if, by that is meant specialized data-collection, experiments, expert opinion and so on. Here there is a need to distinguish what anyone knows as a master of their native language, the realm of what Wittgenstein called “the ordinary,” from scientific knowledge. Furthermore, on this new conception, the results and authority of philosophy (in so far as it has any authority) do not depend upon the support of any specific scientific findings. Of course, we do not want to deny that such findings may provide the impetus to philosophical reflection, or that they may help to undermine one’s philosophical conclusions.

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4) Finally, all the authors in this volume share a pluralist conception of the sciences--and not only in the limited sense accepted by some scientific naturalists who admit that chemistry and biology are irreducible to physics. Our authors are happy to concede that science has no essence and that the very idea of a sharp division between what is scientific and what is not is highly questionable. Indeed, the ideal of the unity of the sciences is an unrealized and unrealizable dream. The point is not just that there is no single method or set of methods that is properly called the scientific method, but, more than that, that there is there no clear, uncontroversial and useful definition of science to do the substantial work scientific naturalists require of it.\[44\]

This point is particularly relevant with regard to the status of the human and social sciences. To acknowledge their legitimacy as sciences inevitably involves commitments to prima facie irreducible normative items such as values, reasons and meanings; and these are, of course, among the very items that are typically candidates for naturalization! Thus we return again to the important question whether scientific naturalism is self-consistent. The papers by Putnam, Dupré, Price, Stroud, and De Caro all provide good reason to doubt whether scientific naturalism is
naturalistic enough by its own lights, and to convict its restrictive conceptions of science, knowledge and reality as further instances of First Philosophy that it ought, in all consistency, to jettison.

Moreover, in general, this pluralistic attitude conveys a radical mistrust of the typical strategies adopted by scientific naturalists to solve philosophical dilemmas by pursuing naturalization projects. The papers collected here discuss such issues as intentionality, agency, freedom, meaning, reference, rationality and personal identity in the belief that all attempts to reduce, eliminate or re-conceive these concepts in terms of some supposedly more scientifically legitimate notions do not just fail--they entirely miss the kind of importance these notions have in our lives and experiences.

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However, although the authors of this anthology share these fundamental views, they diverge in other respects. This should be no surprise. This volume is not intended to be a manifesto for one new paradigm for naturalist philosophy to supplant the old scientific naturalism. Our pluralism extends to philosophy itself: in our view, there is no unifying philosophical method, nor any single right way of understanding what philosophy is or does.
Nonetheless, since we have provided criticisms of scientific naturalism it seems worthwhile to add a brief sketch outlining one possible alternative conception of philosophy. The following remarks are controversial and are not intended to be representative of the authors of this volume as a whole. They are offered simply as an example of one way we might think about philosophy after scientific naturalism.

The question is this: what is the role and authority of philosophy if it is not to be identified with that of the sciences? This is the question that is urgently raised by the papers collected here. They make clear that we must find some more positive conception of philosophy beyond the rejection of its traditional pretensions.

One suggestion is that a good model for the authority of philosophy is not science but criticism, say, the criticism of art or literature or morality or the distinctive activity of making sense of each other—at least on a certain understanding of these activities. In all these cases there is a question of getting something right, of better or worse judgement, of support by reasons and claims to truth, without all (or even most) disagreement being explicable as a matter of ignorance or error or irrationality. Like a good art critic, a good philosopher
must excel at knowing when and how to enter reasons in support of her claims, something that can only be successful if she is attentive to circumstance, style, presentation, and rhetorical force. As the history of philosophy amply demonstrates, philosophical reasoning, like criticism, cannot guarantee agreement on pain of irrationality.

Agreement in philosophy, like agreement in aesthetics or morality, is an ideal that, despite being constantly strived for, is, in fact, rarely attained. It is thus very different from the guaranteed agreement in logic, mathematics or (core) science, which exists only through the exclusion of subjectivity. The absence of guaranteed agreement in philosophy is an indication that agreement is achieved through the inclusion of subjectivity. The philosopher, on this understanding, is someone who does not discount her individuality but attempts to master it in ways that become an example to others: by speaking for herself as honestly and accurately as she can, she discovers that she can speak for others, as well.

Partly because philosophy cannot count on agreement, engaging with the threat of skepticism remains a perennial task of philosophy. Indeed Cavell, Macarthur and Stroud are inclined to think of philosophy and skepticism as internally related. This attitude is in stark contrast to the confident
dismissal of skepticism characteristic of scientific naturalism. This dismissive attitude also demonstrates a striking difference of opinion about the place of history in philosophy since the history of modern philosophy is in no small measure the history of its “refutations” of skepticism. Often scientific naturalists give the impression of thinking that philosophy began with Quine, and that to read earlier texts is to leave philosophy behind for the study of the history of ideas. The new naturalism, alternatively, finds its sense of itself and its problems in readings or interpretations of its history.

Philosophy is at an important cross-roads. Scientific naturalism exhorts us to purify our methods, knowledge, ontology and concepts from their allegedly pre-scientific errors and impurities. When purified, philosophy becomes science. The present volume makes a strong case for an alternative conception. The new directions for philosophy after scientific naturalism earn the title of naturalism by, in one direction, extending the notion of nature beyond scientific nature to fully include the various aspects and normative dimensions of human nature, and in another, by re-interpreting the rejection of philosophy’s foundationalist aspirations and its traditional claims to authority. One can accept that there is no First Philosophy while still
affirming the possibility of the autonomy of philosophy, even in spite of an acknowledgement that the distinction between science and philosophy is one that is constantly being re-negotiated.⁴⁹
NOTES

1 Of course, besides the scientific naturalism discussed here, there have been many other forms of naturalism in the history of philosophy, of which Aristotelean, Spinozistic and Scottish are some of the best known examples.

2 The term “ethical naturalism,” like the term “naturalism” itself, has been employed in various different ways. Very commonly, however, ethical naturalists argue that moral values can be fitted into the natural world as it is understood by the natural sciences either by denying that moral discourse is cognitive or by reducing moral properties to naturalistic properties. Similar versions of ethical naturalism that fit within the scientific naturalist paradigm can be found in the writings of Peter Railton, Gil Harman, David Lewis, Richard Boyd, Simon Blackburn and Allan Gibbard, among others. (Erin Kelly’s paper in this anthology discusses some of these views).

A few versions of ethical naturalism are not forms of scientific naturalism. They include theological ethical naturalism as defended by R. M. Adams--really a form of supernaturalism--and neo-Aristotelian ethical naturalism as defended by, for example, P. T. Geach and Mary Midgley. See

3 See, for example, Kai Nielsen, Naturalism and Religion (Amherst: Prometheus, 2001).


Note that if one were very liberal in what one counts as a science, so that all rational enquiry counts as scientific, the idea that our concepts must refer to, or pick out, some aspect of the world-as-studied-by-the-sciences carries no real bite.


Hartry Field, for example, writes: “when faced with a body of doctrine (or a body of purported causal explanations) that we are convinced can have no physical foundation, we tend to reject that body of doctrine (or of purported causal explanations).” “Physicalism” in John
Earman, ed. *Inference, Explanations, and Other Frustrations.* Essays in the Philosophy of Science, [Berkeley: University of California Press, 1992], pp. 271-291; quotation from p. 271. This is not to say that physics is the only true science. It is to indicate that anything deserving the title of a natural science must be similar enough to physics. That, of course, leaves room for dispute about what counts as similar enough, and in what respects.


15 For example, John Haugeland has influentially argued in favor of the weak supervenience claim “that nothing could have been otherwise without something physical being
otherwise." Part of the attraction of this position is that, with regard to the relation of the mental to the physical, this weak supervenience claim can be accepted without having to accept either type- or token-identity theory. John Haugeland, *Having Thought: Essays in the Metaphysics of Mind* (Cambridge, Mass.: Harvard University Press, 1998), p. 95.


18 Kant, whilst he speaks of placing metaphysics on the path of a science (B xiv), believes that pure reason can discover a priori its own conditions and possibility.

This is not to say that Hume fully achieved this vision. In particular, his “Bundle Theory” of the mind retains a vestigial allegiance to elements of Cartesian dualism.

W. V. Quine, *Theories and Things* (Cambridge, Mass.: Harvard University Press, 1981), p. 67. More fully, he speaks of naturalism as “the recognition that it is within science itself, and not in some prior philosophy, that reality is to be identified and described.” p. 21.


Of course, we might speak as if there were entities that do not, in fact, exist.


For a defence of methodological (or epistemological) naturalism see: Quine, *Theories and Things*; and Kitcher, "The Naturalists Return;" and Hilary Kornblith ed.


See, e.g. Frank Jackson’s defence of a modest conception of the a priori in From Metaphysics to Ethics: A Defence of Conceptual Analysis (Oxford: Clarendon, 1998).

Philosophers in the spirit of Quine will want to reject even this vestigial a priorism. See, for example, Michael Devitt, Realism and Truth, 2nd ed. (Oxford: Blackwell, 1991).

Ludwig Wittgenstein, Tractatus Logico-Philosophicus (1922) trans. D. F. Pears and B. F. McGuiness (London: Routledge, 1961), 4.112. Today, Michael Dummett still defends the view that the aim of philosophy is the clarification of thought, with the proviso (with which he thinks both Frege and Wittgenstein would agree) that this goal can only be
achieved through the clarification of language: see The Origins of Analytical Philosophy (London: Duckworth, 1993).


32 Ibid. p. 388.


35 A representative comment is this: "I admit to naturalism and even glory in it. This means banishing the dream of a first philosophy and pursuing philosophy rather as a part of one’s system of the world, continuous with the rest of science" W. V. Quine, “Reply to Putnam”, in L.E. Hahn and P.A. Schillp, eds., The Philosophy of W. V. Quine, (La Salle: Open Court, 1986); quotation from pp. 430-431.


38 Dewey, for example, remarks “the naturalist is one who has respect for the conclusions of natural science” in Y. H. Krikorian ed. Naturalism and the Human Spirit (New York: Columbia University Press, 1944), p. 2.


41 See his “Naturalism and the Philosophy of Mind” in the present volume.

42 See his "The Charm of Naturalism" in the present volume.


44 Although the majority of scientific naturalists continue to subscribe to a restrictive conception of the sciences even in spite of these difficulties, it has to be admitted that some scientific naturalists (e.g. Stephen Stitch) are happy to acknowledge the diversity and plurality of the sciences.
The inspiration for the suggestion is Ludwig Wittgenstein’s discussion of aesthetics as reported by G. E. Moore in “Wittgenstein’s Lectures in 1930-33” in his Philosophical Papers (London: Allen and Unwin, 1959). Cavell’s conception of philosophy, as exemplified in his practice, represents an elaboration and extension of this suggestion.

Here it is worth considering Rush Rhees’s remark about Wittgenstein’s writing, “If you do not see how style or force of expression are important you cannot see how Wittgenstein thought of philosophical difficulties and of philosophical method.” “The Philosophy of Wittgenstein,” Ratio 8 (1966): 180-193.

This is something that analytic philosophy, and its typical self-effacing mode of presentation in essays modelled on scientific papers, does its best to deny.

These reflections are indebted to Stanley Cavell’s discussion of the relation between aesthetic judgment and the claims of ordinary language philosophers in “Aesthetic Problems of Modern Philosophy” in Must We Mean What We Say (Cambridge: Cambridge University Press, 1969).

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