5 AMERICAN PHILOSOPHY IN THE TWENTIETH CENTURY

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Introduction

Any brief portrait of American philosophy in the twentieth century will inevitably illustrate at least one fundamental principle of William James's (1842–1910) psychology and his pragmatist philosophy: namely, the idea that all cognition is *selective*, for "without selective interest, experience is an utter chaos" (James 1983: I, 402). "Hence, even in the field of sensation," wrote James in 1907 in his classic work *Pragmatism*,

our minds exert a certain arbitrary choice. By our inclusions and omissions we trace the field's extent; by our emphasis we mark its foreground and its background; by our order we read it in this direction or in that. We receive in short the block of marble, but we carve the statue ourselves. (James 1978a: 119)

It follows according to James's pragmatic *pluralism* that there are typically alternative, often conflicting ways of carving up any given object or domain. Each resulting conceptual "statue" may nonetheless be useful (and for the Jamesian pragmatist, so far true) relative to the purposes and constructions of that particular working framework.²

This essay will itself be highly selective, one statue among many others that might have been carved.³ The account that follows will place in the foreground just one central story concerning the relative dominance of *analytic philosophy* in America in the decades following World War II as this style of philosophizing developed in distinctive ways, with initial stimulation from European sources, out of its earlier roots in *American pragmatism*, *realism*, and *naturalism*.⁴ There are many other important movements and topics that will not be covered in this selective overview, most of which, however, are addressed under other headings in this volume.

I shall begin by taking some time to lay out as a relatively comprehensive interpretive framework certain enduring themes that were developed by the two main founders of classical American pragmatism, Charles Sanders Peirce (1839–1914) and William James. Against the background of the pervasive influence of Kantian and Hegelian idealism in America in the decades surrounding the turn of the century, pragmatism and related philosophical outlooks emphasizing naturalism and realism were dominant during the first three decades of the century. Beginning in the 1930s and 1940s, however, the middle third of the century witnessed the rising influence in America of what would become known as "analytic philosophy," with its primary roots in Europe: in the Cambridge philosophical analysis of Moore, Russell, and Wittgenstein; logical empiricism and positivism on the Continent; and linguistic analysis and ordinary-language philosophy at Oxford.

The particular story of philosophy in America during the twentieth century to be told here, then, will be a story of the persistence of pragmatist themes throughout much of the century, while emphasizing the mid-century transformations that resulted from developments primarily in analytic philosophy. These combined influences resulted at the turn of the millennium in the flourishing, among other developments, of distinctively analytic styles of pragmatism and naturalism.

Lasting themes in American philosophy from Charles Sanders Peirce

American pragmatist philosophy finds its most important conceptual and epistemological origins in a series of essays of extraordinary depth and originality by Charles Sanders Peirce, beginning in the 1860s and 1870s. With the ever-increasing influence of his works, Peirce is now justifiably regarded by many as the most original systematic philosopher that America has produced.

There were essential connections for Peirce between his groundbreaking investigations in pure logic, his experimental work as a practicing scientist for over thirty years with the US Coast and Geodetic Survey, and his intense philosophical and historical investigations. For what Peirce sought most fundamentally to understand was the *logic of experimental inquiry* in general. This concern with *method*, however, must be understood in a very broad sense. According to Peirce it is the particular "method of reasoning . . . that is always the most important element in every system of philosophy" (1992: 236). In what follows we shall very briefly highlight the following interrelated themes from Peirce's thought, themes which will frequently resurface in our discussion of twentieth-century philosophy in America:

- a critique of foundationalism in epistemology and metaphysics
- a focus on the logic and methods of science ("experimentalist" methods)
- a fallibilist approach to knowledge and inquiry
- an anti-skeptical emphasis on real doubt vs. Cartesian "hyperbolic" doubt
- epistemological holism (and an "inferentialist" view of cognition)
- the epistemic priority of the "outer" and social over the "inner" and private
- "all thought must necessarily be in signs" (compare the "linguistic turn")

- the *pragmatic maxim* concerning conceptual meaning
- a rejection of much traditional metaphysics, but not of metaphysics itself
- a pragmatist conception of truth (belief-fixation and ideals of inquiry)
- methodological and Darwinian evolutionary naturalism
- a complex mixture of epistemological realism and metaphysical idealism

Let us see how these enduring themes arguably arise out of Peirce's conception of our basic cognitive powers, working up gradually to his pragmatism.

The predominant theories of knowledge throughout much of western philosophy prior to the nineteenth century tended to share certain basic *foundationalist* assumptions in epistemology and metaphysics. On pain of infinite regress or vicious circularity, it was commonly argued, we must be in possession of some knowledge that is self-evident, direct, immediate, or given – or to use the traditional term Peirce picks up on, *intuitive* knowledge. In "Questions concerning certain faculties claimed for man" and "Some consequences of four incapacities" (in Peirce 1992), published in 1868 in the *Journal of Speculative Philosophy* (a journal which had been founded by the St Louis Hegelian idealist, W. T. Harris), Peirce launched a series of powerful broadsides against the very idea of intuitive cognition and against the entire foundationalist picture of the proper method for philosophy. It is striking the degree to which Peirce in these articles of 1868 managed to anticipate both the style and substance of so much of the practice of philosophy in America in the twentieth century.

Peirce defines an *intuition* in the sense he wants to reject as "a cognition not determined by a previous cognition of the same object, and therefore so determined by something out of the consciousness" (1992: 11). The idea is that an intuitive cognition allegedly directly reveals the nature or character of an object "independently of any previous knowledge and without reasoning from signs" (ibid.). Against this foundationalist picture Peirce begins by arguing that it is at least an open philosophical question whether or not we possess any such self-evident or intuitive knowledge (ibid.: 12). That is, it does not seem to be simply directly or intuitively evident that we have such direct or intuitive knowledge. It is invariably a heated subject of dispute, for instance, just how much or what aspects of any given cognition is contributed by the knower rather than by the object or fact known. To insist that it just seems self-evident that we possess such self-evident knowledge begs the question at issue.

So the question whether or not we know by self-evident intuition that we possess any intuitive cognitions is one that has to be settled by argument and evidence. As far as historical and factual evidence is concerned, Peirce points out that many "external" authorities such as sacred texts and oracles, and even the authority of Aristotle in logic, were at one time taken by intelligent inquirers to have an *intrinsic* authority that was later recognized to be inconsistent with their proven fallibility. "Now, what if our *internal* authority," Peirce suggests with reference to the philosophical assumption that the mind is capable of directly intuitive cognitions (1992: 13), "should meet the same fate, in the history of opinions, as that external authority has met? Can that be said to be absolutely certain which many sane, well-informed, and thoughtful men already doubt?" After considering a variety of more sophisticated examples in detail, Peirce concludes:

We have, therefore, a variety of facts, all of which are most readily explained on the supposition that we have no intuitive faculty of distinguishing intuitive from mediate cognitions. Some arbitrary hypothesis may otherwise explain any one of these facts; this is the only theory which brings them to support one another. Moreover, no facts require the supposition of the faculty in question. Whoever has studied the nature of proof will see, then, that there are here very strong reasons for disbelieving the existence of this faculty. These will become still stronger when the consequences of rejecting it have ... been more fully traced out. (1992: 18)

Here we can see already how Peirce has subtly interwoven higher-level questions concerning the proper method for philosophy into what seemed at first to be simply a first-order dispute about whether or not we possess a faculty of direct apprehension or intuitive cognition. The philosopher, like the scientific experimentalist, must offer hypotheses to explain the apparent facts - "apparent," for any supposed fact is open to further scrutiny and possible rejection if doubt arises concerning it (this is Peirce's fallibilism). If a given hypothesis would explain all the relevant facts and is seen to entail further consequences that are judged to provide additional confirmation of the hypothesis, then the given explanatory hypothesis is so far "proved" in the tentative, fallibilist sense that is common to both empirical science and philosophy. That is, we have the best available hypothesis sufficient to explain the phenomena (this is Peirce's method of hypothesis or abduction), subject always to reassessment and potential rejection in the light of further experience and argument. Peirce's meta-hypothesis, as it were, that the method of hypothesis is the proper fallibilist method for philosophy has itself just received its own tentative confirmation. The fallibilist methodological blood running throughout Peirce's philosophy was subsequently to be one of the most distinctive traits of American philosophy throughout the twentieth century.

Having shown it to be at least questionable whether we possess any foundational faculty of intuitive cognition, Peirce proceeds to offer alternative hypotheses concerning the sources of our most basic conceptions. Surely the facts, for example, suggest that conscious subjects at the very least have direct, intuitive knowledge of their private selves, in their own "immediate" self-consciousness? Peirce argues to the contrary that empirical self-awareness probably presupposes a set of learned associations or primitive "inferences" on the part of the child (1992: 18–21). Our cognitions are at first primarily outward-looking sensations, and the most likely hypothesis is that self-awareness ("me," "I") develops only as part of a package that involves associations between sounds, including parents' utterances, and movements of bodies, including the child's own body. The facts suggest that the crucial element is the resulting learned distinction and frequent divergence between how things are (for example as the child experiences them to be reliably testified by the parent) as opposed to how they might seem or feel to the child, or to how the child wants them to be. As Peirce sums up what he takes to be the best available hypothesis: "In short, error appears, and it can be explained only by supposing a self which is fallible." A tentative hypothesis of this kind is superior to one that supposes a faculty of the direct apprehension of the empirical self, for the former supposes only "known faculties, acting under conditions known to exist" (1992: 20).

The Cartesian turn in modern philosophy had prioritized the "inner light" of natural reason and the direct apprehension of one's own clear and distinct ideas and states of consciousness. Peirce argues, however, that in case after case what might seem to be apprehended by a simple act of consciousness, whether as object of intellect or of sensation, is inevitably better explained as the product of association or as presupposing a background of learned inferences in the broadest sense. Consequently, understanding the nature of any cognition, for Peirce, requires theorizing concerning the particular patterns of *inference*, whether habitual or also reasoned and critical, which make it the sort of cognition that it is. The key to philosophy as a whole, therefore, turns out to be *logic* broadly construed as the study of valid patterns of inference embodied objectively in living systems of signs and in particular in increasingly refined forms of scientific inquiry.

It is important not to misunderstand Peirce when, for example, he questions whether "we have any power of introspection" and when he argues that "our whole knowledge of the internal world is derived from the observation of external facts" (1992: 22). Peirce is not denying that there are distinct subjective elements of consciousness, nor that in a suitably understood and derivative sense we can each reliably report our own mental states in a way in which others cannot. What he *is* arguing is that all our "knowledge of the internal world" of these kinds is ultimately and essentially "derived from external observation" (ibid.).

Peirce proceeds to draw the important further consequence that when the nature of thought is thus properly viewed in "the light of external facts, the only cases of thought which we can find are of thought in signs," which suggests the hypothesis that all "thought, therefore, must necessarily be in signs" (1992: 24). Not all sign-systems are spoken natural languages, of course, but with regard to the nature of human conceptual thinking Peirce is anticipating key aspects of the later "linguistic turn" that would transform twentieth-century Anglo-American philosophy in particular. Crudely put, to understand what thinking is one must view thoughts as themselves being signs in the way that spoken and written words, for instance, are signs; and a sign has the meaning or signification it does owing to the role that the sign plays within a wider system of signs, and in particular as caught up in our perceptual responses, inferences, and actions. Ultimately the consequence for Peirce is that all intelligible conceptions, being of the nature of signs, derive their meaning from the difference they make, so to speak, within our habitual patterns of perceptual response, inference, and action.

This last consequence can now be seen to be closely related to what Peirce was the first philosopher to call the maxim or principle of *pragmatism*, conceived as a method for clarifying the conceptual meaning of any term or idea (see also on William James, below). American pragmatism, strictly speaking, had its primary origin in Peirce's attempt to discover a method for clarifying with precision the conceptual content of any given intellectual conception. In "How to make our ideas clear" (1878) Peirce characterized what came to be called *the pragmatic maxim* as follows: "Consider what

effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object." "To say that a body is heavy," Peirce explains with a deceptively simple example, "means simply that, in the absence of opposing force, it will fall" (1992: 132, 133). Peirce offered many examples to illustrate the pragmatic maxim, and over the years he also attempted several different characterizations of the maxim itself. For present purposes we may take the core of the pragmatic maxim to be a theory of conceptual content that runs roughly as follows.

Concepts pick out general kinds and properties of things, such as what it is for anything to be heavy or to be a dog, thus enabling us to successfully re-encounter particular things as instances of those general properties or kinds. The first step towards the pragmatic maxim is the idea that the generality achieved by concepts consists in certain lawful consequences, predictions, and inferential entailments that follow from assertions involving those concepts. To grasp some portion of one's experience as an encounter with a dog, for instance, is to rule out certain past and future courses of experience and reasoning as impossible or unlikely, and to rule in certain others as necessary or probable. The generality of conceptual meaning is not "seen" in an act of direct apprehension, however carefully the "inspection" might be made. Rather, conceptualization is a matter of one's gradually acquired and disciplined habits of response, inference, and expectation coming to reflect the "habitudes" of things in the perceptual and intellectual world that surrounds one. For some mental or linguistic sign to lawfully function in this way in perception, reasoning, and action is precisely what makes it a sign and endows it with the entire conceptual meaning that it has; as the above version of the pragmatic maxim has it, "our conception of these effects is the whole of our conception of the object." Or as Peirce put it more loosely in 1902, "the spirit of the maxim itself . . . is that we must look to the upshot of our concepts in order rightly to apprehend them" (in Thayer 1982: 49).

Peirce's pragmatism thus argues that there is a necessary connection between conceptual meaning and practice: the relevant effects, as indicated in the "maxim" above, are ones with conceivably "practical bearings." We have seen Peirce argue that there is no foundation or origin for conceptual meanings in direct intuitive apprehension. The pragmatic maxim has brought out the ultimate consequence that "there is no distinction of meaning so fine as to consist in anything but a possible difference of practice" (1992: 131); or again later in 1903, "as pragmatism teaches us, what we think is to be interpreted in terms of what we are prepared to do" (1998: 142). For if two alleged conceptions entailed no real difference in how someone would respond or act or infer in some generally specifiable circumstance (as Peirce thinks is the case with many traditional metaphysical disputes; e.g. 1998: 338-9), the question arises of how such a difference in meaning could conceivably be cognized. Given what Peirce has already argued concerning cognition in general, however, such a cognition cannot itself be directly intuitive but rather must depend essentially upon some "prior" relations among cognitions; but the latter, as we also saw, must ultimately take the form of some "external" or publicly ascertainable modes of reasoning or association. On this way of understanding what Peirce was up to, the pragmatic maxim, which seeks to clarify conceptual meaning in terms of public inferential practices and ongoing fallible inquiry, is itself grounded in a philosophical theory or best available explanation of the nature of our most basic cognitive capacities.

Let us consider, finally, some central features of scientific and philosophical inquiry as conceived by Peirce in light of the above account of our cognitive capacities and of the pragmatic maxim. As we have seen, the epistemic status of any cognition is always that of a fallible hypothesis subject to the test of further experience, strengthened by its explanatory ties to other such hypotheses. Consequently, inquiry always takes place *in media res*, in the middle of things, setting out from our *actual* doubts and our actual beliefs. As Peirce puts it, a person "doubts because he has a positive reason for it, and not on account of the Cartesian maxim [of universal doubt]. Let us not pretend to doubt in philosophy what we do not doubt in our hearts" (1992: 29). This, too, would become an important theme in later twentieth-century American philosophy.

Peirce further applied the pragmatic maxim to the nature of inquiry in the brilliant essay of 1877, "The fixation of belief." Peirce contends that the real goal of all inquiry is the fixation of belief and the cessation of doubt. One might object that truth is the object of inquiry, but practically, Peirce argues, we regard as true any of our beliefs to which we do not attach any real doubt; and furthermore our only access to reality is always through the testing and readjustment of our network of beliefs. But if Peirce is thus right in holding that "the settlement of opinion is the sole object of inquiry" (1992: 115), it becomes a matter of the highest importance what method is judged to be appropriate to that end. Peirce considers and ultimately rejects three general methods of settling opinion: (1) by individual "tenacity" in belief, (2) by communal imposition of belief through social "authority" (e.g. church or state), and (3) through the dialectical examination of what is "agreeable to reason (a priori)" itself. Peirce argues that each of these methods is likely, eventually, to give rise to doubts about whether (respectively) (1) my protected beliefs, or (2) the beliefs of the communal authorities I accept, or (3) the beliefs arrived at by my favorite systematic metaphysician, might rather be based on accidents of birth, or passing philosophical tastes, or on various other grounds that I myself am likely to question when I encounter reasonable persons holding beliefs that are opposed to my own. If the goal of inquiry is to satisfy our doubts, Peirce concludes, a different kind of method for settling belief is required: what he calls the method of science.

To satisfy our doubts, therefore, it is necessary that a method be found by which our beliefs may be caused by nothing human, but by some external permanency – by something upon which our thinking has no effect. . . . Such is the method of science. Its fundamental hypothesis . . . is this: There are real things, whose characters are entirely independent of our opinions about them; those realities affect our senses according to regular laws, and, though our sensations are as different as our relations to the objects, yet, by taking advantage of the laws of perception, we can ascertain by reasoning how things really are, and any man, if he have sufficient experience and reason enough about it, will be led to the one true conclusion. The new conception here involved is that of reality. (Peirce 1992: 120)

The relevant modes of reasoning here will be those of the "experimentalist" using the tentative methods that involve the testing of explanatory hypotheses, which we have already seen to characterize not only science and common sense but also philosophy as it ought to be practiced according to Peirce.

Below we shall encounter much dispute concerning this conception of the primacy of scientific methods for philosophy, both within and outside of the pragmatist tradition. It represents, however, a robust defense of one important dimension of philosophical *naturalism* – and in fact in Peirce, it is an *evolutionary* naturalism, both Darwinian and metaphysical – and naturalism, too, will be a dominant theme distinguishing so much of twentieth-century philosophy in America. For on one important construal, philosophical naturalism is the idea that there is no general method of inquiry in philosophy that is prior to, or foundational in relation to, the fallible but self-correcting explanatory methods that are characteristic of the empirical sciences.

It is crucial to note, however, that in Peirce's hands this scientific naturalist outlook is seen as consistent with (in fact, to entail) various *metaphysical* hypotheses concerning the nature of reality, which for Peirce includes a defense of the reality of "scholastic" universals in the form of evolving general laws in nature; in fact it includes the defense of an entire systematic evolutionary metaphysics. Furthermore, the "realist" hypothesis that formed the basis of Peirce's scientific method above – an *über* hypothesis which he sees can admit of only an indirect justification (1992: 120–1) – is combined in Peirce with a variety of fundamentally *idealist* themes. And this, too, will be a recurring theme (in some cases, an accusation to be overcome) in pragmatist outlooks throughout the twentieth century. For given the pragmatic maxim that meaning, as we might put it, is exhaustively constituted by functional and practical roles within evolving inferential frameworks, Peirce draws out the (apparent) consequence that the meaning of *truth* and of *reality* themselves must admit of definition in those pragmatic terms as well:

The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is the way I would explain reality. (1992: 139)

This famous Peircean conception of truth in terms of an ideal convergence of opinion in the long run among responsible inquirers was also to make various reappearances during the twentieth century.

On the whole, then, Peirce attempted to rigorously combine in a unique and comprehensive vision elements of both realism and idealism; of speculative metaphysics and scientific empiricism; of naturalistic experimentalism and pure categorial ontology; of a new, forward-looking, fallibilist method for philosophy, and a deep awareness of the evolving, historical patterns of reasoning and action that shape our most basic conceptions and values. It is also certainly a mark of their merit that the themes from Peirce's philosophy highlighted above provide a useful framework for understanding a complex century of philosophy in America that was to follow.

William James, John Dewey, and other classical American pragmatists

Peirce originated the idea of pragmatism, but it was his famous friend and supporter William James (1842–1910) at Harvard who brought pragmatism into prominence. In an address to the Philosophical Union of the University of California in 1898 entitled "Philosophical conceptions and practical results" (published in part in 1904 as "The pragmatic method") James credited Peirce with having developed the pragmatic maxim:

... Mr. Charles S. Peirce, with whose very existence as a philosopher I dare say many of you are unacquainted ... is one of the most original of contemporary thinkers; and the principle of practicalism – or pragmatism, as he called it, when I first heard him enunciate it at Cambridge in the early '70's – is the clue or compass by following which I find myself more and more confirmed in believing we may keep our feet upon the proper trail. (James 1898: 347–8)

James indicates that he would express "Peirce's principle by saying that the effective meaning of any philosophic proposition can always be brought down to some particular consequence, in our future practical experience, whether active or passive" (1898: 349).⁶

James argued that the pragmatic maxim had the effect of reconciling the fundamentally opposed "philosophical temperaments" that he suggests are evident, in varying mixtures and degrees, not only in the great philosophers but in every thinking person. Both of these tendencies were certainly present most strikingly in James himself. On the one hand, there is what James calls the *tender-minded* temperament: rationalistic, "going by principles," intellectualistic, idealistic, optimistic, religious, free-willist, monistic, dogmatical; and on the other hand there is the *tough-minded* temperament: empiricist, "going by facts," sensationalistic (i.e. prioritizing sensations), materialistic, pessimistic, non-religious, fatalistic, pluralistic, skeptical (James 1978a: 13). Most people, James suggests, want both to respect empirical evidence and to indulge in a spiritual metaphysics. The "layman's dilemma," however, is that tough traditional empiricist and tender metaphysical idealist philosophies have tended to render such a synthesis impossible. For James the pragmatic maxim, both as a method for ascertaining the meaning of concepts and as a general "humanist" conception of truth, enables just such a philosophical reconciliation.

Here we may fruitfully appeal to some of the theses discussed in the previous section which were broadly shared by Peirce and James. On the one hand, the fallibilist, naturalistic, and open-ended nature of inquiry on the pragmatist and experimentalist picture can plausibly be taken fully to respect the scientific temperament and the empiricist's methodological restriction to hypotheses that allow of experiential testing. On the other hand, the same anti-foundationalist, anti-reductionist, and holistic outlook characteristic of pragmatism also encourages an openness to consider any sort of hypothesis concerning the nature of reality, however value-laden or speculative it may be – including the "religious hypothesis" – provided that the supposition of its

truth can be shown to have genuine experiential consequences or practical import. In some respects traditional metaphysical and religious doctrines will fail this pragmatic test, but in others – particularly, according to James, in those decisive, "forced," ultimate questions that really matter to us and which are not ruled out by the facts – they will survive in clarified form as live hypotheses and predictions concerning the overall character of future experienced reality as a whole. (Essentially it is this idea that was carefully defended in James's famous and philosophically controversial doctrine of "the will (or the right) to believe.")

James held a broadly functionalist theory of conceptual cognition along the lines sketched earlier, as part of a rich phenomenological account of the interplay between percepts and concepts in our cognitive carving of objects and relations out of the flux of sensory experience (O'Shea 2000). From his earliest writings in psychology to his last writings concerning radical empiricism and pure experience, James argued that while a concept may be "incarnate" in a word or a mental image, what makes it the conceptual cognition that it is - whatever its "structural" or material aspects might be – are its instrumental or functional "leadings" in bringing the knower into eventual successful engagement with relevant portions of the future experienced world, both inner and outer. Conceptual thinking for James is essentially teleological - adaptive and purposeful – in that our conceptual schemes function as cognitive maps enabling successful reference and lawful prediction across experiences. What James especially stressed, as we saw at the very outset, was the variety of selective interests and purposes that such experiential cognitions can serve, whether concerning practical, theoretical, aesthetic, or emotional ends. As he had put it early on in "The sentiment of rationality" in 1879,

Every way of classifying a thing is but a way of handling it for some particular purpose. Conceptions, "kinds," are teleological instruments. No abstract concept can be a valid substitute for a concrete reality except with reference to a particular interest in the conceiver. The interest of theoretic rationality, the relief of identification, is but one of a thousand human purposes. When others rear their heads, it must pack up its little bundle and retire till its turn recurs. (1978b: 62)

It is these views concerning the purpose-relative and selective nature of all cognition that underpin both the philosophical *pluralism* and the pragmatist account of *truth* for which James is most famous.

James's respected Harvard colleague and friend Josiah Royce (1855–1916), in highly influential works including *The Religious Aspect of Philosophy* (1885), *The World and the Individual* (1900–1), and *The Philosophy of Loyalty* (1908), had been developing a sophisticated version of absolute idealism that reflected, in the very different Hegelian style of philosophizing, many of the themes concerning logic and experience, the primacy of the will and the deep importance of community, that likewise animated the thought of Peirce, James, and Dewey. James, however, used his theory of conceptual cognition to object to the monistic Hegelian theories of the Absolute in favor of

a thoroughgoing pluralism. In particular, the arguments of the monists (as well as of atomistic empiricists such as Hume) covertly rely upon what James dubbed the fallacy of vicious abstractionism. Both the monist and the empirical atomist, James argues, in effect detach conceptual abstractions from the context of their legitimate instrumental role in lawfully mapping the "insuperable" richness of given experiences, and then (illegitimately) regard any property not explicitly contained in the abstract definition of the concept as excluded from those rich experiences themselves (see James 1978a: 300ff.). Ultimately this misconception leads to the view that all real connections and relations among things would have to be necessary, in the way in which abstract conceptual connections are necessary – and we are on the road either to Humean skepticism or to the Absolute. By contrast, James argues that all proposed conceptual connections whatsoever, insofar as they are taken to be applicable to the world, have the status of fallible hypotheses of varying scope and usefulness. On this basis he defends a radically pluralist empiricism in which there is, and might forever be, no overarching, compulsory system of conceptual classification that takes in all the manifold aspects of ordinary commonsense reality. (Aspects of this outlook will later resurface in the neo-pragmatist views of Goodman, Putnam, Quine, and Rorty, discussed below.)

On these bases James developed what might be called a *conceptual scheme pluralism*, along with a corresponding pragmatist conception of truth. In *Pragmatism* James outlined four basic conceptual schemes: those of common sense, realist science, instrumentalist science, and idealist philosophy. Each of these global conceptual frameworks is useful or functionally adaptive (in the senses described above) relative to certain purposes and not others; yet each scheme portrays reality under categories that in various ways ostensibly conflict with the others. Which of them, then, is *true*? For James, this is a deep and difficult question:

The whole notion of truth, which naturally and without reflexion we assume to mean the simple duplication by the mind of a ready-made and given reality, proves hard to understand clearly. There is no simple test available for adjudicating offhand between the divers types of thought that claim to possess it. ... [The four schemes] all seem insufficiently true in some regard and leave some dissatisfaction. It is evident that the conflict of these so widely differing systems obliges us to overhaul the very idea of truth ... (James 1978a: 93–4)

James's resulting pragmatist overhaul of the idea of truth will look to some to be implausible on the surface, but it was to prove a far more subtle conception than many of his early opponents would recognize. The basic conception is this:

"The true," to put it very briefly, is only the expedient in the way of our thinking, just as "the right" is only the expedient in the way of our behaving. Expedient in almost any fashion; and expedient in the long run and on the whole of course.

. . .

The "absolutely" true ... is that ideal vanishing-point towards which we imagine that all our temporary truths will some day converge. (1978a: 106–7)

How can truth consist in utility or expedience, it will be asked, when it is obvious that useful theories are often false? The classical correspondence or "copy theory" of truth holds that an idea or belief is true only if it agrees with reality. James argues, however, that when we actually attempt to spell out what such agreement consists in, in any given case of a belief accepted as true, we find that the actual relations to or "agreements with" reality are as many and various as the different kinds of substantive, functional adaptations to reality of the sort described earlier (among which "copying" or representing is only one, defeasible such relation). The satisfactoriness of our beliefs, in which truth consists for James, is to be measured by a variety of sometimes conflicting standards that must themselves be evaluated against the totality of the community's evolving beliefs through time, including highly refined theoretical beliefs, and must be tested for overall coherence against the repository of past and projected experience on the whole. The fallibilist and regulative conception of a more satisfactory system of belief not yet attained, along with the fact of earlier such schemes having been corrected, is sufficient to preserve the ideal objectivity of truth as overall satisfactoriness of belief.

Even while embracing that regulative ideal, however, for James in the end we ought finally to recognize the validity of the hypothesis of radical pluralism concerning reality:

There is nothing improbable in the supposition that analysis of the world may yield a number of formulae, all consistent with the facts. In physical science different formulae may explain the phenomena equally well, – the one-fluid and the two-fluid theories of electricity, for example. Why may it not be so with the world? Why may there not be different points of view for surveying it, within each of which all data harmonize, and which the observer may therefore either choose between, or simply cumulate one upon another? A Beethoven string-quartet is truly, as some one has said, a scraping of horses' tails on cats' bowels, and may be exhaustively described in such terms; but the application of this description in no way precludes the simultaneous applicability of an entirely different description. (1978b: 66)

Finally, in his later so-called "Bergsonian" phase (named after the French philosopher Henri Bergson, and particularly evident in James's 1909 collection, A *Pluralistic Universe*), James contended that there was a deeper, metaphysical truth to be revealed in the flux of immediate experience: the "pulse" of reality itself, which cannot be adequately "mapped" by concepts but rather must be experienced or felt directly, or non-conceptually. This opened up for James the possibility of further bold cosmological hypotheses and metaphysical speculations of a broadly pantheistic or panpsychist kind (though arguably at the cost of embracing highly problematic doctrines involving ineffability and givenness; O'Shea 2000).

The views of Peirce, James, and Royce were reflected in later thinkers in the classical American pragmatist tradition, most notably by the eminent figure of John Dewey (1859–1952) and by George Herbert Mead (1863–1931) in what became known as the "Chicago School" of pragmatism (in 1904 Dewey moved to Columbia University), as well as in the works of the Harvard philosopher Clarence Irving Lewis (1883–1964). Mead's theories concerning significant communication and symbolic interaction, particularly in relation to the social origins of mind and selfhood, were subsequently highly influential in social psychology and sociology. Here I shall focus briefly on Dewey's important outlook, and further below on C. I. Lewis as well.

Dewey's early influences, similar in many respects to Peirce and James, included a mixture of Kantian and Hegelian idealism, empirical psychology, and (in some important respects) Darwinian scientific naturalism. Increasingly the pragmatist themes highlighted above came to the fore in Dewey's thought: fallibilism, naturalism, holistic empiricism, meaning as functionally anticipated experience, and the overall *instrumentalist* or experimentalist outlook on the logic of inquiry, including the view of truth as satisfactory, purposeful engagement with one's concretely experienced environment. For much of the first half of the twentieth century Dewey was by name if not always by detailed acquaintance with his writings the most widely known philosopher in America. The title of one of his classic works, *Democracy and Education* (1916), indicates two of his deepest philosophical concerns throughout his career, and also reflects the socially and politically engaged character of his thinking; and the title *Art as Experience* (1934) indicates another rich area of inquiry for Dewey. Among his many other important books are *Experience and Nature* (1925), *The Quest for Certainty* (1929), and *Logic: The Theory of Inquiry* (1938).8

For present purposes I will highlight one especially pervasive theme that reoccurs throughout Dewey's wide-ranging philosophy: namely, his questioning of the deep-seated dichotomies in philosophy that have prevented what he sees as the required *Reconstruction in Philosophy* (1920) that needs to take place. Like James on the pragmatic method, Dewey saw his own broadly instrumentalist logic of inquiry as the way toward reconciling or overcoming the traditionally divisive philosophical contrasts between the eternal or essential and the merely mutable or in process; between facts and values; between the subjective and the objective; between nature and human experience; and between abstract theory and concrete practice. (Some of these contrasts, on Dewey's account, have legitimate counterparts when interpreted *instrumentally* in terms of contextually specified, behavioral problem-solving situations.) We have already witnessed in the case of the empirical sciences, according to Dewey, the overcoming of many such traditional dichotomies, but they have yet to be overcome in culture or experience as a whole:

Science as conducted, science in practice, has completely repudiated these separations and isolations. Scientific inquiry has raised activities, materials, tools, of the type once regarded as practical (in a low utilitarian sense) into itself; it has incorporated them into its own being. ... Theories have passed into hypotheses. It remains for philosophy to point out in particular and in

general the untold significance of this fact for morals. For in what is now taken to be morals the fixed, the immutable, still reign, even though moral theorists and moral institutional dogmatists are at complete odds with one another ... In science the order of fixities has already passed irretrievably into an order of connections *in process*. One of the most immediate duties of philosophical reconstruction with respect to the development of viable instruments for inquiry into human or moral facts is to deal systematically with *human* processes. (Dewey 1920: xxxix–xl)

The "secularization" that has accompanied the rise of instrumentalist science, but which remains in tension with traditional religious attitudes, must be *humanized*, as it were, "in terms of ends and standards so distinctively human as to constitute a new moral order" (1920: xxxviii–ix). Dewey's thoroughgoing *naturalism* is thus one in which the experiences to be successfully accommodated in inquiry, unlike either the "sense-data" of traditional empiricism or the intellectually intuited, ready-made natural kinds of classical essentialism, are contextualized, biological experience-situations which are saturated with values and in process of change.

We shall return to further developments within the pragmatist tradition later, including the considerable influence of Dewey upon recent neo-pragmatists such as Putnam, Quine, and Rorty. Let us now turn, however, to consider some of the other influential movements in philosophy in America during the first half of the twentieth century that developed alongside the classical pragmatist tradition.

Varieties of realism, naturalism, and positivism from 1900 to 1950

The new realism

During the first two decades of the twentieth century there was a semi-cooperative philosophical movement in America that came to call itself the new realism or neo-realism. In 1910 there appeared in the Journal of Philosophy, Psychology and Scientific Methods "The program and first platform of six realists," containing short summary theses of aspects of the new realism by E. B. Holt (Harvard), W. T. Marvin (Rutgers), W. P. Montague (Columbia), R. B. Perry (Harvard), W. B. Pitkin (Columbia), and E. G. Spaulding (Princeton). This platform contended that the perpetual disagreements characteristic of philosophy, while due in part to its subject matter, are due "chiefly to the lack of precision and uniformity in the use of words and to the lack of deliberate cooperation in research. In having these failings philosophy still differs widely from such sciences as physics and chemistry. They tend to make it seem mere opinion" (Holt et. al. 1910: 393). This was followed by a collaborative book in 1912, The New Realism: Cooperative Studies in Philosophy. The proximate targets of the new realists were the widespread doctrines of the neo-Hegelian idealists, especially the much admired works of Royce, who along with James had been one of Ralph Barton Perry's teachers at Harvard. (Royce dubbed the collaborators "the six little realists.") As Montague put it in the platform article: "Realism is opposed to subjectivism or epistemological idealism which denies that things can exist apart from an experience of them, or independently of the cognitive relation" (Holt et al. 1910: 396).

R. B. Perry (1876–1957) in particular criticized the many arguments supporting ontological idealism that implicitly appealed to what he called the egocentric predicament (Perry 1910). According to Perry, idealists of various stripes in effect argue that any existing object has a necessary (intentional) relationship or "internal relation" to some mind that knows or conceives that object. The egocentric predicament is basically the idea that any attempt by a critic to falsify this idealist claim by considering a case in which an object exists apart from any such relationship to some mind, will necessarily be unsuccessful, since this very consideration of the object will itself be an instance of that internal relation. But if alternatively I try to subtract all such intentional or cognitive relations, I am in that case unable to know whether the object has thereby been eliminated or not. Perry pointed out, however, that pervasive appeals to this predicament do not in the end entail any idealist conclusions. They entail only that the realist's thesis of the independence of objects from the mind, and hence of cognition as an "external relation" that neither modifies nor creates the object, cannot be established or justified by those comparative methods. Perry suggests, however, that a contrary realist analysis of the cognitive relation is left quite untouched by any of these considerations (Perry 1910: 14).

Perry's realist analysis of cognition may be regarded as taking in one possible direction some of his teacher William James's highly sophisticated suggestions in essays from 1904–6 collected posthumously (by Perry himself) in James's Essays in Radical Empiricism in 1912 (James 1976). James's own distinctive "radical empiricism," for its part, had involved the conception of "A world of pure experience," which Russell later indicated had influenced his own development of a neutral monism. According to Russell's neutral monism, minds and physical bodies are alike logical constructions out of (James would say "functional leadings to," or "experienced relations between") neutral given contents, or "sensibilia" for Russell ("pure experiences" on James's conception). Perry's more behavioristic realism differed in crucial respects from James's phenomenologically rich radical empiricism, but there is some common ground evident in the following remarks from Perry's contribution to the neo-realist platform (compare in particular James's essay in Radical Empiricism, "Does consciousness exist?"):

[T]he difference between subject and object of consciousness is not a difference of quality or substance, but a difference of office or place in a configuration.

[...] The same entity possesses both immanence, by virtue of its membership in one class, and also transcendence, by virtue of the fact that it may belong also to indefinitely many other classes. ... [T]his implies the falsity of the subjectivistic argument from the ego-centric predicament, *i.e.*, the argument that because entities are content of consciousness they can not also transcend consciousness ... (Perry in Holt et al. 1910: 397–8)

For the new realists in general, there is an act of cognition and an object or datum directly cognized, without any intermediary ideas or perceptions of the sort proposed

by traditional representational or indirect realists (Descartes, Locke), and without the object of cognition being itself dependent upon or modified by the act of cognizing that object (in contrast certain idealist arguments attributed to Berkeley, Kant, and Hegel). The objects of such acts of consciousness, for the new realists, are (typically) non-mental objects of many different kinds, including for some of the new realists the abstract objects treated in logic and mathematics. It is a matter of ongoing scientific inquiry rather than a priori theorizing, for many of the new realists, to determine just what kinds of objects there are. Methodological naturalism and ontological pluralism were thus taken to be plausible corollaries of the new realism.

The basic non-representationalist direct realism in the neo-realist account of cognition was susceptible to many different lines of interpretation and development. Several characteristic problems tended to plague all versions of the new realism, however. Serious epistemological and ontological puzzles arose in relation to the ineffable (or quasi-ineffable) immediately given "datum," which on some versions looked to be neither physical nor mental. Furthermore, the hypothetical or relational constructions of ordinary objects out of those elusive "data" more often than not resembled just the sort of phenomenalistic idealism that the new realism had been designed to replace. On the other hand, those act/object versions of the new realism that sought to avoid such constructions in favor of straightforwardly admitting the non-mental, independent existence (or perhaps the *subsistence*, or Being) of nearly all objects of thought, including fictional objects, perceptual illusions, Platonic entities, and so on, faced continual problems of ontological crowd control and population explosion. The *problem of error* was thus another deep difficulty for neo-realism, given its apparent identification of the *content* of experiences with the *objects* experienced.

Critical realism

In America all of these objections, and others, were raised in particular by a second important group of collaborative researchers: the critical realists. In 1916 Roy Wood Sellars (1880-1973), born in Canada and later a professor at Michigan, published his book Critical Realism: A Study of the Nature and Conditions of Knowledge. This was followed in 1920 by a second collaborative work by American philosophers: Essays in Critical Realism: A Cooperative Study of the Problem of Knowledge, by D. Drake (Vassar), A. O. Lovejoy (Johns Hopkins), J. B. Pratt (Williams), A. K. Rogers (Chicago and Yale), George Santayana (Harvard, active retirement in Europe from 1912), Sellars himself, and C. A. Strong (Chicago) (Drake et al. 1920). Lovejoy was a brilliant philosophical critic and historian of ideas, whose book The Revolt Against Dualism (1930) continued the critical realists' defense of the epistemological dualism of inner mental contents and external realities, as opposed to the monistic identification of these in neo-realism (and to some extent in pragmatism and idealism, too). Santayana (1863–1952, born in Spain) has been a figure in American philosophical literature of a stature to rival James or Dewey. His developing thought idiosyncratically combined elements of pragmatism, a Platonic realism of essences (hence the so-called "essence wing" of critical realism), and a comprehensive materialism, expressed in a rich literary style.

For present purposes, however, let us focus on the systematic critical realist epistemology and evolutionary naturalist metaphysics of Roy Wood Sellars. His thought illustrates the kind of philosophical naturalism that was becoming predominant in America, and will also afford an interesting view of the changes that took place in philosophy in America across a generation when we come to consider the currently much discussed views of his son, Wilfrid Sellars (1912–89).¹⁰

R. W. Sellars's anti-skeptical stance insisted that we should start from a presumption in favor of our ordinary and reflective scientific knowledge of the world. Two of his most important books, *Evolutionary Naturalism* (1922) and *The Philosophy of Physical Realism* (1932), outline a conception of the human being as a complex product of organic evolution, resulting in a dynamic and multi-leveled cognitive and causal relationship to its environment. Dewey's more influential pragmatist instrumentalism had emphasized these outlooks as well, but Sellars argues that Dewey insufficiently accounted for the role of the contents of subjective consciousness in cognition, and that he prematurely abandoned the traditional projects of epistemology. The neo-realists were correct in rejecting idealism and Locke's representative or indirect realism, but Sellars judged their direct or naive realism and their alternative constructivist approaches to knowledge to fail primarily for the reasons discussed earlier.

"Critical realism," as Sellars put it in 1929 in "A re-examination of critical realism," is a direct realism which examines very carefully the nature and mechanism of knowing and shows that it harmonizes with all the facts of the causal theory of the conditions of the perceptual act" (1929: 455). The perceptual act itself is a direct cognition, in an interpretive judgment, of the independent physical object itself. Such cognitions are causally mediated, however, by the sorts of sensory data and meaningful predicates that naive realism and neo-realism mistakenly assume constitute an *intuitive* apprehension or acquaintance with the object itself. Scientific and philosophical reflection indicate that we judge the characters of the object itself *by means of* the mind's sensory and "logical" contents, as Sellars puts it, but the physical object itself that is thereby directly cognized is not directly intuited or "existentially" given in consciousness. Perceptual errors and illusions are now explainable without either losing contact with or overpopulating reality. "It is the claim of the critical realist that all the valid insights of realist, idealist, and pragmatist, will be found in this position" (1929: 455).

In conjunction with critical realism Sellars developed what he called a "double knowledge approach" to the mind-problem, along with an account of the evolutionary emergence of higher levels of complexity and organization. With respect to the former position, we have knowledge of the biological brain-mind from the "inside," as it were, directly in terms of the contents of qualitative consciousness; but we know the same brain-mind from the outside, scientifically, as a functionally adaptive cognitive mechanism or structure that is geared to its environment. Sellars's non-reductively materialist naturalism also extended to a frank atheism in which he called for a reorientation of religious values in the direction of what he called a "religious humanism," based essentially on humanistic moral values. (Sellars was in fact the author of the first draft of the well-known "Humanist Manifesto" of 1933, which was signed by many leading intellectuals, John Dewey most prominent among them.)

We saw earlier that Peirce, James, and Dewey were all to varying degrees influenced by Darwinian naturalism, but it ought to be emphasized that naturalism as a philosophical outlook is open to multiple interpretations (see Kitcher 1992 and Kim 2003). For example, Peirce, James, and some of the neo-realists and critical realists (e.g. Strong, Drake) took themselves to be naturalists while also entertaining or developing various versions of panpsychism, according to which something akin to mind is considered to be the fundamental stuff of the universe. (Peirce once described matter as "effete mind.") Dewey's robustly Darwinian experientialism was also developed under the banner of naturalism by philosophers influenced by him at Columbia and New York Universities, such as F. J. E. Woodbridge (1867–1940), John Herman Randall (1899–1980), Ernest Nagel (1901–85), Sidney Hook (1902–89), and Morris Cohen (1880–1947). The pragmatists and the various cooperative efforts of the new and critical realists all certainly tended to champion what has often been called methodological naturalism in philosophy. Again, this is roughly the idea that the fallibilist, observationally data-based, inductively testable and hence self-correcting methods of the successful natural sciences represent the only reliable means of obtaining knowledge about reality; hence philosophy ought to exhibit the same modes of inquiry conducted at the most general and comprehensive level.

Some naturalists, however, such as Roy Wood Sellars himself, came to think that the "merely methodological" naturalism characteristic of the flexible Columbia naturalists and of Dewey's philosophy of "experience" was no longer an ontologically *substantive naturalism* of the sort Sellars was committed to in his physical realism and his evolutionary naturalism. In this spirit, R. W. Sellars, V. J. McGill (1897—1977), and Marvin Farber (1901–80), as editors of the 1949 collection *Philosophy for the Future: The Quest of Modern Materialism* (once again another "cooperative book in which scientists and philosophers collaborate," p. v) remarked in their Foreword that whereas the methodological or procedural "type of naturalism is reluctant to commit itself to a positive theory of the world, materialism endeavors to set forth a synoptic view of man and the universe implicit in the sciences at their present stage of development" (pp. ix–x). Debates concerning the nature and commitments of naturalism and materialism would intensify again later in the century (and never more so than at the present time).

The revolution in logic and the conceptual pragmatism of C. I. Lewis

The character of philosophy as practiced in America underwent an important sea-change that became increasingly evident from the late 1920s through the 1930s and 1940s. These changes resulted, first, from the increasing interest in America in the sorts of logical and linguistic analyses that Russell and others were bringing to bear on traditional philosophical problems in the light of Russell and Whitehead's monumental transformation of logic in their *Principia Mathematica* (1910–13), as well as Wittgenstein's elusive but revolutionary work, the *Tractatus Logico-Philosophicus* (1922); and second, from the influx (resulting from the rise of the Nazis) of logical positivist and logical empiricist philosophers from the Vienna Circle and from Berlin

who had been strongly influenced by the developments in logic just mentioned and by other revolutionary developments in science (see "The birth of analytic philosophy," Chapter 1 and "The development of analytic philosophy: Wittgenstein and after," Chapter 2). The twin influences of early Cambridge analysis and what Russell called "logical atomism" on the one hand, and logical empiricism or positivism on the other, were to form the first stage of the dominance in America and Britain of what would later be known as "analytic philosophy."

In America, however, one of the first philosophers to do important work both in logic itself and in putting the new logical methods to philosophical use was C. I. Lewis, who was nurtured in the Harvard pragmatist tradition. Lewis was influenced by both of his teachers Royce and James, as well as by his study of Kant and Peirce. ¹² In his classic book, *Mind and the World Order* (1929) Lewis put to work the new methods of logical analysis in ways that in some (but certainly not all) respects parallel, within his own distinctive "conceptual pragmatism," many of the characteristic moves of both Russell and the logical empiricists. In his Preface Lewis lays out his view that the new logical methods would have revolutionary consequences:

Whoever has followed the developments in logistic and mathematical theory in the last quarter-century can hardly fail to be convinced that the consequences must be revolutionary. It has demonstrated, with a degree of precision and finality seldom attained, that the certitude of mathematics results from its purely analytic character and its independence of any necessary connection with empirical fact. Its first premises are ... definitions and postulates which exhibit abstract concepts more or less arbitrarily chosen for the purposes of the system in question. Intrinsic connection with experience is tenuous or lacking. (1929: viii)

Furthermore, the development of non-Euclidean geometries and their successful use in Einstein's relativity physics had suggested that the principles of Euclidean geometry and Newtonian mechanics do not have the indispensable "synthetic a priori" status which Kant had claimed for them. Lewis and other philosophers argued that either of the Euclidean or non-Euclidean geometries could in principle be held true by convention and still successfully accommodate the data of experience. The choice as to which of the alternative a priori analytic conceptual systems to apply to empirical reality is for a Lewis a matter that goes beyond the given data and must always rest on overall systematic explanatory and pragmatic grounds.

The pragmatic pluralism of conceptual schemes stressed by James had now found a rigorous logical formulation in Lewis's conceptual pragmatism. His *pragmatic conception* of the a priori extended to all human cognition this basic distinction between analytic a priori definitional truths laid down by the mind, and probable empirical hypotheses that meet the test of the "given" in sensory experience:

While the delineation of concepts is a priori, the application of any particular concept to particular given experience is hypothetical; the choice

of conceptual systems for such application is instrumental or pragmatic, and empirical truth is never more than probable. (Lewis 1929: x)

All our empirical knowledge is thus a matter of "if—then" predictions concerning given perceptual experiences, in conjunction with an ongoing pragmatic evaluation of possible alternative a priori frameworks and categorizations of experience. The mind-independence of the object of experience, for Lewis, primarily consists in its not being up to us whether the given will in fact comport with our free conceptualizations, or not.

If the idealist should find that there is nothing in such "independence" which is incompatible with his thesis, then it may be that between a sufficiently critical idealism and a sufficiently critical realism, there are no issues save false issues which arise from the insidious fallacies of the [representationalist or] copy-theory of knowledge. (Lewis 1929: 194; compare this with the later neo-pragmatist views of Goodman and Putnam, below)

To Roy Wood Sellars the physical realist, however, it is not surprising that Lewis's view looked suspiciously like yet another, albeit more sophisticated version of phenomenalistic empiricism or even idealism, insofar as for Lewis all knowledge is reducible either to analytic truths-by-definition or to hypothetical "if—then" predictions concerning the directly "given element" in qualitative sensory experience. Whatever we should hold is ultimately the correct interpretation of Lewis's subtle, modified Kantian epistemology, it was the logical empiricists or positivists who would come to formulate the most influential versions of the basic methodological dichotomy, "either analytic a priori, or empirical," as a general philosophical outlook.

Logical positivism

Among the many logical empiricists or positivists who emigrated from Europe and made a strong impact at universities in America was the following impressive group of thinkers: Rudolf Carnap (1891–1970) emigrated to Chicago in 1935, where with the help of Charles Morris (1903–79) the Encyclopedia of Unified Science was produced. Hans Reichenbach (1891–1953) was at the University of California, Los Angeles in 1938 until his death in 1953, where he was succeeded by Carnap. Herbert Feigl (1902–88) went to Iowa in 1933, and then to Minnesota in 1940 and was the founder of the influential Minnesota Center for the Philosophy of Science from 1953. Feigl was joined in Iowa in 1938 by Gustav Bergmann (1906–87), who kept a form of metaphysics alive while using the formal methods of his anti-metaphysical positivist colleagues. Carl Hempel (1905-97) moved to Chicago in 1935, and was later at Yale, Queens College, Princeton, and Pittsburgh. Two of the greatest mathematical logicians of the century also arrived, namely Alfred Tarski (1902–83), who was fortunate to be visiting Harvard when the Nazis invaded his native Poland and remained in the USA at Berkeley from 1942; and Kurt Gödel (1906–78), who was at the Institute for Advanced Study in Princeton from 1940.

If there was indeed to be a philosophical revolution inspired by the new logical methods in philosophy as applied to the exact sciences and to human knowledge generally, as C. I. Lewis had anticipated, then in one form or another this impressive group of mathematically and scientifically trained philosophical thinkers looked likely to bring it about. It was once customary among philosophers and historians to look back on logical positivism after its decline in the 1950s as a regrettable case of anti-philosophical and myopic scientism, doomed from the start by its own impossibly strict verifiability criterion of meaningfulness. Roughly speaking, on most versions of the positivist verifiability criterion all meaningful or cognitively significant statements are only of two kinds: they are either analytic propositions pertaining to logic and linguistic conventions, or they are testable empirical hypotheses about the world. One crippling problem, unfortunately, was that this verification principle did not itself seem to be either a merely analytic proposition or an empirical hypothesis. Some positivists responded by suggesting that the verification principle is merely a proposal for language reform or for what should be taken to be properly scientific epistemology; but in that case it became difficult to distinguish such a proposal from a merely dogmatic scientism. However, the admitted difficulties with positivism should not blind us to the fact that in many respects the logical empiricists helped to raise the level of sophistication of philosophical analysis in America in ways that most philosophers now routinely take for granted.

There were, of course, important disagreements and changes of view within logical empiricism – as with any diverse and developing philosophical outlook – but as an example of a mature positivist standpoint on philosophical method in general one turns naturally to Rudolf Carnap's widely discussed article at mid-century, "Empiricism, semantics, and ontology" (1950). Central to Carnap's philosophy since early in his career was the general idea of alternative linguistic frameworks. We have already seen William James and C. I. Lewis emphasize the ever-present plurality of conceptual frameworks in terms of which reality may be interpreted, with the choice between them to be made on essentially pragmatic grounds. Carnap's position is similar to theirs in those respects, but with more emphasis on linguistic or semantical rules than one finds in Lewis's theory of a priori concepts, and with more of an antimetaphysical outlook than one finds in James's pluralist pragmatism. According to Carnap, philosophical questions, insofar as they are cognitively meaningful and are not mere pseudo-questions, are primarily questions concerning the formal-analytic features of various linguistic frameworks.

To adapt an example of Carnap's, consider a philosophical realist concerning the existence of physical objects, such as John Locke, an idealist such as Bishop Berkeley (or a "sense-datum" phenomenalist), and a skeptic such as David Hume; and suppose each of these philosophers to make the same empirical observation of a certain red apple. The philosophical realist and the philosophical idealist will vehemently disagree about whether the apple is *really* a mind-independent material thing or whether, to the contrary, the apple is *really* just a certain complex collection of mind-dependent perceptual contents or sense-data. And the skeptic, for his part, will take the dispute between the other two philosophers to be a meaningful one, but one that

is incapable of any rational solution. Carnap argued, however, that in such a case no possible empirical observation (e.g. "here is a red apple") could provide support for one of those three philosophical positions against the others. Unlike ordinary empirical hypotheses, the alternative philosophical statements are thus neither verifiable nor falsifiable. If they are mistakenly construed as cognitive statements concerning the nature of reality, they show themselves to be meaningless pseudo-statements.

Carnap suggests that the resulting philosophical impasse may be due to the fact that what the idealist and the realist take to be a dispute about reality is really a dispute concerning possible alternative linguistic frameworks. It is indeed worthwhile for the scientific philosopher to investigate whether a rigorous sense-datum language might be constructed in which, for example, the basic terms would designate only the qualities of immediate and remembered perceptual experiences, and in which the empirical truths of common sense and science would be logically constructed out of the former sense-datum sentences using the pioneering methods of Russell and of Carnap himself. (Carnap had attempted a similar reconstruction in his earlier Der logische Aufbau der Welt in 1928, translated as The Logical Structure of the World in 1967.) The choice between (1) such a comprehensive sense-datum language, (2) an ordinary "physical thing" language, and (3) a possible comprehensive scientific language referring only to four-dimensional space-time manifolds (i.e. referring neither to sense-data nor to ordinary physical objects), depends on the pragmatic purposes for which the language is being constructed.

If we are using a physical thing language, then what Carnap calls an *internal question* such as, "Is there a red apple on the table?" will admit of a straightforward answer in terms of the logical and semantic rules of empirical investigation and confirmation within that framework. However, from "these questions we must distinguish the external question of the reality of the thing world itself. In contrast to the former questions, this question is raised neither by the man in the street nor by scientists, but only by philosophers" (1950: 207). If philosophers have thought *external questions* of the latter kind are genuine theoretical questions concerning the nature of things, they have been deluded, "and the controversy goes on for centuries without ever being solved."

A genuinely scientific epistemology, as Carnap sees it, thus recognizes that all meaningful questions are either: (1) questions internal to some particular linguistic framework of syntactic and semantic rules, in which case they are either straightforward empirical hypotheses subject to verification, or else they point to propositions that are merely analytically true-by-definition according to the rules of that framework; or (2) they are external *pragmatic* questions concerning whether or not to accept some particular or proposed linguistic framework itself, given whatever purposes or ends in view the investigator or the agent may have. (The positivist also recognizes the non-cognitive expression of attitudes, feelings, and emotions, in morality, aesthetics, and religion.) Apart from these questions pertaining to the analytic framework-rules, empirical hypotheses, and pragmatic choices between frameworks, there are also external questions concerning linguistic frameworks that have been mistakenly treated by the traditional metaphysician as genuine theoretical propositions, resulting in the

sorts of pseudo-questions which Carnap's version of the linguistic turn in philosophy is designed to avoid.

Carnap was without doubt one of the most important philosophers working in America throughout the middle third of the twentieth century. Many of his technical analyses, constructions, and proposals concerning the language of science in the broadest sense – whether concerning the nature of probability, induction, and laws; the problem of reduction and the unity of science; the analysis of meaning and modal logic; the problem of abstract entities, of the propositional attitudes, or of observational knowledge – would subsequently shape the form and matter of much philosophical work in the analytic tradition long after the decline of logical positivism.

Positivism itself, however, was by the end of the 1950s taken to have died by the double-edged sword by which it had lived: the strict verifiability criterion that all cognitively meaningful statements are analytic a priori linguistic conventions or empirically verifiable hypotheses. Some of the reasons for this decline and the transition to a new style of philosophizing are the subject of the next section.

Mid-century developments: from positivism to ordinary-language philosophy

In 1950 Willard Van Orman Quine (1908–2000) read a paper to the Eastern Division of the American Philosophical Association entitled, "Two dogmas of empiricism." This was to become the most famous of a variety of attacks on the analytic a priori versus synthetic a posteriori dichotomy that lies at the heart of logical positivism. Quine had already initiated his critique in "Truth by convention" in 1936, discussing among other things Carnap's conventionalist account of logical and mathematical truths. On the one hand, Quine's overall view that the most predictively efficient and economical language of science (as canonically reconstructed in a purely extensional logic) is the last arbiter in matters of ontology and epistemology clearly marks him out as in many ways as "The Greatest Logical Positivist," as Putnam has characterized him (Putnam 1990: ch. 20). On the other hand, Quine's twin attack on the notion of analyticity (basically, truth or falsity in virtue of conventional or conceptual meanings) and on reductionist empiricism in "Two dogmas" rendered problematic the central logical empiricist contention that some sentences are determinable as true or false a priori, by convention or solely in virtue of the meanings of the terms involved, while other "protocol" or observation sentences are strictly determinable as true or false in isolation by direct comparison with features of sense experience. Quine would later conclude his article "Carnap on logical truth" by painting a picture of his own holistic and pragmatic naturalism, which from the 1960s onwards was to have considerable influence among analytic philosophers in America:

The lore of our fathers is a fabric of sentences. In our hands it develops and changes, through more or les arbitrary and deliberate revisions and additions of our own, more or less directly occasioned by the continuing stimulation of our sense organs. It is a pale gray lore, black with fact and white with convention. But I have found no substantial reasons for concluding that there are any quite black threads in it, or any white ones. (1966: 132)

We shall return to Quine's own philosophical views later on.¹³

A significant and weighty internal criticism of positivism additional to Quine's was Carl Hempel's "Problems and changes in the empiricist criterion of meaning" published in the Revue Internationale de Philosophie (Hempel 1950). Hempel's characteristically careful and incisive analysis displayed by its own impressive example the philosophical virtues of logical empiricism and of analytic philosophy at their best. One ultimate effect of its content, however, was to suggest that the various verificationist criteria that had been continually proposed as requirements on empirical meaningfulness or cognitive significance by the positivists were highly problematic indeed. Many such reductive empiricist proposals would in fact rule out clearly significant aspects of scientific theories themselves; other proposals would allow in, as meaningful, statements that the positivists clearly wished to exclude; and finally, the status of the verification principle itself as an unverifiable linguistic proposal remained highly suspect by its own lights. Hempel was laboring tirelessly to keep the logical empiricist ship afloat, but it would not be long before he and others would take the philosophy of science in directions leading away from positivistic empiricism (owing to the influence, among others, of Quine, Wilfrid Sellars, Hilary Putnam, and especially Thomas Kuhn; more on these thinkers below).

The most visible transformation in philosophy in America at mid-century, however, came as a result of a new style of linguistic analysis that was beginning to make its presence felt on the American scene after the Second World War. Let us continue to focus on the years surrounding 1950 for evidence of this change.

In 1949 Herbert Feigl and Wilfrid Sellars of the University of Minnesota had put together an important anthology of articles entitled *Readings in Philosophical Analysis*. In 1950 the two of them also co-founded the journal *Philosophical Studies* as the first periodical in America explicitly dedicated to publishing articles in the style of what was now coming to self-consciousness as "analytic philosophy." The selections in the Feigl–Sellars *Readings* for the most part reflected the various streams of influence in pragmatism, positivism, and analytic philosophy which have been discussed up to this point. As Feigl and Sellars put it in their preface to the volume:

The conception of philosophical analysis underlying our selections springs from two major traditions in recent thought, the Cambridge movement deriving from Moore and Russell, and the Logical Positivism of the Vienna Circle (Wittgenstein, Schlick, Carnap) together with the Scientific Empiricism of the Berlin group (led by Reichenbach). These, together with related developments in America stemming from Realism and Pragmatism, and the relatively independent contributions of the Polish logicians have increasingly merged to create an approach to philosophical problems which we frankly consider a decisive turn in the history of philosophy. (Feigl and Sellars 1949: vi)

Feigl and Sellars were correct in their assessment that there had been developing in twentieth-century analytic philosophy a new way of practicing the discipline that would prove to be tremendously influential in the coming decades, and remains so

today. A large part of that influence in the 1950s and 1960s, however, would in fact be due to a further influx of philosophical ideas and methods from Britain not represented in that volume, and in particular from Wittgenstein's later philosophical work (which had been circulating by word of mouth and in transcribed conversations and lecture notes since the 1930s). One year after Feigl and Sellars's *Readings in Philosophical Analysis* there appeared in 1950 another anthology of essays, with the similar title *Philosophical Analysis*: A *Collection of Essays*, edited by Max Black (1909–88) of Cornell University. This collection, both in its preface by Black and in many of its selections, evinces the emergence of a noticeably different philosophical emphasis and style from what was represented in the Feigl and Sellars volume.

In the preface to his collection Black confines himself to "some informal comments upon the work of Russell, Moore, and Wittgenstein; these may serve to recall the complexity of the recent historical background and act as a deterrent against treating 'Philosophical Analysis' as a 'School' having well defined articles of association" (Black 1950: 2). Black calls attention to Russell's conception of philosophical method as "the application of scientific methods to philosophy" (ibid.). As we have seen, this view of philosophy as a cooperative, most general scientific endeavor was also stressed by many of the thinkers associated with pragmatism, realism, naturalism, and positivism in the first half of the century in America, as it would later be vigorously endorsed again by Quine and other philosophical naturalists in the analytic tradition. Significantly, however, Black suggests that "these hopes [are] no longer so widely held" and that they were in fact based on "a radical misconstruction of the relations between philosophy and science" (Black 1950: 5). Referring "to some (though not all) of the writers of the essays which follow" – among the American and British authors he has in mind are Alice Ambrose, G. E. M. Anscombe, O. K. Bouwsma, Norman Malcolm, Gilbert Ryle, and John Wisdom – Black suggests that it may seem to them,

as it seems to me, that Russell has systematically, though unwittingly, *misused* such crucial terms as "doubt," "evidence," and "inference"; that no "philosophical" evidence can be superior to the evidence acceptable in a court of law or in other everyday contexts; and that Russell's pursuit of the indubitable is a jack-o'-lantern hunt for mathematical demonstration of matters of fact. (1950: 5–6, italics added)

It is when Black finally turns to the work of Ludwig Wittgenstein that a very different conception of the nature of philosophical *analysis* begins to emerge.¹⁴

Wittgenstein had published his *Tractatus* back in 1921–2. Aspects of this enigmatic and brilliant work had been appropriated both by Russell in his logical atomism and in the logical positivism of the Vienna Circle. During the 1930s, however, Wittgenstein's lectures at Cambridge were being transcribed and were showing evidence of a fundamental shift in his thinking away from the doctrines of the *Tractatus*. In 1936 Ernest Nagel, in "Impressions and appraisals of analytic philosophy in Europe" (a title that represents a very early use of the label "analytic philosophy"), reported back to America as follows:

While I was at Cambridge a letter from a friend in Vienna assured me that in certain circles the existence of Wittgenstein is debated with as much ingenuity as the historicity of Christ has been disputed in others. I have seen Wittgenstein, though only casually, and therefore feel competent to decide that question. But since I did not receive his permission to attend his lectures, and since except to small, exclusive groups at Cambridge and Vienna his present views are not accessible, I feel extraordinarily hesitant in reporting on the doctrines he holds. For various reasons Wittgenstein refuses to publish; and even among his students of years' standing there is considerable doubt as to what his beliefs are on crucial issues. My information about Wittgenstein's views depends upon certain notes on his lectures which are in circulation and upon conversations with students and disciples both at Cambridge and Vienna. Mystery and a queerly warped personality lend charm to many a philosophy which otherwise is not very significant; but in spite of the esoteric atmosphere which surrounds Wittgenstein, I think his views are both interesting and important. (Nagel 1936: 16–17)

Although Nagel could not gain entrance into the exclusive Wittgensteinian club, his reconnaissance work evidenced in the succeeding pages successfully brought out much of the spirit of the thinking of the later Wittgenstein, which would not appear in published form until the appearance of his *Philosophical Investigations* in 1953 (Wittgenstein died in 1951), but which would soon become highly influential in American philosophy.

"The original sin committed in discussing meanings, according to Wittgenstein," Nagel reports, "is to suppose that meanings are *things* of some sort" (1936: 18), as Frege, Meinong, Bolzano, and others had arguably done. Wittgenstein's view, as Nagel was able to reconstruct fairly accurately from his rummaging in Cambridge, is that

the meaning of *all* expressions must be determined by discovering the usages which govern them. The usage to which an expression is subject is called by Wittgenstein its *grammar*, so that philosophy is an activity of clarifying the meaning of expressions by making explicit their grammar. Sentences obtain their significance from the system of signs or language to which they belong; the meaning, "the life of signs," lies in their use. (1936: 18)

This is not to say, however, that there are explicit rules for every occasion of use of a given linguistic expression. At best "there is what Wittgenstein calls a 'family resemblance' between the different grammatical rules exemplified in each of these occasions; intellectual confusions result in supposing that the vague resemblances between them merge into identity" (1936: 19). On Wittgenstein's view, Nagel writes, "the philosophic function is not to *legislate* meanings, but to note and describe the various meanings which expressions have. It is in this way that the philosopher can become the physician to some of the ills besetting mankind" (ibid.).

By the time of Max Black's edited collection in 1950 there had been other American philosophers who, unlike Nagel, had found actual entrance into the exclusive inner sanctum of Wittgenstein's Cambridge seminars and were bringing his new "therapeutic" philosophy to bear on the American scene. One such philosopher was Alice Ambrose (1906-2001) of Smith College, also known as Alice Ambrose Lazerowitz after marrying her colleague and frequent co-author, the philosopher Morris Lazerowitz in 1938). Ambrose received her BA from Millikin University in Illinois in 1928 and her Ph.D. from Wisconsin in 1932. She received a second doctoral degree at Cambridge during the crucial period in the 1930s when Wittgenstein chose a select few, herself among them, to transcribe the lectures known as the "Blue Book" (1933–4) and the "Brown Book" (1934–5). Ambrose's contribution to the Max Black volume in 1950 was "The problem of linguistic adequacy," and at one point she notes that she is "indebted to lectures at Cambridge University by Dr. L. Wittgenstein" (Black 1950: 32). Ambrose argues in the manner of the later Wittgenstein that if we look to the actual functions and uses of words as they are employed in ordinary language, we shall find that, for example, the vagueness so much complained of by formal logicians is not an inadequacy of ordinary language to be "corrected" on the basis of some "perfectionist ideal." Rather, "vagueness resides in our language and precision in what it inexactly designates" (Ambrose Lazerowitz 1950: 33). "What would it be like," she asks in a manner characteristic of the Wittgensteinian philosophers of the period, "for language to be free from vagueness? Does 'having no possible borderline cases' describe a possible situation? I think it does not and that we have only the pretense of a standard in the demand that words be applicable in such a way as always to set off things having ϕ from those not having it" (1950: 34). The philosophical analysis of the multifarious forms of living language is now understood in a very different sense from the earlier ideal of the analysis of language into its rock-bottom logical atoms on a supposed "ideal language" account or "logical reconstruction."

Norman Malcolm (1911–90) was perhaps the most well-known of the American philosophers who during this period introduced the ideas of the later Wittgenstein to an American audience. Malcolm was born in Kansas and received his Ph.D. from Harvard. He taught at Princeton in 1940 after having studied at Cambridge in the late 1930s with Wittgenstein, with whom he maintained a close relationship thereafter. He was at Cornell University from 1947 to 1979, after which he emigrated to Britain. Malcolm is perhaps best known for his anti-skeptical arguments against the coherence of Descartes's dream argument, as well as for his attempt to strengthen the "ontological argument" for God's existence. In 1942 Malcolm published an important article in the Schilpp-edited Library of Living Philosophers volume on The Philosophy of G. E. Moore, entitled "Moore and ordinary language" (Malcolm 1942). 15 In the Max Black volume in 1950 Malcolm has a long piece, "The verification argument" examining the form this argument takes among authors such as C. I. Lewis and Carnap, for whom in principle, owing to the potentially infinite number of hypothetical statements taken to be implied, no complete verification of any empirical proposition or hypothesis is possible. Malcolm uses ordinary examples to argue, to the contrary, that there are clear cases in which I can fully adequately verify some humdrum empirical fact (e.g. that Milton's Paradise Lost begins with the words "Of Man's first disobedience ..."), where this verification is in no intelligible sense "incomplete." According to Malcolm it "is not possible that I should continue the verification of that fact because, in those circumstances, we should not describe anything as 'further verification' of it. The verification comes to an end" (Malcolm 1950: 277). (Related views on the part of Wittgenstein himself would later be published posthumously in 1969 in his important work, On Certainty.) This type of linguistic analysis was very influential in America well into the 1960s, and was exhibited in such works as A. I. Melden's Free Action (1961) and Stanley Cavell's Must We Mean What We Say? A Book of Essays (1969).¹⁶

So-called "ordinary-language" views of this kind do not entail, of course, that every concept embodied in some ordinary linguistic practice or other is true, or that every criterial or "grammatical" distinction reflected in our everyday linguistic practices is valid. What they do suggest is that attention to the conceptual distinctions embodied in actual usage, as well as in the "language-games" incarnate in various "forms of life" or social practices, might show that distinctively philosophical puzzles about mind, free will, knowledge, morals, and so on are themselves typically generated by dubious generalizations and doubtful contrasts. Consequently such puzzles would require dissolution or philosophical therapy rather than solution on their own confused terms. From the perspective of this variety of linguistic philosophical analysis, the widespread goal (characteristic of logical atomism and positivism) of constructing "ideal languages" is misguided if it is taken to be anything other than an exercise in formal logic. The usual philosophical analyses, translations, and paraphrases into a putatively ideal logical form – insofar as the attempt was made to extrapolate beyond specialized formal contexts – would typically be viewed by these post-Second World War "Oxford School" and Wittgensteinian philosophers as importing just the sorts of conceptual or grammatical confusions highlighted above.¹⁷

There were many important criticisms leveled against the strategies of linguistic analysis employed by the ordinary-language philosophers, the most important of which are well represented in Richard Rorty's important anthology, *The Linguistic Turn* (1967). In general many American philosophers within the analytic tradition came increasingly to believe that the insights of the conceptual-linguistic analysts could be combined with more bold attempts at naturalistic or metaphysical philosophical theorizing of the sort that the ordinary-language philosophers had wanted to resist. One example of such a philosopher was Wilfrid Sellars, and the comparison of his views with those of his father Roy Wood Sellars will make for an interesting case study of two different generations of American philosophy spanning the twentieth century.

One case study in philosophical continuity and change across two generations

Wilfrid Sellars (1912–87) of the universities of Iowa, Minnesota, Yale, and from 1962 to 1987 at the University of Pittsburgh, was one American philosopher who internalized insights from all of the main European influences which, as we have seen, eventually came under the rubric of "analytic philosophy" over the first two-thirds of the century. Yet Sellars's philosophy also developed in new philosophical guises many of the positions that had been articulated by his father Roy Wood Sellars in

the distinctively American milieu of the debates between the Hegelian idealists, the pragmatists, the realists (both neo- and critical), and the naturalists, of the first three or four decades of the twentieth century. Both Roy Wood and Wilfrid defended versions of physical realism and evolutionary naturalism in metaphysics, critical realism in epistemology, and subtle versions of non-reductive materialism in the philosophy of mind. Both also stressed the vital importance of the history of philosophy as well as the idea that philosophy should strive to be thoroughly systematic and synoptic in its speculative vision. Both were atheistic humanists who defended the priority of science in telling us how things are, but also the priority of rational, communal reflection on human welfare in our deliberations concerning how things *ought* to be.

However, as we have seen, much had changed in philosophy in America by the time Wilfrid began writing in the post-World War II scene, and these changes are interestingly reflected in the differing fabrics of the philosophical works of father and son. To an elderly Roy Wood, looking back at it all across the century in his *Reflections on American Philosophy from Within* (1969), it seemed as if American philosophy had lost some of its native vitality as a result of the influence of the various imported philosophies from Britain and Germany surveyed above:

It is not surprising that the next generation after mine of American thinkers turned to Great Britain with its cultural prestige, and what seemed to me, as an onlooker, its immersion in debate between Oxford and Cambridge. I do not want to oversimplify. But since I could not agree with either Russell or Moore on fundamental points ... it seemed to me that the so-called *analytic philosophy* which got quite a vogue was ambivalent. In one sense, I liked its emphasis. In another sense, it did not seem to me very creative in either epistemology or ontology. American addiction to it and disregard of its own momentum struck me as a form of neo-colonialism.

[...] Analysis was a word to conjure with and then came the movement called that of "ordinary language." But all this was, in effect, a clearing of the ground. Philosophy in partnership with science could not be made that easy, as Bertrand Russell pointed out. And with increased communication at work something of the nature of interplay between the United States and Great Britain is occurring. I hope much from it. (R. W. Sellars 1969: ch. 1, "The nature of the Project")

Roy Wood Sellars thought there were systematic questions concerning the nature of mind, perception, and organic "levels of reality" that had been addressed with more insight by the American pragmatists, realists, and naturalists (including, of course, himself) than by the mathematical logicians, logical positivists, and ordinary-language philosophers of more recent vogue. As noted earlier, there is a group of philosophers and historians in America who would emphatically agree with many of the historical sentiments expressed by Roy Wood Sellars above. These thinkers call for a renewal of the sort of engaged, non-technical, culturally and socially conscious philosophical reflections that characterized much of the work of classical American philosophy, with

its roots in Emerson, Peirce, James, Royce, Dewey, Mead, Santayana, Whitehead, and others. This is sometimes contrasted with what is portrayed as the comparatively spiritless, socially detached, stultified and professionalized academic discipline that resulted from the successive trends in analytic and linguistic philosophy outlined above.

It is arguable to the contrary, however, that it was in large part due to his immersion in the works of such thinkers as Russell, Carnap, Ryle, and Wittgenstein that his son Wilfrid Sellars was able to give his philosophical naturalism an argumentative depth and conceptual sophistication that is generally not achieved in the more discursive, non-technical and highly readable works of his father. Whereas Roy Wood tended systematically to sketch desired philosophical results (admittedly often with significant originality and insight), Wilfrid was able to produce detailed philosophical theories. For example, Roy Wood was reaching in perceptive but often largely metaphorical ways for an ontological nominalism that might "do justice," as he would put it, to our grasp of meanings and to the intentional directedness of thought. He remarked, for instance, that "it is merely as if there were universals because meanings have the capacity to disclose the characteristics of similar things" (R. W. Sellars 1932: 156). However, it is not clear that we are ever given a detailed account by Roy Wood of what such "disclosure" consists in or of how it is possible. Wilfrid, on the other hand, was able to adapt and transform Carnap's conceptions of logical syntax, meaning rules, and linguistic frameworks to develop even in the 1950s what amounted to the first detailed functional role semantics. In a nutshell, the latter view was a robust normative and causal account of meaning-as-use, and upon that basis Sellars constructed a theory of thoughts as inner episodes in a functionally conceived "mentalese." The examples of this sort of contrast between the two thinkers and the two generations could be multiplied.

The non-reductive materialism that was being sketched in original ways by Roy Wood Sellars should certainly be credited, as noted by Jaegwon Kim (1934–) earlier, with anticipating many developments later in the century. But it was the tools provided by the various phases of the logical and linguistic turn in the analytic tradition that enabled Wilfrid Sellars to develop more powerful and substantive theories on just how (as he frames the central issues) the perceptual, conceptual, and normative dimensions of the perceptually experienced world or *manifest image* of persons-in-the-world are to be successfully integrated with the comprehensively causal and naturalistic picture of physical nature that is projected in our ongoing *scientific image* of that same world.

Somewhat ironically, then, it might plausibly be argued in relation to this "test case" that the so-called "neo-colonial" philosophical influences of which the 87–year-old Roy Wood Sellars complained in 1967 were in point of fact the indispensable enabling factors for the various cutting edge and – currently in the twenty-first century – much discussed theories that his son had been developing in defense of their shared naturalistic outlook since the late 1940s.

The specific mid-century "analytic" contributions highlighted in the previous sections may also be seen from this case study to have sharpened the overall systematic

naturalism that Wilfrid Sellars effectively inherited from his father. For example, Wilfrid did indeed put to use the insights into the "logic" or "grammar" of our ordinary rule-governed concepts by such thinkers as Ryle, Austin, and the later Wittgenstein. But he also departed sharply from those thinkers and embraced his father's and Russell's view, quoted above, that "philosophy in partnership with science" ought to have more ambitious theoretical, explanatory, and systematic aspirations than many philosophers (in both the "analytic" and "Continental" traditions) were inclined to entertain in the middle decades of the century. Malcolm, for instance, in company with the three British thinkers just mentioned, would from Sellars's perspective be right to stress that, for example, the language we learn, and therefore the concepts we acquire, are governed by implicit norms according to which our ordinary perceptual judgments in standard circumstances will generally be correct (other things being equal). And as such these judgments will indeed constitute instances of reliable perceptual knowledge of ordinary physical objects, rather than such knowledge having to be inferred from an allegedly more basic acquaintance with the character of one's own sensations or sense-data. This is part of Sellars's famous rejection in his "Empiricism and the philosophy of mind" (1956) of the myth of the given and his account of knowledge as a standing within the logical space of reasons. 18 But all four of those thinkers, Sellars believes, were wrong to simply leave the matter there, satisfied with their correct ordinary-language diagnosis of the confusion of the normative (or conceptual) with the natural (or causal) dimensions of discourse that lies at the heart of classical sense-datum views such as Russell's. For according to Sellars, in the spirit of his father's generation of American philosophers, we can and must push further and attempt a systematic theoretical or metaphysical account of the phenomena (in this particular case, an account of the constraining and representational role played by non-conceptual sensations in our various perceptual experiences).

In short, the conceptual insights of the ordinary-language philosophers must, on Sellars's view, be combined with speculative theorizing concerning the ultimate nature of mind, meaning, and matter, if the philosophical and scientific quest for a truly adequate understanding of "man-in-the-world" is to be brought closer to completion. The trademark Wittgensteinian emphasis on the public and communal nature of all meaning and hence of all conceptualization, as normatively rule-governed, was essentially correct. However, it is only in light of just the sort of substantive, naturalistic theorizing in philosophy that would typically be abjured by the more "quietist" Wittgensteinian philosophers, that such conceptual insights can really be put to use in providing an overall satisfactory philosophical and explanatory account of the nature of the human being within the physical world. On Sellars's meta-philosophical outlook, then, the boldly systematic and naturalistic philosophical theorizing of the sort often practiced by pre-1950 American pragmatists, realists, and naturalists (including, of course, his father) as well as by the great figures in the history of philosophy from Plato and Aristotle to Kant and Hegel, must be rejuvenated within the new technical medium if the truly revolutionary insights of the analytic movement, as Sellars did indeed view them, were to bear their proper philosophical fruit.

Once again with some historical irony, then, it seemed that what was needed in order to fulfill the promise of the methods introduced by the vigorously antimetaphysical European imports of positivism and linguistic analysis was an equally vigorous rebirth of metaphysical speculation and epistemological reflection using those same sharpened analytical tools. And indeed it was the distinctive combination of analytical, logical, and linguistic precision with richly metaphysical, naturalistic, causal theorizing that was arguably to make America the most productive and creative site of philosophical activity in the world in the last third of the twentieth century.

However, philosophers' attitudes toward the theory of meaning in the second half of the twentieth century in America were soon to undergo more radical changes than in the case of Wilfrid Sellars, whose views on meaning and conceptual analysis, rules and normativity, in many respects shared certain fundamental assumptions with the views on meaning and rules that had been developed by Carnap, Ryle, and Wittgenstein. Although broadly Wittgensteinian views on meaning of this kind have since about the 1980s once again become the center of lively philosophical discussion (see for example Robert Brandom (1994) and in certain respects the British philosopher John McDowell (1994), both at the University of Pittsburgh), the impressive hive of activity in analytic philosophy in America from the 1960s through the 1990s was based to a large extent on new ways of thinking about mind, language, and meaning that were developed within the American analytic and neo-pragmatist traditions. It is to these particular developments that we shall now turn in the final two sections.

Analytic philosophy in the naturalistic American style comes of age

For many American analytic philosophers from the 1960s to the end of the century present time the various publications of W. V. O. Quine represented an important turning point for the discipline, from "Two dogmas of empiricism" and other articles in the 1950s to Word and Object and other books in the 1960s. The various notions of conceptual analysis that had been articulated throughout the major developments in analytic philosophy discussed above had sought to bequeath to philosophers the primary task of conceptual clarification. Quine charted a different path, however, by arguing that philosophers should not take themselves to be in the business of conceptual analysis or meaning analysis at all, at least not in the various senses in which those enterprises have typically been understood by philosophers.

In "Two dogmas," as we saw briefly earlier, Quine argued that there is no principled, non-circular way of distinguishing the class of statements that are analytic (or necessary, or a priori) from those that are synthetic or have empirical content. The belief in the analytic/synthetic distinction is an unsupported "dogma" of empiricism, for Quine. Furthermore, he argued, the flipside of that same dogma is the reductive empiricist idea that there are particular empirical propositions or observation statements that may be directly verified or falsified in isolation from one's wider system of beliefs and assumptions, thus allegedly providing foundational evidence for the latter. To the contrary, Quine argues, the "unit of empirical significance is the whole of science" (Quine 1953: 42). In the following famous passage from "Two dogmas" Quine sums up his holistic and anti-foundationalist picture of human knowledge in metaphorical terms:

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field. ... But the total field is so underdetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to reëvaluate in the light of any single contrary experience.

[...] Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. (1953: 42–3)

The slogan, "there is no First Philosophy" epitomizes Quine's anti-foundationalist point that there are no items of knowledge, whether a priori or observational, that are somehow justifiable independently of questions concerning the *pragmatic* virtues (of simplicity, predictiveness, conservatism, etc.) of the overall system of beliefs or conceptual scheme concerned. At the outset we saw that Peirce's critique of the idea of "intuitive" knowledge had made many of these same points (and indeed, Peirce also anticipated many aspects of Wilfrid Sellars's critique of the myth of the given mentioned above as well). Quine in fact presents his resulting position as a pragmatism that is more thoroughgoing and naturalistic than that of his immediate predecessors:

Carnap, Lewis, and others take a pragmatic stand on the question of choosing between language forms, scientific frameworks; but their pragmatism leaves off at the imagined boundary between the analytic and the synthetic. In repudiating such a boundary I espouse a more thorough pragmatism. Each man is given a scientific heritage plus a continuing barrage of sensory stimulation; and the considerations which guide him in warping his scientific heritage to fit his continuing sensory promptings are, where rational, pragmatic. (1953: 46)

Reminiscent of Carnap's "tolerance" in relation to the development of alternative linguistic frameworks as well as of James's pragmatic pluralism, in choosing between alternative conceptual schemes Quine's "counsel is tolerance and an experimental spirit" ("On what there is," in Quine 1953: 19). If our interest is in epistemology, for instance, a particularly strict "phenomenalistic" language *might* be appropriate (see the discussion of Goodman below). But this "point of view is one among various, corresponding to one among our various interests and purposes" (1953: 19). For purposes of prediction and simplicity of theory, the "physicalistic" conceptual scheme will have priority.

In his now classic book Word and Object (1960, dedicated "To Rudolf Carnap: Teacher and Friend"), Quine developed a comprehensive philosophical outlook based on the rejection of analytic a priori "truths of meaning" and carrying through the anti-foundationalist, holistic empiricism outlined above, along methodologically behaviorist lines. Since there is no First Philosophy our knowledge is best pictured, not on Descartes's metaphor of a house built on a firm foundation, but rather on the logical positivist Otto Neurath's metaphor of sailors having to repair a ship while at sea: "Neurath has likened science to a boat which, if we are to rebuild it, we must rebuild plank by plank while staying afloat in it. The philosopher and the scientist are in the same boat" (Quine 1960: 3). We have no choice but the productive one of accepting our best ongoing, revisable scientific theories about the nature of the world and of ourselves. Against that inherited background the philosopher or the reflective scientist can practice what Quine called "Epistemology naturalized" (in Quine 1969). This is essentially the attempt to formulate causal-explanatory (and for Quine, largely behavioristic) hypotheses about how human beings have been able to generate predictively successful beliefs, theories, and conceptual schemes from the relatively meager sensory inputs which enter through the sense organs. "The stimulation of his sensory receptors is all the evidence anybody has had to go on, ultimately, in arriving at his picture of the world. Why not just see how this construction really proceeds? Why not settle for psychology?" (Quine 1969: 75). In further spelling out the ways in which, as he contends, our "theories and beliefs in general are under-determined by the totality of possible sensory evidence time without end" (1960: 78), Quine developed his controversial theses of the indeterminacy of translation ("rival systems" of interpretation, he contends, "can fit the totality of speech dispositions to perfection" and yet "still specify mutually incompatible translations of countless sentences," 1960: 72) and ontological relativity or the indeterminacy of reference (diverse ontologies can preserve the same repository of evidence, which consists in observation sentences considered as wholes).

It is perhaps fair to say that Quine's widespread influence on analytic philosophers in America since the 1960s has had more to do with his naturalistic conception of philosophical method and his skeptical challenges to traditional views than with his own conclusions concerning mind and knowledge, meaning and necessity – conclusions which to many have appeared to be largely negative in import. Many philosophers came to share Quine's emphasis on the importance to future philosophy of naturalistic inquiries into psychological processes and causal mechanisms, in contrast to the frequent dismissal of such inquiries as irrelevant during the heyday of linguistic and conceptual analysis. After Quine the idea of philosophy as engaged primarily in the analysis of concepts or meanings was certainly put on the defensive. The naturalistic, fallibilist and non-foundationalist conception of the nature of philosophy, which as we have seen had in many ways already been championed by the American pragmatists, realists, and naturalists during the first half of the century, had once again returned to the fore, now practiced with significantly sharpened analytical tools.

In point of fact, however, most naturalistically inclined analytic philosophers soon advanced beyond Quine's strictures and offered causal theories attempting to illuminate rather than merely set aside questions concerning the sources and nature of the intentionality of thought and belief, the intensionality of meaning and necessity, and the normativity of knowledge and of value claims themselves. 19 In America from the 1960s through to the end of the century such branches of philosophy as the philosophy of mind, philosophy of language, epistemology, logic, philosophy of science, metaphysics, and moral philosophy have witnessed a rebirth of vigorous theorizing conducted primarily in the manner of what might be called analytic naturalism. The predominant style of philosophizing among American philosophers has continued to make use of the powerful tools of analysis and the new philosophical problems inherited from Frege, Russell, Wittgenstein, Carnap, Austin, Quine, and the other analytic philosophers, but more often than not without the previously dominant view that the classical problems of philosophy had somehow to be dissolved or diagnosed as confusions rather than being tackled head on. There was an open-ended, speculative quality to the more recent bouts of philosophical theorizing that was made possible, in large part, by the neo-pragmatist, fallibilist and naturalist critiques of positivism and other foundationalist conceptions of analysis that had been carried out by Quine and Sellars among others. Of course, equally vigorous critics of naturalism, as well as proponents of various alternative views on the significance of the decline of foundationalist analytic philosophy have been continual participants in these various dialogues, which – philosophy being what it is – have been the richer for it.

It is outside the limited scope of this essay to attempt to survey the various technical approaches that have been developed over the last three decades within the branches of analytic philosophy just mentioned, most of which are at any rate covered in adequate detail within the appropriate chapters of the present volume. Analytic philosophy of mind and philosophy of language underwent particularly productive changes during the 1960s and 1970s, however, and a brief note of some of the more notable of these developments will serve to illustrate both the analytic style of naturalism that continues to be practiced by many American philosophers, as well as a robust revival of *metaphysics* within the analytic tradition.

The development of *functionalism* in the philosophy of mind, associated in particular with the American philosophers Hilary Putnam (see the Putnam 1975 collection), David Lewis (1941–2001, Lewis 1983 collection), Daniel Dennett (1969, 1978), and Jerry Fodor (1968, 1975), made more plausible than heretofore the naturalistic hypothesis that our thoughts and other mental processes are in fact, ontologically, nothing over and above certain postulated or a posteriori discoverable neurophysiological processes. The various conceptual distinctions between the mental and the physical, it was argued in a variety of ways, are in principle consistent with mental happenings *turning out to be* certain highly complex goings-on in the central nervous system.²⁰ Interesting new problems and challenges continue to arise for any such materialist account of consciousness and intentionality, functionalist or otherwise. In itself, however, the development of detailed and plausible naturalistic accounts of the mind since the 1960s has arguably represented one of the most significant philosophical developments in the history of metaphysics, successfully opening up new conceptual and explanatory possibilities and marking a genuine advance on previously more crude materialist speculations.

In both philosophy of mind and philosophy of language Noam Chomsky's work on innate, representational "depth grammars" in theoretical linguistics provided an additional impetus for functionalist (e.g. computationalist) theories of mind, particularly influencing the work of Jerry Fodor (1935–). For example, this passage from Chomsky's major 1965 work, Aspects of a Theory of Syntax, illustrates the dominant "top-down" approach characteristic of the new cognitive theories in philosophy and psychology that were gradually replacing more behavioristic outlooks (such as Quine's):

The mentalist ... need make no assumptions about the possible physiological basis for the mental reality that he studies. In particular, he need not deny that there is such a basis. One would guess, rather, that it is the mentalistic studies that will ultimately be of greatest value for the investigations of neurophysiological mechanisms, since they alone are concerned with determining abstractly the properties that such mechanisms must exhibit and the functions they must perform. (Chomsky 1965: 193)

Fodor's work has been influential in attempting to develop a non-reductive, cognitive symbol-processing conception of the mind along these lines in a series of books from *Psychological Explanation* (1968) and *The Language of Thought* (1975) to many other works over the last three decades of the century. In these areas interdisciplinary programs specializing in cognitive studies have become part of a productive tendency to cross the traditional university borders between the arts and humanities on the one side and the sciences on the other. These developments have found particularly fertile ground in the various strains of scientific naturalism that we have seen to be a pervasive feature of American philosophy generally, and which to a significant degree distinguished the American style of analytic philosophy from its British counterparts throughout the century.

The views on mind of Daniel Dennett (1942–) and Donald Davidson (1917–2003) represent two further influential attempts since the 1970s to explain the predictive efficacy of our higher-level interpretations of human beings as rational, intentional agents within a broadly physicalist ontology (Dennett 1978; Davidson 2001a). Dennett introduced the notion of the *intentional stance*, according to which attributions of coherent beliefs and desires to complex systems are often indispensable for predicting their behavior. And Davidson articulated what he called *anomalous monism*, according to which interpretations of human agents as governed by rationality assumptions do not uncover any strict psychological laws (hence, "anomalous"), yet such mental events are also causally efficacious in virtue of being "token identical" with certain physical events (hence, "monism"). Whether such attributional and interpretationist accounts of the nature of mind in a physical world are able to provide sufficiently realist accounts of *mental causation* continues to be a vigorous topic of debate.

In the philosophy of language, in addition to mentalist linguistic theories inspired by Chomsky and various versions of conceptual role semantics along functionalist lines, there were certain other developments in the theory of meaning that inspired what might be called the *neo-metaphysical* turn that took place in analytic philosophy during the final three decades of the twentieth century. Three key thinkers in this regard were Saul Kripke, Hilary Putnam, and David Lewis. The connection between the philosophy of language and the new metaphysical turn may be brought out by briefly considering some lines of thinking from two groundbreaking publications from the 1970s: Hilary Putnam's "The meaning of 'meaning' " (1975) and Saul Kripke's *Naming and Necessity* (1980, from three lectures given in 1970 at Princeton). Kripke's work may be taken as the clearest example of a style of analytic philosophy that broke sharply with the pragmatic, verificationist, and meaning-analysis approaches discussed above, and which remains among the most widely practiced ways of approaching philosophical problems in America today (see Soames 2003).²¹

Saul Kripke was born in Omaha, Nebraska in 1940, and he developed a ground-breaking semantics for quantified modal logic (the formal logic of necessity and possibility) at the age of 15, and a proof of its completeness by age 18. His watershed work *Naming and Necessity* consists of three lectures from the early 1970s that were delivered without notes and which are highly readable despite their conceptual and technical sophistication.

The lectures begin with familiar problems in the philosophy of language concerning the reference of proper names, but Kripke's rejection of the reigning *descriptivist* approaches, according to which the reference of a name is determined by associated descriptions or senses (for example, "Aristotle was the student of Plato") quickly develops in the lectures into a full-blooded metaphysical *essentialism*. This is the view that some properties of an object or kind are necessary or essential to it, and hence are possessed by that object in all possible circumstances or "possible worlds" in which it exists (hence the link with his technical works in modal logic and possible worlds semantics). For example, *being H*₂O might be essential to water, assuming the correctness of our a posteriori discovery that water is in fact H₂O. This leads to Kripke's crucial idea that there are a posteriori discoverable *necessities*, which is in pointed contrast to the traditional Kantian, pragmatist, conventionalist, and analytic equation of the a priori and the conceptually necessary. Necessity is now viewed as a feature of reality, as a metaphysical matter of truth in all (or all relevant) possible worlds, rather than being an artifact of our thought or of language.

The bridge between the philosophy of language and the new metaphysical essentialism was made by what came to be called (if not by Kripke himself) the new *causal theory of reference*. In *Naming and Necessity*, crudely put, the treatment of reference was built upon the consideration that it is not the descriptions which, as far as we know, Aristotle happens to satisfy that make the name "Aristotle" refer to that particular human being, since many of these descriptions might conceivably be false. Rather, it is the causal or (for Kripke) historical chain from an "initial baptism" that links the name "Aristotle" directly with a certain human being, whatever descriptions turn out to be true of him; and it is this causal-historical chain that constitutes the real word/world relation of reference. Putnam (1975) developed similar notions into an influential conception of the meaning of *natural kind* terms, according to which the

meaning of such terms as "water" is partly a matter of what the real essential nature of water turns out to be (e.g. H₂O), no matter how it is "internally," mentally, or descriptively taken to be by us at any given time. Hence, our meanings and the contents of our thoughts turn out to be determined in large part not by how things seem internal to some descriptive scheme, but rather by external natures and facts pertaining to mind-independent reality; and so in this and related senses externalism was often conceived to be central to the new *metaphysical realism*.

David Lewis (1941–2001) and others appealed to the idea of possible worlds to address a host of traditional philosophical problems in epistemology, philosophy of language, and metaphysics (see Lewis 1986). The development of a wide variety of externalist conceptions of mind, knowledge, and meaning also grew out of Donald Davidson's truth-conditional theory of meaning (Davidson 2001b), and from various causal-reliabilist theories of knowledge that had been developed in the wake of the famous "Gettier" problem in epistemology (Gettier 1963, "Is justified true belief knowledge?"; and, e.g., Alvin Goldman 1967, 1986). These are just a few of the most well-known ways in which analytic philosophers from the 1970s to the turn of the century shifted, in a spirit broadly similar to Kripke's groundbreaking work, toward the development of technical approaches to traditional problems that build on metaphysical realist, modal realist, or causal-naturalistic starting points.

Quine, as we have seen, had raised problems for classical analytic conceptions of meaning-analysis and had urged an abandonment of those notions in favor of a scientifically naturalized epistemology or psychology. The rise of the new metaphysical realism and essentialism, however, had now given analytic philosophers a way of resuscitating and exploring the problems of philosophy in novel ways, which are still in the process of being worked out and evaluated. Furthermore, many of the enduring pragmatist themes that we have been tracing from Peirce through much of the analytic tradition in America, such as holistic empiricism, naturalism, verificationism, and the primacy of language and action, would in varying degrees be challenged by analytic philosophers who now took themselves to be liberated from many of those allegedly misguided epistemological and meaning constraints. For example, while it is true that many of the new realists and externalists were also naturalists and materialists, Kripke, for example, was neither of the latter. The only constraints on philosophical theorizing were now thought to consist in judgments of overall intuitive plausibility, technical adequacy, and explanatory fecundity. Again with some historical irony, Quine's antifoundationalist methodological clarion call of "no First Philosophy" was now being enthusiastically embraced by philosophers attracted more to the tropical rainforests of traditional metaphysics and epistemology than to the behaviorist, verificationist, and nominalist desert landscapes preferred by Quine himself.

Not all analytic philosophers embraced the new metaphysical turn, however, and there has in fact been a revival of varieties of *neo-pragmatism* from the 1950s through the turn of the century. (It is interesting to note that Jerry Fodor, writing from the broad perspective of the new metaphysical realism, has characterized these neo-pragmatist tendencies as "the defining catastrophe of analytic philosophy of language and philosophy of mind in the last half of the twentieth century", Fodor 2004: 73–4.)

Some of these neo-pragmatist thinkers consider themselves to be broadly analytic philosophers, while others take themselves to be already in a "post-analytic" period in which the divisions between pragmatism, analytic philosophy, and Continental philosophy are viewed as merely superficial artifacts of the discipline. It will be appropriate to close with some brief remarks on these neo-pragmatist developments.

Neo-pragmatism and other recent developments

In the second half of the twentieth century there was a revival of pragmatism in American philosophy. We have seen this already in the case of Quine and Sellars, who in their different ways embraced many of the lasting themes from Peirce discussed at the outset: fallibilism, holism, non-foundationalist empiricism, naturalism, realism, and the priority of the "outer" over the "inner." The views of Quine and Sellars in fundamental ways also resembled those of Peirce in arguing for the primacy of scientific method and explanation in epistemology and ontology. Other neo-pragmatist thinkers in the analytic tradition, however, such as Nelson Goodman (1906–98), Hilary Putnam (since the mid-1970s), and Richard Rorty (1931–), made use of pragmatist ideas from James and Dewey in a more pluralistic manner, reflecting a more thoroughgoing rejection or reworking of the traditional distinctions: fact versus value, the subjective versus the objective, what "depends on us" as opposed to what "depends on the world." According to these thinkers, there is – contrary to what the "metaphysical realists" contend – no one, unique way of representing how the world really is in itself. Rather, there are multiple versions or approaches within any given domain of inquiry or action, and there are no neutral or overarching criteria of rightness or truth apart from considerations internal to those various perspectives. This is not, however, taken to entail an implausible relativism according to which any perspective or conceptual scheme is as good or as true as any other. (Putnam, Kuhn, and Rorty reject the attribution of relativism, while Goodman by contrast defends what he calls a "radical relativism under rigorous constraints, that eventuates in something akin to irrealism," Goodman 1978: x.)

Nelson Goodman received his Ph.D. from Harvard in 1941 and taught at the University of Pennsylvania (1946–64), Brandeis (1964–7), and then Harvard (1968–77). Prior to his professional academic career he was Director of the Walker-Goodman Art Gallery in Boston from 1929 to 1941. Goodman believed that our understandings of the world, whether in the arts or the sciences, whether literal or metaphorical, are achieved by means of symbol systems of various kinds, the complex nature and diversity of which was the primary object of his philosophical investigations. Different symbol systems may be useful and yield understanding while carving up their worlds of objects in different, sometimes incompatible ways. It follows, for Goodman, that the presumption that there must ultimately be one fundamental classification of the world "as it is in itself" is groundless. We should rather speak of many worlds (if any), corresponding to the plurality of versions of reality that are presented in our various symbolic representations and renderings. Hence the title of Goodman's engaging yet subtle little book in 1978, Ways of Worldmaking.

These themes were already in evidence in 1951 in The Structure of Appearance, in which Goodman sympathetically criticized Carnap's logical reconstruction of the empirical world in the Aufbau and developed his own complex mereological, nominalistic construction of concrete things out of repeatable qualia taken as the basic elements. There is no absolute epistemic priority accorded by Goodman to phenomenal qualia, however; he insists that an alternative physicalistic basis for the constructions could have been chosen instead. The work is pluralist in spirit but rigorously formal in its design and execution. In Fact, Fiction, and Forecast Goodman presented his famous grue paradox concerning induction: the evidence up to a given future time t that all emeralds are green is also evidence that all emeralds are grue, where x is grue if and only if x is examined before future time t and is found to be green, or x is not so examined and is blue. Goodman's solution to this puzzle meshes with the pragmatist tradition: we continue to "project" the predicate green into the future rather than grue because the former has as a matter of fact become entrenched in our linguistic practices. This reflects the fact that what kinds of things there are in a world is a matter of the symbolic system in accordance with which the things of that world are constructed, rendered, and remade. Goodman is better known to many, however, for his important contribution to aesthetics in The Languages of Art (1968, with the pluralist theme again to the forefront). Here Goodman's technical sophistication in logic and the philosophy of language combined with his knowledge of the various worlds of art were put to use in applying his general investigations into the various modes of symbolic understanding to the syntactic and semantic structures which, he argues, are embodied in aesthetic representations. The metaphorical and other truths exhibited in the arts, on Goodman's view, are not less objective or otherwise cognitively inferior to the truths articulated in the sciences. Furthermore, not all rightness of representation is the stating of truths, and denotation and exemplification (e.g. of emotions) is achieved in the arts in ways that may be assessed as objectively better or worse in a given context.

On a general methodological level Goodman's writings were also important for articulating and exemplifying a form of anti-foundationalist rational justification that John Rawls (1921–2002) of Harvard University – one of the most important moral and political philosophers of the century – called, in his groundbreaking work A Theory of Justice (1971), the method of reflective equilibrium (see "Twentieth-century political philosophy," Chapter 21). Rawls duly noted that Goodman in Fact, Fiction, and Forecast had already emphasized the "process of mutual adjustment of principles and considered judgments" in which the method consists, noting in particular Goodman's "remarks concerning the justification of the principles of deductive and inductive inference" (Rawls 1971: 20).²² As Goodman had put it, the "point is that rules and particular inferences alike are justified by being brought into agreement with each other" through delicate mutual adjustments, and "in the agreement achieved lies the only justification needed for either" (Goodman 1954: 64). Overall rightness of fit is the goal, within any given working version of reality.

Partly under the influence of Goodman, Hilary Putnam's thought has taken a strong neo-pragmatist turn since the mid-1970s, articulated in what he has called

his internal realism (or later his "pragmatic," "commonsense," "human" realism, as he has variously characterized it) in contrast to the "God's eye point of view" allegedly characteristic of metaphysical realism. Central to Putnam's later thought is his critique of the correspondence theory of truth (which he sees as a descendent of James's pragmatist criticisms of the "copy theory" of truth), as well as his defense of what he calls conceptual relativity; this is a scheme-relative ontological pluralism that is in some ways similar to Goodman's views about multiple incompatible world-versions each of which may nonetheless be true. "That there are ways of describing what are (in some way) the 'same facts' which are (in some way) 'equivalent' but also (in some way) 'incompatible' is a strikingly non-classical phenomenon' (Putnam 1987: 29). It is a phenomenon that Putnam, like James, wants to celebrate without losing touch with commonsense realism and objectivity, and without endorsing either relativism or subjectivism. Putnam's book The Many Faces of Realism of 1987 is a clear example of these later trends in his thinking, and his 1995 book Pragmatism: An Open Question makes explicit the connections with the pragmatism of James, Dewey, and the later Wittgenstein. As Putnam himself described the former lectures (which explore many of the pragmatist and neo-pragmatist themes discussed above):

in the present lectures I stress the *pluralism* and thoroughgoing *holism* which are ubiquitous in Pragmatist writing. If the vision of fact, theory, value and interpretation as interpenetrating undermines a certain sort of metaphysical realism, it equally, I believe, undermines fashionable versions of antirealism and "postmodernism." (1987: xii)

One main source of the "fashionable" views that Putnam is concerned to distance himself from are the views of his fellow neo-pragmatist Richard Rorty. Rorty mobilized resources from analytic philosophy, pragmatism, and Continental philosophy to stake out a historicist and in certain ways postmodernist philosophical perspective, one which also exhibited affinities with the intellectual currents of the time in literary criticism, cultural theory, feminist theory, and a variety of emancipatory political philosophies.²³

From 1946 to 1952 Rorty completed his BA and MA at the University of Chicago, studying under Rudolph Carnap, Charles Hartshorne (1897–2000), and Richard McKeon (1900–85), and then he received his Ph.D. at Yale with the thesis "The concept of potentiality" under the metaphysician Paul Weiss (1901–2002). His combined training in both the history of philosophy and in technical analytic philosophy would serve Rorty well as he moved gradually from his more analytic phase as an "eliminative materialist" in the philosophy of mind in the 1960s, toward his now famous break with the traditional epistemological tasks of modern philosophy in *Philosophy and the Mirror of Nature* (1979), Consequences of Pragmatism (1982), and later works. Broadly put, Rorty attacked the traditional foundationalist picture of knowledge from Descartes, Locke, and Kant through Husserl's phenomenology and Russell's analytic philosophy, according to which "to know is to represent accurately what is outside the mind; so to understand the possibility and nature of knowledge is

to understand the way in which the mind is able to construct such representations" (Rorty 1979: 3). On this traditional outlook, according to Rorty:

Philosophy's central concern is to be a general theory of representation, a theory which will divide culture up into the areas which represent reality well, those which represent it less well, and those which do not represent it at all (despite their pretense of doing so). (1979: 3)

The heroes in Rorty's account are the later, revolutionary stages in the thought of Wittgenstein, Heidegger, and Dewey. These "therapeutic" thinkers, Rorty thought, sought to liberate us from the traditional dead-ends of epistemology by questioning the entire framework in which the traditional problems of philosophy could seem to be pressing and to require a forever elusive, systematic theoretical resolution.

The centerpiece of Rorty's argument in 1979 was his combined use of Quine's attack on the analytic/synthetic distinction and Sellars's attack on the myth of the given, in order to argue beyond Sellars and Quine for the incoherence of the main twentiethcentury analytic-epistemological projects of empiricism and meaning analysis in the philosophy of science and the philosophy of language. Thomas Kuhn's massively influential book, The Structure of Scientific Revolutions (1962), had shown convincingly, according to Rorty, that there is no neutral or timelessly rational methodology that is common across the revolutionary shifts between incommensurable "paradigms" (to use Kuhn's famous term) that characterize progress in scientific problem-solving.²⁴ In general, for Rorty, there is no a priori foundation for knowledge to be derived from principles pertaining to mind, meaning, or method that may be unearthed by the philosopher. Rather, truth and knowledge are changing social phenomena that concern the ability to justify one's beliefs to one's peers, with no constraints foreseeable in advance of the contingencies of history and conversation (this is one respect in which Rorty sees Dewey as a precursor); language is a tool for satisfying our interests rather than a representational medium that "mirrors" reality (here Rorty appeals to the later Wittgenstein in particular); and the idea of the knower as a source of necessary truths is (as Rorty credits Heidegger with pointing out) just "one more self-deceptive attempt to substitute a 'technical' and determinate question for that openness to strangeness which initially tempted us to begin thinking" (Rorty 1979: 9). Philosophy, Rorty suggests, should cease attempting to emulate the sciences by portraying itself as an ahistorical tribunal of knowledge, and should rather become more like the arts and humanities in cultivating edifying conversations and developing new, more fruitful vocabularies for coping with the world.²⁵

With Rorty's brand of neo-pragmatism we are now certainly very far away from anything that Peirce, the originator of pragmatism, would have recognized as a desirable direction for philosophical inquiry to take (see Haack 2004). Even Putnam in his most "internalist" phases rejects Rorty's identification of truth with intersubjective agreement or the compliments and consensus of one's peers. Putnam wants to hold that there are rational warrants beyond what the majority of one's peers believe, but the basis for Putnam's normative distinction in this regard, given his other philosophical

commitments, have not always been clear. Robert Brandom's 1994 book, *Making it Explicit: Reasoning, Representing, and Discursive Commitment*, is the most rigorous recent attempt to outline a thoroughgoing pragmatist and internalist outlook that owes much to the latter Wittgenstein, Sellars, and Rorty.

At the beginning of the new millennium, philosophy in America is in a state of fruitful turbulence. The various strains and developments of analytic philosophy along the naturalist, neo-metaphysical, and neo-pragmatist lines described above remain the most visible styles of philosophical inquiry in most of the leading journals and graduate departments of philosophy in America. However, increasing numbers of philosophers now argue that the distinctions between analytic, Continental, and pragmatist approaches are, or ought to be, losing their significance. The fallibilism, anti-foundationalism, naturalism, holism, pluralism, and social perspective that we have seen to be characteristic themes in the classical American pragmatist and analytic traditions from Peirce and James to Quine and Putnam remain pervasive, though certainly not universal methodological features across the current philosophical divides. Those themes taken as a whole do go some way toward marking out much of twentieth-century philosophy in America as distinctive in relation to the various prevailing modes of approach taken by philosophers in periods prior to the twentieth century. Perhaps it is the open-ended nature of philosophy as practiced in America in the twentieth century that also makes it difficult to predict what lies in store in the rest of the twenty-first century.²⁶

Notes

- 1 See the entire concluding section of the chapter entitled "The stream of thought" in James's Principles of Psychology for a striking discussion of the selectivity that he argues is operative throughout all levels of cognition.
- 2 As pertains to James in what follows I have drawn freely from the more detailed discussion to be found in my "Sources of pluralism in William James" (O'Shea 2000).
- 3 For reasons of space, this chapter will refer primarily to philosophers working at universities in the United States, with no attempt being made to cover the important developments in twentieth-century philosophy taking place in the rest of North America, Central America, and South America, which merit separate treatment. Furthermore, the discussion will generally be limited to topics concerning the nature of philosophical method and the theory of knowledge broadly construed; crucial developments in moral and political philosophy in America, among many other subject matters, are adequately covered elsewhere in this volume. Important issues concerning social, cultural, and biographical context will also generally be sacrificed in order to highlight conceptual and epistemological themes.

There are many other respects in which the range of this essay has been restricted. In particular, in this survey of the most influential movements of the period I have not attempted to canvass a variety of important speculative/metaphysical, religious/theological, and existential/phenomenological traditions in twentieth-century American thought. Bruce Kuklick's A History of Philosophy in America: 1720–2000 (2001) will provide an excellent starting point for anyone interested in further pursuing a more comprehensive historical survey of the variety of philosophical influences and streams in twentieth-century American philosophy.

4 Many American philosophical and cultural historians stress a distinction between an indigenous or classical "American Philosophy" and "Philosophy in America." The former had its roots in the Founders (e.g. Franklin, Jefferson), Native American philosophy (on which in general, see Wilshire 2000, Pratt 2002), Whitman, Emerson, the classical pragmatists (Peirce, James, Dewey, Mead), and

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such other figures as Royce, Santayana, Whitehead, the Columbia naturalists, and the more recent revival of pragmatist thinking in general. The latter term is thought to be especially useful for characterizing the period after World War II in particular, which was dominated by analytic philosophy with its sources in large part stemming from British analysis and Vienna positivism. For a recent statement of the distinction and an explicit championing of the former outlook, see *The Blackwell Guide to American Philosophy*, which the editors begin as follows:

This book is a guide to American philosophy, not to philosophy in America. The distinction is an important one. Beginning roughly after the end of the Second World War . . . American philosophers turned to various European philosophical movements then current for their inspiration. [. . .] But American philosophy . . . is something else. [. . .] The point is that there is a continuous story of the development of American philosophy from its Puritan origins through the classical period of the pragmatists and naturalists, to contemporary writings by a number of philosophers who work in the broadly defined pragmatist and naturalist traditions. The chapters in this volume tell that story. (Marsoobian and Ryder 2004: xv, xvi; see also the helpful Epilogue by John J. McDermott, "The renascence of classical American philosophy")

In a similar spirit, for a stimulating collection of essays examining the changes from classical or "progressivist" pragmatism, through mid-century "positivist and linguistic" pragmatism, to recent "postmodernist" pragmatism, see Hollinger and Depew (1995).

In what follows I do not insist on this distinction, since I regard the contributions of analytic philosophy to have been vital to the progressive development in the twentieth century of "American Philosophy" on any plausible understanding of that subject matter, and since I will be emphasizing the ways in which analytic philosophy itself took a particular shape in America precisely because of the pragmatism and naturalism that permeated classical American philosophy.

- 5 For a close examination of Peirce's various formulations of the pragmatic maxim, see Christopher Hookway 2004, "The principle of pragmatism: Peirce's formulations and examples."
- 6 James 1977, edited by John McDermott, is a useful selection of James's writings, but the definitive edition is *The Works of William James* published in multiple volumes by Harvard University Press.

It should be noted that Peirce objected to certain aspects of James's version of pragmatism, including James's nominalistic emphasis on *particular* experiences, as in the quote from James on p. 000. In 1905 Peirce announced for his own view "the birth of the word 'pragmaticism', which is ugly enough to be safe from kidnappers" (Peirce 1998: 335).

- 7 For a useful selection of Royce's writings, see Royce 2005, edited by John McDermott.
- 8 For representative selections from the works of Dewey, see Dewey 1981 and 1998.
- 9 The title of this leading journal of American philosophy was shortened to *The Journal of Philosophy* in 1921. It was intended to cover "the whole field of scientific philosophy, psychology, ethics and logic," and was founded by Frederick J. E. Woodbridge at Columbia University in 1904.
- 10 Jaegwon Kim has remarked in an excellent historical and conceptual examination of the nature of philosophical naturalism that to "see that American naturalists held substantive doctrines in metaphysics and epistemology as constitutive of their naturalism, it is useful to go back to earlier naturalists, in particular, Roy Wood Sellars, a philosopher whose work, in my view, has been unjustly neglected" (2003: 88). For a comprehensive overview of philosophical naturalism in the second half of the twentieth century, see Kitcher 1992.
- 11 Richard Rorty would later use Dewey to portray Roy Wood's son Wilfrid Sellars's rejection of "the given" as likewise recommending an abandonment of the traditional tasks of epistemology, whereas in fact Wilfrid Sellars is philosophically far closer to the views of his father than he is to those of Rorty's Dewey.
- 12 For more on the "golden age" at Harvard, see Kuklick 1977 and 2001.
- 13 It should be noted that in 1950 Morton White had also published his article, "The analytic and the synthetic: an untenable dualism" (reprinted in White 2005, From a Philosophical Point of View a title in pointed contrast to Quine's 1953 collection, From a Logical Point of View). While Quine pursued his holistic rejection of the analytic/synthetic distinction in the direction of a scientific naturalism having clear roots in Carnap's positivism and in formal logical concerns, White over the years developed what he calls a holistic pragmatism that has its origins in Dewey's broader philosophy of culture and experience (see also White 1956).

Another example of just one of the many other important streams of American philosophy outside the positivist and analytic traditions may be noted in the occurrence, also in 1950, of the first meeting of the Metaphysical Society of America. This society was founded by the metaphysician Paul Weiss of Yale (1901–2002). Although logical empiricism, as we shall now see, would at mid-century gradually be eclipsed in America by what is usually referred to as "linguistic philosophy" or "ordinary-language philosophy," it is important to recognize that there were always throughout the century many other currents of thought in American philosophy that kept alive, contributed to, and transformed the classical, metaphysical, and speculative traditions of philosophy. I regret that I have not been able to explore these other developments in this selective overview.

- 14 See Nelson 1965 for an overview of Wittgenstein's influence in America covering the period from the 1930s to 1964.
- 15 See also Richard Rorty's book, The Linguistic Turn: Recent Essays in Philosophical Method (1967) for an excellent anthology that includes Malcolm's article and many other articles pertaining to both the earlier so-called "ideal-language philosophy" and the later "ordinary-language philosophy." The 1942 Schilpp volume on Moore was a watershed publication, including essays by C. D. Broad, C. L. Stevenson, W. K. Frankena, O. K. Bouwsma, C. J. Ducasse, Norman Malcolm, M. Lazerowitz, Alice Ambrose, John Wisdom, L. Susan Stebbing, and others.
- 16 Stanley Cavell has taught at Harvard since 1963, where he became the Walter M. Cabot Professor of Aesthetics and the General Theory of Value, and then Professor Emeritus since 1997. In wide-ranging and cross-disciplinary works since the 1960s he has explored issues concerning ordinary-language philosophy, the interpretation of Wittgenstein, skepticism, aesthetics (film studies, Shakespeare, modernism, opera, art history), American studies (Emerson, transcendentalism), romanticism, philosophy of language, and ethics.
- 17 Wittgenstein, of course, was at Cambridge rather than Oxford, and there were differences of emphasis between the two strains of linguistic philosophy. For further details see J. O. Urmson, "The history of philosophical analysis" in Rorty 1967, as well as Geoffrey Warnock's entry in *The Routledge Encyclopedia of Philosophy* (Craig 1998–2005), "Ordinary-language philosophy, school of."
- 18 For further commentary on Wilfrid Sellars on these and other themes, see deVries and Triplett 2000 and O'Shea 2007.
- 19 See, for example, Jaegwon Kim's widely cited response to Quine, "What is 'naturalized epistemology?" (Kim 1988). For more on naturalized epistemology, see Hilary Kornblith 1985 and Philip Kitcher 1992.
- 20 Crucial problem areas in this connection have been how to account for intentionality or representational content (John Searle's (1980) "Chinese room" thought-experiment was an early, much discussed critique of computationalist accounts of intentionality); how to accommodate the nature of qualitative consciousness and subjective experience (Thomas Nagel's (1974) "What is it like to be a bat?" was an equally influential critique of materialist accounts of consciousness); and ontologically, how to explain the relationship between the "higher" levels of mind and the "lower" biological and physical levels on which they supervene (see Kim 2004 for an overview).
- 21 Ruth Barcan Marcus (born 1921, Ph.D. Yale 1946 and later Professor at Yale) wrote important articles in the area of modal logic and identity from the late 1940s on, including in particular Marcus 1961. Marcus had put forward the idea that identities between names are necessary, and a debate has subsequently ensued about the originality of some of Kripke's basic ideas in *Naming and Necessity*. For this debate, and on the "new theory of reference" generally, see Fetzer and Humphreys 1998.
- 22 In fact, however, Rawls had already outlined an earlier version of what was in many ways the same method in 1951 ("Outline of a decision procedure for ethics"). Rawls deserves a prominent place in any history of American philosophy, but since the present brief overview is restricted to general methodological issues primarily in epistemology and metaphysics I shall not attempt to convey his views here. Charles L. Stevenson, William Frankena, Robert Nozick, and many other notable American moral and political philosophers have regrettably had to be omitted as well.
- 23 Two recent anthologies of pragmatism that include emphases on the Rortyean, literary, political activist, and postmodernist strains of neo-pragmatism are those edited by Russell B. Goodman (1995) and Louis Menand (1997). For trenchant criticism of some of those recent tendencies from the perspective of an analytic, Peircean pragmatist, see Susan Haack's "Pragmatism, old and new" (2004),

- as well as her criticism of Menand's anthology in "Vulgar Rortyism" (*The New Criterion*, vol. 16, available online at http://www.newcriterion.com/archive/16/nov97/menand.htm). Another Peircean pragmatist outlook of note is the conceptual idealism of Nicholas Rescher of Pittsburgh (see his 1992 book, among his many others).
- 24 The influence of Kuhn's conception of paradigm shifts and of incommensurability in scientific revolutions has been extraordinary, both within philosophy and in the humanities and social sciences generally. The very brief reference to Kuhn here should be supplemented with the discussion of his views in "Philosophy of Science," Chapter 14.
- 25 Rorty contends that we can be deeply committed to promoting and reshaping our western democratic ideals without having to see our ideals as corresponding to a culture-transcendent, ahistoricist reality or reason. On this basis Rorty sees pragmatism as a useful outlook for feminist thinkers:

We pragmatists see universalism and realism as committed to the idea of a reality-tracking faculty called "reason" and an unchanging moral reality to be tracked, and thus unable to make sense of the claim that a new voice is needed. So we commend ourselves to feminists on the ground that we can fit that claim into *our* view of moral progress with relative ease. (Rorty in Goodman 1995: 129)

For an in-depth discussion of feminist philosophy in the twentieth century, see "Feminism in philosophy," Chapter 7. The Goodman collection (1995) is useful for containing a selection of recent neo-pragmatist thinkers who are active in the social and political domains of thought, including Cornel West (1953–), Professor of Religion and African American Studies at Princeton University. West is an example of a politically conscious neo-pragmatist philosopher whose "prophetic pragmatism" is influenced by Rorty but who suggests (unlike Rorty) that a blend of Marxist and Christian perspectives might be put to use in transforming cultural traditions in more free and democratic ways (see, for example, West 1989).

26 I would like to thank Dermot Moran and the publisher's anonymous readers for their comments on an earlier (and longer) version of this chapter.

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